



USER AND SAFETY GUIDE

Z-Wave™ shutter control with power measurement

READ BEFORE USE

This document contains important technical and safety information about the Device, its safe use and installation.

CAUTION! Before beginning the installation, please read carefully and entirely this guide and any other documents accompanying the Device. Failure to follow the installation procedures could lead to installation, danger to your health and life, violation of law or refusal of legal and/or commercial guarantee (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 of following the user and safety instructions in this guide.

TERMINOLOGY

Gateway – A Z-Wave™ gateway, also referred to as a Z-Wave™ controller, Z-Wave™ main controller, Z-Wave™ primary controller, or Z-Wave™ hub, etc. is a device that serves as a central hub for a Z-Wave™ smart home network. The term "gateway" is used in this document.

S button – The Z-Wave™ Service button, which is located on Z-Wave™ devices and is used for various functions such as inclusion (adding), exclusion (removing), and resetting the device to its factory default settings. The term "S button" is used in this document.

Device – In this document, the term "Device" is used to refer to the Shelly Qubino device that is a subject of this guide.

ABOUT SHELLY QUBINO

Shelly Qubino is a line of innovative microprocessor-managed devices, which allow remote control of electric circuits with a smartphone, tablet, PC, or home automation system. They work on Z-Wave™ wireless communication protocol, using a gateway. When the gateway is connected to the internet, you can control Shelly Qubino devices remotely from anywhere. Shelly Qubino devices can be operated in any Z-Wave™ network with other Z-Wave™ certified devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. Devices are designed to work with older generations of Z-Wave™ devices and gateways.

ABOUT THE DEVICE

The Device enables remote control of motorized blinds, roller shutters, venetian blinds, awnings, etc. It measures power consumption of the connected device.

It is recommended to use only motors for blinds with electronic or mechanical limit switches. The motor limit switches must be set correctly before connecting the Device to the motor.

ELECTRICAL DIAGRAM (110–240 V AC)

Connecting to the power grid with power supply 110-240 V AC (Fig. 1-5).

INSTALLATION INSTRUCTIONS

The Device can control a bi-directional AC motor. It can be retrofitted into standard electrical wall boxes, behind the switches or other places with limited space.

CAUTION! Danger of electrocution. Mounting/installation of the Device to the power grid has to be performed with caution, by a qualified electrician.

CAUTION! Danger of electrocution. Every change in the connections has to be done after ensuring there is no voltage present at the Device terminals.

CAUTION! Use the Device only with a power grid and appliances that comply with all applicable regulations. A shunt circuit in the power grid or any appliance connected to the Device may damage it.

CAUTION! Do not connect the Device to appliances exceeding the given max. load!

CAUTION! Do not shorten the antenna.

RECOMMENDATION: Place the antenna as far away as possible from metal elements as they can cause signal interference.

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

CAUTION! Do not install the Device where it can get wet.

CAUTION! Do not use the Device if it has been damaged!

CAUTION! Do not attempt to service or repair the Device yourself!

RECOMMENDATION: Connect the Device using solid single-core wires with increased insulation heat resistance not less than PVC T105°C (221°F)

CAUTION! Before starting the mounting/installation of the Device, check that the breakers are turned off and there is no voltage on their terminals. This can be done with a phase tester or multimeter. When you are sure that there is no voltage, you can proceed to connecting the wires.

If you want to use the Device with a push-button, refer to the Fig. 1 and Fig. 2. For a switch, refer to the Fig. 3 and Fig. 4.

CAUTION! Use only one phase AC circuit. Do not use mixed AC and DC circuits.

Connect both L Terminals to the Live wire and the N terminal to the Neutral wire. Connect the common motor terminal/wire to the Neutral wire. Connect motor direction terminals/wires to the O1 and O2 terminals.* Connect the first switch/push-button to the SW1 terminal and the Live wire. Connect the second switch/push-button to the SW2 terminal and the Live wire. *The Device outputs can be reconfigured to match the required rotation direction.

RECOMMENDATION: For inductive appliances that cause voltage spikes during switching on/off, such as electrical motors, fans, vacuum cleaners and similar ones, RC snubber (0.1 µF / 100 Ω / 1/2 W / 600 V AC) should be connected parallel to the appliance.

CAUTION! Do not allow children to play with the push-buttons/switches connected to the Device. Keep the Devices for remote control of Shelly Qubino (mobile phones, tablets, PCs) away from children.

AUTOMATIC CALIBRATION

Automatic calibration is a process during which the Device learns the position of the limit switches.

Note! For the correct position operation, the Device must perform a calibration procedure!

Note! The motor must be equipped with electronic or mechanical limit switches and the limit positions must be set correctly before calibration!

Note! The calibration is successful when the Device performs a complete cycle of movement: up, down, up, down to 50%.

Note! If the calibration is not executed, check that the limit switches are correctly set and that the wiring is done according to the instructions in the User Guide.

Automatic calibration with the push-button SW1:

1. Move blind to the top (upper) position.

2. Press SW1 4 times in 3 seconds.

3. The Device will start calibration and complete 3 cycles: down, up, down to 50%.

4. Check the LED status to see if the calibration has been successful.

Automatic calibration with the S button:

Note! Calibration with the S button is not time-limited and can be started anytime.

1. Enter the Setting mode by pressing the S button for less than 0.5s (short press).

2. Keep pressing the S button until the calibration is selected, indicated by the yellow LED colour.

3. Start calibration by pressing the S button for more than 2 seconds.

4. The Device will start calibration and complete 3 cycles: down, up, down to 50%.

5. Check the LED status to see if the calibration has been successful.

VENETIAN MODE

Note! For more information about Venetian mode and this Device in general refer to the Extended User Guide available at: <https://kb.shelly.cloud/>

Z-WAVE™ ADDING / REMOVING / FACTORY RESET

Note! The blind connected to the Device will move 2s up/2s down if the Device is successfully added to/removed from a Z-Wave™ network.

Note! In case of Security 2 (S2) adding (inclusion), a dialog will appear asking you to enter the responding PIN Code (S underlined) that is written on the Z-Wave™ DSK label on the side of the Device and on the Z-Wave™ DSK label inserted in the packaging. IMPORTANT: The PIN Code must not be lost.

Adding the Device to a Z-Wave™ network (inclusion) SmartStart adding (inclusion):

SmartStart enabled products can be added into a Z-Wave™ network by scanning the Z-Wave™ QR Code present on the Device with a gateway providing SmartStart inclusion. No further action is required in the SmartStart device as the device will be added automatically within 10 minutes of being switched on in the network vicinity.

1. With the gateway application scan the QR code on the Device label and add the Security 2 (S2) Device Specific Key (DSK) to the provisioning list in the gateway.

2. Connect the Device to a power supply.

3. Check if the blue LED is blinking in Mode 1. If so, the Device is not added to a Z-Wave™ network.

4. Adding will be initiated automatically within a few seconds after connecting the Device to a power supply, and the Device will be added to a Z-Wave™ network automatically.

5. The blue LED will be blinking in Mode 2 during the adding process.

6. The green LED will be blinking in Mode 1 if the Device is successfully added to a Z-Wave™ network.

Adding (inclusion) with a switch/push-button:

1. Connect the Device to a power supply.

2. Check if the blue LED is blinking in Mode 1. If so, the Device is not added to a Z-Wave™ network.

3. Enable add/remove mode on the gateway.

4. Toggle the switch/push-button connected to any of the SW terminals (SW, SW1, SW2, etc.) 3 times within 3 seconds (this procedure puts the Device in Learn mode*). The Device must receive on/off signal 3 times, which means pressing the momentary switch 3 times, or toggling the switch on and off 3 times.

5. The blue LED will be blinking in Mode 2 during the adding process.

6. The green LED will be blinking in Mode 1 if the Device is successfully added to a Z-Wave™ network.

***Learn mode** state allows the Device to receive network information from the gateway.

Adding (inclusion) with the S button:

1. Connect the Device to a power supply.

2. Check if the blue LED is blinking in Mode 1. If so, the Device is not added to a Z-Wave™ network.

3. Enable add/remove mode on the gateway.

5. Quickly release and then press and hold (> 2s) the S button on the Device until the blue LED starts blinking in Mode 3. Releasing the S button will start the Learn mode.

6. The blue LED will be blinking in Mode 2 during the adding process.

7. The green LED will be blinking in Mode 1 if the Device is successfully added to a Z-Wave™ network.

Note! In Setting mode, the Device has a timeout of 10s before entering again into Normal mode.

Removing the Device from a Z-Wave™ network (exclusion)

Note! The Device will be removed from your Z-Wave™ network, but any custom configuration parameters will not be erased.

Removing (exclusion) with a switch/push-button:

1. Connect the Device to a power supply.

2. Check if the green LED is blinking in Mode 1. If so, the Device is added to a Z-Wave™ network.

3. Enable add/remove mode on the gateway.

4. Toggle the switch/push-button connected to any of the SW terminals (SW, SW1, SW2, etc.) 3 times within 3 seconds (this procedure puts the Device in Learn mode**). The Device must receive on/off signal 3 times, which means pressing the momentary switch 3 times or toggling the switch on and off 3 times.

5. The blue LED will be blinking in Mode 2 during the removing process.

6. The blue LED will be blinking in Mode 1 if the Device is successfully removed from a Z-Wave™ network.

Removing (exclusion) with the S button:

1. Connect the Device to a power supply.

2. Check if the green LED is blinking in Mode 1. If so, the Device is added to a Z-Wave™ network.

3. Enable add/remove mode on the gateway.

4. To enter the Setting mode, quickly press and hold the S button on the Device until the LED turns Solid blue.

5. Quickly release and then press and hold (> 2s) the S button on the Device until the blue LED starts blinking in Mode 3. Releasing the S button will start the Learn mode.

6. The blue LED will be blinking in Mode 2 during the removing process.

7. The blue LED will be blinking in Mode 1 if the Device is successfully removed from a Z-Wave™ network.

Note! In Setting mode, the Device has a timeout of 10s before entering again into Normal mode.

Factory reset

After Factory reset, all custom parameters and stored values (kWh, associations, routings, etc.) will return to their default state. HOME ID and NODE ID assigned to the Device will be deleted. Use this reset procedure only when the gateway is missing or otherwise inoperable.

Factory reset with a switch/push-button:

Note! Factory reset with the switch/push-button is only possible within the first minute after the Device is connected to a power supply.

1. Connect the Device to a power supply.

2. Toggle the switch/push-button connected to any of the SW terminals (SW, SW1, SW2, etc.) 5 times within 3 seconds.

3. Press and hold (> 2s) S button on the Device until the red LED starts blinking in Mode 3. Releasing the S button will start the factory reset.

4. During factory reset, the LED will turn solid green for about 1s, then the blue and red LED will start blinking in Mode 3 for approx. 2s.

5. The blue LED will be blinking in Mode 1 if the factory reset is successful.

Factory reset with the S button:

Note! Factory reset with the S button is possible anytime.

1. To enter the Setting mode, quickly press and hold the S button on the Device until the LED turns Solid blue.

2. Press the S button multiple times until the LED turns Solid red.

3. Press and hold (> 2s) S button on the Device until the red LED starts blinking in Mode 3. Releasing the S button will start the factory reset.

4. During factory reset, the LED will turn solid green for about 1s, then the blue and red LED will start blinking in Mode 3 for approx. 2s.

5. The blue LED will be blinking in Mode 1 if the factory reset is successful.

LED SIGNALIZATION

LED blinking modes	
Mode 1	0,5s On/2s Off
Mode 2	0,5s On/0,5s Off
Mode 3	0,1s On/0,1s Off
Mode 4	(1x to 6x - 0,2s On/0,2s Off) + 2s Off
Mode 5	0,2s On blue/0,2s On red

Note! For more information about LED signalization and this Device in general refer to the Extended User Guide available at: <https://kb.shelly.cloud/>

OPERATIONAL INSTRUCTIONS

If the inputs are configured as push-buttons:

• Pressing the push-button when the blind is static, moves the blind in the corresponding direction until the endpoint is reached.

• Pressing the push-button for the same direction while the blind is moving, stops the blind.

• Pressing the push-button for the opposite direction while the blind is moving, reverses the blind movement until the endpoint is reached.

If the inputs are configured as switches:

• Turning the switch on moves the blind in the corresponding direction until the endpoint is reached.

• Turning the switch off stops the blind movement.

• If both switches are turned on, the Device respects the last engaged switch. Turning the last engaged switch stops the blind movement, even if the other switch is still on.

• To move the blind in the opposite direction, the other switch has to be turned off and on again.

SPECIFICATION

Power supply	110–240 V AC ±10%
Power consumption	< 0.3 W
Power measurement [W]	Yes
Max switching voltage AC	240 V
Max switching current AC	10 A per channel
Overheating protection	Yes
Overcurrent protection	Yes
Distance	up to 40 m indoors (131 ft.) (depends on local condition)
Z-Wave™ repeater	Yes
CPU	Z-Wave™ S800
Z-Wave™ frequency bands	868.4 MHz; 865.2 MHz; 869.0 MHz; 921.4 MHz; 908.4 MHz; 916 MHz; 919.8 MHz; 922.5 MHz; 919.7-921.7-923.7 MHz; 868.1 MHz; 920.9 MHz
Maximum radio frequency power transmitted in frequency-band(s)	< 25 mW
Size (H x W x D)	37 mm x 42 mm x 16 mm ± 0.5 mm / 1.46 in x 1.65 in x 0.63 in ± 0.02 in
Weight	29 g / 1.02 oz.
Mounting	Wall console
Screw terminals max torque	0.4 Nm / 3.5 lb.in

Z-Wave™ wireless communication may not always be 100% reliable. This Device should not be used in situations in which life and/or valuables are solely dependent on its functioning. If the Device is not recognized by your gateway or appears incorrectly, you may need to change the Device type manually and ensure that your gateway supports Z-Wave Plus™ multi-channel devices.

ORDERING CODE: QN5H-001P10XX
XX – Values define product version per region.

DECLARATION OF CONFORMITY

Hereby, Shelly Europe Ltd. (former Alterco Robotics EOOD) declares that the radio equipment Type Wave Shutter is in compliance with the Directives 2014/53/EU, 2011/65/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/WaveShutter-DoC>

MANUFACTURER:

Shelly Europe Ltd.
Address: 103 Cherni vrh Blvd., 1407 Sofia, Bulgaria
Tel.: +359 2 988 7435

E-mail: zvawe-shelly@shelly.cloud;
Support: support@shelly.cloud;
Web: <https://www.shelly.com>

Changes in the contact data are published by the Manufacturer at the official website: <https://www.shelly.com>

BENUTZER- UND SICHERHEITSHANDBUCH

Z-Wave™ Rollladensteuerung mit Leistungsmessung

BITTE VOR GEBRAUCH DURCHLESEN

Dieses Dokument enthält wichtige technische und sicherheitsrelevante Informationen über das Gerät und seine sichere Verwendung und Installation.

ACHTUNG! Bevor Sie mit der Installation beginnen, lesen Sie bitte die Begleitdokumentation sorgfältig und vollständig durch. Die Nichtbeachtung der empfohlenen Verfahren kann zu Fehlfunktionen, Lebens- und Eigentumsverletzungen führen. Shelly Europe Ltd. haftet nicht für Verluste oder Schäden im Falle einer falschen Installation oder Bedienung dieses Geräts.

TERMINOLOGIE

Gateway – Ein Z-Wave™-Gateway, auch als Z-Wave™-Controller, Z-Wave™-Hauptcontroller, Z-Wave™-Primärcontroller oder Z-Wave™-Hub usw. bezeichnet, ist ein Gerät, das als zentraler Hub für ein Z-Wave™-Smart-Home-Netzwerk dient. In diesem Dokument wird der Begriff "Gateway" verwendet.

S-Taste – Die Z-Wave™ Service-Taste, die sich auf Z-Wave™-Geräten befindet und für verschiedene Funktionen wie die Aufnahme (Hinzufügen), der Ausschluss (Entfernen) und das Zurücksetzen des Geräts auf die Werksinstellungen verwendet wird. In diesem Dokument wird der Begriff "S-Taste" verwendet.

Gerät – In diesem Dokument bezieht sich der Begriff "Gerät" auf das Shelly Qubino Gerät, das Gegenstand dieses Handbuchs ist.

USER SHELLY QUBINO

Shelly Qubino ist eine Reihe innovativer, mikroprozessorgesteuerter Geräte, die die Fernsteuerung von Stromkreisen mit einem Smartphone, Tablet, PC oder einem Hausautomatisierungssystem ermöglichen. Sie arbeiten mit dem drahtlosen Z-Wave™-Kommunikationsprotokoll unter Verwendung eines Gateways. Wenn das Gateway mit dem Internet verbunden ist, können Sie die Shelly Qubino Geräte von überall aus fernsteuern. Shelly Qubino Geräte können in jedem Z-Wave™ Netzwerk mit anderen Z-Wave™ zertifizierten Geräten anderer Hersteller betrieben werden. Alle netzbezugenen Knotenpunkte innerhalb des Netzwerks werden unabhängig vom Hersteller als Repeater fungieren, um die Zuverlässigkeit des Netzwerks zu erhöhen. Die Geräte sind so konzipiert, dass sie mit älteren Generationen von Z-Wave™-Geräten und Gateways funktionieren.

Über das Gerät

Das Gerät ermöglicht die Fernsteuerung von motorisierten Jalousien, Rollläden, Jalousien, Markisen, usw. Es misst den Stromverbrauch des angeschlossenen Geräts.

Es wird empfohlen, nur Jalousiemotoren mit elektronischen oder mechanischen Endschaltern zu verwenden. Die Motorsensoren müssen vor dem Anschluss des Geräts an den Motor korrekt eingestellt werden.

ELEKTRISCHER SCHALTPLAN (110–240 V AC)

Anschluss an das Stromnetz mit Stromversorgung 110–240 V AC (Abb. 1-5).

INSTALLATIONSANLEITUNG

Das Gerät kann einen bidirektionalen AC-Motor steuern. Es kann in eine Standard-Unterputzkonsole, hinter den Schalter oder an anderen Orten mit begrenztem Platz nachgerüstet werden.

VORSICHT! Gefahr eines Stromschlags. Die Montage/Installation des Geräts an das Stromnetz muss von einem qualifizierten Elektriker mit Vorsicht durchgeführt werden!

VORSICHT! Es besteht Stromschlaggefahr. Bei jeder Änderung der Anschlüsse muss sorgfältig überprüft werden, dass an den Klammern des Geräts keine Spannung anliegt!

VORSICHT! Verwenden Sie das Gerät nur mit einem Stromnetz und Geräten, die allen geltenden Vorschriften entsprechen. Ein Kurzschluss im Stromnetz oder in einem an das Gerät angeschlossenen Geräte kann dieses betriebsunfähig machen.

VORSICHT! Schließen Sie das Gerät nicht an Geräte an, die die angegebene Höchstlast überschreiten!

VORSICHT! Kürzen Sie die Antenne nicht!

EMPFEHLUNG: Stellen Sie die Antenne möglichst weit von metallenen Gegenständen auf, da diese Signalstörungen verursachen können.

VORSICHT! Schließen Sie das Gerät nur auf die in dieser Anleitung beschriebene Weise an. Jede andere Methode kann zu Schäden und/oder Verletzungen führen!

VORSICHT! Installieren Sie das Gerät nicht an einem Ort, an dem es nass werden kann.

VORSICHT! Verwenden Sie das Gerät nicht, wenn es beschädigt ist

VORSICHT! Verwenden Sie nicht, das Gerät selbst zu warten oder zu reparieren!

EMPFEHLUNG: Schließen Sie das Gerät mit massiven endseitigen Kabeln mit erhöhter Isolationswärmebeständigkeit von mindestens PVC T105°C (221°F) an!

VORSICHT! Bevor Sie mit der Installation/Montage des Geräts beginnen, prüfen Sie, ob die Leitungsschutzschalter (Sicherungen) ausgeschaltet sind und keine Spannung an den Klammern anliegt. Dies kann mit einem Phasenprüfer oder Multimeter erfolgen. Wenn Sie sicher sind, dass keine Spannung anliegt, können Sie mit dem Anschluss der Kabel fortfahren!

Wenn Sie das Gerät mit einem Druckknopf verwenden wollen, sehen Sie sich Abb. 1 und Abb. 2 an. Für einen Schalter, siehe Abb. 3 und Abb. 4.

VORSICHT! Verwenden Sie nur einen einphasigen Wechselstromkreis. Verwenden Sie keine gemischten AC- und DC-Stromkreise.

Schließen Sie beide Klammern L an das stromführende Kabel und die Klemme N an das neutrale Kabel an.

Verbinden Sie die gemeinsamen Motorklammern-/kabel mit dem Nullleiter. Schließen Sie die Klammern/Kabel für die Motorrichtung an die Klammern O1 und O2 an.

Schließen Sie den ersten Schalter/Druckknopf an die Klemme SW1 und das stromführende Kabel an. Schließen Sie den zweiten Schalter/Druckknopf an die Klemme SW2 und das stromführende Kabel an.

1. Die Ausgänge des Geräts können neu konfiguriert werden, um die gewünschten Drehrichtung zu entsprechen.

EMPFEHLUNG: Bei induktiven Geräten, die beim Ein- und Ausschalten Spannungsspitzen verursachen, wie z. B. Elektromotoren, Ventilatoren, Staubsauger und ähnliche, sollte ein RC-Snubber (0,1 µF / 100 Ω / 1/2 W / 600 V AC) parallel zum Gerät angeschlossen werden.

VORSICHT! Erlauben Sie Kindern nicht, mit den an das Gerät angeschlossenen Geräten zu spielen. Halten Sie die Geräte

