

User Manual of MOBILUS C-ZR external receiver

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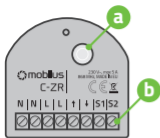
## 1. GENERAL INFORMATION

Module **MOBILUS C-ZR** is remotely controllable **MOBILUS** unit operating in **COSMO / COSMO | 2WAY** system, designed for mounting in a wall junction box or wherever there is a need to control blinds. With it, you can lift and lower the shutters, adjust the angle of the lamellas position, remotely by radio using dedicated **COSMO / COSMO | 2WAY** controllers, using the smart home control unit **COSMO | GTW** or directly from the connector connected to the module.

## 2. IMPORTANT INFORMATIONS

- Read the instructions carefully before use.
- When unpacking the unit, make sure that there is no damage in the transport. If so, you should immediately inform the supplier.
- Read the operating manual carefully before use.
- **MOBILUS C-ZR** module should be powered by 230 V ~, 50 Hz. Its installation should only be carried out by persons with electrical qualifications according to the enclosed electrical diagram in accordance with all applicable regulations.
- The appliance must be installed in place not accessible for children.
- The **MOBILUS C-ZR** module is designed to work with all **COSMO / COSMO | 2WAY** series remote controls, but its full functionality is provided by **COSMO | HB**, **COSMO | HM**, **COSMO | HCT** and **COSMO | GTW** smart home control unit.
- The range of the radio control is limited by regulations for maximum power of the remote control and the conditions of the installation of the equipment. When designing the location of the remote control, consider limiting the range to about 20m by 2 walls.
- Declaration of Conformity:  
We declare under our sole responsibility that the **MOBILUS C-ZR** complies with the following European Directives:
  1. 2014/53 / EU RED Radio Directive;
  2. 2014/30 / EU Electromagnetic Compatibility Directive.

### 3. PRODUCT DESCRIPTION



1. Antenna.
2. Illuminated PROGRAMMING BUTTON P.
3. Connection terminals:
  - N** - Neutral line;
  - L** - phase line;
  - ↑** - UP;
  - ↓** - DOWN;
  - S1** - switch up;
  - S2** - switch down;

### 4. TECHNICAL PARAMETERS

Power supply voltage: 230 V~; 50 Hz.

Radio protocol: COSMO | 2WAY, COSMO.

Frequency: 868 MHz.

Signal strength: up to 1 mW.

Range in building: 40 [m]. The range of the radio signal depends on the type of construction, used materials and placement of units.

Installation location – concealed box  $\varnothing \geq 50$  mm.

Working temperature: 0 °C – 40 °C.

Dimensions – 44 x 46 x 19 mm.

## 5. ENTRY INTO THE MODULE PROGRAMMING MODE

Press and hold a programming button on module **MOBILUS C-ZR** above 5 sec until the connected actuator executes one sequence of noticeable and audible micro movements down / up confirming the entrance of the receiver in the **PROGRAMMING MODE**. - Fig. 2. In addition, in 1 second intervals the diode is blinking.

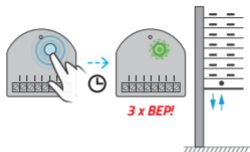


Fig. 2

**WARNING!** If within 20 seconds no programming will be performed, the **MOBILUS C-ZR** radio module automatically exits from the programming mode. Connected actuator executes one sequence of noticeable and audible micro movements down / up, blinks are stopped.

## 6. LOADING THE MASTER-A \* CODE TO THE RECEIVER MEMORY

1. Enter the **MOBILUS C-ZR** PROGRAMMING MODE.
2. Press and hold the **STOP** and **UP** buttons simultaneously on the remote control - Fig. 3.
3. The **MASTER** pilot reads two short beeps from the module.  
The **MASTER-a** code has been loaded into memory and the module goes to the **WORK** MODE. Now, with the **MASTER** remote control, you can operate the units or enter the **PROGRAM** MODE to load more remote controls.

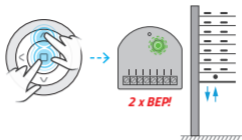
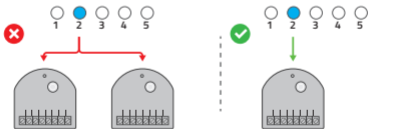


Fig. 3

**WARNING** In the case of a multi-channel remote control select only one channel to be **MASTER**.

**NOTE** For the convenience of programming, it is recommended that each **COSMO | C-ZR** module had its own separate **MASTER** (remote control (separate channel for multi-channel remotes). Avoid situations where several **COSMO | C-ZR** modules remote controls will have common **MASTER** (shared channel).



\***MASTER** - remote control or channel (in the case of a multi-channel remotes) loaded first into the memory of the **MOBILUS C-ZR** module. Allows you to program further remote controls.

## 7. PROGRAMMING OF THE SECOND AND EVERY OTHER REMOTE CONTROL

1. On the **MASTER** remote control, simultaneously press and hold the **STOP** and **UP** until the connected actuator performs one sequence of noticeable and audible micro movements down / up, the module will release three short beeps, confirming entry into the **PROGRAMMING MODE** - Fig. 4a. Additionally in this mode every 1 sec. the diode is blinking.
2. On the second remote control (for the multi-channel remote control, select the channel you want to program), press and hold both **STOP** and **UP** buttons simultaneously, until the connected actuator performs one sequence of noticeable and audible micro movements down / up, the module will release two short beeps. The remote (channel) was loaded into the receiver's memory - Fig. 4b.

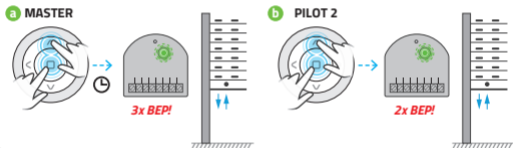


Fig. 4

Repeat step 2 to load the next remote control. If, however, no programming operation is started within 20 seconds, the module automatically returns to operating mode - the module will output one long beep. Return to operating mode can also be performed manually using **MASTER**. In such a situation, press and hold the **STOP** and **UP** **MASTER** buttons simultaneously at the same time. In both cases, the return to operating mode will be confirmed by one long beep.

## 8. CHANGING THE DIRECTION OF THE ACTUATOR

1. If you press the **UP** button on the remote control and the armor goes down, change the direction of rotation of the drive. At the same time, press and hold:
  - a) on the remote control **COSMO | HM, | HB** buttons **STOP** and **DOWN** - Fig. 5b;
  - b) on the remote control **COSMO | HCT** buttons **UP** and **F3** - Fig. 5c;until the drive executes one sequence of micro down / up moves.
2. Check the **UP / DOWN** buttons - Fig. 5d.



Fig. 5

## 9. C-ZR MODULE RESET - FACTORY SETTINGS

**WARNING!!! RESTORATION OF FACTORY SETTINGS erases all programmed remotes from the MOBILUS C-ZR module.**

1. Enter the **PROGRAMMING MODE** for the **MOBILUS C-ZR** module - Fig. 6a.
2. In the **PROGRAMMING MODE**, press and hold the programming key above 5 seconds - Fig. 6b. All previously loaded remote modules have been removed from the memory module which confirms one sequence of noticeable and audible micro moves down / up of the connected actuator and three long beeps.

## CONTINUED 9. C-ZR MODULE RESET - FACTORY SETTINGS

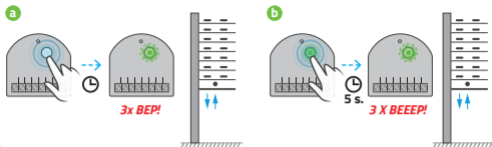


Fig. 6

## 10. REMOVAL OF INDIVIDUAL REMOTES (CHANNELS)

It is possible to delete only one of the programmed remotes (not for MASTER remote). To do this:

1. On the **MASTER**, press simultaneously and hold the **STOP** and **UP** buttons until the connected actuator executes one sequence of noticeable and audible micro movements down / up, the module will release two short beeps, confirming the receiver's entrance into the programming mode - Fig. 7a. Additionally in this mode every 1 sec. the diode is blinking.
2. On the remote control (channel) that you want to delete, press and hold the **STOP** and **UP** buttons simultaneously until the connected actuator performs one sequence of noticeable and audible micro movements down / up, **MOBILUS C-ZR** receives two long beeps onfirming the removal of the pilot code from the actuator memory - Fig. 7b.

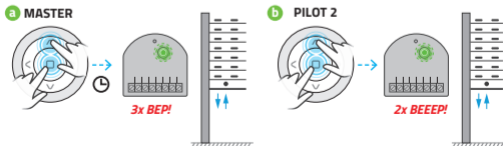


Fig.7



## CONTINUED 10. REMOVAL OF INDIVIDUAL REMOTES (CHANNELS)

**WARNING!** Repeat step 2 to proceed to remove the next remote control. However, if within 20 sec. no programming operation is started, the receiver automatically returns to operating mode. Return to operating mode can also be performed manually using the **MASTER**. In such a situation, simultaneously press and hold the **STOP** and **MASTER** buttons until the connected actuator executes one sequence of noticeable and audible micro movements down / up. In both cases, the return to operating mode will be through one sequence of micro down / top moves of the connected actuator.

## 11. CONNECTING THE ADDITIONAL SWITCH / DRIVER

It is possible to connect an external keyboard connector (without support) - Fig. 8.1, bell connector - Fig. 8.2, control via a controller with relay output - Fig. 8.3. They must be connected according to the attached diagram.

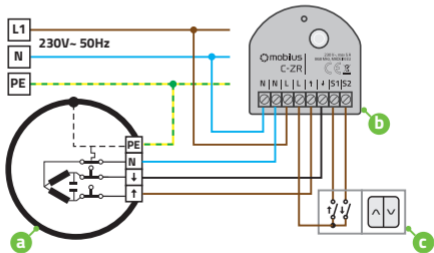


Fig. 8.1

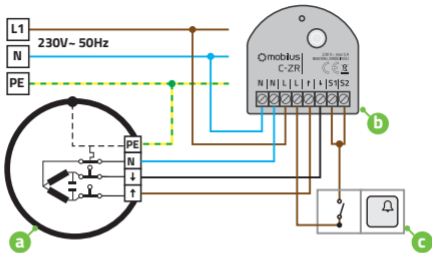


Fig. 8.2

## 12. CONTROL OF THE POSITION OF THE SHUTTER AND SLOPE OF THE LAMELLAS - CONNECTOR

**Control of the position of the shutter up / down.** Briefly pressing the key corresponding to the direction will lower or raise the louver to the appropriate end positions. The operation stops after a short press of the opposite key to the current shutter motion.

**Lamella's slope control.** Long holding down one of the connector keys will cause the lamella to rotate slowly. If the lamella is in the required position, release the key.

## 13. CONTROL OF THE POSITION OF THE SHUTTER AND SLOPE OF THE LAMELLA - REMOTE CONTROL

You can control the position (up / down) of the shutter with all **COSMO | 2WAY** remotes. Full control, along with the possibility to set the slope of the lamella is provided only by the following remote controls: **COSMO | HM**, **COSMO | HB**, **COSMO | HCT**.

Appropriate operating mode should be set.

For remotes **COSMO | HM**, **COSMO | HB**.

1. Press **<** / **>** to activate the remote control.
2. Press the P2 function key located on the rear of the controller - Fig. 10.
3. Set II operating mode - two blue LEDs will light up.

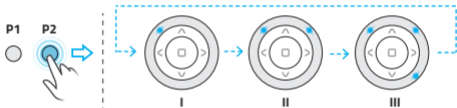


Fig. 10

For remotes **COSMO | HCT** *(for software from 2.4.0-4.0)*

1. Go to the SETTINGS tab -> OTHER -> OPERATION MODE.
2. Select II OPERATION MODE.
3. Save settings.

**Control of the up / down position of the shutter.** Briefly pressing the up button corresponding to the direction **▲** / **▼** UP / DOWN will lower or raise the shutter to the appropriate end positions. The operation is stopped after a short press of the STOP button **□**.

**Lamellas slope control.** Long pressing of one of the remote control **▲** / **▼** UP / DOWN buttons will cause the lamella to rotate slowly. If the lamella is in the required position, release the button.

## 14. REPEATER FUNCTION

**SIGNAL REPEATER** - This feature allows you to expand the radio control area. The **MOBILUS C-ZR** module with the repeater function enabled receives signals from the controller or actuators and passes them forward. Thanks to the furthest located receivers which are not within the controller can receive and transmit information through modules located indirectly. Turn on the repeater function:

1. Press the **STOP** and **UP** buttons simultaneously on the **MASTER** until the connected actuator executes one sequence of noticeable and audible micro movements down / up, the **MOBILUS C-ZR** module will issue three short beeps confirming entry into the **PROGRAMMING MODE**. Additionally in this mode every 1 sec. the diode is blinking.
2. On the remote control, press the button sequence: **UP, STOP, DOWN, UP, STOP, DOWN**. Activation of the repeater function will cause three sequences of **DOWN-UP** micro-movements by the actuator, in addition, it will output the sequence of audio signals from the module: 3 short, 3 short, 1 long. - Fig. 11c.
3. Repeat step 1 to deactivate the repeater function. Then press the button sequence: **UP, STOP, DOWN, UP, STOP, DOWN** -confirmation of deactivation is the execution of two sequences of micro-**DOWN-UP** movements by connected actuator and release of sequence of sound signals from the module: 3 short, 1 long - Fig.11d.

**WARNING!** *Turn on the repeater function only on devices that are within range of the signal range. Because of the efficient work, we recommend that you enable the signal repeater function on up to three devices in the facility. Unreasonable inclusion of signal repeater on many devices may cause interference in all radio equipment.*

## CONTINUED 14. REPEATER FUNCTION

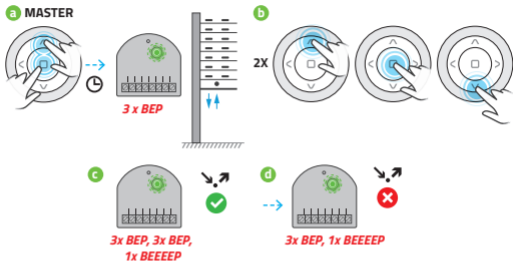


Fig. 11

## 15. BIDIRECTIONALITY

**MOBILUS C-ZR** with two-way communication with the remote control allows control of the state of shutter position ( eg. open, closed, intermediate level ).

Proper operation of bidirectional communication requires the use of pilots with bidirectional communication.

Remote controls supporting two-way communication: **MOBILUS COSMO | HCT, COSMO | G3+, COSMO | HM, COSMO | HB, COSMO | WT9, COSMO | WT.**

## 16. BI-DIRECTIONAL - INFORMATION ABOUT THE POSITION OF THE SHUTTER

The **MOBILUS C-ZR** transmits information to the remote control about the shutter position and the intermediate position, as well as the angle of the lamellas (for the **COSMO | GTW**). Mode is automatically turned on - there is no deactivation.

## 17. BI-DIRECTIONAL - OVERLOAD INFORMATION

**MOBILUS C-ZR** transmits information to remotes about overload - for example, it may be related to a housing lock occurring at the time of raising or lowering. Mode is factory-setted - it is possible to turn off.

Enable / disable of overload detection:

1. At the **MASTER** remote control press and hold the **STOP** and **UP** buttons simultaneously until the connected actuator performs one sequence of noticeable and audible micro movements down / up confirming the receiver input into the programming mode - Fig. 14a. Additionally in this mode every 1 sec. the diode is blinking.
2. On the **MASTER**, press the **STOP** button and hold until the actuator connected to the **MOBILUS C-MR** module will perform two sequences of noticeable and audible micro movements down / up. Overload detection active - Fig. 14b.
3. To stop the overload detection, repeat step 1. Then press the **STOP** button on the **MASTER** control and hold until the actuator connected to the **MOBILUS C-ZR** module will perform 1 sequence of noticeable and audible micro moves down / up - Fig. 14c.

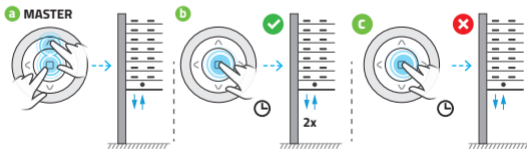


Fig. 14

## 18. SETTING OF THE SWITCHING TIME OF RELAYS

**MOBILUS C-ZR** allows you to change the relay switching time. This operation is necessary, for example, for very high shutters. By default this time is 120 seconds.

## CONTINUED 18. SETTING OF THE SWITCHING TIME OF RELAYS

1. Press **MASTER** at the same time and hold the **STOP** and **UP** buttons until the connected actuator performs one sequence of noticeable and audible micro movements down / up, confirming the receiver entry into the programming mode - Fig. 15a. Additionally in this mode every 1 sec. the LED flashes.
2. On the **MASTER**, press the **UP** button - Fig. 15b. The blind will begin to rise.
3. At the moment when the user presses the **STOP** key, the new relay operating time is saved - Fig. 15c.



Fig.15

## 19. ENVIRONMENTAL PROTECTION



This appliance is marked according to the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC) and further amendments. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for the waste electrical and electronic equipment for recycling purpose. For more information about recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.



**MOBILUS MOTOR Spółka z o.o.**

ul. Miętowa 37, 61-680 Poznań, PL

tel. +48 61 825 81 11, fax +48 61 825 80 52

VAT NO. PL9721078008

Wersja 1.0ENG, 170714

[www.mobilus.pl](http://www.mobilus.pl)