

User Manual of MOBILUS C-SW external module

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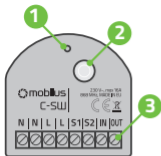
1. GENERAL INFORMATION

MOBILUS C-SW relay is a 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 any receiver with a power rating of up to 3.5 kVA. With it, you can turn on and off devices connected to its output remotely by radio using **COSMO / COSMO | 2WAY** series 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-SW** 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-SW** 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-SW** complies with the following European Directives:
 1. 2014/53 / EU RED Radio Directive;
 2. 2014/30 / EU Electromagnetic Compatibility Directive.
 3. 2014/35 / UE Low Voltage Directive

3. PRODUCT DESCRIPTION



1. Antenna.
2. Illuminated **PROGRAMMING BUTTON P.**

Connection terminals:

N - neutral line;

L - phase line;

S1 - button no. 1;

S2 - button no. 2;

IN - relay input terminal;

OUT - relay output terminal;

4. TECHNICAL PARAMETERS

Power supply voltage: 230 V~; 50 Hz.

Acceptable output power: 3,5 kVA.

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-SW** module as shown in:
 - a 230 V ~ mains connection diagram with a single (bistable) light switch with a S1 connector - Fig. 5a;
 - 230 V ~ mains connection diagram with single (monostable) bell connector using S2 connector - Fig. 5b;
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

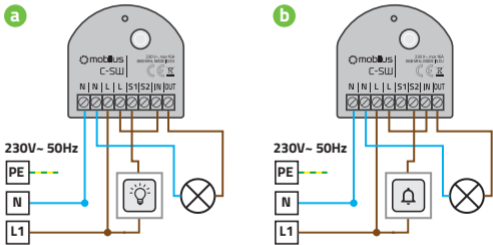


Fig. 5

6. ENTRY INTO THE MODULE PROGRAMMING MODE

Press and hold a programming button on module **MOBILUS C-SW** 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-SW 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-SW 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.

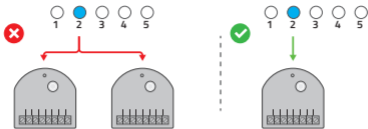


MASTER! *In the case of a multi-channel remote control select only one channel to be MASTER.*

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



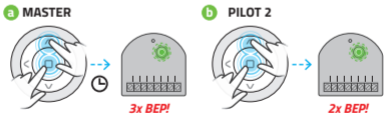
CONTINUED 7. LOADING THE MASTER-A * CODE TO THE RECEIVER MEMORY



MASTER - remote control or channel (in the case of a multi-channel remotes) loaded first into the memory of the **MOBILUS C-SW 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.



rys. 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-SW RESET - FACTORY SETTINGS

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

1. Enter the **PROGRAMMING MODE** for the **MOBILUS C-SW** 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 three 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-SW** 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-SW**.

11. TURN ON / OFF THE RECEIVER

The device connected to the **MOBILUS C-SW** module can be controlled as follows:

I. Controlling with THE PROGRAMMING BUTTON.

Briefly press the **PROGRAMMING BUTTON** in **MOBILUS C-SW** module. The device will switch state. If turned on, it will be disconnected - or vice versa.

II. Controlling with COSMO / COSMO | 2WAY REMOTE CONTROL.

On the remote control press the **UP** button - the unit will be turned on.

Pressing the **DOWN** key will turn the device off.

III. Control with a SINGLE-BUTTON BISTABLE CONNECTOR.

The connector connected to the terminal S1 - Fig. 5a. Key switch in bistable connector:

ON - the unit is turned on.

OFF - the unit is turned off.

IV. Control with monostable monofunctional connector.

The connector connected to the terminal S2 - Fig. 5b. Pressing the key in the monostable connector will switch the receiver state. If the receiver was turned on - will be turned off and vice versa.

12. RECEIVER'S OPERATIONAL TIME

Setting the operating time of the device. **MOBILUS C-SW** allows you to set the running time of the connected device. For this purpose:

1. On the **MASTER**, simultaneously press the **STOP** and **UP** buttons until **MOBILUS C-SW** releases three relay switching signals confirming entry into the **PROGRAMMING MODE**. In addition, in 1 second intervals the green LED flashes - Fig. 12a.
2. On the remote control, press the **UP** button. The connected receiver will turn on. From that moment **MOBILUS C-SW** module begins to measure the time that the connected device will operate.
3. Pressing the **STOP** button will turn off the connected receiver and save the measured operating time in the **MOBILUS C-SW** module - Fig. 12b. The module will exit the **PROGRAMMING MODE**.

CONTINUED 12. RECEIVER'S OPERATIONAL TIME

Principle of operation. Pressing the **UP** button on the remote control will activate the connected device. The unit will shut down after the user programmed time.



Fig. 12

Deleting the operating time of the device. For this purpose:

1. On the **MASTER**, simultaneously press the **STOP** and **UP** buttons until the module releases two relay switching signals, confirming entry into the **PROGRAMMING MODE**. In addition, in 1 second intervals the green LED flashes - Fig. 12a.
2. Press and hold **STOP** until **MOBILUS C-SW** exits **PROGRAM MODE**. The time has been cleared - Fig. 12c.

13. STATUS OF THE RECEIVER'S WORK AFTER THE VOLTAGE BREAK

The **MOBILUS C-SW** module allows you to select one of three operating modes after a power failure:

MODE I. The device connected to the module remains OFF.

MODE II. The unit connected to the module will be turned ON.

MODE III. The device connected to the module will be in the same state as before the power failure. The device must be at least 2 seconds in a state in order for the receiver to remember it in its memory.

CONTINUED 13. STATUS OF THE RECEIVER'S WORK AFTER THE VOLTAGE BREAK

Choosing the right mode:

1. On the **MASTER**, simultaneously press the **STOP** and **UP** buttons until **MOBILUS C-SW** releases three relay switching signals, confirming entry in the **PROGRAMMING MODE**. In addition, in 1 second interval the green LED flashes - fig. 13a.
2. On the remote control press and hold the **DOWN** button. - Fig. 13. until the **MOBILUS C-SW** module releases the corresponding sequence of the relay switching signals:
1 x signal sequence - active **MODE I**. If you want to select **MODE II** again press and hold **DOWN** button until you hear 2 x signal sequence - active **MODE II**. Analogously press and hold **DOWN** again until you hear 3 x sequence of signals - **MODE III** is selected.

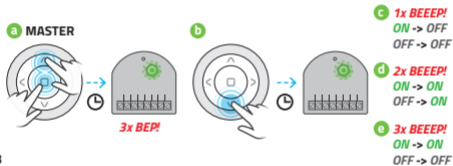


Fig. 13

3. On the **MASTER**, simultaneously press the **STOP** and **UP** buttons. Module releases two relay switching signals, confirming entry into the **PROGRAMMING MODE**.

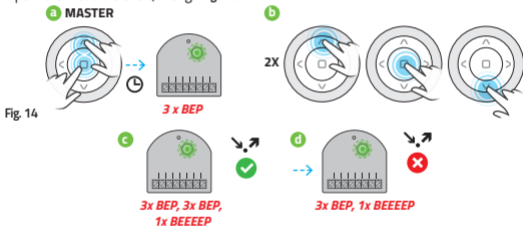
14. REPEATER FUNCTION

SIGNAL REPEATER - This feature allows you to expand the radio control area. **MOBILUS C-SW** 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.

CONTINUED 14. REPEATER FUNCTION

Turn on the repeater function:

1. Press the **STOP** and **UP** buttons simultaneously on the **MASTER** until the **MOBILUS C-SW** module will issue three short beeps confirming entry into the **PROGRAMMING MODE**. - Fig. 14a.
2. On the remote control, press the button sequence: **UP, STOP, DOWN, UP, STOP, DOWN**. - Fig. 14b. Activation of the repeater function will cause three sequences of audio signals from the module: 3 short, 3 short, 1 long. - Fig. 14c.
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.14d.



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.

15. BIDIRECTIONALITY

MOBILUS C-SW module thanks to two-way communication with the remote control and informations from connected reed switches, it allows control of the state of the device (on, off). 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. BIDIRECTIONAL - INFORMATION ABOUT THE POSITION OF THE BLIND

COSMO C-SW 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.

17. 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.



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