



User Manual of MOBILUS C-GR external receiver

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

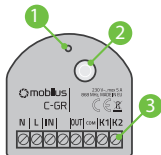
## 1. GENERAL INFORMATION

Control panel **MOBILUS C-GR** is remotely controllable unit **MOBILUS** operating in COSMO / COSMO | 2WAY system, designed for use in a wall switch box or wherever there is a need for gate control. The module allows the gate to be controlled by converting the signal received from the controller to the potential free signal given to the gateway input. In addition, the **MOBILUS C-GR** module is equipped with terminals for connection of limit switches K1 and K2.

## 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-GR** 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-GR** module is designed to work with all **COSMO / COSMO | 2WAY** series remote controls.
- 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-GR** 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;  
**IN** - relay input terminal;  
**OUT** - relay output terminal;  
**COM** - sensor supply;  
**K1** - first sensor;  
**K2** - second sensor;

### 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. INSTALLATION OF THE DEVICE

1. Make sure the mains voltage is disconnected.
2. Connect the **MOBILUS C-GR** module as shown in - Fig. 5.
3. Place the **MOBILUS C-GR** module in the electrical box.
4. Properly align the antenna (as far away as possible from metal elements).
5. Turn on the mains voltage.

It is possible to connect external reed switches that determine the position of the gate.

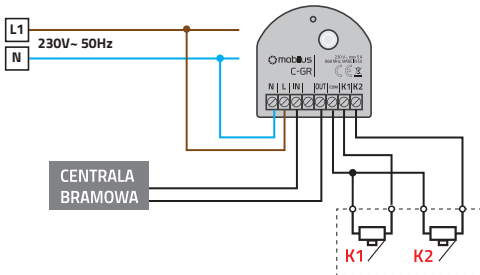


Fig. 5

## 6. ENTRY INTO THE MODULE PROGRAMMING MODE

Press and hold a programming button on module **MOBILUS C-GR** above 5 sec. Three short beeps confirm the entrance of the module in the **PROGRAMMING MODE**. In addition, in 1 second intervals the diode is blinking.

**WARNING!** *If within 20 seconds no programming will be performed, the MOBILUS C-GR radio module automatically exits from the programming mode. Beeps and blinks are stopped.*



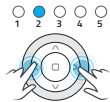
## 7. LOADING THE MASTER-A \* CODE TO THE RECEIVER MEMORY

1. Enter the **MOBILUS C-GR PROGRAMMING MODE**.
2. Press and hold the **STOP** and **UP** buttons simultaneously on the remote control.
3. 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.

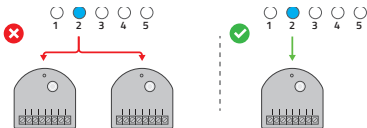


**WARNING!** *In the case of a multi-channel remote control select only one channel to be **MASTER**.*

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



## CONTINUED 7. LOADING THE MASTER-A \* CODE TO THE RECEIVER MEMORY



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

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

1. On the **MASTER** remote control, simultaneously press and hold the **STOP** and **UP** the module will release three short beeps, confirming entry into the **PROGRAMMING MODE** - Fig. 8a. 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** until the module will release two short beeps.

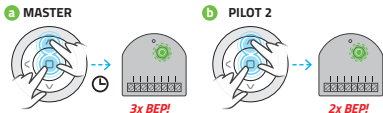


Fig. 8

## CONTINUED 8. PROGRAMMING OF THE SECOND AND EVERY OTHER REMOTE CONTROL

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.

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

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

1. Enter the **PROGRAMMING MODE** for the **MOBILUS C-GR** module- Fig. 9a.
2. In the **PROGRAMMING MODE**, press and hold the programming key above 5 seconds - Fig. 9b. All previously loaded remote modules have been removed from the memory module, which is confirmed with three long beeps.

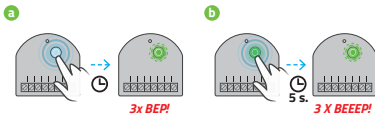


Fig. 9

## 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, simultaneously press and hold the **STOP** and **UP** buttons until the connected receiver outputs two short beeps, confirming the receiver's input in the PROGRAMMING MODE - Fig. 10a. Additionally in this mode every 1 sec. the diode is blinking.
2. On the remote control (channel) you want to clear, press and hold both **STOP** and **UP** buttons until **MOBILUS C-GR** receives two long beeps, confirming that the remote code is removed from the receiver memory. - Fig. 10b.

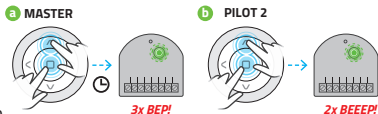


Fig. 10

**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. In this case, press and hold the **STOP** and **MASTER** buttons simultaneously. In both cases the return to operating mode will be confirmed by two beeps from the receiver **MOBILUS C-GR**.

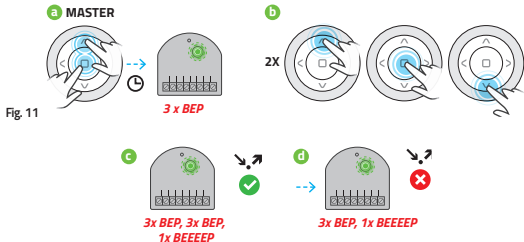


## 11. REPEATER FUNCTION

**SIGNAL REPEATER** - This feature allows you to expand the radio control area. **MOBILUS C-GR** 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 **MOBILUS C-GR** module will issue three short beeps confirming entry into the **PROGRAMMING MODE**- Fig. 11a.
2. On the remote control, press the button sequence: **UP, STOP, DOWN, UP, STOP, DOWN**. - Fig. 11b. Activation of the repeater function will cause three sequences 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 release of sequence of sound signals from the module: 3 short, 1 long - Fig. 11d.



## CONTINUED 11. REPEATER FUNCTION

**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.*

## 12. BIDIRECTIONALITY

Mobilus C-GR module thanks to two-way communication with the remote control and informations from connected reed switches, it allows to control the state of the gate (eg. open, closed, intermediate level). Proper operation of bidirectional communication requires the use of pilots with bidirectional communication and reed contactors.

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

## 13. BIDIRECTIONAL - INFORMATION ABOUT THE POSITION OF THE BLIND

Cosmo C-GR transmits information about the end position and intermediate position blinds to remote controls. The mode is switched on automatically - there is no possibility of deactivation.

**WARNING!** *Connection of reed switches is required.*

## 14. 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.

## 15. CONTROL REMOTES - „COSMO” SERIES



COSMO | HCT



COSMO | HB



COSMO | HM



COSMO | G3+



COSMO | WT



COSMO | WT9



COSMO | LI



COSMO | L5



**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, 170525

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