# CYFRAL®

### COSMO-R1 COSMO-R2



#### Installation and operation manual of the intercom set

We are very pleased that you have chosen the CYFRAL intercom set. We believe that the good quality and functionality of our product will meet your expectations.

#### 1. COSMO headquarters

The COSMO control panel is a solution in which duplex signal transmission is used, and the connection of the handset uniphone with the call panel is made by a two-wire line.

The following signals are sent over this line:

- •call (bell),
- acoustic (speech),
- •controlling the electromagnetic catch.

The intercom set includes:

- •COSMO control panel with surface-mounted roof,
- •SMART uniphone or two uniphones (COSMO-R2) in white, with an additional button,
- •AC adapter 12V AC 800mA
- •four RFID proximity tags,
- assembly key.

The most important characteristics of the set are:

•simplicity of assembly,

- •support for RFID proximity tags,
- •unusual screws preventing unauthorized access to the inside of the panel,
- •resistance to weather conditions aluminum front cover protected against corrosion by anodizing and housing made of ABS plastic,
- •small dimensions,

•illuminated business cards.

2. Installation of the intercom.

#### 2.1. Mechanical assembly of the unit.

Before starting the installation, disassemble the aluminum panel (using a TORX10 screwdriver) by removing the screws located in the holes of the front panel. At the same time, pay attention to the even and alternating unscrewing of the screws connecting the aluminum cover with the housing.







#### 2.2. Electrical connections in the switchboard.

Electrical connections in the panel with other elements of the CYFRAL entry phone should be made in accordance with the block diagram, remembering that:

screw the wires from the AC adapter to the marked terminals~11.5V

•electromagnetic strike wires to the terminalsHOOK.

• uniphone 1 with the "hot" ( + ) end to the UN1 terminal and the "cold" ( - ) end to the common ground of the control panel marked MASS

• uniphone 2 (COSMO-R2) with the "hot" ( + ) end to the UN2 terminal and the "cold" ( - ) end to the common ground of the control panel marked **MASS** 

#### ATTENTION!

#### We do not use DC power supplies

On the electronics board there is a volume control potentiometer in the loudspeaker of the P2 panel and a potentiometer used to minimize acoustic feedback between the loudspeaker and the panel microphone (BALANS - next to the microphone). **The BALANCE potentiometer is factory set to the optimal position and should not be changed without a clear need.** 



- 1. Uniphone call button 1
- 2. Call button for Uniphone 2 (COSMO-R2)
- 3. BALANCE potentiometer balance adjustment
- 4. Master key programming jumper
- 5. Potentiometer P2 volume control6. RFID antenna



#### 2.3. List of tenants.

To insert the list of tenants, disassemble the aluminum panel, then slide down the plastic roof (lower) and the frame of the list of tenants. After assembling your own list, assemble everything in reverse order.

#### 3. Installing the power supply.

The power supply should be installed in such a way that water and moisture cannot reach it. If the power supply is installed at a considerable distance from the control panel, the cross-section of the power supply cables must be taken into account. For the cable of**diameters**0.5mm wires, a distance of not more than 10m is recommended.

#### 4. Installation of uniphones.

Before assembly and configuration, the uniphone holder (base) must be opened.

Intercom**SMART**it is characterized by easy disassembly of the camera holder, whose two parts of the cover are connected to each other by one screw located under the speaker of the handset. To remove the cover, unscrew the screw with a screwdriver, then grab the edge of the holder's cover in its upper part and pull it towards you. Then repeat the operation by grabbing the edge of the cover in its lower part.



After dismantling the cover of the uniphone holder, the installation wires "+"**UNIPHONE**and**GND**coming from the control panel, after passing them through the housing opening, connect them to the terminals marked accordingly**L**+and**L**-in accordance with the drawing below, which also shows the arrangement of the most important regulatory and functional elements.



#### 4.1. Elements of the uniphone

- 1. Connector for connecting the uniphone line coming from the exchange.
- 2. Volume control potentiometer in the uniphone handset (too high volume level may cause undesirable acoustic feedback).
- 3. Connector jumper shorting with a jumper converts the uniphone from the version without eavesdropping to the version with eavesdropping, especially useful in installations in single-family houses, where eavesdropping of the input, as well as full activity of the uniphone after removing the handset from the holder, without the need to trigger it beforehand, can be desirable.
- 4. Lock opening button.
- 5. Three-position ringer volume switch:
  - high ringer level
  - medium ringer level
  - ringer off
- 6. Microphone sensitivity adjustment
  - jumper installed high sensitivity
  - jumper removed sensitivity lowered
- 7. Multifunction button connector.

By default, the camera is set to high microphone sensitivity - if the sound level in the external panel is too high, the jumper should be removed.

#### 4.2. Multifunction button

The additional multi-functional button is used to connect additional devices (light switches, gate control, etc.). It is independent of the intercom system and is a normal opening button.

#### Maximum load:50mA 12V AC/DC

#### 5. System operation.

- The intercom exchange serves one (COSMO-R1) or two tenants (COSMO-R2).
- Pressing the button on the panel causes the uniphone of the selected tenant to be called.
- Ringing occurs twice after pressing the button.
- Taking up a call is signaled by the switchboard by flashing the highlight of the list of tenants.
- After hanging up the handset of the uniphone, the control panel enters the standby mode.
- The catch can be opened both from the uniphone and from the RFID tag. In the case of opening the uniphone with the button, there is no need to start a conversation, the button is active all the time after starting the set. Activating the catch with an RFID key fob, the control unit emits four short beeps.

In the case of an unregistered key, the switchboard generates a uniform access denial tone.

#### 5.1. Property exit button

It is possible to connect an additional closing button used to open the catch. To do this, connect the button to the terminals**UN1** and**MASS**. The effect will be the same as when pressing the hook opening button in the uniphone.

#### 5.2. Additional uniphones

Up to two uniphones can be connected in parallel to one terminal (UN1 or UN2). Telephones connected in this way will ring simultaneously. It is not recommended to conduct a conversation from two uniphones, as it may cause harmful acoustic feedback.

#### 6. RFID tags programming procedure

The COSMO doorphone exchange is equipped with an RFID proximity tag reader. The reader is placed directly under the illuminated business card window. In order to activate the catch or program the RFID tag, it should be brought close to the business card window at a distance of about 10mm.

Two MASTER keyfobs can be programmed to the control panel, enabling programming and deletion of additional keyfobs up to 98 pcs. The total memory capacity is 100 key fobs.

#### 6.1 Programming MASTER keyfobs

- put on jumper SW3, marked on the board as "*MASTER PROG."*. The control panel will confirm entering the programming with sound signals,
- put two RFID tags, which we want to be programmed as MASTER, in succession to the antenna located between the backlight diodes,
- registration of the key fob is confirmed by sound signals,
- to exit the programming, remove the jumper SW3, the control panel is ready for operation.

#### COMMENTS :

- jumper SW3 is used only for programming MASTER key fobs,
- entering the MASTER programming mode deletes both previously saved MASTER keyfobs,
- pressing the lower button deletes all programmed keyfobs (not MASTER),
- MASTER keys open the electromagnetic catch in the same way as ordinary keys.

#### 6.2 Programming other keyfobs

- in order to program other keys, press the UN1 call button and hold it for at least five seconds (during this time the control panel will make a full call).
- holding down the UN1 button, put the MASTER key fob to the reader (confirmation of entering the programming is signaled by a triple beep).
- move the MASTER key fob away from the reader and release the UN1 button, the control panel is in the programming mode, from now on we can add more key fobs.
- to remove the key fob from the control panel, press and hold the UN1 button and apply the key fob that you want to remove (removal confirmation with a double beep).

#### COMMENTS :

*the control panel remains in the programming mode for 10s, each application of the key extends this time by another 10s.* 

#### 7. Programming the electric strike opening time

By default, the time is set to 4s. It can be adjusted in the range of 1-15 seconds. To set a new time, follow these steps:

- Walk into "programming other keyrings"-point 6.2
- Press simultaneously: Button "UN1" in the switchboard and the electro-catch opening button in any Uniphone (or Button "UN1" and short-circuit the terminal of the UN1 uniphone to the GND terminal for a moment) the control panel will confirm with five short beeps that it has entered the opening time programming mode.
- From now on, the open time is set to "1s", each subsequent button press "UN1" increases the time by another second.
- 10 seconds after the last button press "UN1" the control panel switches to the normal operation mode, and the programmed new opening time is indicated by the number of beeps.

COMMENTS :

- Entering the opening time programming always resets the time to "1s"
- For example, to set the "7s" time, press the "UN1" button 6 times and wait 10 seconds for automatic exit from the programming mode.

#### SYSTEM TECHNICAL DATA

- supply voltage
- rated power
- acoustic output
- electricity consumed during a call
- mating hitch

230V AC / 12V AC 50Hz 4.5VA 0.6W 50-60 mA 12V AC / 500mA max

#### **ENJOY USING!**

#### **Producer:**

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To avoid harmful effects on the environment and human health, the used device should be stored in places intended for this purpose. For information on where and how to safely dispose of your used product, please contact your local authority or waste recycling company.

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