Unio-868
289800006

elero

CE 0682

EN **Operating instructions (translation)**
Keep the operating instructions in a safe place!

181112301_EN_1015

(DE) **The German operating instructions are the original version.**
All other documents represent the language translations of the original text.

(EN) **Translation from the original German version.**
All other documents in different languages are translations of the original version.

Contents

1 General information

1.1 Notes on the Operating Instructions

Please read these Operating Instructions of the Unio 868 carefully prior to the first commissioning and observe the safety instructions! All activities on and with the Unio-868 may only be performed as they are explained in these Operating Instructions. Please store this document for later use. If you pass the Unio-868 on to someone else, please give them these Operating Instructions as well.

Warning symbols and signal words used in these Instructions.

Warning symbols and signal words used	
	**Warning!** Warning of danger by electric shock!
	**Caution!** Observe instructions to prevent injuries and material damage!
	**Important:** Observe instructions!
	**Important:** Further information on the use of the Unio-868!
	**Disposal note:** Electronic parts to be disposed of separately from the household waste.

The manufacturer reserves the right to make changes to the Specifications stated in these Operating Instructions at any time. These may, in individual cases, be different from the respective device version, however the functional information will not undergo significant changes or become invalid. The current version of the Specifications may be requested from the manufacturer at any time. No claims may be asserted against the manufacturer as a result of the preceding sentence. Deviations from text or picture statements are possible and depend on the technical development, features, and accessories of the device. Deviating information on special versions will be explained by the manufacturer in the sales documentation. Other information shall remain unaffected by these provisions.

1.2 Standards and Directives

During the design process, the basic health and safety requirements of the applicable laws, Standards and Directives were complied with. All safety information in these Operating Instructions refer to the laws and regulations currently applicable in Germany. All instructions in the Operating Instructions shall be observed without limitation and at any time. Beside the safety instructions contained in these Operating Instructions, the provisions for accident prevention, environmental protection and occupational safety, which are applicable for the operating site, must be observed. Provisions and Standards for the safety rating can be found in the EC Declaration of Conformity which also confirms the safety herein.

1.3 Intended use

The Unio-868 is a radio switching outlet that permits the comfortable wireless switching of electric mains-powered devices across large distances. The device designation Unio-868 contains the version based on 915 MHz as well.

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The Unio-868 can be operated via a button at the device itself as well as via the radio hand-held sender that belongs to the **elero** ProLine or ProLine 2-production range.

Programmed data (e.g. via taught-in transmitters) are permanently retained in an integrated memory (also at mains failure, storage of the programmed Unio-868 without voltage supply or change of the mains outlet).

Further fields of application have to be arranged with the manufacturer, **elero** GmbH Antriebstechnik (see Chapter 8, Manufacturer's Address).

The operator will be solely responsible for damage resulting from improper use of the Unio-868. The manufacturer cannot be held liable for personal or material damage caused by misuse or procedural errors, and by improper operation and commissioning.

A use which deviates from the intended use stated by the manufacturer, **elero** GmbH Antriebstechnik, is deemed as foreseeable misuse.

Please read the instructions completely and carefully once before first commissioning; they contain many notes on the intended use of the Unio-868.

1.4 Warranty and liability

Principally, the General Terms and Conditions of the manufacturer, **elero** GmbH Antriebstechnik (see Chapter 8, Manufacturer's Address for address), apply. Liability claims for personal or material damage are excluded when they can be attributed to one or more of the following causes:

- Opening of the Unio-868 by the customer
- Non-intended use of the Unio-868.
- Improper commissioning or operation of the Unio-868.
- Structural modifications to the Unio-868 without the written consent of the manufacturer.
- Operation of the Unio-868 with improperly installed connections, defective safety devices or improperly installed safeguards.
- Non-observance of the safety provisions and instructions of these Operating Instructions.
- Operation of the Unio-868 outside the limits specified in the Specifications.

2 Safety

The Unio-868 is not intended to be used by people (including children) with limited physical, sensory, or mental aptitude, or lack of experience and/or knowledge, unless they are supervised by a person responsible for their safety or have received instruction from this person as to how the Unio-868 is used.

- Never allow children to use electrical devices unless they are supervised.

2.1 General safety instructions

The Operating Instructions contain all safety instructions which must be observed in order to prevent dangers inherent to handling the Unio-868 in connection with the components to be switched. A safe use of the Unio-868 can only be ensured when all given safety instructions are observed.

The Unio-868 is maintenance-free.

- Do not open the Unio-868; it does not contain any parts that need to be serviced by you.
- Only operate the Unio-868 in dry inner rooms and avoid influence of moisture, dust and direct sunlight. Avoid any wetness or high humidity, extreme cold or heat, dust or flammable gases, steams or solvents, strong vibrations and strong magnetic fields at the site of use or during transport.

- Never use the Unio-868 when it has been taken from a cold to a warm room. The resulting condensation may destroy the Unio-868. First let the product reach room temperature without switching it on.
- Do not touch the Unio-868 and the mains plug of the device that you want to plug in to the Unio-868 with moist or wet hands!
- Only load the Unio-868 to the indicated power limit. Overload may cause destruction, fire or electrical accident.

- Before each use, check the Unio-868 for damage. If you find any damage, the Unio-868 must not be connected to the mains voltage. There is a danger to life!
- Before cleaning, disconnect the Unio-868 from the mains socket and any connected device from the Unio-868.
- Clean the Unio-868 with a dry and lint-free cloth, which may be moistened slightly in case of severe contamination, and only after disconnection from the mains outlet. Do not use any solvent-containing cleaning agents for cleaning. The plastic housing and labels may be attacked.

2.2 Requirements for the personnel

- Each person who is tasked to work with the Unio-868 must have read the complete Operating Instructions and have understood the dangers resulting from the use of device before performing any activities.

2.3 Safety instructions for operation

- You have to check the casing and the connected consumers for damage prior to the commissioning and regularly afterwards as well. Never commission a damaged Unio-868.

3 Product description

3.1 General information

The Unio-868 is an easy to handle radio switching outlet with many usage options that permits the comfortable wireless switching of electric mains-powered devices across large distances. The Unio-868 has (bidirectional) routing functions.

The Unio-868 is connected between the outlet of the electrical household installation and the electrical consumer to be controlled. Only such devices must be used that have a mains plug and mains voltage range that fits the specifications of the Unio-868. The connected consumer must not exceed the maximum switching output of the Unio-868.

The environment for intended application of the Unio-868 is the residential and business area, as well as small industry.

The Unio-868 must not be used to control devices where malfunction may cause a danger to persons, animals or property.

Interferences from other radio and telecommunication systems that work on the same frequency band cannot be fully excluded.

Radio operation is only permitted with released transmitters.

3.2 Scope of supply

The purchased product includes the following:

- Unio-868
- Operating instructions

3.3 Accessories

- Radio transmitters
- Radio sensors

3.4 Bidirectional radio system

The term bidirectional radio system means the transmission of radio signals to radio receivers and the response option for the radio receivers to the transmitter. The radio signal can be sent directly to the target receiver. If this is not possible, the radio signal will be routed via other bidirectional participants until it reaches the target receiver. The target receiver carries out the command and sends a confirmation back to the transmitter. The prerequisite for a bidirectional radio system is hence the radio transmitting capability as well as the radio reception capability of all participating components.

3.5 Unidirectional radio system

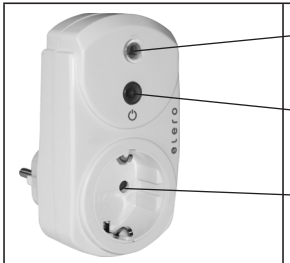
A unidirectional radio system transmits radio signals to radio receivers. However, unlike in a bidirectional radio system, the radio receiver cannot send any message back to the transmitter. It is also not possible to transmit radio signals from radio receiver to radio receiver.

3.6 Preparations for operation

WARNING!
Danger of injury due to electric current.

- ❑ Protect yourself from electrical shock. Use the corresponding care when handling electrical current.

Plug the Unio-868 into a mains socket and connect a consumer, e.g. a lamp, to the outlet of the Unio-868.



The indicator light (LED) 2-coloured green and orange

Operating button for manual mode

Outlet for consumers up to 2300 VA

3.7 Operation (use)

3.7.1 Status display of the Unio-868

The status display of the indicator lamp on the top of the hosing signals different operating conditions of the switchable outlet.

Status indicator	Operating condition
LED off	**OFF**.
LED green	**ON**. Unidirectional configuration
LED orange	**ON**. Bidirectional configuration

3.7.2 Direct operation by button at the Unio-868

The connected consumer can be switched directly by pushing the operating button (switching condition switches from **ON** to **OFF** or from **OFF** to **ON)**.

3.7.3 Operation by hand-held transmitter

STOP button (■)	**OFF** (fixed)
UP button (▲)	**ON** or **OFF**, depending on teaching direction
DOWN button (▼)	**OFF** or **ON**, depending on teaching direction

3.7.4 Operation by automatic devices (clocks and/or sensors)

- Up to 16 transmitters (sensors, hand-held transmitters) can be taught in to the Unio-868. Permitted sensors (the radio version 868 MHz of each) are: Lumo, Lumero, Sensero and Aero. The Sensero and Aero only evaluate the light telegrams.
- The last command received is executed.
- An automatic switching function that is overwritten by the hand-held transmitter is executed according to the SmartStart/semi-automatic rules. SmartStart/semi-automatic causes condition changes of the Unio-868 to be performed only when the condition of the transmitting sensors has changed first. This is needed to change a switching condition that was determined by cyclic transmission from a sensor and to keep it stable.
- If the automatic function is switched off, the Unio-868 will only react to the operation button and the hand-held transmitters anymore. The Unio-868 will then not react to sensor and timer commands, except for prioritised alarm and clock commands.
- The Unio-868 controls the twilight function of the triggered sensors. When using the twilight function of the Lumo, a manual switching command or a clock switching command is to be used to revoke the twilight switching condition.

- Double commands (double **UP** or double **DOWN**) are treated like "single" running commands (**UP** or **DOWN**). This means that the Unio-868 is generally not suitable for ventilation and interim position running strategies. Switching times never limit themselves independently. Automatic **STOP** commands are ignored.
- Switching from manual mode to automatic mode resets all sensor functions.
- Central channel switching commands are ignored.

3.8 Teaching in (programming)

The purpose of teaching in is programming one or several transmitters for the Unio-868.

By teaching in the first transmitter, the radio operating mode of the Unio-868 is specified for the **elero** ProLine mode or **elero** ProLine 2 mode - according to the transmitter to be taught in.

- Mixed operation of ProLine 1 transmitters and ProLine 2 transmitters is not possible.

❑ Connect the Unio-868 to a mains outlet.
The Unio-868 is in *teaching mode* for 5 minutes.
Teaching mode is signalled by one flash of the LED:

❑ When the Unio-868 receives the radio signal from a pushed programming button P (or teaching button P) during these 5 minutes, the Unio-868 is put in *learning mode* for 2 minutes.
Learning mode is signalled by the flashing LED.

- Fast flashing (approx. 10 Hz) = **ON**
- Slow flashing (approx. 2 Hz) = **OFF**

In learning mode, the Unio-868 switches its switching condition (**OFF** / **ON**) every 3 seconds. Between the switching conditions, there is a break of one second each. The learning sequence is started with the switching condition **ON**.

3.8.1 Teaching in hand-held/wall transmitters, clock transmitters

When teaching in hand-held/wall transmitters and transmitters with clock function, the switching condition (**ON** or **OFF**) may be taught in in any assignment to the **UP**/**DOWN** running commands of the sensors.

- ❑ Teaching in switching condition **ON**:
  Push the button **UP** or **DOWN** once while the light is flashing quickly to set a hit.
- ❑ Teaching in switching condition **OFF**:
  Push the button **DOWN** or **UP** once while the light is flashing slowly to set a hit.

Teaching is completed.

If several transmitters from the group of the hand-held/ wall transmitters and from the ground of clock transmitters are taught in to the Unio-868, the last transmitter taught in determines the assignment of all transmitters to this group.

- **Important:**
  The Unio-868 does not react to manual central channel commands.

3.8.2 Teaching of sensors (sensor transmitters)

When teaching in sensors (sensor transmitters), the switching condition (**ON** or **OFF**) may be taught in in any assignment to the **UP** or **DOWN** buttons of the Unio-868.

- ❑ Teaching in switching condition **ON**:
  Push the button **UP** or **DOWN** once while the light is flashing quickly to set a hit.
- ❑ Teaching in switching condition **OFF**:
  Push the button **DOWN** or **UP** once while the light is flashing slowly to set a hit.

Teaching is completed.

If several sensors have been taught in to the Unio-868, the last sensor taught will determine the assignment of all sensors from the sensor transmitter group.

- **Important:**
  Wind sensors have a higher priority than light sensors where assignment of the switching conditions is concerned.

3.8.3 Deleting a taught-in transmitter in the Unio-868

→ see transmitter instructions

3.8.4 Deleting all taught-in transmitters in the Unio-868

→ see transmitter instructions

4 Technical Data

Operating voltage [V / Hz] (supply voltage)	198 ... 253 / 50 ... 60
Power consumption [W]	< 0.5 (stand by)
Switching output [VA]	max. 2300 VA
Radio frequency [MHz]	868
Transmission power [mW]	10
Effective range [m]	up to 100 (free field) approx. 30 (in buildings)
Permitted ambient temperature [°C]	0 to 55
Dimensions (L x W x H) [mm]	110 x 60 x 40 (without plug)

Weight [g]	160
Protection type (IP code)	IP20

5 Notes on the EC declaration of conformity

elero GmbH hereby declares that the Unio-868 complies with the basic prerequisites and the other relevant provisions of the EC directives. The complete declaration of conformity can be found in the download area of our website.

6 Troubleshooting

Fault	Cause	Remedy
No radio reception	1. Transmitter is not programmed 2. No mains voltage	1. Programming the transmitter 2. Switch on the mains voltage
Bad radio reception	1. Detrimental position of the Unio-868 2. Distance between transmitter and Unio-868 too high. 3. HF-fault sources overlie the radio signal.	1. Change the position of the Unio-868. 2. Reduce the distance between the transmitter and the Unio-868 or remove obstacles between the transmitter and Unio-868. 3. Switch off or remove fault sources.
The connected consumer is not supplied with power	1. No mains power supply to the Unio-868 2. Transmitter is not programmed. 3. Switching condition of the Unio-868 does not correspond to the user's expectations.	1. Switch on the mains voltage. 2. Set transmitter. 3. Check the switching condition of the Unio-868 by the indicator lamp. Correct the assignment of the **UP** or **DOWN** button if necessary.

7 Repair

If you have any questions, please refer to your specialised company.

Please always state the following information:

- ❑ Item number and item designation on the nameplate
- ❑ Error type
- ❑ Previous and unusual events
- ❑ Surrounding circumstances
- ❑ Own assumption

8 Manufacturer's address

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9 Disposal

When disposing of the Unio-868 you must comply with the applicable international, national, and local laws and regulations.

Please make sure to consider material recyclability, ease of dismantling, and separability of materials and components as well as environmental and health hazards during recycling and disposal.

Packaging

Your Unio-868 is packed to protect it from transport damage. Packagings are raw materials and can by recycled or returned to the raw material cycle.

Dispose electrical and electronic components:

Disposal and recycling of electric and electronic components must comply with the applicable national laws and regulations. The Unio-868 must be supplied to orderly disposal according to the disposal directive 2002/95/EC. Plastics and electronic parts must be supplied to recycling.

Never dispose of the Unio-868 in the regular household waste. If in doubt, ask your local city or community authority for information on environmentally compatible and proper disposal.

10 Legal Notes

The information contained in this documentation and the software are subject to changes due to technical improvements.

Brands like Unio-868, Lumo, Lumero, Sensero, Aero are protected brands of **elero** GmbH.
All other trademarks (such as product names, logos, commercial designations) are protected for the benefit of their respective owners.