

Shelly PRO 4PM Circuit Wi-Fi Relay Switch User Manual

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Shelly PRO 4PM Circuit Wi-Fi Relay Switch



Product Information

The Shelly Pro 4PM is a 4-circuit Wi-Fi relay switch that can be used to control various types of electrical appliances, lighting and other electronic devices. It can be controlled via the internet using the Shelly Cloud app, or locally using the HTTP, MQTT, CoAP or UDP protocols. The device can also be integrated with popular smart home platforms like Amazon Alexa, Google Home and Apple Home Kit.

Product Usage Instructions

- 1. Connect the Shelly Pro 4PM to your home Wi-Fi network using the Shelly Cloud app or by following the instructions in the user manual.
- 2. Connect the electrical appliances, lighting or electronic devices that you want to control to the appropriate circuit terminals on the Shelly Pro 4PM.
- 3. Use the Shelly Cloud app or your preferred smart home platform to turn the circuits on or off, set schedules or create automation rules for your devices.
- 4. You can also control the Shelly Pro 4PM locally by sending HTTP, MQTT or CoAP commands using a web browser or command-line interface.
- 5. Make sure to follow all safety instructions in the user manual when installing and using the Shelly Pro 4PM.

Read before use

This document contains important technical and safety information about the device, its safety use and installation.

CAUTION! Before beginning the installation, please read this guide and any other documents accompanying the device carefully and completely. Failure to follow the installation procedures could lead to malfunction, danger to your health and life, violation of the law or refusal of legal and/or commercial guarantee (if any). Allterco Robotics is not responsible for any loss or damage in case of incorrect installation or improper operation of this device due to failure of following the user and safety instructions in this guide.

Product Introduction

Shelly® is a line of innovative Devices, which allow re-mote control of electric appliances through a mobile phone, tablet, PC, or home automation system. Shelly® may work standalone on the local Wi-Fi network, without being managed by a home automation controller, or it can also work through cloud home automation services. Shelly®

devices can be accessed, controlled, and monitored remotely from any place the User has Internet connectivity, as long as the devices are connected to a Wi-Fi router and the Internet.

Shelly® has an integrated web server, through which the User may adjust, control and monitor the Device. Shelly® has two Wi-Fi modes – access Point (AP) and Client mode (CM). To operate in Client Mode, a Wi-Fi router must be located within the range of the Device. Shelly® devices can communicate directly with other Wi-Fi devices through HTTPS protocol. An API can be provided by the Manufacturer.

Shelly® devices may be available for monitor and control even if the User is outside the range of the local Wi-Fi network, as long as the Wi-Fi router is connected to the Internet. The cloud function could be used, which is activated through the web server of the Device or through the settings in the Shelly Cloud mobile application.

The User can register and access Shelly Cloud, using either Android or iOS mobile applications, or any internet browser and the website: https://my.Shelly.cloud/

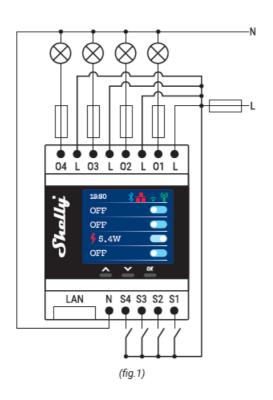
Control your home with your voice

Shelly® devices are compatible with Amazon Echo and Google Home supported functionalities. Please see our step-by-step guide on:

https://shelly.cloud/support/compatibility/

Shelly® Pro Series

Shelly® Pro series is a line of Devices suitable for homes, offices, retail stores, manufacturing facilities, and other buildings. Shelly® Pro devices are DIN mountable inside the breaker box, and highly suitable for new building construction. Connectivity for all Shelly® Pro devices can be through Wi-Fi or LAN Internet connection, and Bluetooth can be used for the inclusion process.



LEGEND:

- N Neutral input (Zero);
- L Line input (110-240V);
- L* Input of O1, O2, O3, O4;
- O1, O2, O3, O4 Output 1, 2, 3, 4;
- S Switch (input) for control;
- S1, S2, S3, S4 Switch (input) controlling O1, O2, O3, O4
- LAN Local Area Network RJ 45 connector

*The cables connected to L must be with the same length!

Installation Instructions

- **CAUTION!** Danger of electrocution. Mounting/ Installation of the Device to the power grid has to be performed with caution, by a qualified person (electrician).
- CAUTION! Danger of electrocution. Mounting the De-vice to the power grid has to be performed with caution.
- **CAUTION!** Do not allow children to play with the button/ switch connected to the Device. Keep the Devices for re-mote control of Shelly (mobile phones, tablets, PCs) away from children.
- **CAUTION!** Danger of electrocution. Even when the De-vice is turned off, it is possible to have voltage across its terminals. Every change in the connection of the terminals has to be done after ensuring all local power is powered off/disconnected.
- CAUTION! Do not connect the Device to appliances exceeding the given max load!
- **CAUTION!** Use the Device only with a power grid and appliances which comply with all applicable regulations. A short circuit in the power grid or any appliance connected to the Device may damage the Device.
- **CAUTION!** Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.
- **RECOMMENDATION!** The Device may be connected to and may control electric circuits and appliances only if they comply with the respective standards and safety norms.
- **RECOMMENDATION!** The Device may be connected with solid single-core cables with increased heat resistance to insulation not less than PVC T105°C.

Connection to the grid

Shelly Pro 4PM relay switch (4 channel)

Connect the relay to the power grid and install it in the switchboard as shown in the scheme (fig. 1) and following the Safety Instructions. Before installing/mounting the device, ensure that the grid is powered off (turned down breakers) and in compliance with the Safety Norms. The Shelly Pro 4PM smart relay by Alterio Robotics is intended to be mounted into a standard switchboard on DIN rail, next to the circuit breakers in order to control and monitor the electric power through it. Shelly can work as a standalone device or as an accessory to a home automation controller.

Before starting, wire check that the breakers are turned off and there is no voltage on their terminals. This can be done with a phase meter or multimeter. When you are sure that there is no voltage, you can start wiring the cables according to fig.1. Install a wire from O1, O2, O3, O4 – to the load and from the load to the Neutral. Install also a wire from the Fuse to L.

Connect the Neutral to the device. The last step is to install cables from the switches to the terminals S1, S2, S3 and S4.

For inductive appliances, those that cause voltage spikes during switching on: electrical motors, as fans, vacuum cleaners and similar ones, RC snubber $(0.1 \mu F / 100 \Omega / 1/2 W / 600 V AC)$ should be wired between Output and Neutral of the circuit.

CAUTION! Do not install the device at a place that is possible to get wet.

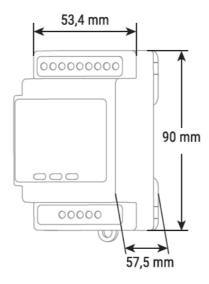
Initial Inclusion

You may choose if you want to use Shelly with the Shelly Cloud mobile application and Shelly Cloud service. Instructions on how to connect your device to the Cloud and control it through the Shelly App can be found in the

"App guide". You can also familiarize yourself with the instructions for Management and Control through the embedded Web interface.

Specification

- Power supply: 110-240V; 50/60Hz AC
- Max current per channel: 16A
- Total max. current of all outputs: 40 A
- Complies with EU standards: RED 2014/53/EU; LVD 2014/35/EU; EMC 2014/30/EU; RoHS2 2011/65/EU
- Ambient temperature: 0°C 40°C
- Radio signal power: 1mW
- Radio protocol: Wi-Fi 802.11 b/g/n
- Frequency: 2412-2472 MHz; (Max. 2483,5 MHz)
- Operational range (depending on local construction):
 - up to 50 m outdoors,
 - up to 30 m indoors
- Dimensions (HxWxL): 57,5×53,4×90 mm
- Electrical consumption: < 2 W
- · Specification Size and dimensions
- Mounting DIN rail
- Wi-Fi YES
- Bluetooth: v4.2
- Basic/EDR: YES
- Bluetooth modulation: GFSK, π/4-DQPSK, 8-DPSK
- Bluetooth frequency TX/RX 2402 2480MHz
- LAN YES
- Temperature Protection YES
- Scripting (mjs) YES
- MQTT YES
- CoAP No
- URL Actions 20
- Scheduling 50
- Add-on support No
- CPU ESP32
- Flash 8MB



Display

Home Screen – Shows the status of the circuit (on/off), current power consumption and connection status. By pressing the "OK" button and holding it for a few seconds you can go to the Menu. From there you can select with the arrow buttons and pressing the "OK":

- Main pressing the "OK" button will return you to the Home screen
- Network set on/off :
 - Wi-Fi
 - Ethernet (LAN)
 - Bluetooth
- Status status of the device
- Maintenance
 - Wi-Fi reset
 - Factory reset
 - Reboot

Technical Information

- Control through Wi-Fi from a mobile phone, PC, automation system or any other Device supporting HTTP and/or UDP protocol.
- Microprocessor management.
- Controlled elements: 4 electrical circuits/ appliances.
- Controlling elements: 4 relays.
- Shelly may be controlled by an external button/switch.

Declaration of conformity

Hereby, Alterio Robotics EOOD declares that the radio equipment type Shelly Pro 4PM 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.cloud/knowledge-base/devices/shelly-pro-4pm/Manufacturer: Allterco Robotics EOOD

Address: Bulgaria, Sofia, 1407, 103 Chernivrah Blvd. Tel.: +359 2 988 7435

E-mail: support@shelly.cloud
Web: http://www.shelly.cloud

Changes in the contact data are published by the Manufacturer at the official website of the Device http://www.shelly.cloud

All rights to trademark Shelly® and other intellectual rights associated with this Device belong to Alterio Robotics EOOD.

Documents / Resources



Shelly PRO 4PM Circuit Wi-Fi Relay Switch [pdf] User Manual

PRO 4PM Circuit Wi-Fi Relay Switch, PRO 4PM, Circuit Wi-Fi Relay Switch, Wi-Fi Relay Switch , Relay Switch

References

- Shelly Shelly
- Shelly Cloud
- Shelly Pro 4PM
- Shelly Smart Control

Manuals+,