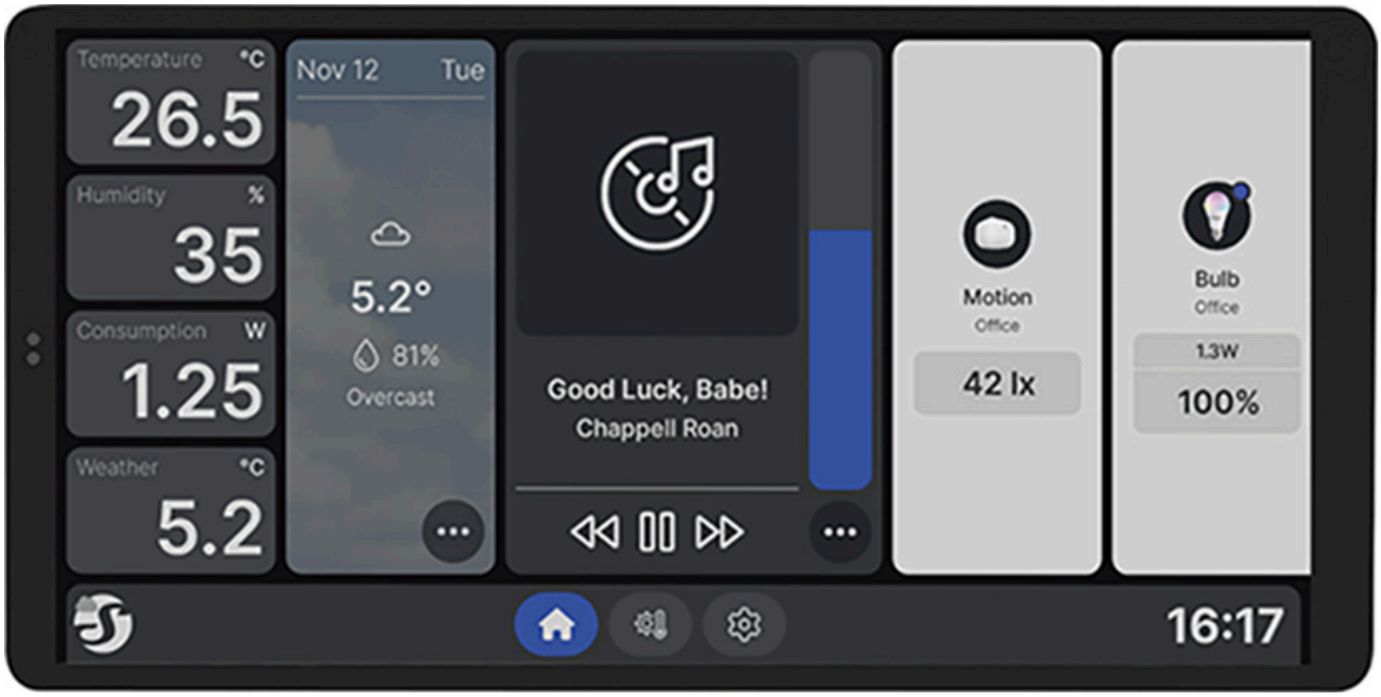
Shelly Wall Display X2



Device identification

- Device name: **Shelly Wall Display X2**
- Device model: **SAWD-2A1XX10EU1**
- Device Bluetooth ID: **0x3002**

Short description

Shelly Wall Display X2 (the Device) is a smart home control panel with a 6.95” color display and load circuit switching functionality.

Main features

- Touch-sensitive 6.95” color display
- Easy navigation and customizable home screen
- Choice between panoramic and portrait view on the display
- Integrated relay for appliance control
- Integrated 0.8 W speaker
- Integrated temperature, humidity, and light sensors
- Power consumption monitoring of all devices in a room in your Shelly Smart Control account

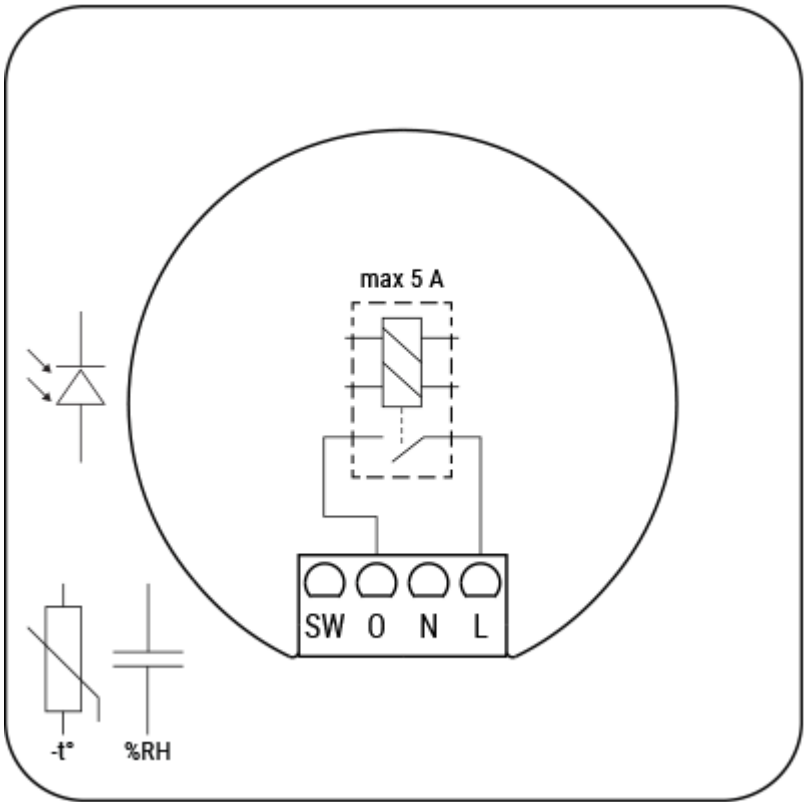
Use cases

- **Space-efficient fitting:** Install the Shelly Wall Display X2 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

- **Home Automation:** Integrate the Shelly Wall Display X2 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 X2 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.

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 appliances)
- Capacitive (capacitor banks, electronic equipment, motor starting capacitors)
- Inductive with RC Snubber (LED light drivers, transformers, fans, refrigerators, air-conditioners, washing machines, tumble dryers)

User interface

Touch-sensitive 6.95” 5-point capacity color display with fully-customizable layout.

Specifications

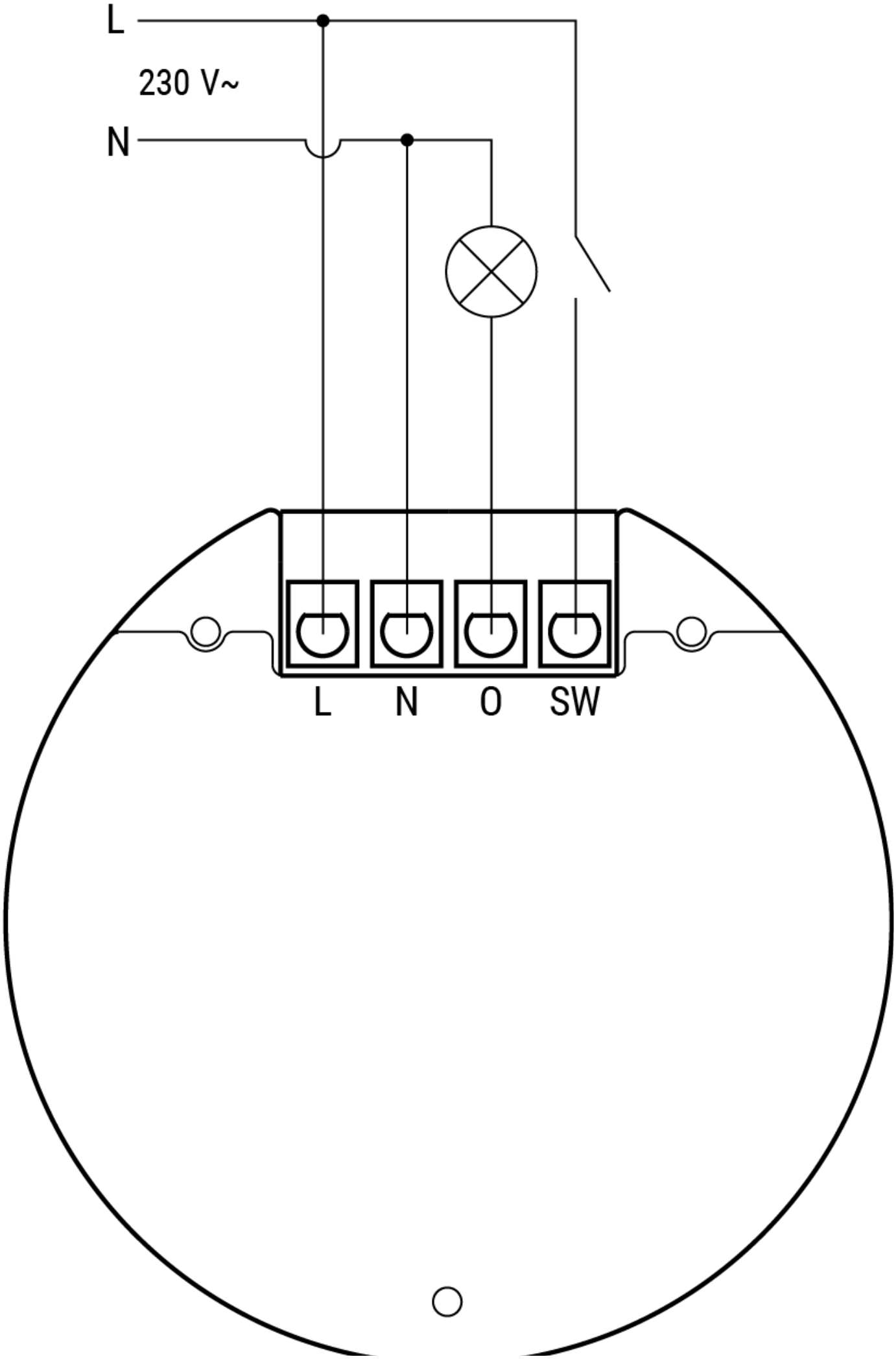
Quantity	Value

Physical	
Size (HxWxD):	87x178x33 mm / 3.43x7x1.3 inch
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 inch
Mounting:	Wall box
Shell material:	Plastic, aluminum, glass
Shell color:	Black
Speaker:	0.8W*1
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 VAC, 50/60Hz
Power consumption:	< 1 W
USB TYPE-C power supply:	5V⎓, 1A

Output circuits ratings	
Max. switching voltage:	230 VAC
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 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth	
Protocol:	5.0
RF band:	2402 - 2480 MHz

Max. RF power:	< 4 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends 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
Webhooks (URL actions):	20 with 2 URLs per hook…
Scripting:	No
MQTT:	Yes

Basic wiring diagrams


L
230 V~
N
L
N
O
SW

Legend

Terminals		Wires	
SW	Switch input terminal	**N**	Neutral wire
O	Output terminal	**L**	Live (230 VAC, 50/60 Hz) wire
N	Neutral terminal		
L	Live (230 VAC, 50/60 Hz) terminal		

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.

Compliance

- Shelly Wall Display X2 UK PSTI ACT Statement of compliance.pdf
- Shelly Wall Display X2 multilingual EU declaration of conformity.pdf

Printed user guide

- Shelly Wall Display X2 multilingual printed user and safety guide.pdf

Installation guides