ONE-MB4 SERIES TUBULAR MOTOR

radio controlled, electronically set end positions, **feedback signal**

433 MHz 230V/50Hz

05.2025

Significant hazards can occur if the handling and safety instructions laid out in this manual are not complied with.
It is strongly recommended that you follow the operating instructions.

Installation of the tubular motor should be performed by specialists with 1kV or higher SEP-certified electrician's licence or equal licence.

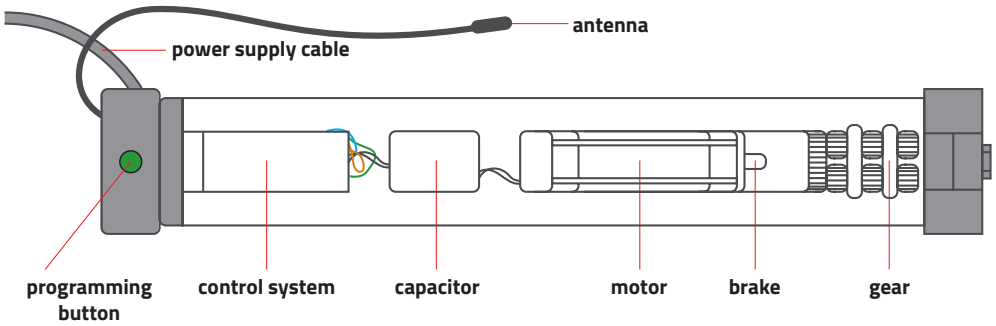
ONE MB4 tubular motors are motors with bi-directional communication.

The tubular motors are compatible with all **ONE SMART HOME** brand devices.

ONE ZB2	ONE YB1	ONE FB1	ONE FB2	ONE XB1	ONE XB2	ONE XB3	ONE XB4	ONE XB5	ONE SMART HOME
Switch / radio receiver	Radio receiver	1-channel on-wall transmitter	5-channel on-wall transmitter with timer	1-channel remote control	5-channel remote control	15-channel remote control	30-channel remote control	Remote control (key fob)	Central control unit
									
Designed for wired motors		Compatible with ONE-MB4 motor							

Technical data

ONE-MB4 motors are motors with two-way communication and a radio receiver. They have a mechanism for detection of obstacles, so that the motor stops if sensing resistance in its path. Detection of obstacles works in both directions, with the use of lock hangers as well as with springy hangers. Electronic end position switches set by using the remote control provide ease of programming. Motors provide the ability to set the third position. For **ONE-MB4** motors, it is possible to connect an impulse switch that controls the motor in „step by step" mode. EV/S series tubular motors are compatible with all **ONE SMART HOME** brand devices.



Radio receiver memory:
up to 10 transmitters

Max time of continous work: 4 min.

Power supply: 230 V / 50 Hz

Operating temperature:
from -5°C to 50°C

Protection degree: IP 44

PROGRAMMING BUTTON FUNCTIONS:

1. Pressing the programming button briefly for approximately 1 second controls the drive step by step.
2. Press the programming button for 2 seconds to enter the first transmitter programming mode. If the drive has no end positions set, the transmitter is added first. Otherwise, it is added as another transmitter without deleting previously programmed transmitters.

Maximal time of continuous work is 4 minutes. After that time thermal protection will be activated preventing motor from overheating. Finally, motor will be disabled for about 20 minutes until it cools down.

Safety measures

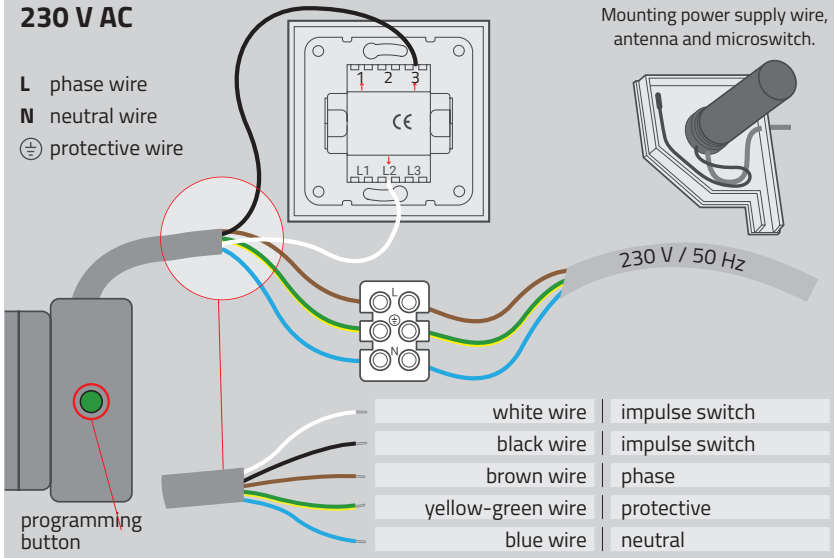
Before installing or using the motor please read the following user manual. The installer must comply with the standards and regulations in force in the country where the appliance will be installed and provide information to users about the conditions and maintenance of the device. Failure to follow these instructions can present risk to life and health, or may cause improper functioning of the roller shutter. This also results in the loss of warranty rights.

– Motors torque parameter should be adequate to the weight of the roller shutter curtain.
– Wiring should be mounted in a way preventing water from entering the tubular motor, it should also prevent the moving roller shutter curtain from damaging the wiring.
– Electrical system control should be performed regularly to detect any signs of use or damage of the motor.
– Electrical supply needs to be disconnected before conducting any maintenance, cleaning and/or repair work.
– All contact of the motor with any liquids should be reduced to a minimum.
– No tools should be used when placing the motor in the tube.
– When mounting the adapter special attention must be paid not to damage the motor.
– Motor and its control system should be kept out of reach of children.

Connecting ONE MB4 motor

230 V AC

L phase wire
N neutral wire
protective wire



Mounting power supply wire, antenna and microswitch.

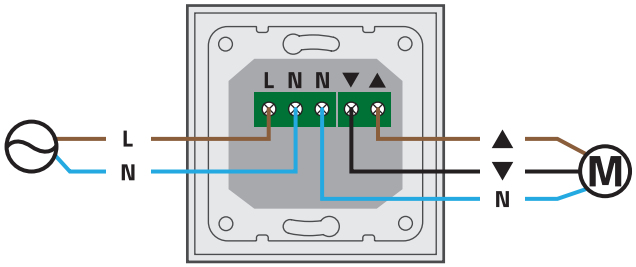
white wire	impulse switch
black wire	impulse switch
brown wire	phase
yellow-green wire	protective
blue wire	neutral

Installation of the tubular motor should be performed by specialists with 1kV or higher SEP-certified electrician's licence or equal licence. Device is designed to operate in places shielded from unfavourable weather conditions. Motor should be installed in accordance with all provisions of EU law and professional standards. All cables connecting power receiver with electric source should be protected from overload and short-circuits effects with devices automatically disconnecting power. Device should be powered with a separate source and protected only with a fast-blow fuse (eg. WTS, S- B class) slow-blow fuse (class C or D) should never be used. Creating electrical system using inadequate fuse may result in loosing rights under the provisions of warranty. When connecting device to power source with cables appropriate cross-section should be used. Long-lasting output load capacity table should be the ground for choosing correct cables.

Connecting ONE ZB2 switch / radio receiver

230 V AC

N	neutral wire – blue (power supply)
L	phase wire – brown (power supply)



▼	Direction 1 – black wire (motor)
▲	Direction 2 – brown wire (motor)
N	neutral wire – blue (motor)

Programming and adding ONE ZB2 switch / radio receiver to the remote control

Press and hold STOP button for 2 s. Motor makes a sound, the roller shutter makes short up/down movements.

Press and hold STOP button for 2 s. Motor makes a sound, the roller shutter makes short up/down movements.

The remote control has been programmed

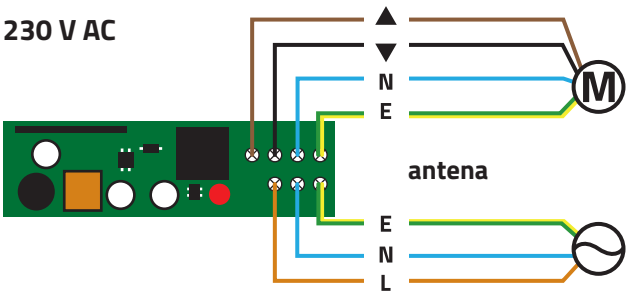
Deleting the remote control from ONE ZB2 switch / radio receiver

Press and hold STOP button for 2 s. Motor makes a sound, the roller shutter makes short up/down movements.

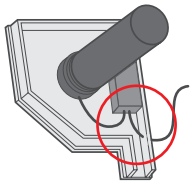
Press and hold STOP button for 2 s. Motor makes a sound, the roller shutter makes short up/down movements.

The remote control has been deleted

Connecting ONE YB1 radio receiver



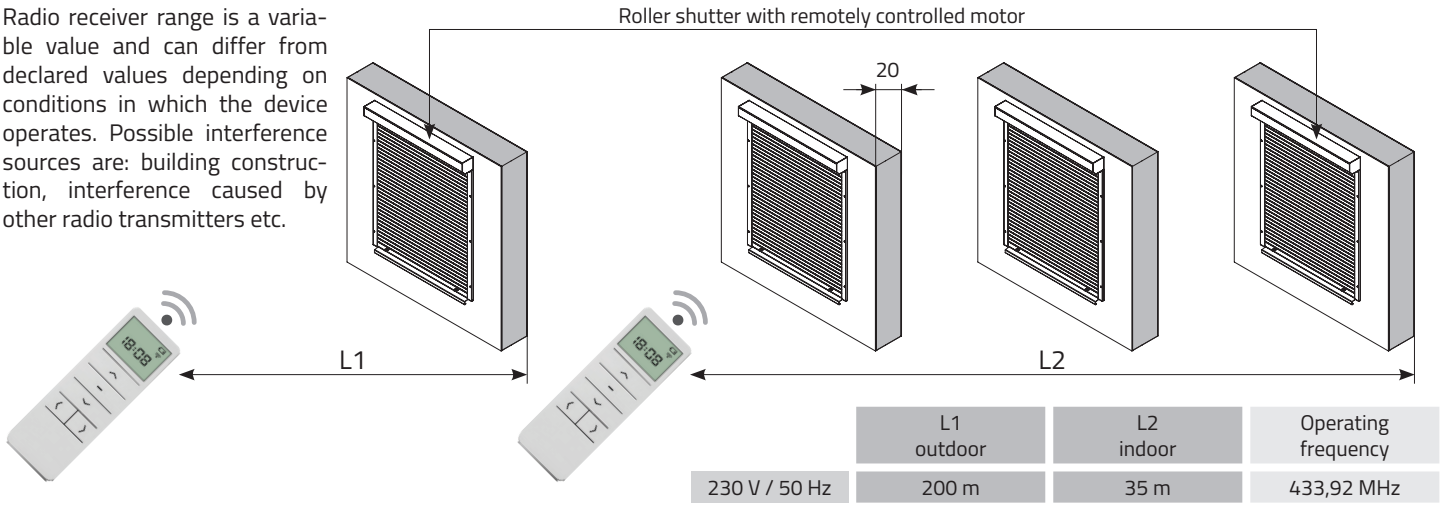
▼	Direction 1 – black wire (motor)
▲	Direction 2 – brown wire (motor)
N	Neutral wire – blue (motor)
E	Protective wire – yellow-green (motor)
E	Protective wire – yellow-green (power supply)
N	Neutral wire – blue (power supply)
L	Phase wire – brown (power supply)



The receiver should be mounted as shown in the drawing (with the wires facing down).

Range

Radio receiver range is a variable value and can differ from declared values depending on conditions in which the device operates. Possible interference sources are: building construction, interference caused by other radio transmitters etc.

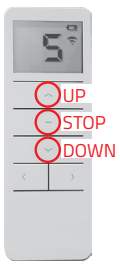


	L1 outdoor	L2 indoor	Operating frequency
230 V / 50 Hz	200 m	35 m	433,92 MHz

Programming and operating buttons

ONE FB1 ONE FB2 ONE ZB2

ONE XB1 ONE XB2 ONE XB3 ONE XB4



ONE XB5

Location of P2 programming button

ONE FB1

ONE FB2

ONE XB1 ONE XB2 ONE XB3 ONE XB4

ONE ZB2

Simultaneous pressing of UP/STOP buttons

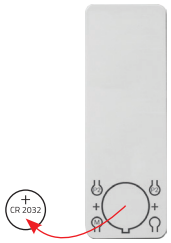
ONE XB5

Simultaneous pressing of UP/STOP buttons

Selection of transmitter operating mode

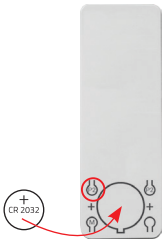
If connecting remote control with the motor is impossible, check transmitter's operating mode.

1. Transmitter's operating modes:
   a) bi-directional
   b) unidirectional
2. Transmitter's operating mode default setting is bi-directional.



Remove battery from the transmitter.

Press P2 programming button on the remote control.



While holding P2 programming button, insert the battery.

If LED light flashes 1 time – transmitter is in **unidirectional operating mode**.

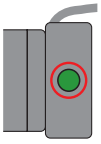
On remote controls with a display **number 1** will appear on the display.

If LED light flashes 2 times – transmitter is in **bi-directional operating mode**.

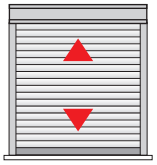
On remote controls with a display **number 2** will appear on the display.

Programming the first transmitter

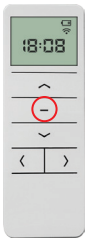
1. Longer than 6 seconds pause between series of button clicks during programming will cause device to switch off from programming mode without saving any changes.
2. If the end positions are not set, the programming of the first transmitter results in the deleting of pre-programmed transmitters from memory.



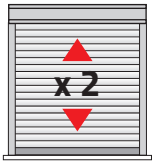
Turn on power supply or press programming button on motors head (for 2 sec.) when power is on.



Motor makes a sound. Roller shutter makes an up/down move.



Press STOP button for a 2 seconds on the remote.

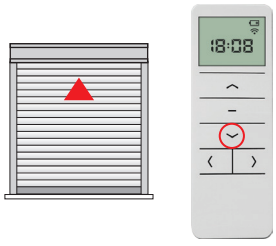


Roller shutter makes 2 short up/down movements. Motor makes several short beeping sounds.

Changing motor direction

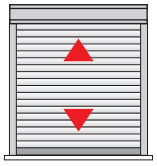
METHOD 1:

Changing the work motor direction using this method is only possible before the end positions are programmed.

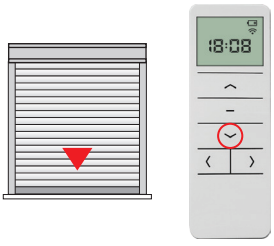


When pressing DOWN button roller shutter moves up.

Simultaneously press and hold UP and DOWN buttons for 2 seconds.

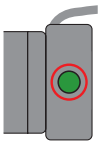


Roller shutter makes short up/down movements.

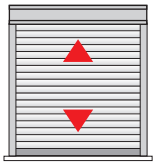


When pressing DOWN button roller shutter moves down.

METHOD 2:



Press and hold programming button for 6 seconds on motor head.

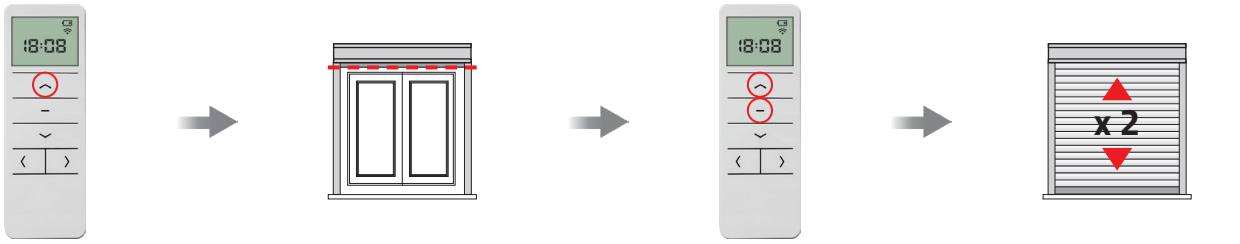


Roller shutter makes short up/down movements. Motor makes 2 short sounds.

Programming end positions

1. If the end positions are not set, the motor is in pulse mode.
2. **Longer than 2 minute pause** between series of button clicks during programming will cause device to switch off from programming mode without saving any changes.

UPPER END POSITION:



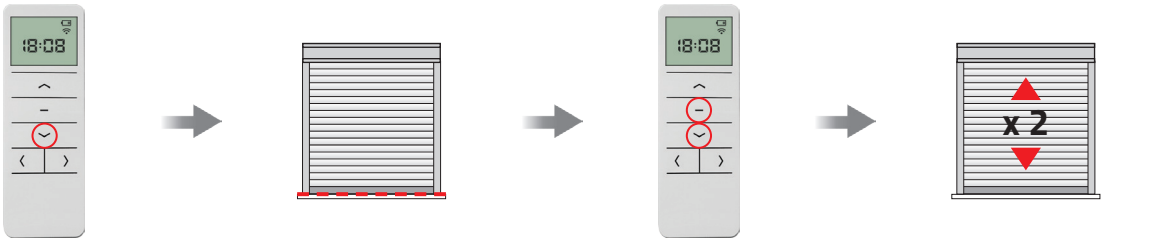
Press UP button.

Stop the motor in the upper end position.

Simultaneously press and hold UP and STOP buttons for 2 seconds to confirm upper end position.

Roller shutter makes 2 short up/down movements. Motor will make several beeping sounds.

LOWER END POSITION:



Press DOWN button.

Stop the motor in the lower end position.

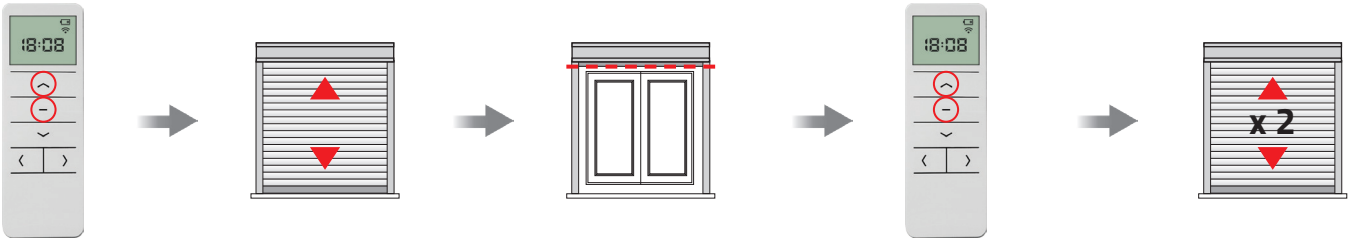
Simultaneously press and hold DOWN and STOP buttons for 2 seconds to confirm upper end position.

Roller shutter makes 2 short up/down movements. Motor will make several beeping sounds.

Adjusting end positions

1. When setting the end positions, you can adjust the upper or lower end position.
2. **Longer than 2 minute** pause between series of button clicks during programming will cause device to switch off from programming mode without saving any changes.

ADJUSTING THE UPPER END POSITION



Simultaneously press and hold UP and STOP buttons for 5 seconds.

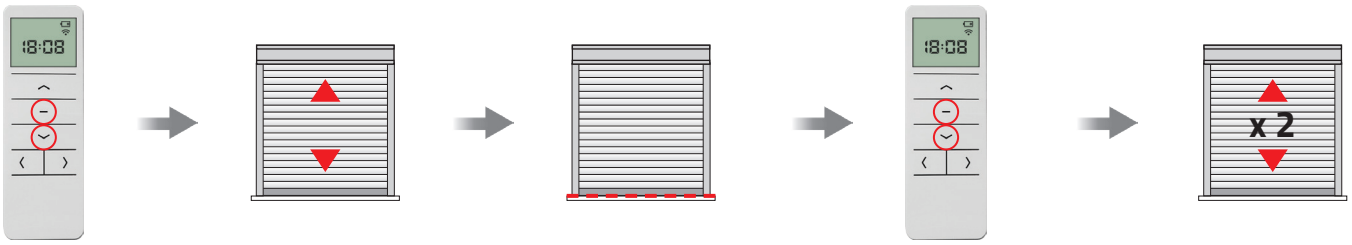
Motor makes a beeping sound. Roller shutter makes short up/down movements.

Set the new upper end position.

Simultaneously press and hold UP and STOP buttons for 2 seconds to confirm the new upper end position.

Roller shutter makes 2 short up/down movements. Motor will make several sounds.

ADJUSTING THE LOWER END POSITION



Simultaneously press and hold DOWN and STOP buttons for 5 seconds.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

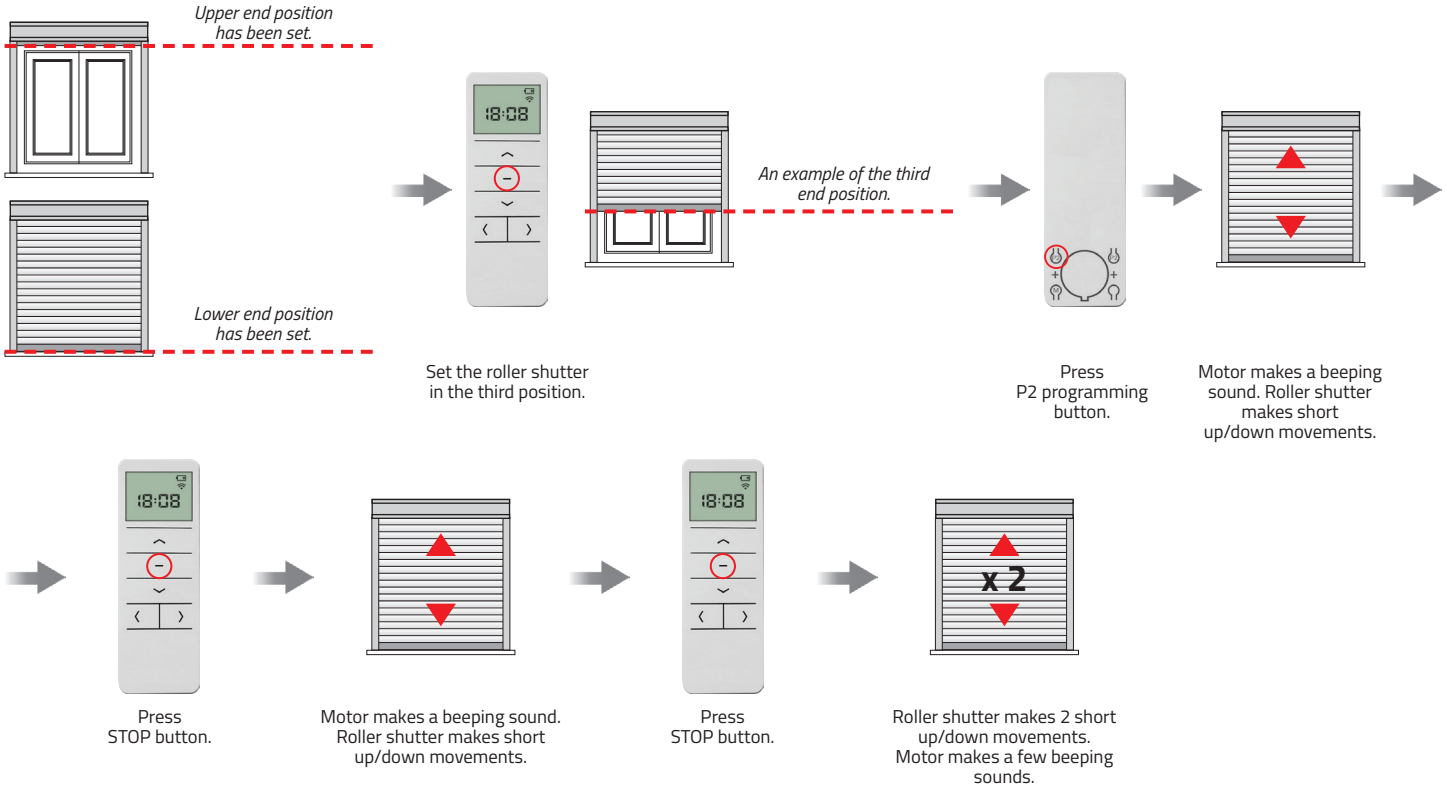
Set the new lower end position.

Simultaneously press and hold DOWN and STOP buttons for 2 seconds to confirm the new lower end position.

Roller shutter makes 2 short up/ down movements. Motor will make several sounds.

Programming the third end position

1. After setting the upper and lower end positions, it is possible to set the third position (favorite) between those positions.
2. Hold the STOP button for 3 seconds to set the blind in third end position.



Set the roller shutter in the third position.

Press P2 programming button.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

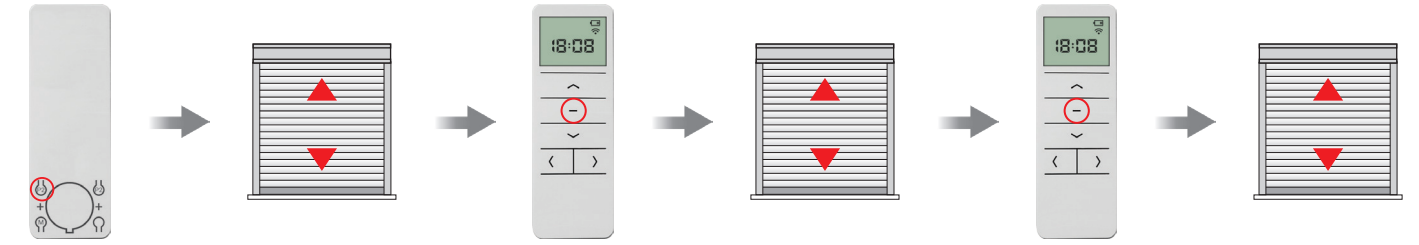
Press STOP button.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

Press STOP button.

Roller shutter makes 2 short up/down movements. Motor makes a few beeping sounds.

Deleting the third end position



Press P2 programming button.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

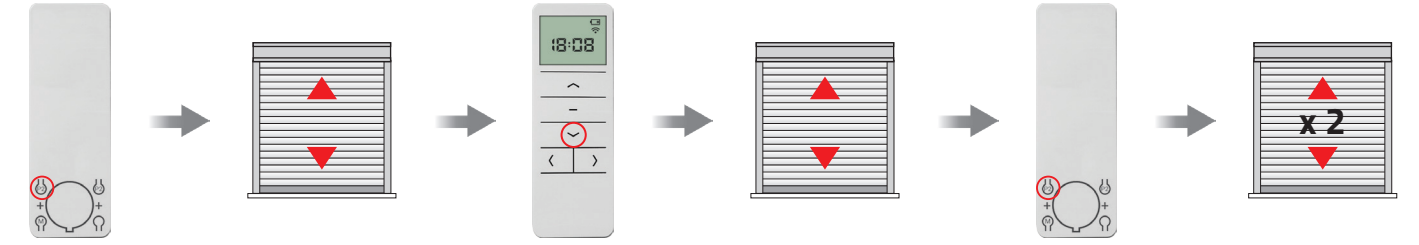
Press STOP button.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

Press STOP buton.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

Deleting end positions



Press P2 programming buton.

Motor makes a beeping sound. Roller shutter makes short up/down movements.

Press DOWN button.

Roller shutter makes 2 short up/down movements. Motor makes a few beeping sounds.

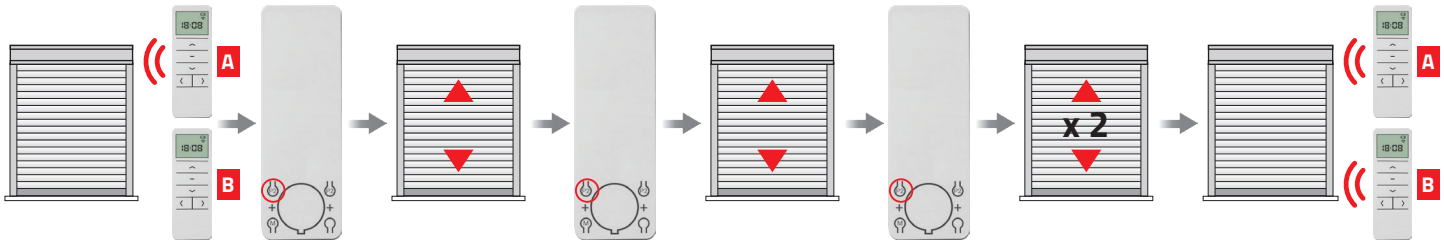
Press P2 programming buton.

Roller shutter makes 2 short up/down movements. Motor makes a few beeping sounds.

Programming another transmitter

1. Receiver can be controlled by up to 10 transmitters.
2. **Longer than 6 seconds** pause between series of button clicks during programming will cause device to switch off from programming mode without saving any changes.

METHOD 1:



Press programming button P2 on the remote control „A".

Motor will make a beeping sound. Roller shutter makes short up/down movements.

Press programming button P2 on the remote control „A".

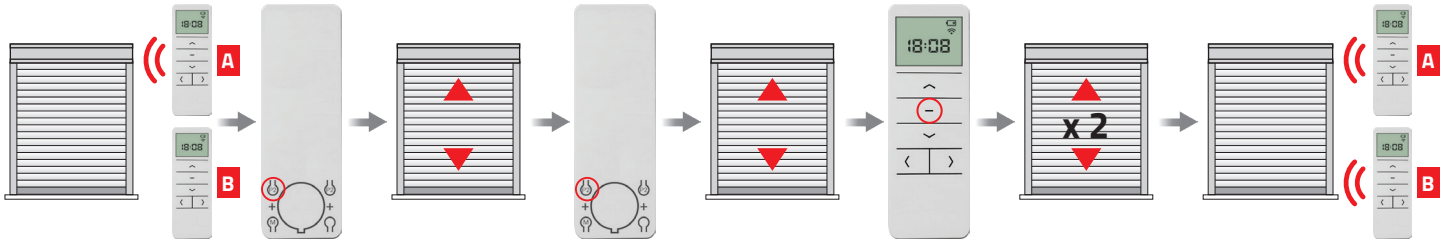
Motor will make a beeping sound. Roller shutter makes short up/down movements.

Press programming button P2 on the B remote control.

Roller shutter makes 2 short up/down movements. Motor makes a few beeping sounds.

The remote control has been programmed.

METHOD 2:



Press programming button P2 on the remote control „A".

Motor will make a beeping sound. Roller shutter makes short up/down movements.

Press programming button P2 on the A remote control.

Motor will make a beeping sound. Roller shutter makes short up/down movements.

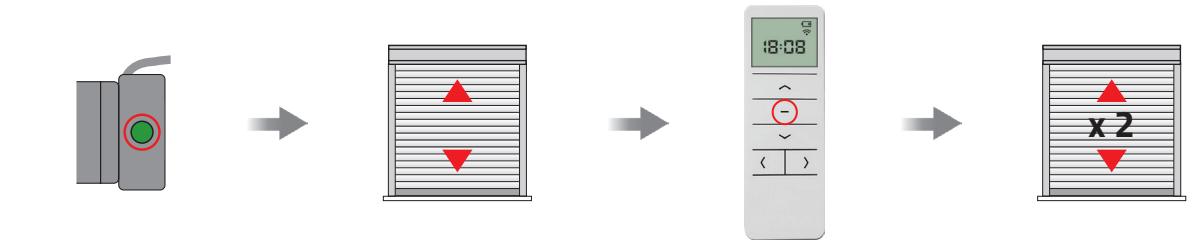
Press STOP button on the B remote control for 2 seconds.

Roller shutter makes 2 short up/down movements. Motor makes a few beeping sounds.

The remote control has been programmed.

METHOD 3:

Adding a transmitter using this method is possible after programming the end positions.



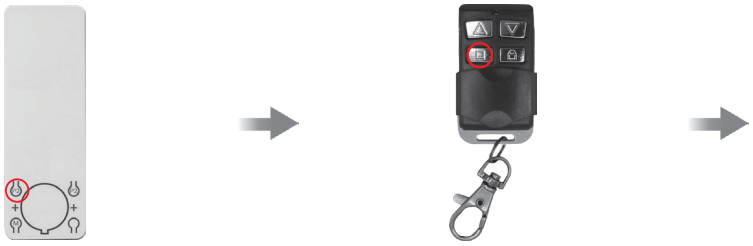
Press and hold programming button for 2 seconds on motor head.

Motor makes a sound. Roller shutter makes short up/down movements.

Press and hold STOP button on the remote control „B" for 2 seconds.

Roller shutter makes 2 short up/down movements. Motor makes several short sounds.

Copying data from the transmitter to the remote control ONE XB5

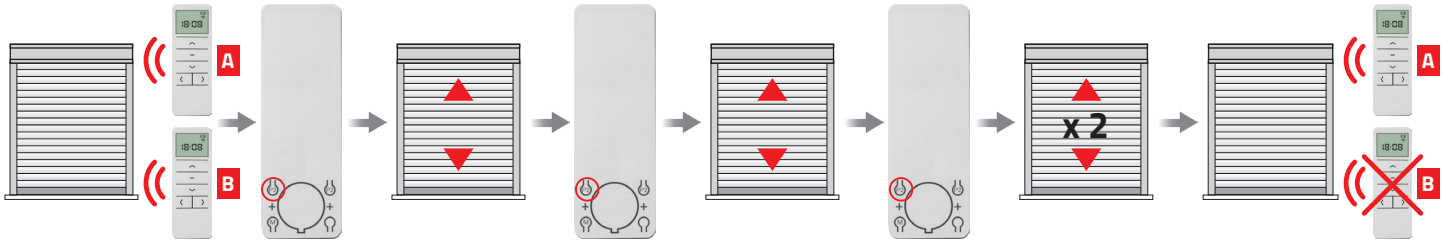


Press programming button P2 on the remote control „A". (2x). Every time you press the button, the motor makes a beeping sound.

Press STOP/UP buttons simultaneously. Every time you press the buttons, the receiver makes a beeping sound.

The end of copying is confirmed by a beeping sound.

Deleting another transmitter



Press P2 programming button on the remote control „A".

Motor makes a sound. Roller shutter makes short up/down movements.

Press P2 programming button on the remote control „A".

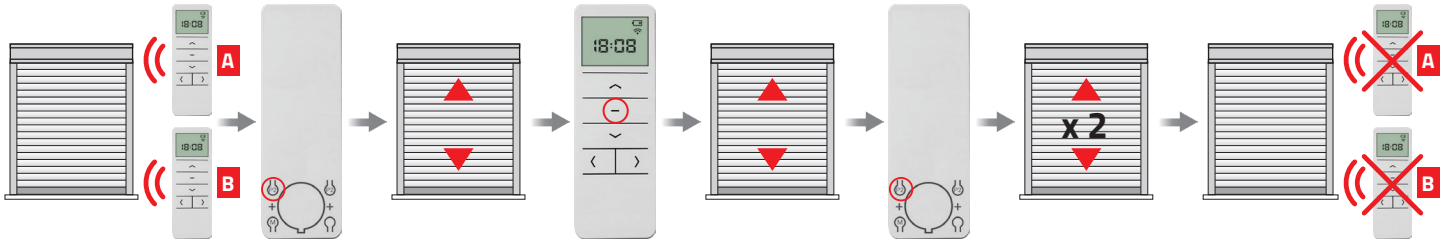
Motor will make a sound. Roller shutter will make short up/down movements.

Press P2 programming button on the remote control „B".

Roller shutter will make 2 short up/down movements. Motor makes several short sounds.

Remote control has been deleted.

Deleting all transmitters



Press P2 programming button on the remote control „A".

Motor will make a sound. Roller shutter will make short up/down movements.

Press STOP button.

Motor will make a sound. Roller shutter will make short up/down movements.

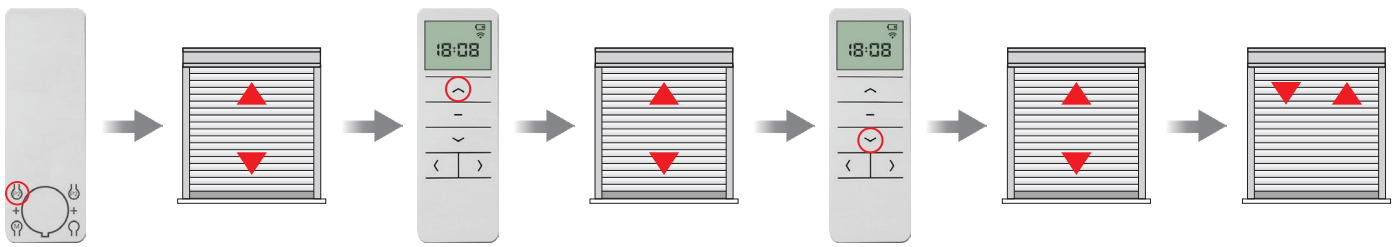
Press P2 programming button.

Roller shutter will make 2 short up/down movements. Motor makes several short sounds.

All active transmitters have been deleted.

Activating impulse mode

1. **Longer than 6 seconds** pause between series of button clicks during programming will cause device to switch off from programming mode without saving any changes.
2. To activate impulse mode follow the procedure below. To deactivate impulse mode repeat the procedure.



Press P2 programming button on any remote control.

Roller shutter makes short up/down movements. Motor makes a sound.

Press UP button on the remote control.

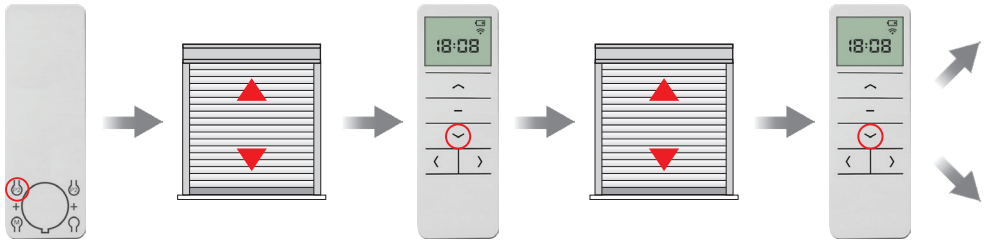
Roller shutter makes short up/down movements. Motor makes a sound.

Press DOWN button on the remote control.

Roller shutter makes short up/down movements. Motor makes 2 sounds.

When you press the direction button once on the remote control, the motor makes a short move.

Selecting a reaction to obstacle detected



Press P2 programming button.

Roller shutter makes short up/down movements. Motor makes a sound.

Press DOWN button on the remote control.

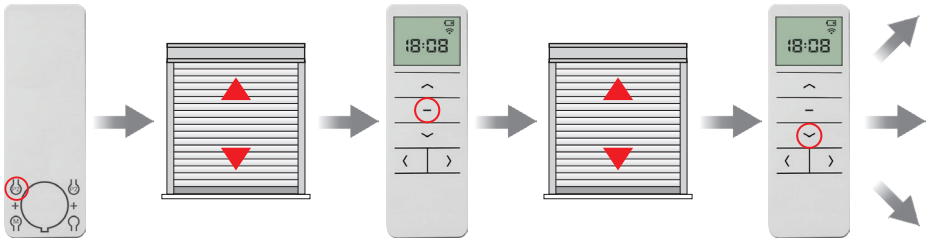
Motor makes a sound. Roller shutter makes short up/down movements.

Press DOWN button on the remote control.

If the motor makes two short up/down movements and makes a few sounds, it means that the **reaction 1 has been triggered: when an obstacle is detected the roller shutter stops.**

If the motor makes a short up/down movement and makes a sound, it means that the **reaction 2 has been triggered: when an obstacle is detected the roller shutter makes a short movement in the opposite direction.**

Selection of obstacle detection operation mode



Press P2 programming button.

Roller shutter makes short up/down movements. Motor makes a sound.

Press STOP button on the remote control.

Motor makes a sound. Roller shutter makes short up/down movements.

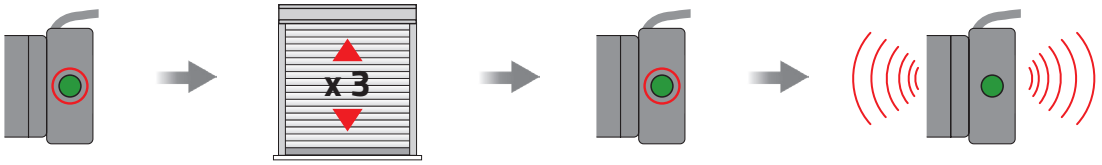
Press DOWN button on the remote control.

If the motor makes a short up / down movement and makes a sound, it means that it is in **mode 1**: The sensitivity of obstacle detection is reduced to 20 cm from the upper and lower limit positions.

If the motor makes two short up / down movements and makes two sounds, it means that it is in **mode 2**: The sensitivity of obstacle detection is reduced to 10 cm from the upper and lower limit positions.

If the motor makes three short up / down movements and makes three sounds, it means that the motor is in **mode 3**: The sensitivity of obstacle detection is reduced along the entire height of the roller shutter.

Reset



Press and hold programming button on motor head.

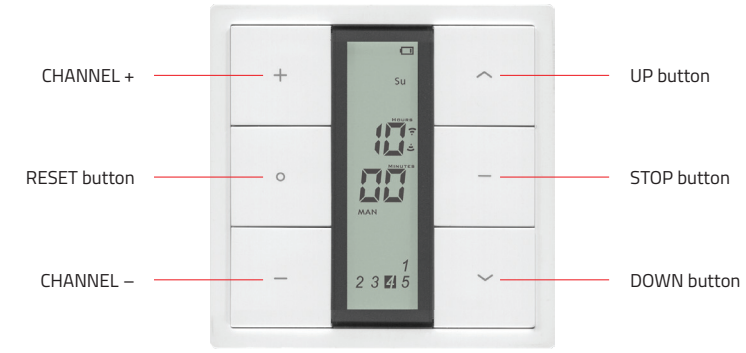
Roller shutter makes 3 short up/down movements.

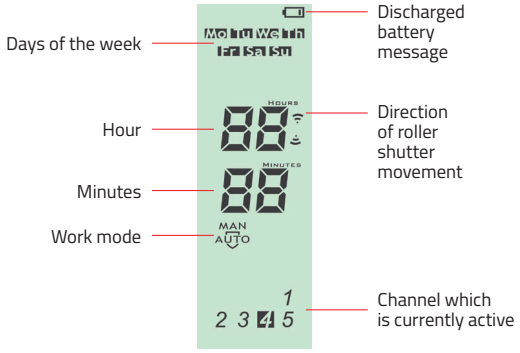
After the last move, release the programming button – the motor makes 1 beeping sound.

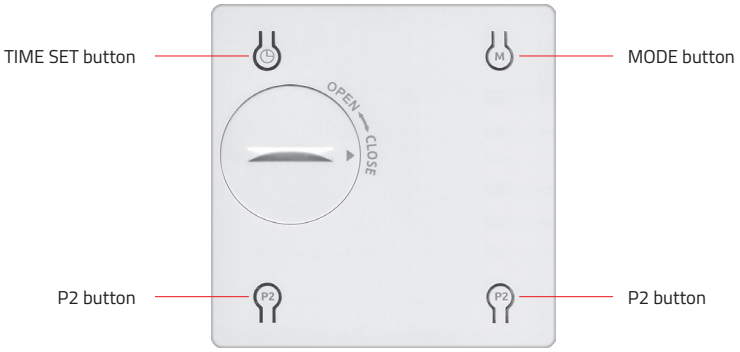
If motor does not make a sound, repeat the procedure.

Motor has been reset. Its memory has been erased and factory settings restored.

ONE FB2 – 5-channel on-wall transmitter with timer







1. Group channel is active when all numbers are selected 1 2 3 4 5.
2. Estimated battery lifespan is 1 year if the device runs 4 commends a day on average.
3. Batteries should be changed when no channel number is displayed after pressing any button or receiving device stops reacting to commands.

When replacing the battery, pay attention to the correct polarity.
Batteries contain substances that may be hazardous to health and may pollute the environment.
Used batteries should be disposed of properly.

ONE FB2 - change of operating mode

Manual (MAN) – manual control only.

Automatic (AUTO) – manual and timer-based control.

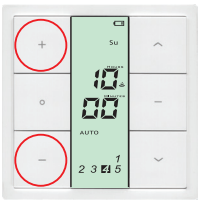
Shuffle mode (AUTO) – manual and random control. With timer-based control function only; +/- 15 min differences in time intervals (with regard to set time).

To change mode, **press M button**.

ONE FB2 – setting the current time and day of the week

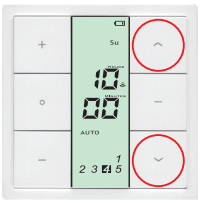
Time can be set only when device is in manual working mode. Longer than 60 seconds pause between series of button clicks during programming will cause device to switch off from time setting mode.

Switch to manual mode (MAN).

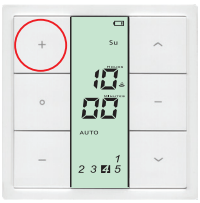


Select the channel you want to edit.

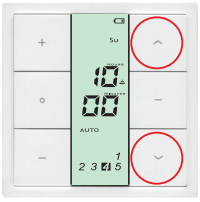
Press TIME SET button, hold it for min. 3 s.



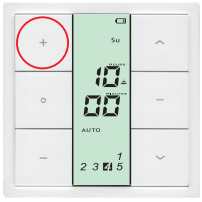
Press UP or DOWN button to set the current hour.



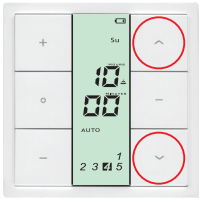
Press + to confirm.



Press UP or DOWN button to set the current minute.



Press + to confirm and proceed to set the day of the week.



Press UP or DOWN button to set the current day.

Press TIME SET button, hold it for min. 3s to confirm.

Press TIME SET button 1x to activate current time settings.

Setting the time for opening and closing window coverings with ONE FB2

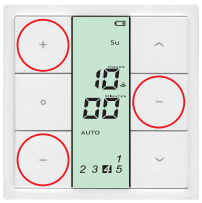
Each operation should be carried out in less than 60 seconds, otherwise the device will switch off from programming mode without saving any changes.

3 methods of synchronisation of timings:

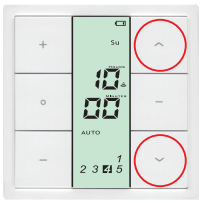
1. **'Mo-Su'** symbol flashes on the display – **the same timing is set from Monday till Sunday**.
2. **'Mo-Fr'** symbol flashes on the display – **the same timing is set from Monday till Friday, Saturday and Sunday timing is set separately**.
3. **'Su'** symbol flashes on the display – **timing is set for each day of the week separately**.

Switch to automatic mode or shuffle mode.

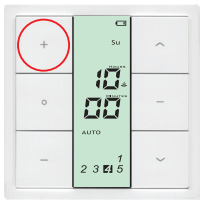
Press TIME SET button, hold it for min. 3 s.



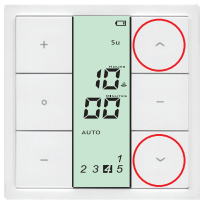
Press + to select a synchronisation method. Next, press STOP to confirm. Pressing + and – buttons select the day of the week.



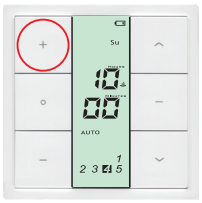
By pressing UP/DOWN buttons set the hour for the UP movement of the blind.



Press + to confirm and proceed to set the minutes.

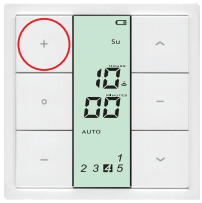


By pressing UP/DOWN buttons set the minutes for the UP movement of the blind.

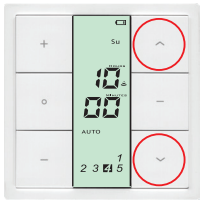


Press + to confirm and proceed to set the timing for the DOWN movement of the blind.

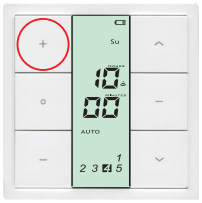
By pressing UP/DOWN buttons set the hour for the DOWN movement of the blind.



Press + to confirm and proceed to set the minutes.



By pressing UP/DOWN buttons set the minutes for the DOWN movement of the blind.



Press + to confirm and proceed to set consecutive days of the week.

Finish setting up the timing for UP/DOWN movements in selected days.

Selecting active channel – if the channel symbol is flashing, time settings have been disabled.
To activate selected channel go to the channel via automatic mode and press '+' for min 3 s.
If the channel symbol is no longer flashing – the channel has been activated.
Repeat the operation to disable time settings for the selected channel – if the channel symbol is flashing – time settings have been disabled.