# Shelly Wall Display Xl



## Device identification

- Device name: **Shelly Wall Display XL**

- Device model: **SAWD-3A1XE10EU2**

- Device Bluetooth ID: **0x3003**

## Short description

Shelly Wall Display XL (the Device) is a smart home control panel with a 10.1" color display and load circuit switching functionality.

## Main features

- Touch-sensitive 10.1" color display

- Easy navigation and customizable home screen

- Integrated relay for appliance control

- Integrated 2x 2 W speakers

- Integrated On/Off screen button

- Integrated 4 buttons fully customizable for easy control of set devices

- Integrated light sensors

- Power consumption monitoring of all devices in a room in your Shelly Smart Control account

## Use cases

- **Space-efficient fitting:** Install the Shelly Wall Display XL in standard electrical wall boxes for light switches.

- **Appliance Control:** Use it to remotely control and automate the operation of various electric appliances such as lights, fans, or other devices. Adjust operation of dehumidifiers, humidifiers, and fans based on the current temperature and humidity conditions. Control other devices based on integrated LUX measurement sensor.

- **Power Monitoring:** Monitor the power consumption of appliances in the room in your Shelly Smart Control account. This is useful for understanding energy usage patterns and promoting energy efficiency.

- **Home Automation:** Integrate the Shelly Wall Display XL into your home automation system to create custom scenes and schedules for your devices.

- **Audio integration:** Connect a Bluetooth or Sonos speaker to the Shelly Wall Display X2 for enhanced audio control. Stream music, notifications, alarms, and other audio signals for better sound coverage.

- **Energy Efficiency:** Leverage the power measurement feature to identify energy-hungry appliances and make informed decisions to improve overall energy efficiency in your home.

- **Remote Monitoring:** Keep an eye on your devices even when you're away from home. The remote access feature allows you to monitor and control connected appliances from anywhere with internet connectivity.

- **Climate control:** Adjust the heating, ventilation, and air conditioning system based on current temperature and humidity levels to maintain a comfortable indoor environment.

- **Prevent mold and mildew:** Monitor humidity levels to prevent the growth of mold and mildew in spaces like basements and bathrooms. The Shelly Wall Display XL can activate ventilation or dehumidification devices when needed.

- **Alerts and notifications:** Receive alerts or notifications when the temperature or humidity reaches predefined thresholds and prevent issues like frozen pipes in cold weather or excessive moisture.

- **Optimizing greenhouse conditions:** Optimize conditions for greenhouse plants by adjusting watering systems and ventilation based on humidity and temperature levels.

- **Security enhancement:** Increase your home protection by detecting unusual temperature changes that might indicate fire or flood.

# Main applications

- Residential

- MDU (Multi Dwelling Units - apartments, condominiums, hotels, etc.)

- Light commercial (small office buildings, small retail/restaurant/gas station, etc.)

- Government/municipal

- University/college

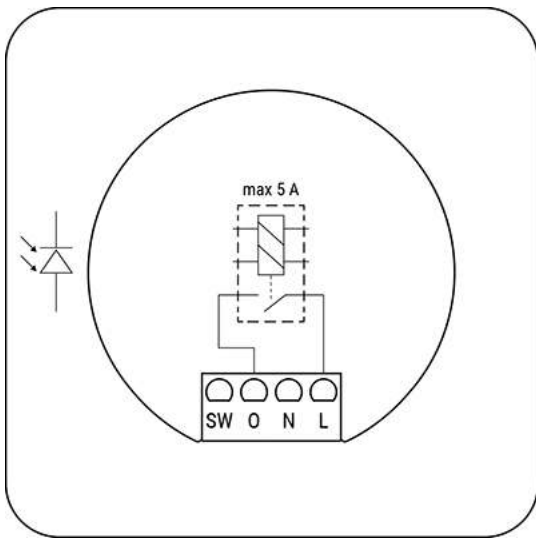# Integrations

## Amazon Alexa supported capabilities

N/A

## Google Smart Home supported traits

N/A

## Samsung SmartThings supported capabilities

N/A

# Simplified internal schematics

# Device electrical interfaces

## Inputs

- 1 switch/button input on screw terminal

- 2 power supply inputs on screw terminals: N and L

## Outputs

- 1 relay output

## Connectivity

- Wi-Fi

- Bluetooth

## Safety function

- Overheating protection

## Supported load types

- Resistive (incandescent bulbs, heating devices)

- Capacitive (capacitor banks, electronic equipment, motor start capacitors)

- Inductive (LED light drivers, transformers, fans, refrigerators, air-conditioners)

## User interface

- 1 screen On/Off button

    - Short press: Screen ON/OFF

    - Hold ‹ 5s choose reboot option (soft or full)

    - Hold › =5 s force full reboot

- 4 customizable push buttons - from top to bottom (push buttons 1-4). By default they are set as:

    - Button 1 - Volume UP (supports hold)

    - Button 2 - Volume Down (supports hold)

    - Button 3 - Relay ON (does not support hold)

    - Button 4 - Relay OFF (does not support hold)

Buttons 1 through 4 can be customised as follows:

1. Control media player (Prev, Next, Pause, Stop, Choose song)

2. Play radio (Stop, Choose station)

3. Control your home (Device control, Group control, Scene execution) - ON/OFF/Toggle for devices and also lights

4. Clear custom action and revert to default (see above)

- Touch-sensitive 10.1" 5-point capacity color display with fully-customizable layout.

# Specifications

| Quantity | Value |
|---|---|
| **Physical** | |
| Size (HxWxD): | 155,8x272,5x38,3 mm / 6.13x10.7x1.50 inch |
| Weight: | 920 g / 32.45 oz |
| Touch Screen: | 5-point capacity screen, G+FF touch |
| Screen resolution: | 1280x752 px |
| 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: | 15 mm / 0.24 to 0.59 in |
| Mounting: | Wall box |
| Shell material: | Metal stamping, PC with coating, glass |
| Shell color: | <ul><li>Black with Grey frame</li><li>Black with Black frame</li></ul> |
| Speaker: | 2x 2 W (BOX sound cavity) |
| **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: | 100 - 240 V~ 50/60Hz |
| Power consumption: | ‹ 15 W |
| USB TYPE-C power supply: | 5 V⎓ / 3 A |
| Power Button: | 1 button for turning On/Off the screen |
| Control Buttons: | 4 functional buttons for setting |
| **Output circuits ratings** | |
| Max. switching voltage: | 240 V~ |
| Max. switching current: | 5 A |
| Output (AC) | 100 - 240 V~ 50/60Hz |
| Output (USB TYPE-C) | 5 V⎓ / 0.5 A |
| **Sensors, meters** | |
| Internal-temperature sensor: | No |
| Ambient temperature sensor: | No |
| Humidity sensor: | No |
| Light sensor: | Yes |
| Microphone: | Yes (Four-microphone line array) |
| G-sensor: | No |
| Proximity sensor: | Yes (≤1 meter) |
| **Radio** | |
| **Wi-Fi** | |

| | |
|---|---|
| Protocol: | Wi-Fi 6 Dual Band |
| RF band: | 2.4 & 5 GHz |
| Max. RF power: | ‹ 20 dBm |
| Range: | Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors<br>(Depends on local conditions) |
| **Bluetooth** | |
| Protocol: | 5.4 |
| RF band: | 2402 - 2480 MHz |
| Max. RF power: | ‹ 4 dBm |
| Range: | Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors<br>(Depends on local conditions) |
| **Microcontroller unit** | |
| CPU: | Rockchip RK3566 Quad core Cortex-A55 |
| RAM: | 2 GB |
| Flash: | 16 GB |
| System: | Android 11 |
| **Firmware capabilities** | |
| Schedules: | 20 |
| Webhooks (URL actions): | 20 with 5 URLs per hook… |
| Scripting: | No |
| MQTT: | Yes |

# Basic wiring diagrams
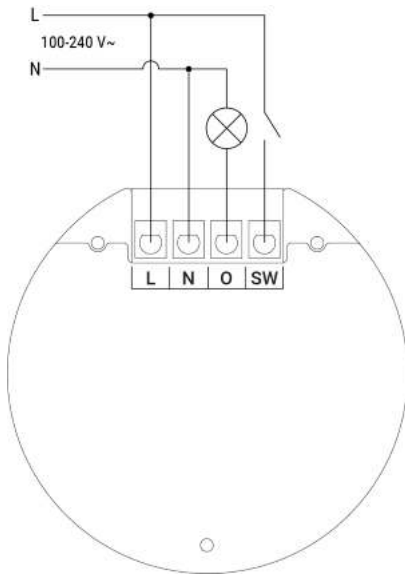
## Legend

| Terminals | | Wires | |
|-----------|--|-------|--|
| SW | Switch input terminal | N | Neutral wire |
| O | Output terminal | L | Live (100-240 VAC, 50/60 Hz) wire |
| N | Neutral terminal | | |
| L | Live (100-240 VAC, 50/60 Hz) terminal | | |

## Shelly Smart Control

- Adding the device to the Shelly Smart Control

## Shelly Web user interface

- Shelly Wall Display Web user interface guide

## Troubleshooting

1. **Ensure that the device is properly powered:**

   - Check power cables, outlets, and any power indicators on the device.

2. **Inspect Connections:**

   - Verify that all connections, including cables and wiring, are secure and properly seated. Loose connections can lead to functionality issues.

3. **Review Device Settings:**

   - If applicable, check and review the device settings. Ensure that configurations are correct and match your intended use.

4. **Update Firmware/Software:**

   - Check if there are any available firmware or software updates for the device. Keeping the device up-to-date can resolve known issues and improve performance.

5. **Restart or Reboot:**

- Sometimes, a simple restart can resolve temporary glitches. Turn off the device, wait a few seconds, and then power it back on.

6. **Check Network Connection:**

    - If the device is connected to a network, ensure that the network settings are correct. Test the network connection and consider restarting routers or switches if needed.

7. **Inspect Physical Components:**

    - Physically inspect the device for any signs of damage, overheating, or unusual behavior.

8. **Check Compatibility:**

    - Ensure that the device is compatible with other components in your system, including hardware and software. Incompatibility issues can lead to malfunctions.

9. **Monitor Environmental Factors:**

    - Consider environmental factors such as temperature and humidity.

10. **Inspect Power Supply Quality:**

    - Poor power quality, including voltage spikes or fluctuations, can affect device performance. Consider using a surge protector or voltage regulator if needed.

*These are general troubleshooting steps, and the specific steps may vary based on the type of device or issue you are facing. If the issue persists and you are unable to resolve it, consider reaching out to our technical customer support.

# Components and APIs

All Shelly devices and services

# Compliance

Shelly Wall Display XL multilingual EU declaration of conformity 2025-09-04.pdf

UK PSTI ACT Statement of compliance - Shelly Wall Display XL.pdf

# Printed user guide

Shelly Wall Display XL multilingual printed user and safety guide.pdf

# Installation guides

Unternehmen