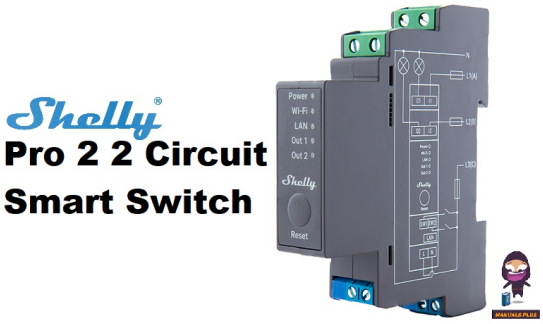


Shelly Pro 2 2 Circuit Smart Switch User Guide

Contents

Shelly Pro 2 2 Circuit Smart Switch

Product Usage Instructions

- Connect the input sources I1 and I2 to the corresponding terminals.
- Connect the output devices O1, O2, Out 1, and Out 2 to the appropriate outputs.
- Ensure power is supplied to the device through the Power input.
- Use the Wi-Fi and LAN connectivity options for network integration.
- Use the Reset button to reset the device if needed.
- Adjust settings using the SW1, SW2, and LAN controls as required.

User and safety guide
Shelly Pro 2
A DIN rail mountable 2-circuit smart switch

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 safety information.
- This sign indicates an 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 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.
- **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 plug- ging in or unplugging it, must not be metallic.
- **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 may be connected to and control only electric circuits and appliances that comply with the applicable standards and safety norms.
- **CAUTION!** Do not connect the Device to appliances that exceed the specified maximum electric load
- **CAUTION!** Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.
- **CAUTION!** The Device and the appliances connected to it must be secured by a cable protection switch under EN60898-1 (tripping characteristic B or C, max. 16A rated current, min. 6 KA interrupting rating, energy limiting class 3).
- **CAUTION!** Do not use the Device if it shows any sign of damage or defect.
- **CAUTION!** Do not attempt to repair the Device yourself.
- **CAUTION!** The Device is intended only for indoor use.
- **CAUTION!** Keep the Device away from dirt and moisture.
- **CAUTION!** Do not allow children to play with the buttons/switches connected to the Device. Keep the devices (mobile phones, tablets, PCs) for remote control of Shelly away from children.
- **CAUTION!** For inductive appliances that cause voltage spikes during switching on/off, such as electrical motors, fans, vacuum cleaners, and similar ones, an RC Snubber (0.1uF / 100 / 1/2 W / 600 VAC) should be connected in parallel with the appliance. The RC Snubber can be purchased at **https://www.shelly.com/en/products/shop/rc-snubber**.

Product description

- Shelly Pro 2 (the Device) is a DIN rail mountable 2-circuit smart switch.
- Enhanced with the second-generation firmware flexibility and LAN connectivity, it provides professional integrators with many more options for end customer solutions.
- The Device has an embedded web interface used to monitor, con- trol, 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
- Devices 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 promptly.

Wiring diagram

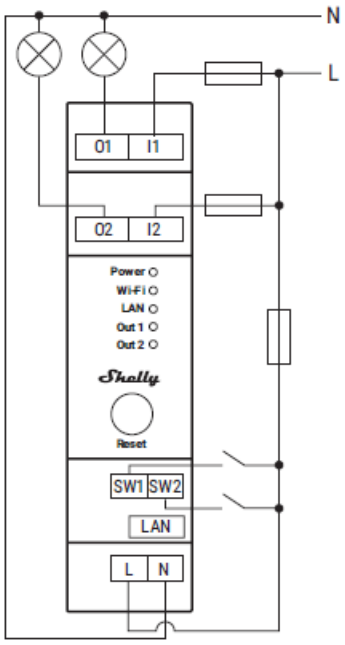


Fig. 1: Basic wiring diagram

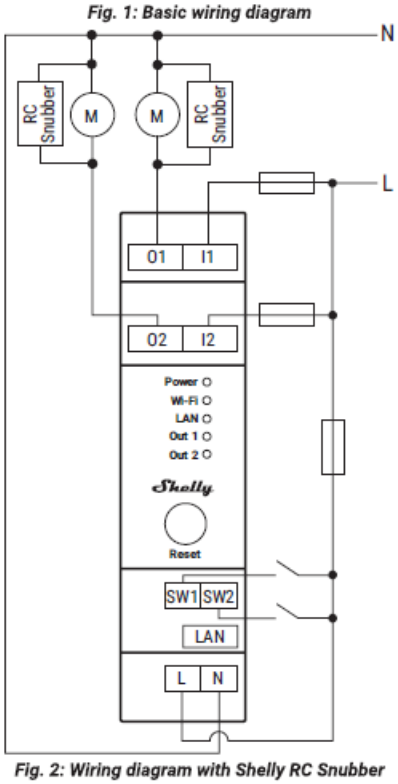


Fig. 2: Wiring diagram with Shelly RC Snubber

Legend
Device terminals

- **01, 02:** Load circuit output terminals
- **11,12:** Load circuit input terminals
- **SW1, SW2:** Switch/button input terminals
- **L:** Live terminal (110-240 V~)
- **N:** Neutral terminal

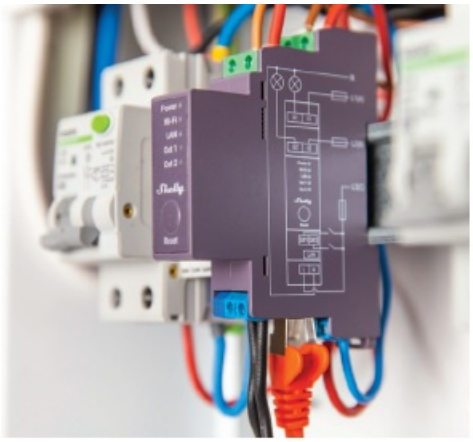
- **LAN:** Local Area Network, RJ-45 connector

Wires

- **L1(A):** Load circuit 1 live (110-240 V~) wire
- **L2(B):** Load circuit 2 live (110-240V~) wire
- **L3(C):** Device power supply live (110-240 V~) wire
- **N:** Neutral wire

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).
- Do not use buttons or switches with built-in LED or neon glow lamps.
- When connecting wires to the Device terminals, consider the specified conductor cross-section and stripped length. Do not connect multiple wires to 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- tect the Device AP (Access Point).
    1. Connect the N terminal to the Neutral wire and the L terminal to the Device power supply circuit breaker as shown in Fig. 1
    2. Connect the first load circuit to the 01 terminal and the Neutral wire.
    3. Connect the I1 terminal to the first load circuit breaker.
        - Two different phases can be used for the load circuit and the Device power supply circuit.
    4. Connect the second load circuit to the 02 terminal and the Neutral wire.
    5. Connect the 12-terminal to the second load circuit breaker.
    6. Connect the two switches/buttons to the SW1 and SW2 terminals and the Device power supply circuit breaker.
- For inductive loads, connect an RC snubber in parallel to the load. For more details, see Fig. 2.



LED indications

- Power (red): Red light indicator is on if the power supply is connected.
- Wi-Fi (varies):
    - Blue light indicator is on if in AP mode.

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

Reset button

- Press and hold for 5 seconds for AP mode.
- Press and hold for 10 seconds for a factory reset.

Specifications

Physical

- Size (HxWxD): 94x19x69 / 3.70×0.75×2.71
- Weight: 76 g / 2.68 oz
- Screw terminals max torque: 0.4 Nm / 3.5 lbin
- Conductor cross section: 0.5 to 2.5 mm* / 20 to 14 AWG (green connectors) 0.5 to 1.5 mm? / 20 to 16 AWG (blue connectors)
- 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 connectors)
- Mounting: DIN rail
- Shell material: Plastic
- Shell color: Grav

Environmental

- Ambient working temperature: -20°C to 40°C / -5°F to 105°F
- Humidity: 30% to 70% RH
- Max. altitude: 2000 m / 6562 ft

Electrical

- Power supply: 110-240 V~ 50/60 Hz
- Power consumption: < 3 W
- Output circuits ratings
- Max. switching voltage: 240 V~
- Max. switching current: 16 A per channel, 25 A total

Sensors, meters

- Internal-temperature sensor: Yes

Radio Wi-Fi

- Protocol: 802.11 b/g/n
- RF band: 2400 – 2495 MHz
- Max. RF power: < 20 dBm
- Range: Up to 50 m / 164 ft outdoors, up to 30 m / 98 ft indoors (depending on local conditions)

Bluetooth

- Protocol: 4.2
- RF band: 2402 – 2480MHz
- Max. RF power: <4 dBm
- Range: Up to 30 m / 98 ft outdoors, up to 10 m / 33 ft indoors (depending on local conditions)

Microcontroller unit

- CPU: ESP32-D0WDQ6
- Flash: 8 MB
- Firmware capabilities
- Schedules: 20
- Webhooks (URL actions): 20 with 5 URLs per hook
- Wi-Fi range extender: Yes
- BLE Gateway Yes
- Scripting: Yes
- MQTT: Yes
- Encryption: 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 **https://control.shelly.cloud/**.
- 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: **https://shelly.link/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.

Troubleshooting

- In case you encounter problems with the installation or operation of the Device, check its knowledge base page: **https://shelly.link/pro_2**

Declaration of Conformity

- Hereby, Shelly Europe Ltd. declares that the radio equipment type Shelly Pro 2 complies 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/Pro2_DoC**

Disposal and recycling

- This refers to the waste of electrical and electronic equipment. It is applicable in the EU, the US, and other countries to collect waste separately.
- This symbol on the Device or in the accompanying literature indicates that it should not be disposed of in the daily waste.
- The Device must be recycled to avoid possible damage to the environment or human health from uncontrolled waste disposal and to promote the reuse of materials and resources.
- It is your responsibility to dispose of the Device separately from general household waste when it is no longer usable.

CONTACT

- Manufacturer: Shelly Europe Ltd.
- Address: 103 Cherni Vrah Blvd., 1407 Sofia, Bulgaria
- Tel.: +359 2 988 7435
- E-mail: **support@shelly.cloud**
- Official website: **https://www.shelly.com**
- 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

FAQ

- **Q: What is the purpose of the RC Snubber?**
  - **A:** The RC Snubber is designed to reduce electrical noise and voltage spikes in circuits, improving overall performance and reliability.
- **Q: How many output devices can be connected to the RC Snubber?**
  - **A:** The RC Snubber supports multiple output devices, including O1, O2, Out 1, and Out 2 for versatile connectivity.
- **Q: Can the RC Snubber be integrated into a network?**
  - **A:** Yes, the RC Snubber features Wi-Fi and LAN connectivity options for seamless network integration.

Documents / Resources

	**Shelly Pro 2 2 Circuit Smart Switch** [pdf] User Guide O1, I1, O2, I2, Pro 2 2 Circuit Smart Switch, Pro 2, 2 Circuit Smart Switch, Circuit Smart Switch, Smart Switch, Switch

References

- **User Manual**