

VarioTel 2 867/868/915 MHz  
28245.0001, 28246.0001,  
28247.0001, 28245.0901,  
28246.0901, 28247.0901

e l e r o



**EN** Operating instructions (translation)

181220201\_EN\_0314

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## Safety instructions



The instructions shall be observed to ensure that the product can be operated smoothly and safely and that its features can be correctly used.

- The operator/user must have read and understood the instructions fully.
- The operator must ensure that the instructions are available to the user in a legible form.
- The operator must ensure that all safety measures are observed and complied with.
- The following safety and assembly instructions apply to the unit and not to the accessories or drive.



### CAUTION!

Failure to observe these instructions can lead to injury.

→ Observe all safety instructions.

- Never install or operate damaged units.
- Only use unmodified and compatible original parts.
- There is a risk of personal injury or damage if the unit is opened without permission or used in an improper manner, or if it is incorrectly installed or operated.
- The unit contains small parts which can be swallowed.

### Transport

- You must not use a unit that you have received in a damaged condition despite proper packaging. Complain about any damage to the transport company immediately.

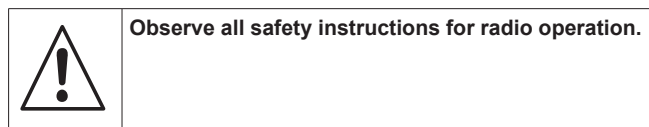
### Installation

- Observe all regulations during installation.

## Operation

- Use only in dry rooms.
- The operating range of the system must remain visible during operation if one or more transmitters are used for controlling the system.
- Keep control systems out of the reach of children and the disabled.
- Dispose of used batteries properly.

## Safety instructions for radio operation



Only use radio systems which are approved and can be operated without interference.

- Radio systems must not be operated in areas where there is an increased risk of interference (e.g. hospitals, airports).
- The remote control is only approved for units and systems for which any malfunction of the transmitter or receiver would not result in a risk for persons, animals or property, or if such a risk is covered by other safety equipment.
- The operator has no protection whatsoever against interference by other telecommunication installations and local terminals (e.g. also from radio installations which are operated properly in the same frequency range).
- The range of the radio signal is limited by legislation and the structural conditions.

## Intended use

The VarioTel 2 is a multi-channel transmitter. It can be used unidirectionally (compatible with the existing ProLine-program) or bidirectionally. The hand-held transmitter should only be used for controlling roller shutter, Venetian blinds and sun protection systems which are fitted with elero-radio receivers. Other use, or use going

beyond this is not considered to be use for the intended purpose. The hand-held transmitter is referred to in these instructions as the "unit".

## Exclusion of liability

Elero GmbH assumes no liability for personal injuries, property damage and financial losses which arise from use other than mentioned above, modifications to the unit, improper use and failure to observe the operating instructions. Liability for material defects is excluded in such cases.

## Scope of supply

VarioTel 2 hand-held radio transmitter (batteries included in the unit), wall bracket, 2 wall plugs, 2 screws.

## Technical data

Name of unit	VarioTel 2
Operating voltage	3 V DC
Battery type	2 x LR06 (AA mignon)
IP Code	IP 20
Temperature range	0 to +50 °C
Radio frequency	867/868 MHz frequency band
Dimensions in mm (hand-held transmitter)	L 120 x W 51 x H 26
Weight in grams (including batteries).	120

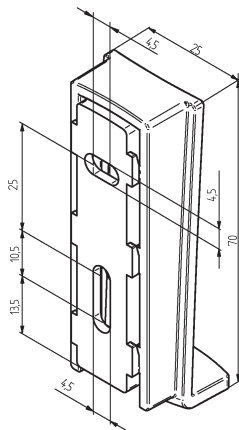
There are regulations names for the USA, Canada, Australia and some countries in South America.

Radio frequency	915 MHz frequency band
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## Mounting of wall bracket

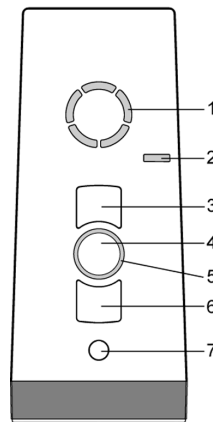
- The wall bracket must be fixed so that the holes drilled avoid any electrical cables.
- Before installing the unit in the required position, check that the transmitter and receiver are functioning perfectly.
- Attach the bracket to the wall with the wall plugs and screws provided.

The top part of the wall bracket can be moved.



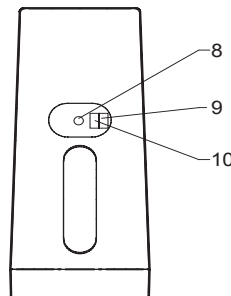
## Device explanation

### Front of unit



- 1 Channel indicator
- 2 Operating mode indicator
- 3 **UP** button
- 4 **STOP** button
- 5 Status indicator
- 6 **DOWN** button
- 7 Select button

### Rear of unit



- 8 Learn button **P**
- Only for experts:
- 9 DIP switch 1
- 10 DIP switch 2

## Explanation of functions

### Bidirectional radio system

A bidirectional radio system transmits radio signals to a radio receiver and enables feedback from the radio receiver to the transmitter. The radio signal can be sent directly to the target receiver. If this is not possible then the radio signal is forwarded via other bidirectional participants until the signal reaches the target receiver. The target receiver carries out the command and sends a confirmation back to the transmitter. Bidirectional radio operation is only possible if all participants are bidirectional. Otherwise, the system is only unidirectional.

### Unidirectional radio system

A unidirectional radio system transmits radio signals to radio receivers. However, unlike the bidirectional radio system, the radio receivers cannot send back a reply to the transmitter. The transmission of radio signals from radio receiver to radio receiver is also not possible.

### Initial operation

Press a button to switch on the hand-held transmitter and illuminate the status display and operating mode display. The hand-held transmitter is in automatic mode during initial operation.

#### Note

Do not press the P button until the receivers are in programming mode. The active channel for a radio system is decided during programming. If the receiver is not in teach-in mode, the channel from the transmitter changes to unidirectional mode. Press and hold the **STOP** and **P** buttons simultaneously for 6 seconds until the status display lights up.

### Status display

A radio signal is displayed by the status display (LED ring around the STOP button) lighting up. The various colours of the status display mean:

Status display	Meaning
Flashing orange	Channel (transmitter) not programmed in any receiver
Rapidly flashing orange	Channel (transmitter) in bidirectional programming mode. Operation of receivers already programmed not possible. Every 3 seconds in group programming mode (also without a button being pressed)
Orange then green	Channel (transmitter) is operating bidirectionally and receiver has received the signal
Orange then flashing red	Channel (transmitter) is operating bidirectionally and one of the receivers has not received the signal
Red then green	Channel (transmitter) is operating bidirectionally and receiver has received the signal, batteries weak
Red then flashing red	Channel (transmitter) is operating bidirectionally and one of the receivers has not received the signal, batteries weak
Green with repetition, then red (unidirectional)	Channel (transmitter) has been deleted
Green	Channel (transmitter) is operating unidirectionally: Transmit signal is being sent
Orange and green (or red) alternating, then red (bidirectional)	Channel (transmitter) has been deleted
Flashing red	Batteries weak

The transmitting power or the radio range will be reduced by the reduction in the performance of the battery. If the voltage drops below 2 V, functions are no longer executed and nothing is displayed.

### Group control unit

A group is understood to mean the control of several receivers at the same time. The selected group is controlled by a travel command. All 5 channels (transmitter) can be used for the group control.

Any number of receivers can be programmed and controlled in each channel.

### Selection button

Pressing the selection button briefly allows you to select from 5 channels. The various channels are indicated by the LEDs in the channel indicator lighting up.

An additional channel is reserved for the central channel to which all the individual channels are assigned automatically. When the central channel is selected, this controls all radio channels simultaneously. This is indicated by all five LEDs lighting up.

Pressing the selection button briefly allows you to query the current status (automatic/manual) of the programmed receivers (bidirectional receivers only) and the hand-held transmitter.

Pressing the selection button for longer (approximately 1 second) switches off automatic mode of the current bidirectional channel or all unidirectional channels. The operating mode indicator lights up red. → The receiver now only carries out manual travel commands and does not respond to automatic travel commands.

### Note

Upward travel of the receiver is initiated when the automatic system is activated.

Pressing the selection button for longer (approximately 1 second) switches on automatic mode of the bidirectional channel or all unidirectional channels. The operating mode indicator lights up

green. → The receiver now executes automatic and manual travel commands.

Pressing the selection button in the central channel for longer (approximately 1 second) changes the Auto or Manual operating mode for **all the individual channels**. A different operating mode for individual channels (auto and manual) is set on switching for all channels to Auto operating mode.

## Programming the transmitter

### Requirement

The receiver is installed. **Check whether the channel has been deleted** or in the correct mode according to the status display. Stand in front of the blind to be programmed while programming.

1. With receivers which have already been installed, switch the circuit breaker off and on again after a few seconds.  
The receiver is now in programming mode for about 5 minutes.
2. Press the programming button **P** on the back of the unit briefly (approximately 1 second) until the status display lights for a short time. The blind moves up and down for approximately two minutes, showing that the receiver is in programming mode.
3. Press the **UP** button as soon as the blind starts moving in Open direction (within 1 second at the most). The status display lights briefly.  
The blind stops briefly, starts moving again, stops and then moves in the Down direction.
4. Immediately (within no more than 1 second) after down travel has started, press the **DOWN** button. The status display lights briefly. The blind stops. The transmitter channel is programmed.

### Note

The blind must be programmed again if it does not stop.

A bidirectional programming process in the hand-held transmitter can be cancelled by pressing the **STOP** button for 6 seconds.

## Programming additional transmitters

### Note

If **several receivers** are connected to the **same supply line**, then all are simultaneously in programming mode for approximately 5 minutes after the mains power is switched on.

If the **P** button on the transmitter is now pressed, all the receivers start programming mode at the same time (up/down movements). Randomly different intervals between up/down movements cause the receivers to become offset against one another. The longer programming is delayed, the greater the offset will be.

The short up/down movements can be stopped by pressing the **STOP** button briefly on a transmitter which has already been programmed. The programming mode in the receiver is interrupted.

The transmitter can now be assigned without having to disconnect individual receivers. If the blind moves in the wrong direction, delete the transmitter and program it again.

(→ see Deletion of transmitter)

For programming additional transmitters to one receiver:

1. Press the **UP**, **DOWN** buttons and the programming button **P** (rear of unit) simultaneously (for 3 seconds) on a transmitter which has already been programmed to the receiver. The status display lights briefly. The receiver is now in programming mode.
2. Press the programming button **P** on the transmitter to be programmed until the status display lights briefly. The receiver is now in programming mode (up/down movements).
3. Press the **UP** button as soon as the blind starts moving in Open direction (within 1 second at the most). The status display lights briefly. The blind stops briefly, starts moving again and then moves downwards.
4. Immediately (within no more than 1 second) after down travel has started, press the **DOWN** button. The status display lights briefly. The blind stops. The transmitter channel is programmed.

If more than 10 bidirectional receivers are being programmed at the same time, the transmitter channel in programming mode switches to group mode. The group mode is indicated by fast flashing with pauses.

Programming in group mode is completed after a 2-minute pause or pressing the **STOP** button for 6 seconds.

### Note

A jogging mode for Venetian blinds for quickly reaching receivers which are further away is not possible in a transmitter channel with more than 10 programmed receivers.

## Synchronous programming mode

For programming additional receivers to one transmitter at the same time:

1. Press the **DOWN** button and the **P** programming button (rear of unit) simultaneously (for 3 seconds) on a transmitter which has already been programmed to the receivers. The status display flashes. The receivers are now in programming mode.
2. For bidirectional operation only: press the programming button **P** on the transmitter to be programmed until the status display lights briefly. The receivers are now in programming mode (up/down movements).
3. Press the **UP** button as soon as the blind starts moving in Open direction (within no more than 1 second). The status display lights briefly. The blinds stop briefly, start moving again, stop and then move downwards.
4. Immediately (within no more than 1 second) after down travel has started, press the **DOWN** button. The status display lights briefly. The blinds stop moving. The transmitter channel is programmed.

## Stopping programming mode (bidirectional) in the transmitter

Press the **STOP** button for at least 6 seconds until the status display lights orange.

## Approaching end positions of roller shutter / awning / Venetian blind

### Requirement

The transmitter/transmitter channel is programmed. The end positions of the drive have been set.

### Approaching bottom end position (roller shutter/awning)

Press the **DOWN** button briefly. The blind moves to the bottom end position/the awning extends completely.

### Approaching the lower end position (Venetian blind)

Press the **DOWN** button until the status display lights briefly. The blind approaches the lower end position.

Press the **DOWN** button only briefly (Inching for JA, pulsed operation for Combio Pulse) and the blind moves a short distance and stops again.

### Approaching top end position (roller shutter/awning)

Press the **UP** button briefly. The blind approaches the upper end position/the awning retracts.

### Approaching the upper end position (Venetian blind)

Press the **UP** button until the status display lights briefly. The blind approaches the upper end position.

Press the **UP** button only briefly (Inching for JA, pulsed operation for Combio Pulse) and the blind moves a short distance and stops again.

## Intermediate positions of the blinds

	Roller shutter	Awning	Venetian blind	Interior shading
Pos ▼	Intermediate position	Intermediate position	Intermediate position	Intermediate position 1
Pos ▲	Ventilation position	-- /fabric tensioning	Tilting position	Intermediate position 2

## Programming the intermediate position in the receiver

### Requirement

The transmitter/transmitter channel is programmed. The end positions of the drive have been set. The blind is in the top end position.

1. Move the blind to the required position using the **DOWN** button. In doing so, keep the **DOWN** button pressed.
2. Also press the **STOP** button. The blind stops. The status display lights briefly. The intermediate position is programmed.

## Programming the ventilation/tilting position in the receiver

### Requirement

The transmitter/transmitter channel is programmed. The end positions of the drive have been set. The blind is at its lower end position.

1. Use the **UP** button to move the blind in the UP direction until the ventilation gaps open or the slats turn. Keep the **UP** button pressed during the movement.



2. Also press the **STOP** button. The blind stops. The status display lights briefly.  
The ventilation position/tilting position is programmed.

### Approaching intermediate position

#### Requirement

The transmitter/transmitter channel is programmed. The blind is at its upper end position.

1. Press the **DOWN** button twice briefly. The status display lights briefly.
2. The blind travels to the stored intermediate position. In the case of Venetian blinds, after reaching the intermediate position, the slats turn automatically. If no intermediate position is programmed, the blind drives to the bottom end position (not when Combio Pulse is used).

### Approaching ventilation/tilting position

#### Requirement

The transmitter/transmitter channel is programmed. The blind is at its lower end position.

1. Press the **UP** button twice briefly. The status display lights briefly.
2. The blind travels to the stored ventilation/tilting position. If no ventilation/tilting position has been programmed, the blind moves to the top end position (not when Combio Pulse is used).

### Operation of the transmitter with Combio JA Pulse

A Combio-868/-915 JA Pulse can be used for blind drives for precise adjustment of the slats. The system is operated for the pulse time set in the Combio Pulse when the **UP** or **DOWN** button is pressed.

The pulse duration can be modified by the user. To do this, press and hold the **STOP** and **UP** button on a taught-in transmitter for 6 seconds. The drive begins to move in short pulses. As soon as the curtain has covered the desired distance, release the **UP**

button, then release the **STOP** button. The new pulse duration is stored. The new pulse duration corresponds to the total of all pulse durations during programming of the pulse duration. The Combio JA Pulse ends programming of the pulse duration after 30 pulses.

### Deleting positions/deleting transmitters

#### Deleting the intermediate position in the receiver

1. Press both the **STOP** and **DOWN** buttons.
2. Hold down this button combination for approximately 3 seconds. The status display lights briefly.

#### Deleting the ventilation position in the receiver

1. Press both the **STOP** button and the **UP** button.
2. Hold down this button combination for approximately 3 seconds. The status display lights briefly.

#### Deleting the transmitter channel in the receiver

1. Press both the **STOP** button and the programming button **P** (on the rear of the unit).
2. Keep this button combination pressed for approximately 6 seconds until the status display lights orange briefly and then lights red. In unidirectional radio operation, the status display lights for 6 seconds: first green briefly twice and then red. The channel in the transmitter is also deleted.

#### Deleting all the transmitters in the receiver

1. Press the **STOP** button and also the programming button **P** (on the rear of the unit) + **UP** button + **DOWN** button.
2. Hold down this button combination for approximately 6 seconds. The status display lights up orange-green briefly twice, followed by red (bidirectional). The channel in the transmitter is also deleted. In unidirectional radio operation, the status display lights for 6 seconds: first green briefly twice and then red.

## Expert Settings

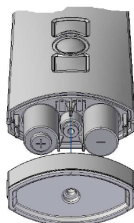
DIP switch 2 on the rear of the device, beneath the cover:  
Switch up: Off (bidirectional and unidirectional operation possible; default setting), switch down: On (bidirectional operation only possible). DIP switch 1: OEM settings.

## Battery replacement

### Note

Replace batteries only with batteries of the identical type.

1. Unscrew the underside of the unit and open the housing.
2. Remove the batteries.
3. Insert the new batteries in the correct position.
4. Put the unit back together again.



Dispose of used batteries properly.

Batteries can be removed easily from end user in accordance with battery directive 2013/56/EU.

## Cleaning

Clean the unit with a damp cloth. Do not use a detergent. This may attack the plastic.

## Disposal

After the end of its service life, dispose of the unit in accordance with the relevant regulations.

## Troubleshooting

Fault	Cause	Remedy
Drive does not run, status display does not light	1. Batteries are low 2. Batteries are incorrectly installed	1. Insert new batteries 2. Insert batteries correctly
Drive does not run, status display lights red or flashes orange Unidirectional: Status display lights green	1. The receiver is outside the transmitting range 2. Receiver out of order or faulty 3. Receiver not yet programmed	1. Reduce distance to the receiver 2. Switch on or replace receiver 3. Program receiver
Drive operates in the wrong direction	Directions are incorrectly allocated	Delete transmitter and reprogram
Required drive does not run	Incorrect channel selected	Select correct channel

## Repair

Please contact your dealer if you have any questions.

Please always provide the following information:

- Item number and name on the type plate
- Type of fault
- Unusual events occurring prior to fault
- Accompanying conditions
- Own suspicion

## EC Declaration of conformity

The product complies with the basic requirements and the other relevant provisions of the EC directives 2014/53/EU. The complete declaration of conformity can be found in the download area of our website: [www.elero.com/downloads-service/](http://www.elero.com/downloads-service/)

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