TempoTel 2   867/868/915 MHz

28265.0002, 28266.0002,
28267.0002, 28265.0902,
28266.0902, 28267.0902

elero

(EN) **Operating instructions (translation)**

182020002_EN_0715

Contents

Safety instructions

⚠	**Observance of these instructions is a precondition for safe and fault-free operation and for the product performing as intended.**

- The operator/user shall have read the instructions fully and understand them.
- The operator shall ensure that the instructions are available to the user in a legible form.
- The operator shall ensure that all safety measures are observed and complied with.
- The following safety and installation instructions relate to the device and not to its accessories or the drive.

⚠	## CAUTION! **Failure to observe these instructions may lead to injury"** → Observe all safety instructions.

- Never install or use damaged products.
- Only use unmodified and compatible original parts.
- If the device is opened without permission or used in an improper manner, or if it is incorrectly installed or operated, there is a risk of damage to persons and property.
- The unit contains small parts which can be swallowed.

Transport

- The device may not be used should you have received the device damaged, despite proper packaging. Complain about any damage to the transport company immediately.

Installation

- Observe all regulations for installation.

Operation

- Use only in dry rooms.
- It must be possible to observe the equipment while it is in operation if the equipment is controlled by one or more transmitters.
- Keep control systems out of the reach of children and the disabled.
- Dispose of used batteries properly.

Safety instructions for radio operation

⚠	**Observe all 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).
- Remote control is permitted only for devices and equipment for which a malfunction of the transmitter or receiver does not give rise to a hazard to persons, animals or objects or where this safety 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 the government and the structural conditions.

Intended use

The TempoTel 2 is a multi-channel transmitter. This can be used unidirectionally (compatible with the existing ProLine program) or bidirectionally. The hand-held transmitter should only be used for controlling roller shutters, Venetian blinds and sun protection systems which are fitted with elero radio receivers. Other uses or use going beyond this is considered to be contrary to the intended use.

The handheld transmitter is referred to in these instructions as the "device".

Exclusion of liability

elero GmbH accepts no liability for injury, damage or financial losses arising from modifications to the device, improper use or a failure to observe the operating instructions. Liability for material defects is excluded in such cases.

Scope of supply

TempoTel 2 (batteries contained in the device), wall bracket, 2 wall plugs, 2 screws.

Technical Data

Name of device	TempoTel 2
Operating voltage	3 V DC
Battery type	2 x LR06 (AA mignon)
Protection type	IP20
Temperature range [°C]	0 ... 55
Radio frequency [MHz]	867/868 band
Transmission power	≤ 500 mW

Dimensions in mm (handheld transmitter)	L 150 x W 51 x H 26
Weight [g] (including battery)	140
Conformity	CE

In a deviation, the following applies for the USA, Canada, Australia and some nations in South America:

Radio frequency	915 MHz band

Mounting of wall bracket

The wall holder is made of a bottom and a top.
- Make sure that the holes are not drilled into electric cables when fitting the wall bracket!
- 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.
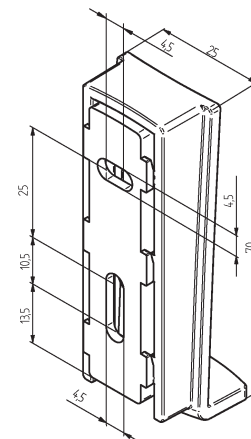
Description of the device

Front side of the device

1 Display

2 Left menu button

3 Right menu button

4 Joystick

5 Operating mode indicator

6 **UP** button

7 **STOP** button

8 Status indicator

9 **DOWN** button

10 Select button

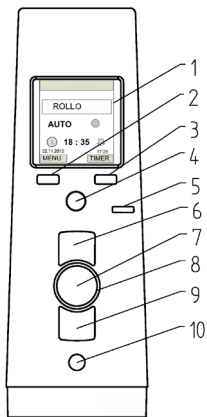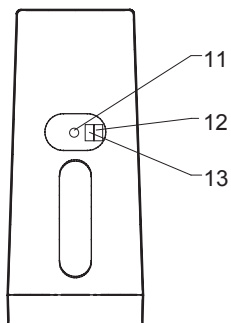### Rear of the device

11 Programming button **P**

Only for experts:

12 DIP switch 1

13 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 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.

Initial operation

Press a button to switch on the hand-held transmitter and illuminate the display, status display and operating mode display. The handheld transmitter is in automatic mode when first switched on.

Note

> **Do not press the P** button until the receivers are in programming mode. The active channel selects a radio system during programming. If the receivers are not in programming mode, the transmitter channel changes to unidirectional mode. Press the **STOP** and **P** buttons simultaneously for 6 seconds until the status display lights to restore the initial condition.
>
> Select the required language by navigating the menu during initial operation.

Factory settings

Program	**Individual**	Off
	Open	07:00 / Sat + Sun 08:00
	Close	20:00
	Astro	On
	Lock time opening	06:30 / Sat + Sun 08:00
	Lock time closing	--:-- (off)
	Astro evening	Off
	Open	07:00 / Sat + Sun 08:00
	Lock time closing	--:-- (off)
Settings	Holiday	Off
	Astro offset	In the morning +0:00 min
		In the evening +0:30 min
	Language	German
	Lighting (display)	On
	SU/WI time	Automatic changeover ON
	Intermediate position	--- (without specifying run time)
	Ventilation position	--- (without specifying run time)
	Program position ↓	End position (for timed switching command **DOWN**)
	Program position ↑	End position (for timed switching command **UP**)
	Priority	Off (automatic switching commands not prioritised)
	Shading	Off (automatic shading system not deactivated with automatic timed switching command **DOWN**)
	Product selection	Roller shutter

Note

> Settings according to channels are only available if at least one channel has been programmed.

Notice: Confirming "Factory settings" in the menu FUNCTION restores all the internal settings of the hand-held transmitter to the factory settings ("Settings", "Program") except the setting for deleting the channel.

Status indicator

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

Status indicator	Meaning
Flashing orange	Channel (sender) not taught-in into any receiver
Flashing orange rapidly	Channel (transmitter) in bidirectional programming mode. Operation of already programmed receivers is not possible. In group teach-in mode every 3 seconds (even without button pressing)
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	Channel (transmitter) is operating unidirectionally: Transmit signal is being sent
Green with repeat, then red (unidirectional)	Channel (transmitter) is deleted
Alternating orange and green (or red), then red (bidirectional)	Channel (transmitter) is deleted
Flashing red	Batteries weak

The transmitting power or radio range will be reduced by declining battery output. The display shows weak batteries with **BAT**. No more functions are executed and there is no display if the voltage drops below 2 V.

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 10 channels (transmitter) can be used for the group control.

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

Joystick

Pressing the joystick briefly up and down enables you to select from 10 channels. The channels are shown in the display with the channel number or with the name input by the user.

An additional channel is reserved for the central channel (**All**) which is automatically assigned to all individual channels. You can select the central channel by moving the joystick briefly to the left. When the central channel is selected, this controls all radio channels simultaneously.

If the hand-held transmitter has two or more bidirectional individual channels, you can configure and select two group control systems by moving the joystick briefly to the right. The bidirectional channels can be allocated for a group via the "Administration" menu.

Selection button

Pressing the selection button briefly allows you to query the current mode (automatic/manual) of the programmed receivers (bidirectional receivers only) and the handheld transmitter channel.

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 display lights red and changes to MANUAL mode in the display. → The receiver now only carries out manual travel commands and does not respond to automatic travel commands.

Note

> In **unidirectional** channels, only the automatic system for timed switching functions in the transmitter is switched off when these are in manual mode. The automatic shading system stays switched on in unidirectional receivers.

> In the case of **bidirectional channels** all the automatic functions in the receivers are switched off in manual mode. This means the receivers do not respond to automatic timed switching commands and shading commands from programmed sensors.

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

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 display lights green and the operating mode in the display changes to AUTO. → The receivers now execute automatic and manual travel commands.

Pressing the selection button in the central channel for longer (approx. 1 second at the most) changes the AUTO or MANUAL operating mode for all the **individual channels**. Switching all the channels to AUTO operating mode sets a different operating mode for individual channels (AUTO and MANUAL),as indicated by the orange operating mode display and the letters **A+M** in the display.
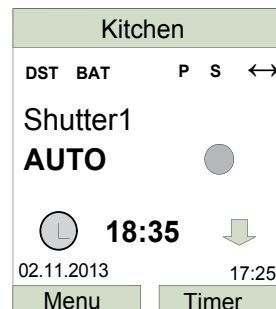
Operating mode

Each time a button is pressed, the following are shown in the display: the currently **selected channel**, the current **operating mode** (AUTO or MANUAL) and the **symbol for the control status**. Activating a switching time function for a channel displays the type of switching time function and the next automatic switching time.

Room allocation is also shown in the display if the channel is allocated to a room in the editing menu.

Display in operating mode

Kitchen
DST   BAT   P   S   ↔
Shutter1
AUTO   ⬤
🕐 **18:35** ⬇
02.11.2013   17:25
Menu   Timer

Room allocation (optional)
Function bar:
↔ = Bidirectional
→ = Unidirectional
Channel number or name of the channel
Operating mode, status symbol

Switching time type, next switching time

Pressing the menu button "**Timer**" can activate or deactivate the automatic timed switching function for the channel.

The display switches off after 2 minutes if no buttons have been pressed.

Function bar abbreviations and display symbols

DST	Daylight saving time activated
BAT	Low battery charge
P	Channel-related priority for timed switching command activated
S	Channel-related activation or deactivation of the automatic shading system when automatic timed switching command is activated

⬆	Open	⬤	Stop status
⬇	Down		Wind interlock
	Top end position	🕐	Individual switching time ON
	Bottom end position		Astro switching time ON

Menu structure

Date/Time			
Program	Channel selection	Individual	Individual switching times
		Astro	Astro mode switching times
		Astro evening	Astro mode closing
		Switching time off	All day switching times switched off in the channel
Administration	Channels		Channel-specific allocations
	Rooms		Room-specific allocations
	Groups		Group allocations
	Reset		Reset all allocations and names
Settings	Holiday		Holiday mode On/Off
	Astro	Select town	Town selection by geographic data with continental assignment for astro function
		Latitude / longitude	Freely selectable input of geographic data Latitude, longitude and UTC for astro function
	Language		Language selection
	Lighting		Display lighting On/Off
	Summer/winter time		Set summer/winter time changeover to automatic, manual or changeover disabled
	Channel settings	Product selection	Product-specific transmitter configuration (not for groups and central channel)
		Intermediate position or Intermediate position 1 (in secs)	Setting a travel time to intermediate position
		Ventilation/tilting position or intermediate position 2 or fabric tensioning position (in 0.1 seconds)	Setting a travel time to desired position
		Program – Position ↓	Setting travel on time switching command DOWN
		Program – Position ↑	Setting travel on time switching command UP
		Priority	Priority automatic commands On/Off
		Shading	Activate auto shading for clock UP On/Off
		Astro offset	Shift astro time for opening and closing
Function	Factory setting		Reset all settings to factory settings (without changing channel assignment)
	Expert		All on / off Info on / off Total reset SRV
	Version		Version details

Menu mode

Pressing the "**MENU**" button opens the menu mode for setting the time, date, switching times and function parameters.

You can make selections and changes in the menu using the left and right menu buttons and the joystick. The keyboard layout is specified in the text above the menu button.

Joystick functions

Movement down	Downward scrolling function or value change (-) In the Time Change menu: Selection of the days
Movement up	Upward scrolling function or value change (+) In the Time Change menu: Selection of the days
Movement to the left/ right	Changes the setting ranges or activates the field.

Note

If the hand-held transmitter is in the menu mode and the buttons are not pressed for longer than 90 seconds, the menu is automatically changed back to operating mode without saving the changes.

DATE / TIME menu

Setting the date and time. Using the automatic switching commands requires a current setting.

When changing the battery, the settings of date and time are retained.

PROGRAM menu

Once you have selected the channel, you can set different switching times:

- Individual (each day can be selected)
- Astro (each day can be selected), set ON at the factory
- Astro evening (each day can be selected)

The selection of the switching or lock times assigned to days is performed using the activation of the days of the week using the joystick (up/down).

Switching time example:

```
Switching times channel 4

Mo Tu We Th Fr Sa Su
☑  ☑  ☑  ☑  ☐  ☑  ☑

   ⬆   07:25

   ⬇   20:15

Change        Back
```

All switching times can additionally be switched off for all days per channel, display "–:–" for deactivated switching times.

Note

It is not possible to select different switching times for specific channels for several unidirectional function channels (switching time applies to all unidirectional channels).

Individual

Automatic up and down movement at the set times and days.

Astro

Controls the up and down according to Astro function in accordance with the sunrise and sunset times. Programmable lock times prevent up and down movement occurring too soon.

A switching time adapted to the local conditions for the up and down can be achieved using input of the geographic data by selection of a town or inputting longitude and latitude. This can be supplemented with an individual Astro offset (see settings).

Astro evening

This controls movement up according to the set switching time and movement down according to Astro function. The programmable lock time prevents movement down in accordance with the Astro function occurring too soon.

Lock time

This prevents movement up or down in accordance with the Astro function occurring too soon. Changing lock times: "Program" menu, select channel, Astro evening (or Astro), select "Change", select days by moving joystick completely to the right, change lock times, save.

ADMINISTRATION menu

You can select channels, rooms and groups and set their names and assignments.

Channels

You can allocate a selected channel to a room or group (bidirectional channels only). You can change the designation individually for the selected channel. You can move the channel's position in the list for the operating mode.

Rooms

Once you have designated individual rooms, you can allocate channels to the selected room and change room designations. However, no functions can be assigned.

Groups

You can select two groups, allocate individual channels to them and change their group designation.

Note

Group allocation is only available if at least 2 bidirectional radio channels exist. Group allocation is not possible for unidirectional channels.

Reset

Selecting the menu item "**Reset**" resets all designations to the factory settings (rooms, channel and group assignments, room assignments). List items from channels are retained.

SETTINGS Menu

Adjusting the functions as required.

Settings for holidays, Astro, language, lighting and Summer/ Winter time apply to all channels.

Submenu holiday

The holiday function simulates an occupied house while you are on holiday. If this function is active, all the programmed switching times are delayed by 0 to 30 minutes at random.

Submenu Astro

When the Astro menu is selected, the input of a town or the direct input of longitude and latitude with time zone are available for adapting the Astro switching times according to geographic data or individual requirements.

Select town

Select a town using the geographic data. The towns are sorted by continent. The continents are selected by moving the joystick sideways; a town is selected by moving the joystick up or down. The town of Kassel for Germany is set at the factory. See the "Towns for selection" chapter for selectable towns.

Longitude / latitude

The direct input of geographic data for the Astro function is possible using the "Longitude", "Latitude" and "Time zone" input fields. When a town is selected, the geographic data of the selected town are displayed. If data are entered directly which are different from the town-related coordinates, the previous selection of the town is cancelled.

Submenu Language

You can select the language of the menu texts from a list:

- German
- Spanish
- Dutch
- Polish
- English
- Italian
- Swedish
- French
- Portuguese
- Danish

Submenu Lighting

Switching the display background lighting on and off

This is switched off automatically if no button is pressed for 5 seconds. The lighting function is switched on at the factory.

Submenu SU/WI time

Su/Wi designates the automatic Summer/Winter time changeover. The automatic changeover is activated at the factory; the timer adjusts automatically.

In the menu, you can select between an automatic Summer / Winter time changeover in accordance with country-specific rules or a manual Summer time changeover for areas without defined rules for the Summer time. Automatic Summer time changeover is not available in these areas. Both changeover types can be deactivated with resetting to the local standard time.

An activated Summer time is indicated in the function bar of the display with "DST" (daylight saving time).

Note

> If the automatic Summer time changeover cannot be selected, a possibly necessary manual Summer time setting must always be made using the "Su/Wi time" menu in order to prevent unwanted switching time offsets of the Astro function (closing and opening too soon).

Submenu Channel settings

Individual or local adjustment of the Astro switching times with the option of offsetting the opening and/or closing time by up to a maximum of ± 120 minutes.

The following settings apply to each channel.

Possible running time to the intermediate position: from 0 to 360 seconds, running time to the ventilation position: roller shutters 0 to 120 seconds, Venetian blinds 0 to 180 seconds.

In addition, you can program intermediate/ventilation/tilting positions. You can also program on the receiver.

Product selection

After selection of a channel, a product-specific designation of individual functions and a maximum running time can be assigned to the channel. Product-specific basic characteristics of Venetian blind products as compared with other product groups are recognised and configured automatically.

Application	Available setting
Roller shutter	Intermediate position and ventilation position
Awning	Intermediate position and cloth tensioning position
Interior shading	Intermediate position 1 or intermediate position 2
Venetian blinds	Intermediate position and turning position

Intermediate position or intermediate position 1 (in seconds)

The transmitter can store a run time for the intermediate position for each channel. A common run time for the intermediate position can be set for unidirectional channels.

After selection of a channel, a running time for the start from an intermediate position from the top end position can be set in 1 second steps using the joystick (up/down) or using the **UP**/**DOWN** buttons.

Approach of the intermediate position (according to the preset running time): short double press of the **DOWN** button.

The intermediate position run time is set at 0 (---) at the factory.

Ventilation, tilting, fabric tautening position, intermediate position 2 (in tenths of seconds)

The transmitter can store a running time for this position for each channel. A common run time can be set for unidirectional channels.

After selection of a channel, a running time for the approach of a ventilation position (roller shutter) or tilting position (Venetian blind) from the bottom end position can be set in 0.1 second steps using the joystick (up/down) or using the **UP**/**DOWN** buttons.

Approach of the ventilation or tilting position (according to the preset running time): short double press of the **UP** button.

The ventilation position running time is set to 0 (---) at the factory.

Program position ↓ (DOWN)

After selection of a channel, the way an automatic closing command is carried out (if the timed switching function for the channel is activated) can be selected. You can set a common program position for unidirectional channels.

End position	Roller shutter, awning, Venetian blind or interior shading moves to the bottom end position
Intermediate position / intermediate position 1	Roller shutter, awning or Venetian blind moves to the programmed position or a taught-in runtime
Interim position 2 / ventilation / turning / cloth tensioning position	Roller shutter, awning, Venetian blind or interior shading moves to the bottom end position and then to the programmed position

Program position ↑ (UP)

After selection of a channel, the way an automatic opening command is carried out (if the timed switching function for the channel is activated) can be selected. You can set a common program position for unidirectional channels.

End position	Roller shutter, interior shading, Venetian blind or awning moves to the top end position (factory setting)
Interim position 2 / ventilation / turning / cloth tensioning position	Roller shutter, awning, Venetian blind or interior shading moves to the programmed position or travels for the programmed running time

Priority

Once you have selected a channel, you can set an activated priority, which means that automatic time switching commands from the hand-held transmitter channel are given priority in all receivers and accepted even the MANUAL operating mode of receivers. Automatic switching commands are prioritised in the factory settings.

The activated prioritisation of timed switching commands is indicated in the function bar of the display by a "**P**".

In all unidirectional channels only a common setting of the priority is possible.

Shading

A time-controlled down command switches off the automatic shading system (privacy protection). A time-controlled open command switches on the automatic shading system again.

Requirements: The setting for shading is on "Automatic ON".

The shading setting is set to "Automatic OFF" at the factory.

The activated shading function is indicated in the function bar of the display by an "**S**".

In all unidirectional channels only a common setting of the automatic shading function is possible.

Astro offset

Individual or local adjustment of the Astro switching times with the option of offsetting the opening and/or closing time by up to a maximum of ± 120 minutes.

FUNCTION menu

Submenu Factory settings

Resets all settings except the receiver assignments linked to channels to the factory settings. All the initial operation steps must then be carried out.

During the initial commissioning, the following must be set using the automatic menu guidance:
"Language setting" -> "Town selection" -> "Date/time".

Submenu expert

The Expert menu is usually not released. It can be released by pushing the following key combination in the dialogue of the menu "Version" for 3 seconds:
first <Menu key left> + then <Menu key right>.

The menu "Experts" is called and can be reached through the menu "Function" until the display switches off (2 minutes without key operation).

All On/Off

According to the factory settings, the central channel is available: "All on".

If this is not desired or does not seem sensible (e.g. for mixed operation with roller shutters and awnings), this function can be switched off with "All off".

When selecting the setting "All off", the control and setting options of the central channel are deactivated.

Info On/Off

Activation or deactivation function for the cyclic request of the individual channels when starting during a movement in the group or the central channel. Depending on the individual channels in the group or the central channel, deactivation can clearly reduce the radio traffic when sending in the group. In case of deactivation, the position display is updated by the internal runtime of the transmitter.

Total reset

Note:

• All data and taught-in receivers re deleted!

• Internal memory is reformatted.

• Date/time is reset to 01.01.2015, 06:00 hours.

SRV

Service information.

Submenu version

Indication of the current firmware version.

Programming the transmitter

Requirement

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

1. Where electrical receivers 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 rear of the device briefly (approximately 1 second) until the status display lights up briefly. The curtain 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 curtain starts moving in upwards direction (within 1 second at the most). The status indicator is lit briefly. The curtain stops briefly, starts moving again and then moves downwards.

4. Press the **DOWN** button as soon as the curtain starts moving in downwards direction (within 1 second at the most). The status indicator is lit briefly. The curtain stops. The transmitter channel has been programmed.

Note

Programming will have to be repeated if the curtain does not stop.

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

Programming additional transmitters

Note

Multiple receivers connected to the **same supply** are all simultaneously ready for programming for approximately 5 minutes after connection to the mains and signals this by a brief run downwards.

If the **P** button is now pressed on the transmitter, all receivers start the programming mode simultaneously (ascents/descents). An offset is created between the receivers by randomly different pauses between the ascents/descents. The longer programming is delayed, the greater the offset will be.

You can stop the short opening and closing movements by briefly pressing the **STOP** button 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 curtain moves in the wrong direction, delete the transmitter and program it again (→ see Deleting transmitters)..

To program additional transmitters to one receiver:

1. Press the **UP**, **DOWN** and the programming button **P** (back of device) simultaneously (for 3 sec.) on a transmitter, which has already been programmed to the receiver. The status indicator is lit briefly. The receiver is now ready for programming and briefly moves down.

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 (movements up and down).

3. Press the **UP** button as soon as the curtain starts moving in upwards direction (within 1 second at the most). The status indicator is lit briefly. The curtain stops briefly, travels further, stops and then travels in the downwards direction.

4. Press the **DOWN** button as soon as the curtain starts moving in downwards direction (within 1 second at the most). The status indicator is lit briefly. The curtain stops. The transmitter channel has been programmed.

If more than 10 bidirectional receivers are being programmed in one channel at the same time, the transmitter channel in programming mode switches to group mode. 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 bidirectional transmitter channel with more than 10 programmed receivers.

Synchronized programming mode

For programming one transmitter to multiple receivers at the same time.

1. Press the **DOWN** and programming **P** (rear of the device) buttons simultaneously (for 3 seconds) on a transmitter that 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 up briefly. The receivers are now in programming mode (ascents/descents).

3. Press the **UP** button as soon as the curtain starts moving in upwards direction (within 1 second at the most). The status indicator is lit briefly. The curtains stop briefly, start moving again, stop and then move downwards.

4. Press the **DOWN** button as soon as the curtain starts moving in downwards direction (within 1 second at the most). The status indicator is lit briefly. The curtains stop moving. The transmitter channel has been programmed.

Stopping programming mode (bidirectional) in the transmitter

Press the STOP button and hold for at least 6 seconds until the status display lights up orange.

Approaching limit positions of roller shutter / awning / Venetian blind

Requirement

The transmitter/transmitter channel has been programmed.
The end positions of the drive are set.

Approaching the lower end position (roller shutter/awning)

Press the **DOWN** button briefly. The curtain descends to the lower end position/the awning extends fully.

Approaching the lower end position (blind)

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

Press the **DOWN** button only briefly (jog mode on JA, pulse mode for Combio Pulse), the curtain starts up briefly and stops again.

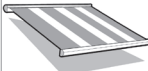**Approaching the upper end position (roller shutter / awning)**

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

Approaching the upper end position (blind)

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

Press the **UP** button only briefly (jog mode on JA, pulse mode for Combio Pulse), the curtain starts briefly and stops again.

Intermediate positions of the curtains

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

Programming intermediate positions in the receiver

Requirement

The transmitter/transmitter channel has been programmed. The end positions of the drive are set. The shutters are in the top end position.

1. Move the curtain to the required position with the **DOWN** button. Keep pressing the **DOWN** button.
2. Also press the **STOP** button. The curtain stops. The status indicator is lit briefly.
   The intermediate position is now programmed.

Programming the ventilation/tilting position in the receiver

Requirement

The transmitter/transmitter channel has been programmed. The end positions of the drive are set. The curtain is in the bottom end position.

• Move the curtain in the UP direction using the **UP** button until the ventilation slots open, or the slats have turned. Keep pressing the **UP** button during operation. Also press the **STOP** button. The curtain stops. The status indicator is lit briefly. The ventilation/tilting position is programmed.

Moving to intermediate positions

Requirement

The transmitter/transmitter channel has been programmed. The curtain is in the top end position.

1. Press the **DOWN** button briefly twice. The status indicator is lit briefly.
2. The shutters will move to the registered intermediate position. In the case of Venetian blinds, the slats turn automatically after reaching the intermediate position if a turning position has been programmed. If no intermediate position is programmed, the curtain travels to the lower end position (not if Combio Pulse is in use).

Moving to ventilation / turning position

Requirement

The transmitter/transmitter channel has been programmed. The curtain is in the bottom end position.

1. Press the **UP** button twice briefly. The status indicator is lit briefly.
2. The shutters will move to the registered ventilation / turning position. If no ventilation/turning position is programmed, the curtain travels to the upper end position (not if Combio Pulse is in use).

Operation of the transmitter using Combio JA Pulse

A Combio 867/868/915 JA Pulse can be used for the precise adjustment of the slats for Venetian blind drives.
The preset pulse time of Combio Pulse is cycled by pressing the **UP** or **DOWN** button.

The pulse time can be changed by the user. Keep the **<STOP>** and **<UP>** buttons on a programmed transmitter pressed for 6 seconds for this. The drive starts to move in small pulses. As soon as the curtain has travelled the required distance, release the **UP** button, then release the **STOP** button. The new pulse time is saved. The new pulse time corresponds to the sum of all pulse times during the programming of the pulse time. The Combio JA Pulse ends the programming of the pulse time after 30 pulses.

Deleting positions/deleting transmitters

Deleting the intermediate position from the receiver

1. Press both the **<STOP>** button and the **<DOWN>** button.

2. Hold this button combination for approximately three seconds. The status indicator is lit briefly.

Deleting the ventilation/tilting position in the receiver

1. Press both the **<STOP>** button and additionally the **<DOWN>** button.

2. Hold this button combination for approximately three seconds. The status indicator is lit briefly.

Deleting a transmitter channel in the receiver

1. Press both the **<STOP>** button and additionally the **<Programming button P>** (back of the device).

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 transmitters from the receiver

1. Press both the **<STOP>** button + the **<programming button P>** (on the back of the device) + the **<UP>** button + the **<DOWN>** button.

2. Hold this button combination for approximately 6 seconds. The status display lights 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 or unidirectional operation possible), switch down: ON (only bidirectional operation possible; preset). DIP switch 1: OEM setting.

Replacing the battery

Batteries can be removed easily by the end user according to the battery directive 2013/56/EU.

Replace batteries only with batteries of identical type.

- Screw open the underside of the unit and open the lid.

- Remove the flat batteries.

- Insert 2 new batteries of the same type LR06, AA, rated voltage each in the correct position. Use of of accumulator cells is excluded.

- Attach the lid again and connect it to the device by the screw.
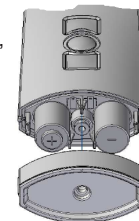
Do not dispose of flat batteries in the household waste!

Cleaning

Clean the unit with a damp cloth. Do not use any cleaning agents or solvents. This may attack the plastic.

Towns for the selection

EUROPE

Trondheim, Oslo, Oestersund, Stockholm, Helsinki, Moscow, Kobenhaven, Glasgow, London, Manchester, Amsterdam, Bruxelles, Hamburg, Kassel, Berlin, Köln, Dresden, Frankfurt, Nürnberg, Stuttgart, München, Warzawa, Krakow, Praha, Kiev, Wien, Linz, Innsbruck, Graz, Budapest, Basel, Zürich, Bern, Geneve, Lille, Paris, Brest, Lyon, Toulouse, Marseille, Venezia, Milano, Firenze, Roma, Napoli, Zagreb, Ljubljana, Bucaresti, Istanbul, Ankara, Izmir, Athens, La Coruna, Madrid, Malaga, Las Palmas, Lisboa.

NORTH AMERICA

Vancouver, Montreal, New York, San Francisco, Denver, Atlanta, San Diego, Dallas, Miami, Mexico City.

SOUTH AMERICA

Medelin, Lima, Santiago DC, Sao Paulo, Buenos Aires.

AFRICA

Casblanca, Tunis, Cairo, Cape Town.

ASIA

Beijing, Shanghai, Hong Kong, Manila, Singapore, Mumbai, New Delhi, Tehran.

AUSTRALIA / NEW ZEALAND

Perth, Sydney, Brisbane, Christchurch.

EC declaration of conformity

elero GmbH hereby declares that the TempoTel 2 complies with the basic prerequisites 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/*

Certification FCC / IC

US: Addendum to the manual
FCC / IC approval

This device (TempoTel 2) complies with part 15 of the FCC Rules and RSS-210. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

CA: Addendum au manuel
Homologation FCC / IC

Le présent appareil (TempoTel 2) est conforme aux FCC part 15 et CNR-210 d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Troubleshooting

Fault	Cause	Remedy
Drive does not run; status display does not light up	1. Batteries are exhausted 2. Batteries are incorrectly installed	1. Insert new batteries 2. Insert batteries correctly
Drive does not run; status display lights up red or flashes orange Unidirectional: Status display lights green	1. The receiver is outside radio range. 2. Receiver not operating 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
Desired drive does not run	Incorrect group or channel selected	Select correct group or channel
End positions are approached inaccurately	End positions not yet set	Have the end positions set by a specialist in accordance with the product instructions
The hand-held transmitter does not carry out the set switching commands	1. The date and time are not set 2. "MANUAL" operating mode is set 3. The timed switching functions for specific channels are not activated	1. Setting the date and time 2. Set "AUTO" operating mode 3. Activate the timed switching function for the channel

Fault	Cause	Remedy
The hand-held transmitter does not carry out the set switching commands accurately	Holiday function is switched on	Switch holiday function off
The Astro program switches inaccurately	1. Date set incorrectly 2. Holiday function is switched on 3. Astro offset is set	1. Set correct date 2. Switch holiday function off 3. Adjust Astro offset
There is no timed switching function for automatic switching commands after the batteries have been replaced	Power supply interrupted for too long	Setting the date and time

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
- Unusual events preceding fault
- Accompanying conditions
- Own suspicion

Manufacturer's address

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www.elero.com

Please visit our website if
you require a contact outside
Germany.

Disposal /
notes on environmental protection

From implementation of the European directives 2002/96/EC and
2006/66/EC in national law, the following applies:

Electrical and electronic devices as well as batteries must not be
disposed of in the household waste. The consumer is
required by law to return electrical and electronic devices
as well as batteries to the public collection points provided
for this or the point of sales at the end of their service lives.
Details on this are provided for by the respective national law.

The icon on the product, the operating instructions or the packaging
refers to these provisions. Reuse, recycling or other forms
of use of old devices or batteries make an important
contribution to protect our environment.