



LoRaWAN Wall Button

SKU: BUTLWE01

Version: 1



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1. Product Description

The wall switch enables the transmission of a control command via LoRaWAN. It can therefore be used flexibly in various application scenarios. The switch can be installed on any dry, flat surface using the included screws or double-sided adhesive tape.

The device is powered by a CR2032 battery.



2. Installation

The button is typically mounted on a flat, dry surface using either double-sided adhesive tape or two screws. However, it is also possible and sometimes useful to simply place the device on a bedside table, for example. The pre-installed CR2032 battery must be activated by pulling out a tab. To do this, the rocker cover must be removed. Using a screwdriver or knife, the rocker can be carefully levered off the main housing and pressed back on after activating the battery.

3. Connection to the LoRaWAN Network

This device must be registered with a LoRaWAN network operator using its three keys (Dev EUI, Join EUI, Join Key), provided that the operator covers the installation location.

The public Device EUI is printed directly on the device as a QR code and as a 16-character string. This information is also located on the device packaging.

The two additional private keys can be obtained from your dealer or directly from Aqua-Scope via email. To do so, enter the public Device EUI key and your email address on the website <https://aqua-scope.com/lora>.

Immediately after inserting the batteries or connecting a power supply, the device attempts to connect to the LoRaWAN network for which the three keys were provided. During this process, the LEDs flash. After approximately 25 seconds, this process, called "Join", is either successful or aborted. In this case, the device immediately enters sleep mode when running on battery power.

If the sensor later loses connection to the server for any reason, the connection is automatically restarted. This process is called "Rejoin" and is repeated whenever the device attempts to send a message to the LoRaWAN network.

Pressing the button always triggers a LoRaWAN communication, which also leads to a "Rejoin" if the connection to the LoRaWAN network has been lost. Please note the LoRaWAN duty cycle restrictions. Sending messages or repeated rejoins too quickly may be ignored by the LoRaWAN network. The button sends either a logical "On" (payload 0x07 0x64) or a logical "Off" (payload 0x07 0x00).

4. Operation

Using the button is very simple:

- Pressing button "I" or "O" for longer than half a second sends a control command to the paired motor.
- Pressing button "I" for more than 4 seconds activates the single-button



menu.

5. Single-Button Menu

Press and hold the upper button for 4 seconds to activate the single-button menu. This state is indicated by a brief flash of the green LED. After activation, the red LED flashes once, indicating that command number 1 is preselected. A short press of button "1" increases the number of flashes to 2, and so on. After reaching command number 4 (= four red flashes), the next short press returns to command 1. A long press activates the selected command (1 to 4), and both LEDs turn off. If inactive, the single-button menu exits automatically after 10 seconds.

The following commands are available:

- Command #1 = **Reset to factory mode**: The binding to another device is deleted and a new device can be paired.
- Command #2 = **Link test**: If a device has been paired, this command tests the radio connection quality. The LEDs will briefly light up red and green 1 to 5 times to indicate signal quality. 1 is poor, 5 is excellent. If nothing is displayed, the paired device was not reached or did not respond.
- Command #3 = **Switch between LoRaWAN and LoRa P2P mode**: If the device SKU ends with *****01, it is a LoRaWAN device that sends LoRaWAN packets after a successful join. If the SKU ends with ***02, the device operates in LoRa P2P mode for direct control of an Aqua-Scope device. This command switches the mode. Warning: The originally intended function may no longer be available. Running the command again switches the mode back.

6. Technical Data

- Wireless: LoRaWan 869 MHz, Class A
- Battery: CR2032
- Dimensions: 80 x 80 x 16 mm
- Protection: IP 20
- Weight: 50 gr.
- EAN Number: 4251295783512

7. Support and Contact

Should you encounter any problem, please give us the opportunity to address it before returning this product. Please check our website www.aqua-scope.com and particularly the support section for answers and help. You can also send a message to info@aqua-scope.com.

While the information in this manual has been compiled with great care, it may not be deemed an assurance of product characteristics. Aqua-Scope shall be liable only



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8. Declaration of Conformity



Aqua-Scope Technology OÜ, Sakala 7-2, 10141 Tallinn, Republic of Estonia, declares that this radio emitting device works on the following frequencies:

Български С настоящото Aqua-Scope Technology OÜ декларира, че този тип радиосъоръжение BUTLWE01 е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: www.aqua-scope.com/ce.

Čeština Tímto Aqua-Scope Technology OÜ prohlašuje, že typ rádiového zařízení BUTLWE01 je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: www.aqua-scope.com/ce.

Dansk Hermed erklærer Aqua-Scope Technology OÜ, at radioudstyrstypen BUTLWE01 er i overensstemmelse med direktiv 2014/53/EU. EUoverensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: www.aqua-scope.com/ce.

Deutsch Hiermit erklärt Aqua-Scope Technology OÜ, dass der Funkanlagentyp BUTLWE01 der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.aqua-scope.com/ce.

Eesti Käesolevaga deklareerib Aqua-Scope Technology OÜ, et kesolev raadioseadme tüüp BUTLWE01 vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni terviklik tekst on kättesaadav järgmisel internetiaadressil: www.aqua-scope.com/ce

English Hereby, Aqua-Scope Technology OÜ declares that the radio equipment type BUTLWE01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.aqua-scope.com/ce

Español Por la presente, Aqua-Scope Technology OÜ declara que el tipo de equipo radioeléctrico BUTLWE01 es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.aqua-scope.com/ce

Ελληνικά Με την παρούσα ο/η Aqua-Scope Technology OÜ, δηλώνει ότι ο ραδιοεξοπλισμός BUTLWE01 πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: www.aqua-scope.com/ce

Français Le soussigné, Aqua-Scope Technology OÜ, déclare que l'équipement radioélectrique du type BUTLWE01 est conforme la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible l'adresse internet suivante: www.aqua-scope.com/ce



Hrvatski Aqua-Scope Technology OÜ ovime izjavljuje da je radijska oprema tipa BUTLWE01 u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: www.aqua-scope.com/ce

Italiano Il fabbricante, Aqua-Scope Technology OÜ, dichiara che il tipo di apparecchiatura radio BUTLWE01 conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE disponibile al seguente indirizzo Internet: www.aqua-scope.com/ce

Latviešu Ar šo Aqua-Scope Technology OÜ deklarē, ka radioiekārta BUTLWE01 atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: www.aqua-scope.com/ce Lietuvių Aš, Aqua-Scope Technology OÜ, patvirtinu, kad radijo įrenginių tipas BUTLWE01 atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo internet adresu: www.aqua-scope.com/ce

Magyar Aqua-Scope Technology OÜ igazolja, hogy a BUTLWE01 típus rádiberendezés megfelel a 2014/53/EU irányelvnek. Az EÜmegfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: www.aqua-scope.com/ce

Malti B'dan, Aqua-Scope Technology OÜ, niddikjara li dan it-tip ta' tagħmir tar-radju BUTLWE01 huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformit tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: www.aqua-scope.com/ce

Nederlands Hierbij verklaar ik, Aqua-Scope Technology OÜ, dat het type radioapparaat BUTLWE01 conform is met Richtlijn 2014/53/EU. De volledige tekst van de EUconformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: www.aqua-scope.com/ce

Polski Aqua-Scope Technology OÜ niniejszym oświadczam, że typ urządzenia radiowego BUTLWE01 jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności z UE jest dostępny pod następującym adresem internetowym: www.aqua-scope.com/ce

Português O(a) abaixo assinado(a) Aqua-Scope Technology OÜ declara que o presente tipo de equipamento de rádio BUTLWE01 está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.aqua-scope.com/ce

Română Prin prezenta Aqua-Scope Technology OÜ declară că tipul de echipamente BUTLWE01 este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: www.aqua-scope.com/ce

Slovensko Aqua-Scope Technology OÜ potrjuje, da je tip radijske opreme BUTLWE01 skladen z irektivom 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: www.aqua-scope.com/ce

Slovensky Aqua-Scope Technology OÜ týmto vyhlasuje, že rádiové zariadenie typu BUTLWE01 je v slade so smernicou 2014/53/EÚ. Úplné EÜ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.aqua-scope.com/ce

Soumi Aqua-Scope Technology OÜ vakuuttaa, että radiolaitetyyppi BUTLWE01 on direktiivin 2014/53/EU mukainen. EUvaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: www.aqua-scope.com/ce

Svenska Härmed försäkrar Aqua-Scope Technology OÜ att denna typ av radioutrustning BUTLWE01 verensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EÜförsäkran om verensstämmelse finns på följande webbadress: www.aqua-scope.com/ce

9. Disposal Guidelines



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging health and well-being.