



User manual of COSMO |HM, COSMO |HB controllers.

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1. GENERAL INFORMATION

COSMO | HM, COSMO | HB is a 99-channel remote control, designed for remote control receivers brand **MOBILUS** (radio remote controls for roller shutters, awnings, blinds / control modules for motors without radio communication module / ON / OFF modules)

- Support 99 channels.
- Support 99 channel groups.
- Bi-directional communication - the opportunity to receive additional feedback information from receivers.

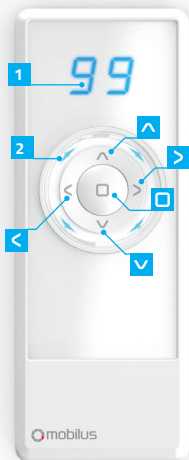
Remote **COSMO | HM** - is a remote control with mechanical keyboard.

Remote **COSMO | HB** - is a remote control with touch screen keyboard with additional beeps and flashes.

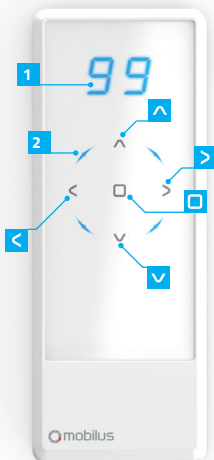
Please refer to the instruction manual that tells how to safely use the device. You are solely responsible for any damages resulting from the using the device in a manner inconsistent with its intended purpose. The manufacturer accepts no responsibility for damage or injury caused by misuse, improper handling and running.

2. DESCRIPTION OF THE REMOTE CONTROL

COSMO | HM

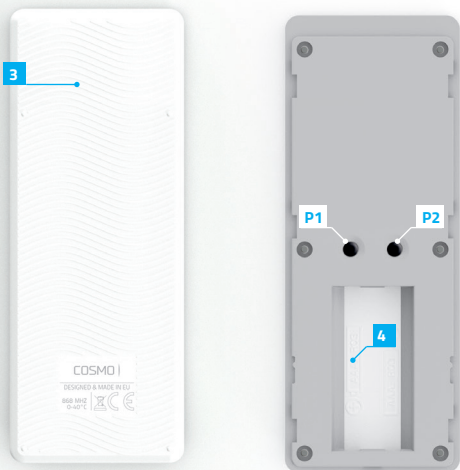


COSMO | HB



- 1 Display - channels / status.
2 Ring of 4 information LED's.
3 Flap housing.
4 Battery compartment 2 x AAA.
P1 Programming button.

- < Control button / navigation area LEFT.
> Control button / navigation area RIGHT.
^ Control button / navigation area UP.
v Control button / navigation area DOWN.
□ Control button / navigation area STOP.




3. CONTENTS OF THE PACKAGE

The packaging contains the following items:

- remote **COSMO | HM** or **COSMO | HB**
- 2 AAA batteries in the remote control protected against discharging with a seal,
- user manual,
- wall holder with magnet and fixing pins (2 pcs.).

4. TECHNICAL PARAMETERS

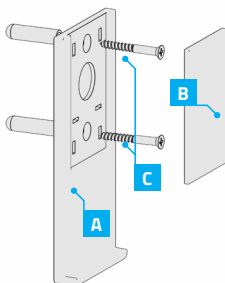
- Radio protocol: **COSMO | 2WAY / COSMO**.
- Frequency: 868 [MHz]
- Dynamic code
- FSK modulation
- The supply voltage 3,0 V DC .
- Power source: batteries 2 x AAA LR03.
- Working temperature [°C]: 0-40°C.
- Display: LED segment.
- Range in building: 40 [m]. The range of the radio signal depends on the type of construction, used materials and placement of units. The transmission of the radio signal in different conditions is as follows: brick wall 60-90%, reinforced concrete 2,060%, wooden structures with sheets of plasterboard 80-95%, glass 80-90%, metal walls 0-10%.
- Buzzer - tone generator – only the remote **COSMO | HB**
- Vibrations - only the remote **COSMO | HB**
- Dimensions of the remote control (without the handle): 49 x 16 x 125 mm.

5. ASSEMBLY OF A HOLDING FIXTURE

Elementy uchwyty ściennego:

- transparent handle - **A**,
- assembling screws cap - **B**,
- anchors with screws - **C**.

1. Determine the position where the handle will be located (easy access, no running power cables, pipes, reinforcement of walls, etc.).
2. Determine the points on the wall so that the handle after assembly will adhere to the wall and will be mounted perpendicular to the ground.
3. Drill the holes and place the assembly anchors (distance between the holes 36 mm, diameter 3.5 mm).
4. Attach the handle and tighten it to the wall.
5. Insert the adapter plate.



6. POWER SUPPLY

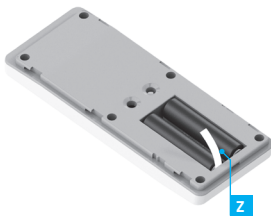
The device is powered by two batteries **AAA LR03**. In the case of low battery level the display shows information **Lo**. To change the battery slide the bottom flap down tight.



7. THE INITIAL COMMISSIONING

The device is factory protected against battery wearing. To the deprotection:

1. Open the battery cover.
2. Remove the seal **Z**, which protects the batteries from discharging (marked in white).





8. READING OF REMOTE INTO THE MOTOR'S MEMORY

WARNING! Do not program the remote control when the shutter is in the extreme position (top or bottom). Each program and changes of motor's operation directions are confirmed by two micro-movements of the driver.
Failure to comply with these rules may result in damage the blinds (inhaled by the housing).

CONTINUED 8. READING OF REMOTE INTO THE MOTOR'S MEMORY

WARNING! In order to perform this operation on the remote control COSMO | HB disable its limit functions for channel below 99. See LIMITATION OF AMOUNTS AVAILABLE CHANNELS). After the operation you can again limit the number of channels.

1. Press the  /  to select the appropriate channel. Select the desired channel 1 to 99 with the buttons. - Fig. 8.1.
2. Enter **MOBILUS motor, serie R** in the PROGRAMMING MODE OF MASTER REMOTE:
 - press for 5 seconds **PROGRAMMING BUTTON** in the motor - Fig. 8.2a;
 - or double turn off and turn on the power supply of the motor - Fig. 8.2b;
 The confirmation of properly performed operation will be two micro-movements of the motor driver - Fig. 8.2c;

88 ... 99



Fig. 8.1

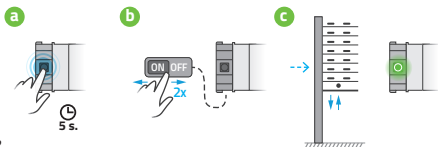


Fig. 8.2

WARNING! The first remote control readed into the receiver is a remote control MASTER. It allows you to operate motor and enter it in the PROGRAM MODE OF OTHER REMOTES.



3. On the remote control simultaneously press the  and  - Fig. 8.3a. 4 LEDs start blinking - Fig. 8.3b. Hold the buttons until the motor driver will perform two micro-movements. The remote control has been readed into the motor.





Fig. 8.3a

Fig. 8.3b

9. READING IN OTHER REMOTE

WARNING! In order to perform this operation on the remote control COSMO | HB disable its limit functions for channel below 99. See LIMITATION OF AMOUNTS AVAILABLE CHANNELS). After the operation you can again limit the number of channels.

1. On the **MASTER** remote control simultaneously press the  and  - Fig. 9.1a. 4 LEDs start blinking - Fig. 9.1b. Hold the buttons until the motor driver will perform two micro-movements confirming the input of the motor in the PROGRAM MODE.

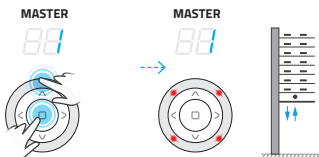


Fig. 9.1a

Fig. 9.1b

CONTINUED 9. READING IN OTHER REMOTE





- On the second remote control, you want to program, press the  and  - Fig. 9.2c. Hold the buttons until the motor driver will perform two micro-movements - Fig. 9.2d. Another remote was loaded into the motor..



Fig. 9.2c



Fig. 9.2d

Within 20 sec. you can proceed to load the next remote. However, if no action of programming at this time doesn't happen, motor automatically returns to the OPERATING MODE. You can expedite return to the OPERATING MODE manually using the remote control MASTER. In this case, press the button on the  and  and hold more than 5 seconds. In both cases, return to the OPERATING MODE will be confirmed by two micro-movements of the driver.

10. BI-DIRECTIONAL COMMUNICATION

Remote control **COSMO | HM, COSMO | HB** enables bi-directional exchange of information with the receiver / receivers (sends and receive messages).

This feature allows you to control the state of blinds, check whether they have been properly lowered or raised as to whether there is damage to be checked (eg. due to interference by third parties).



Correct functioning of bidirectional communication requires:

- use of the receivers with bidirectional communication,
- programming one channel only for one receiver,
- the correct channel configuration - setting for bidirectional communication channel,
- ensure seamless communication of the remote control with the receiver.

Receivers supporting the bidirectional communication: **MOBILUS: M35_ER_, M45_ER_.**

11. BI-DIRECTIONAL COMMUNICATION - ACTIVATION / DISACTIVATION

WARNING! In order to perform this operation on the remote control **COSMO | HB** disable its limit functions for channel below 99. See: **LIMITATION OF AMOUNTS AVAILABLE CHANNELS**). After the operation you can again limit the number of channels.

- Select the channel for which you want to enable / disable bidirectional communication.
- Press the buttons  and  and hold them for 5 seconds until 4 LEDs light up signaling radio transmission. Blue color - bidirectional communication enabled - Fig. 11.2a. Red - bidirectional communication disabled - Fig. 11.2b.

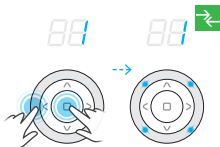


Fig. 11.2a

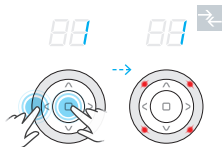


Fig. 11.2b

12. BI-DIRECTIONAL COMMUNICATION - READING OF POSITION

As long as bi-directional communication is enabled, the remote control **COSMO | HB, COSMO | HM**, will expect to send information about the state from the receiver. After receiving feedback on the remote will turn on the LEDs.

Due to the battery consumption waiting time for feedback has been limited to 20 seconds.



- a** - upper LEDs blink in blue - blind / gate is located in the top position.
b - lower LEDs blink in blue - blind / gate is located in the lower position.
c - LEDs blink diagonally in blue - the blind is located in the area between the upper and lower limit switch.
d - top and lower LEDs blink red light - the additional sound signal - error occurred - blind encountered an obstacle.

It is possible to query the receiver about its current status. Please select the channel and press . The remote will send a question to the receiver. Upon receipt of the response it displays its status.

13. CHANGE OF MOTOR'S OPERATION DIRECTION



WARNING! You can change the direction of the work of motor for MOBILUS drives with electronic limit switches only before setting the upper and lower limit switches. You can change the direction of work for the MOBILUS motors with mechanical limit switches at any time.

After loading the remote control to the motor check that the buttons **UP** and **DOWN** correspond to lifting and lowering the blinds. If not, press simultaneously buttons **STOP** and **DOWN** and hold them for about 4 seconds on the remote control any loaded to the motor. The confirmation of correctly performed operation are two micro-movements of the driver.

14. LIMITING THE NUMBER OF AVAILABLE CHANNELS

For convenient operation of the remote controls **COSMO | HM**, **COSMO | HB** user may limit the number of available channels at any time. To enable this function:

I. If the remote control does not have any fixed limit (access to 99 channels):

- Select the appropriate channel with buttons / from 1 to 99 - Fig. 14.Ia.
- Select the highest channel - Fig. 14.Ib and then press **P1** - Fig. 14.Ic, until 4 LEDs light up and signal the radio transmission. Color blue - limiting the number of channels has been activated - Fig. 14.Id.



Fig. 14.I

CONTINUED 14. LIMITING THE NUMBER OF AVAILABLE CHANNELS

II. If the remote control does not have any fixed limit (access to 99 channels):

1. Activate remote with buttons / - Fig. 14.IIa.
2. Press **P1** - Fig. 14.IIb, until 4 LEDs light up and signal the radio transmission. Red color - limiting the number of channels has been switched off - Fig. 14.IIc.

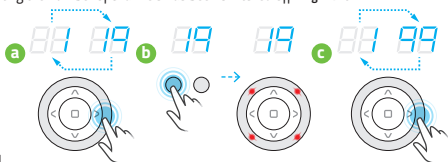


Fig. 14.II

15. TRANSMISSION PROTOCOL SWITCHING COSMO - COSMO | 2WAY

Remote control **COSMO | HB**, **COSMO | HM** works in latest version of radio communication **COSMO | 2WAY**.

If you need to change the mode to an older version (for example, if you purchase a new remote control for older COSMO radio tubular motors), follow these instructions:

1. Activate the remote control.
2. Press and hold the **P1 + P2** function buttons on the back of the controller for 20 seconds at the same time. - Fig. 15.
3. When the LEDs at the bottom of the front panel light up, the corresponding communication standard is activated:

colour red - the latest radio communication **COSMO | 2WAY**

blue colour - previous communication **COSMO**



Fig. 15

16. CHECK THE ACTIVE COMMUNICATION MODE

To quickly identify the active communication mode:





1. Activate the remote control.
2. Press and hold the **STOP** button for about 5 seconds - Fig. 16.
3. The LEDs in the lower part of the front panel shall light up indicating:
colour red - the latest radio communication **COSMO | 2WAY**
blue colour - previous communication **COSMO**











Fig. 16

17. CONTROL MODES

COSMO | HB, COSMO | HM controllers allow you to work in one of the 3 modes:

I CONTROL MODE	blind	shutter
short press of the button  / 	The roller-blind will unroll or will curl up to placed final positions.	The shutter will unroll or will curl up to placed final positions.
long press of the button  / 	The roller-blind will unroll or will curl up to placed final positions.	The shutter will unroll or will curl up to placed final positions.

II CONTROL MODE	blind	shutter
short press of the button  / 	The roller-blind will unroll or will curl up to placed final positions.	The shutter will unroll or will curl up to placed final positions.
long press of the button  / 	The roller-blind will unroll or will curl as long as a button is being kept.	The louver slats change the angle of inclination.

III CONTROL MODE	blind	shutter
short press of the button  / 	The roller-blind will unroll or will curl up to placed final positions.	The shutter will unroll or will curl up to placed final positions.
long press of the button  / 	The LED display sets the percentage value. Releasing the button causes sending this value to the blind and setting the position corresponding to the percentage value.	The LED display sets the percentage value. Releasing the button causes sending this value to the blinds and setting the inclination angle of the slats corresponding to the percentage value.

18. CHANGING THE CONTROL MODE

If there is a need to change the CONTROL MODE, please follow the instructions below:

1. Press  /  to activate remote.

2. Press the function button P2 located in the back of the controller - Fig. 18a.

Lighting up the diodes on the front panel means activating the corresponding CONTROL MODE::

1 blue LED - I CONTROL MODE

2 blue LED's - II CONTROL MODE

3 blue LED's - III CONTROL MODE

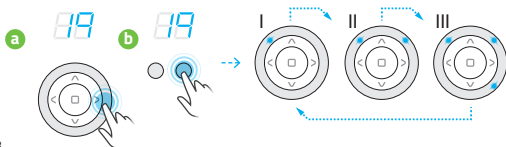


Fig. 18

WARRANTY

The manufacturer guarantees correct device functioning. The manufacturer also agree to repair or replace device damaged if the damage results from defects in materials and construction.

The warranty is valid for 24 months from the date of purchase under the following conditions:

- Installation was made by a person authorized in accordance with the manufacturer's instructions.
- Seals haven't been breached and unauthorized design changes haven't been made.
- The device was operated as intended by the user manual.
- Damage is not a result of the improperly performed electrical installation or any atmospheric phenomena.
- The manufacturer is not responsible for damage resulting from misuse or mechanical damage.
- In case of failure the device should be provided for repair with proof of purchase.

Defects found during the warranty period will be removed free for no longer than 14 working days from the date of acceptance of device for repair. The manufacturer MOBILUS MOTOR Sp. z o.o. carries on warranty repairs. If you have any questions, please contact your dealer (please provide the following information: event description, description of the error, the conditions under which the accident occurred).

MAINTENANCE

1. For cleaning, use a soft cloth (eg. microfiber), moistened with water. Then wipe dry.
2. Do not use chemicals.
3. Avoid using in soiled and dusty environments.
4. Do not use the device at temperatures higher or lower than the declared range.
5. Do not open the device - otherwise the warranty shall be lost.
6. The device is sensitive to dropping, throwing.

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.