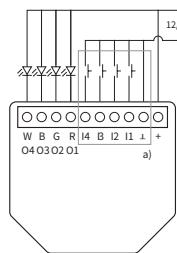
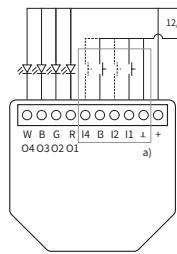


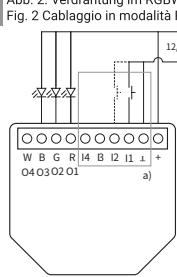
EN Wiring diagram
DE Anschlussplan
IT Schema elettrico



EN Fig. 1 Wiring in Lights mode
DE Abb. 1. Verdrahtung im Licht-Modus
IT Fig. 1 Cablaggio in modalità Luci



EN Fig. 2 Wiring in RGBW mode
DE Abb. 2. Verdrahtung im RGBW-Modus
IT Fig. 2 Cablaggio in modalità RGBW



EN Fig. 3 Wiring in RGB mode
DE Abb. 3. Verdrahtung im RGB-Modus
IT Fig. 3 Cablaggio in modalità RGB

EN

Legend

Device terminals

- +: 12/24 VDC positive terminal
- -: 12/24 VDC negative terminal
- 1, 12, 13, 14: Switch/button/potentiometer input terminals for light control
- R, G, B: Red, Green, and Blue channel outputs (when in "RGB" or "RGBW" mode)
- W: White channel output (when in "RGBW" mode)
- 01, 02, 03, 04: Light outputs (when in "Lights" mode)

Wires

- +: Positive wire
- -: Negative wire

DE

Legende

Geräteanschlüsse

- +: 12/24 VDC positive Klemme
- -: 12/24 VDC negative Klemme
- 1, 12, 13, 14: Schalter-/Taster-/Potentiometer-Eingangsanschlüsse für die Lichtsteuerung
- R, G, B: Kanalausgänge Rot, Grün- und Blau (im "RGB" oder "RGBW"-Modus)
- W: Kanalausgang Weiß (im "RGBW"-Modus)
- 01, 02, 03, 04: Lichtausgänge (im "Licht"-Modus)

Kabel

- +: Positives Kabel
- -: Negatives Kabel

IT

Leggenda

Terminali del dispositivo

- +: Terminalle positivo 12/24 VDC
- -: Terminalle negativo 12/24 VDC
- 1, 12, 13, 14: Terminali di ingresso per interruttore/pulsante/potentiometro per il controllo della luce
- R, G, B: Uscite dei canali rosso, verde e blu (in modalità "RGB" o "RGBW")
- W: Uscita canale bianco (in modalità "RGBW")
- 01, 02, 03, 04: Uscite luminose (in modalità "Luci")

Cavi

- +: Cavo positivo
- -: Cavo negativo

00124 Ver1



EN

User and safety guide

Shelly Plus RGBW PM
Wi-Fi/Bluetooth-operated RGBW controller

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 important note.

⚠ CAUTION! Installation of the Device must be performed carefully by a qualified electrician.

⚠ CAUTION! The Device operates at 12 or 24 VDC. Do not connect it directly to the power grid.

⚠ CAUTION! Before making any changes to the connections, ensure there is no voltage present at the Device terminals.

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

⚠ CAUTION! Before installing the Device, check that 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! The Device is intended only for indoor use.

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

Product description

Shelly Plus RGBW PM (the Device) is a Wi-Fi/Bluetooth-operated RGBW controller. It can be connected like any LED controller and allows the lighting to be controlled directly from a mobile device or tablet. It supports 3 profiles - "Lights", "RGB", and "RGBW". Power measurement functionality allows real time track of the voltage, current and power consumption.

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.

⚠ Do not use buttons or switches with built-in LED or neon glow lamps.

Connect the + wire to the + terminal and the - wire to the - terminal of the Device.

Lights mode:

In Lights mode, the Device can control up to 4 different LED strips (groups of lights) independently.

Connect the positive wire of the LED strips to the + wire and the negative to the corresponding Device outputs 01, 02, 03, and 04 as shown in Fig. 1 a).

Connect either a button (single-button dimming only possible) as shown in Fig. 1 a), a switch as shown in Fig. 1 b), or a potentiometer as shown in Fig. 1 c) to each input 11, 12, 13, and 14 which controls the corresponding output 01, 02, 03, and 04.

RGBW mode:

In RGBW mode, the Device can control a single RGBW LED strip.

Connect the positive wire of the LED strip to the + wire and the R, G, B, and W ones to the corresponding Device outputs R, G, B, and W as shown in Fig. 2 a).

You can use either single or dual-button dimming to control the brightness of the RGB and the white lights independently as shown in Fig. 2 a).

For single-button dimming, connect a button to 11 for the RGB light and a button to 13 for the white light.

For dual-button dimming, connect 2 buttons to 11 and 12 for the RGB light, and 2 buttons to 13 and 14 for the white light.

Pressing the buttons connected to 11 and 13 increases the brightness, and of the ones connected to 12 and 14 decreases it.

If you want to just turn on/off the LED strip, connect a switch to 11 as shown in Fig. 2 b).*

The RGB and the white lights are turned on/off by the switch simultaneously.

If you want to use a potentiometer to smoothly control the brightness of the LED strip, connect one to 11 as shown in Fig. 2 c).*

The RGB and the white lights are dimmed by

the potentiometer simultaneously.

RGB mode

In RGB mode, the Device can control a single RGB LED strip.

Connect the positive wire of the LED strip to the + wire and the R, G, and B ones to the corresponding Device outputs R, G, and B as shown in Fig. 3 a).

You can use either single or dual-button dimming for brightness control as shown in Fig. 3 a).

For single-button dimming, connect a button to 11 and for dual-button dimming, connect another one to 12.

In dual-button dimming pressing the button connected to 11 increases the brightness, and of the one connected to 12 decreases it. If you want to just turn on/off the LED strip, connect a switch to 11 as shown in Fig. 3 b).*

If you want to use a potentiometer to smoothly control the brightness of the LED strip, connect one to 11 as shown in Fig. 3 c).*

* You can adjust the brightness and the color independently in your mobile application or the Device web interface.

Specifications

Physical

- Size (HxWxD): 42x37x12 mm / 1.65x1.46x0.47 in
- Weight: 16 g / 0.56 oz
- Screw terminals max torque: 0.2 Nm / 1.8 lb-in
- Conductor cross section: 0.1 to 1 mm² / 30 to 16 AWG (solid, stranded, and bootlace ferrules)
- Conductor stripped length: 6 mm / 0.24 in
- Mounting: In-wall
- Shell material: Plastic
- Shell color: Yellow
- Connectors color: Green

Environmental

- Ambient working temperature: -20°C to 40°C / -5°F to 105°F
- Humidity: 30% to 70% RH

Electrical

- Power supply: 12/24 VDC
- Power consumption: < 1.2 W

Output circuit ratings

- Max. control voltage: 24 VDC
- Max. control current: 4 A per channel (10 A total)

PMW frequency: 22 kHz

Sensors, meters

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

Radio

Wi-Fi

- Protocol: 802.11 b/g/n

- RF band: 2401 - 2495 MHz

- Max. RF power: < 20 dBm

- Range: Up to 30 m / 98 ft indoors and 50 m / 164 ft outdoors (Depends on local conditions)

Bluetooth

- Protocol: 4.2

- RF band: 2400 - 2483.5 MHz

- Max. RF power: < 4 dBm

- Range: Up to 10 m / 33 ft indoors and 30 m / 98 ft outdoors (Depends on local conditions)

Microcontroller unit

- CPU: ESP32

- Clock frequency: 160 Mhz

- RAM: 400 KB

- Flash: 4 MB

Firmware capabilities

- Schedules: 20
- Webhooks (URL actions): 20 with 5 URLs per hook
- Scripting: Yes
- MQTT: 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 <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>.

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Connect either a button (single-button dimming only possible) as shown in Fig. 1 a), a switch as shown in Fig. 1 b), or a potentiometer as shown in Fig. 1 c) to each input 11, 12, 13, and 14 which controls the corresponding output 01, 02, 03, and 04.

RGBW mode:

In RGBW mode, the Device can control a single RGBW LED strip.

Connect the positive wire of the LED strip to the + wire and the R, G, B, and W ones to the corresponding Device outputs R, G, B, and W as shown in Fig. 2 a).

You can use either single or dual-button dimming to control the brightness of the RGB and the white lights independently as shown in Fig. 2 a).

For single-button dimming, connect a button to 11 for the RGB light and a button to 13 for the white light.

For dual-button dimming, connect 2 buttons to 11 and 12 for the RGB light, and 2 buttons to 13 and 14 for the white light.

Pressing the buttons connected to 11 and 13 increases the brightness, and of the ones connected to 12 and 14 decreases it.

If you want to just turn on/off the LED strip, connect a switch to 11 as shown in Fig. 2 b).*

The RGB and the white lights are turned on/off by the switch simultaneously.

If you want to use a potentiometer to smoothly control the brightness of the LED strip, connect one to 11 as shown in Fig. 2 c).*

The RGB and the white lights are dimmed by

the potentiometer simultaneously.

The host manufacturer has the responsibility that the host device should be compliant with all essential requirement of RED. This restriction will be applied in all member states.

The simplified EU declaration of conformity referred to in Article 10(6) shall be provided as follows:

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