Shelly X2 Wall Display Dimmer Instruction Manual

Shelly X2 Wall Display Dimmer

Contents

Legend

Device terminals

- **SW**: Switch input terminal
- **O**: Output terminal
- **N**: Neutral terminal
- **L**: Live terminal (230 V~, 50/60 Hz)

Wires

- **N**: Neutral wire
- **L**: Live wire (230 V~, 50/60 Hz)

User and safety guide Shelly Wall Display X2

Smart home control panel

Referred to in this document as "the Device"
⚠ This sign indicates safety information.
ⓘ This sign indicates an important note.

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.

⚠ **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.

⚠ **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 must be secured by a cable protection switch in accordance with 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.

ⓘ 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.

Product description

Shelly Wall Display X2 (the Device) is a smart home control panel with a 6.95" color display and load circuit switching functionality.
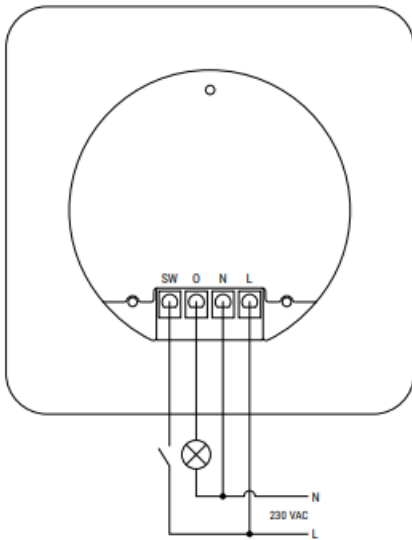The Device has an embedded web interface to monitor, control, and adjust its settings.
You can open the web interface by entering the device's IP address into your browser when accessed from the same network the Device is connected to.
The Device can access and interact with other smart devices or automation systems if they are in the same network infrastructure. Shelly Europe Ltd. provides APIs for the devices, their integration, and cloud control.
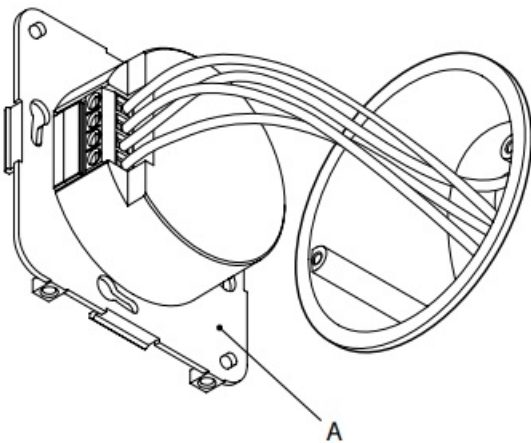For more information, visit **https://shelly-api-docs.shelly.cloud**.
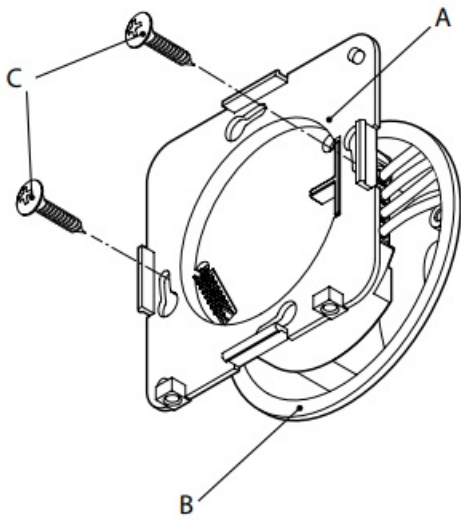
Wiring diagram – Fig. 1

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).

1. Connect the wires to the power module
   (Fig. 2 A) according to the wiring diagram

   (Fig. 1):
   a. Connect the Live wire to the Device L terminal
   b. Connect the Neutral wire to the N terminal.
   c. Connect the load to the Output terminal O and the Neutral wire.
   d. Connect a switch or a button to the Device SW terminal and the Live wire.
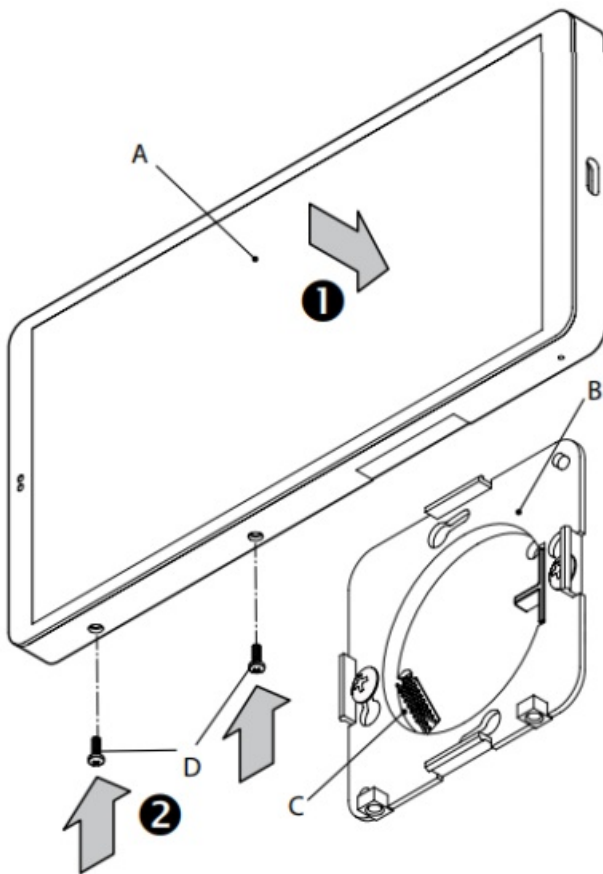2. Install the power module (Fig 3 A):

a. Insert the power module with the wires in the wall box (Fig. 3 B).

b. Fix the module to the wall box with two screws (Fig. 3 C).

ⓘ Be careful not to bend the header pins

(Fig. 4 C) when inserting them into the display module header connection. See Step 3c.

3. Install the display module (Fig. 4 A)

   a. Align the female pin header of the display with the header pins on the power module (Fig. 4 C).

   b. Press the display against the power module until you hear a click.

   c. Place the two supplied screws into the holes on the lower side of the display (Fig. 4 D).

   d. Fasten the screws to prevent accidental detachment.

ⓘ Alternatively, you can power the Device through its USB Type-C port. Note that if the Device is powered through USB, you cannot use its switching circuit functionality.

Specifications

Physical

- Size (HxWxD): 87x178x33 mm / 3.43x7x1.3 in
- Weight: 256 g / 9.03 oz
- Touch screen: 5-point capacity screen
- Screw terminals max torque: 0.4 Nm / 3.5 lbin
- Conductor cross section: 0.2 to 2.5 mm² / 24 to 14 AWG (solid, stranded, and bootlace ferrules)
- Conductor stripped length: 6 to 7 mm / 0.24 to 0.28 in
- Mounting: Wall console / In-wall box
- Shell material: Plastic, aluminum, glass
- Shell color:
    - Black
    - White
- Connector's color: Black
- **Speaker**: 0.8W*1
- **USB port**: Type-C

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:** 230 V~, 50/60Hz
- **Power consumption:** < 1 W
- **USB Type-C power supply:** 5 V , 1 A

Output circuits ratings

- **Max. switching voltage:** 230 V~
- **Max. switching current:** 5 A

Sensors, meters

- **Internal-temperature sensor**: No
- **Ambient temperature sensor**: Yes
- **Humidity sensor:** Yes
- **Light sensor:** Yes
- **Microphone:** Yes
- **G-sensor:** Yes
- **Proximity sensor:** Yes

Radio Wi-Fi

- **Protocol:** 802.11 b/g/n
- **RF band:** 2412-2472 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**: 2402-2480 MHz
- **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:** SC7731E, Quad Core A7 1.3GHz
- **RAM:** 1 GB
- **Flash:** 4 GB
- **System:** Android 8.1

Firmware capabilities

- **Schedules:** 20
- **Web hooks (URL actions):** 20 with 5 URLs per hook
- **BLE Gateway:** Yes
- **Scripting:** No
- **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 at0 **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 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/wall_display_x2**

Declaration of Conformity

Hereby, Shelly Europe Ltd. declares that the radio equipment type Shelly Wall Display X2 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/wall_display_x2_DoC**

Disposal and recycling

This refers to the waste of electrical and electronic equipment. It is applicable in the EU, 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 already unusable.

CUSTOMER SUPPORT

For UP PSTI Act Statement of Compliance scan the QR code

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Tel.: +359 2 988 7435
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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.

Documents / Resources

	Shelly X2 Wall Display Dimmer [pdf] Instruction Manual X2 Wall Display Dimmer, Display Dimmer, Dimmer

References

- ⊕ **Shelly Control**

- 🔄 **Welcome to Shelly Technical Documentation | Shelly Technical Documentation**
- 🔄 **Shelly Smart Control guide**
- **User Manual**