

# Shelly Pro 2 2 Channel Smart Wifi Relay Switch Clean **Contacts Owner's Manual**

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Pro 2 2 Channel Smart Wifi Relay Switch Clean Contacts **Owner's Manual USER AND SAFETY GUIDE DIN MOUNTABLE 2-CIRCUIT WI-FI SMART RELAY SHELLY® PRO 2** 

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# 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 EOOD 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 microprocessor-managed devices, which allow remote control of electric circuits through a mobile phone, tablet, PC, or home automation system. Shelly® devices can work standalone in a local Wi-Fi network or they can also be operated through cloud home automation services. Shelly Cloud is a service that can be accessed using either Android or iOS mobile application, or with any internet browser at <a href="https://home.shelly.cloud/">https://home.shelly.cloud/</a>. Shelly® devices can be accessed, controlled and monitored remotely from any place where the User has internet connectivity, as long as the devices are connected to a Wi-Fi router and the Internet. Shelly® devices have embedded Web Interface accessible at <a href="http://192.168.33.1">http://192.168.33.1</a> when connected directly to the device access point, or at the device IP address on the local Wi-Fi network. The embedded Web Interface can be used to monitor and control the device, as well as adjust its settings.

Shelly® devices can communicate directly with other Wi-Fi devices through HTTP protocol. An API is provided by Allterco Robotics EOOD. For more information, please visit: <a href="https://shelly-api-docs.shelly.cloud/#shelly-family-overview">https://shelly-api-docs.shelly.cloud/#shelly-family-overview</a>.

Shelly® devices are delivered with factory-installed firmware. If firmware updates are necessary to keep the devices in conformity, including security updates, Allterco Robotics EOOD will provide the updates free of charge through the device embedded Web Interface or Shelly Mobile Application, where the information about the current firmware version is available. The choice to install or not the device firmware updates is user's sole responsibility. Allterco Robotics EOOD shall not be liable for any lack of conformity of the device caused by failure of the user to install the provided updates in a timely manner.

#### Control your home with your voice

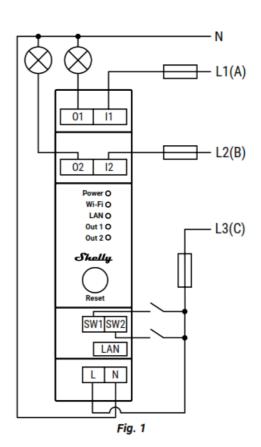
Shelly® devices are compatible with Amazon Alexa and Google Home supported functionalities. Please see our step-by-step guide on: <a href="https://shelly.cloud/support/compatibility/">https://shelly.cloud/support/compatibility/</a>.

#### 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. All Shelly® Pro devices can be controlled and monitored through Wi-Fi and LAN connections. Bluetooth connection can be used for the inclusion process.

Shelly® Pro 2 (the Device) is a DIN rail mountable 2-circuit smart relay. Enhanced with the second generation firmware flexibility and LAN connectivity, it provides the professional integrators with much more options for end customer solutions.

#### **Schematic**



#### Legend

#### **Device terminals:**

- O1, O2: Load output terminals
- I1, I2: Load input terminals
- SW1, SW2: Switch input terminals controlling O1 and O2
- L: Live (110-240 VAC) terminal
- N: Neutral terminal
- LAN: Local Area Network BJ 45 connector

#### Cables:

- N: Neutral cable
- L1(A): Load circuit 1 live (110-240 VAC) cable
- L2(B): Load circuit 2 live (110-240 VAC) cable
- L3(C): Device power supply live (110-240 VAC) cable

#### **Installation Instructions**

- △ **CAUTION!** Danger of electrocution. Mounting/installation of the Device to the power grid has to be performed with caution, by a qualified electrician.
- △ **CAUTION!** Danger of electrocution. Every change in the connections has to be done after ensuring there is no voltage present at the Device terminals.
- △ **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! Do not connect the Device to appliances exceeding the given max load!
- △ CAUTION! Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or in- jury.
- △ CAUTION! Do not install the device at a place that is possible to get wet.
- △ CAUTION! Allow at least 10 mm of space around each Pro device if you expect currents higher than 5 A per channel
- ⚠ **RECOMMENDATION** Connect the Device using solid sin- gle-core cables with increased insulation heat resistance not less than PVC T105°C.

Before starting installing/mounting the Device, 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 proceed to connecting the cables.

Connect the N terminal to the Neutral cable and the L terminal to the Device power supply circuit breaker as shown on Fig. 1. Connect the first load circuit to the O1 terminal and the Neutral cable. Connect the I1 terminal to the first load circuit breaker. Connect the second load circuit to the O2 terminal and the Neutral cable. Connect the I2 terminal to the second load circuit breaker.

Two different phases can be used for the two load circuits and a third one for the Device power supply circuit. Connect the two switches/buttons to the S1 and S2 terminals and the Device power supply circuit breaker.

 $\triangle$  **RECOMMENDATION:** For inductive appliances that cause voltage spikes during switching on/off, such as electrical motors, fans, vacuum cleaners and similar ones, RC snubber (0.1 $\mu$ F / 100  $\Omega$  / 1/2 W / 600 VAC) should be connected parallel to the appliance. The RC snubber can be purchased at <a href="https://shop.shelly.cloud/rc-snubber-wifi-smart-home-automation">https://shop.shelly.cloud/rc-snubber-wifi-smart-home-automation</a>.

#### **Initial Inclusion**

If you choose to use the Device with the Shelly Cloud mobile application and Shelly Cloud service, instructions on how to connect the Device to the Cloud and control it through the Shelly App can be found in the "App Guide". The Shelly Mobile Application and Shelly Cloud service are not conditions for the Device to function properly. This

Device can be used stand-alone or with various other home automation platforms and protocols."

△ **CAUTION!** Do not allow children to play with the buttons/switches connected to the Device. Keep the Devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

#### **LED** indication

- Power (red): Red light indicator will be on if power supply is connected.
- · Wi-Fi (varies):
  - Blue light indicator will be on if in AP mode.
  - Red light indicator will be on if in STA mode and not connected to a Wi-Fi network.
  - Yellow light indicator will be on if in STA mode and connected to a Wi-Fi network. Not connected to Shelly Cloud or Shelly Cloud disabled.
  - Green light indicator will be on if in STA mode and connected to a Wi-Fi network and to the Shelly Cloud.
  - The light indicator will be flashing Red/Blue if OTA update is in progress.
- LAN (green): Green light indicator will be on if LAN is connected.
- Out (red): Red light indicator will be on if the Output relay is closed.

#### **Reset button**

- Press and hold for 5 sec for AP mode.
- Press and hold for 10 sec for factory reset."

### **Specification**

- · Mounting: DIN rail
- Dimensions (HxWxL): 68.5×18.5×89.5 mm
- Working temperature: -20°C 40°C
- Power supply: 110 240 VAC, 50/60Hz
- Max altitude: 2000 m
- Electrical consumption: < 3 W
- · Max switching voltage: 240 VAC
- Max switching current per channel: 16 A
- Max total current trough both channels: 25 A
- Max RF output power: 13.35 dBm
- Radio protocol: Wi-Fi 802.11 b/g/n
- Wi-Fi frequency: 2412 2472 MHz (Max. 2483 MHz)
- Operational range (depending on local construction):
  - up to 50 m outdoors,
  - up to 30 m indoors
- Bluetooth: v.4.2
- Bluetooth modulation: GFSK, π/4-DQPSK, 8-DPSK
- Bluetooth frequency: TX/RX 2402 2480MHz
- Max RF output power Bluetooth: 4.25 dBm
- LAN/Ethernet (RJ45): Yes
- · Dry contacts: Yes

· Power metering: No

Overpower protection: No

Overcurrent protection: No

· Overvoltage protection: No

• Overtemperature Protection: Yes

· Scripting (mjs): Yes

MQTT: YES

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

Schedules: 20CPU: ESP32Flash: 8 MB

### **Declaration of conformity**

Hereby, Allterco Robotics EOOD declares that the radio equipment type Shelly Pro 2 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 <a href="https://shelly.cloud/knowledge-base/devices/shelly-pro-2/">https://shelly.cloud/knowledge-base/devices/shelly-pro-2/</a>

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E-mail: support@shelly.cloud

Official website: https://www.shelly.cloud

Changes in the contact data are published by the Manufacturer at the official website.

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



## **Documents / Resources**



Shelly Pro 2 2 Channel Smart Wifi Relay Switch Clean Contacts [pdf] Owner's Manual Pro 2 2 Channel Smart Wifi Relay Switch Clean Contacts, Smart Wifi Relay Switch, Relay Switch, Smart Wifi Switch, Switch

#### References

- Shelly Home
- 5 Welcome to Shelly Technical Documentation | Shelly Technical Documentation
- Shelly Pro 2
- J Shelly Smart Control
- Shelly Cloud Shelly

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