MKA – TINY RECEIVER

MKA

User Manual V2.1

Please read the instructions carefully before you start using your device. You fulfil step by step necessary specifications like installing settings, electrical connections and first operate system configurations carefully. After this stage, product owner/user have to keep this manual on known and visible place throughout product life.

- Use the product only indoors and in dry environments.

- Keep the product in a dry place.

- All service and repairs can only be done by Kontal Elektronik technical service. The product should not be intervened by any other persons.

- Each product working voltage is described on own label. Do not supply the product with a different source outside this voltage range.

If the product is used in violation of the above-mentioned items, it may cause fire, personal injury, or damage to the product or the structure in which the product is installed. Kontal Elektronik Ltd does not accept any responsibility for such situations caused by the user

- ✓ This exclamation mark will be used to highlight important points.

Do not touch supply input of the product with bare hands.

- ✓ This electric mark will be used to highlight electricity hazard.

This sign on the label indicates that the supply voltage of the product is DC.

This symbol on the product or its box indicates that this product cannot be treated as normal household waste. Instead, the product should be delivered to designated collection points for the recycling of electronic equipment. Incorrect disposal of the product can have negative consequences for the environment and human health.

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1. DEFINITION

MKA is a mini receiver board compatible with the Rolan series remote controls. The board has a single relay output and offers two operating voltage options: 12V and 24V. It is designed for remote control operation of doors equipped with electronic lock mechanisms, but it can also be used for triggering applications in low-power environments.

2. TECHNICAL FEATURES

TECNICAL FEATURES

Model	:	MKA
Product Code	:	K031-02
Working Voltage	:	12 / 24V DC
Working Current	:	48mA @24V DC
Working Frequency	:	433,92MHz
Output Type	:	Pulse /Toggle
Contact Type	:	12 / 24V DC - NO
Max. Contact Power	:	250V 5A
Auto Learn	:	✓
Remote Control Capacity	:	500
Weight	:	28gr
Dimensions (Width x Length x Depth)	:	27 x 67,5 x 22mm

2.1. Select Working Voltage

There is a jumper (**J1**) on board to select working supply. If a and b pins of J1 is short circuited, supply voltage is DC 12V. If b and c pins of J1 is short circuited, supply voltage is DC 24V.
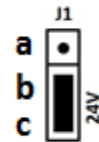

Figure 1 - 12V Option

Figure 2 - 24V Option

When the system is powered on, it provides no indication (e.g., no LED illumination, no relay activation, etc.).

2.2. Registering Remote Controls

1. Connect the supply voltage to the MKA board.
2. Press the button on MKA card until the LED lights up. After the LED lights up, lift your finger off the button and press the first channel of the remote control you want to teach.
3. If the receiver has learned the remote control, the LED on the receiver board will flash 3 times.

2.3. Auto Learning Mode

1- Using Remote Control;

- To use this feature, MKA must have learned at least one remote before.
- Connect the supply voltage to the MKA board.
- Press the first and second buttons of the remote control you have already taught the system for about 15 seconds.
- MKA will enter learning mode and the LED will light up.
- While the system is in learning mode, press the first channel of the remote control you want to teach.
- If the receiver learns the remote control, the LED will turn on and off 3 times.

2- Using Jumper;

- The receiver board is activated by short-circuiting pins 4 and 5 of the J2 jumper.
- This allows new remotes to be added to the system without interacting directly with the receiver board. When a new Rolan series remote, programmed with the same receiver code using your LCD CODER device, is pressed for the first time on the appropriate button, the receiver board learns the remote. On subsequent presses, the receiver board will begin to operate.
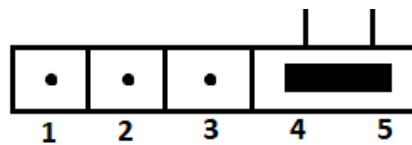
AUTO LEARN IS ACTIVATED

Figure 3 – Auto Learn Mode

2.4. Deleting Remotes from Memory

1. Disconnect the power supply to the card.
2. Press and hold the button on the card while the power is off, and then reconnect the card to power.
3. The LED will remain on for about 3-4 seconds. When the LED is completely off, take your finger off the button.
4. At the end of these steps, all remote controls registered in the receiver memory will be deleted.

2.5. Selecting Working Mode

Pulse Mode: This is default mode of operation. In this mode, when the user presses the first channel of the Rolan series remote control, which he had previously taught in the system, relay is triggered for 1 second and then becomes passive. If pins 1 and 2 are open circuit, the system operates in PULSE mode.
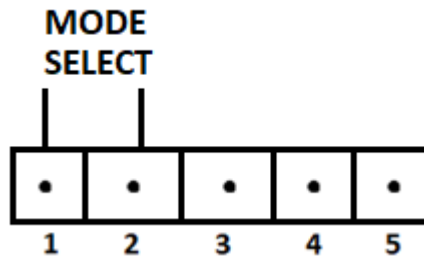
Figure 4 – Pulse Mode Select

Toggle Mode: In this mode, when the first channel of the Rolan series remote control that has been taught to the system is pressed, the relay remains triggered. In order to deactivate the relay, the first pressed button must be pressed again. If pins 1 and 2 are short-circuited, the system operates in TOGGLE mode.
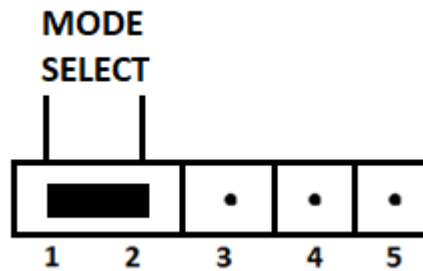

Figure 5 – Toggle Mode Select
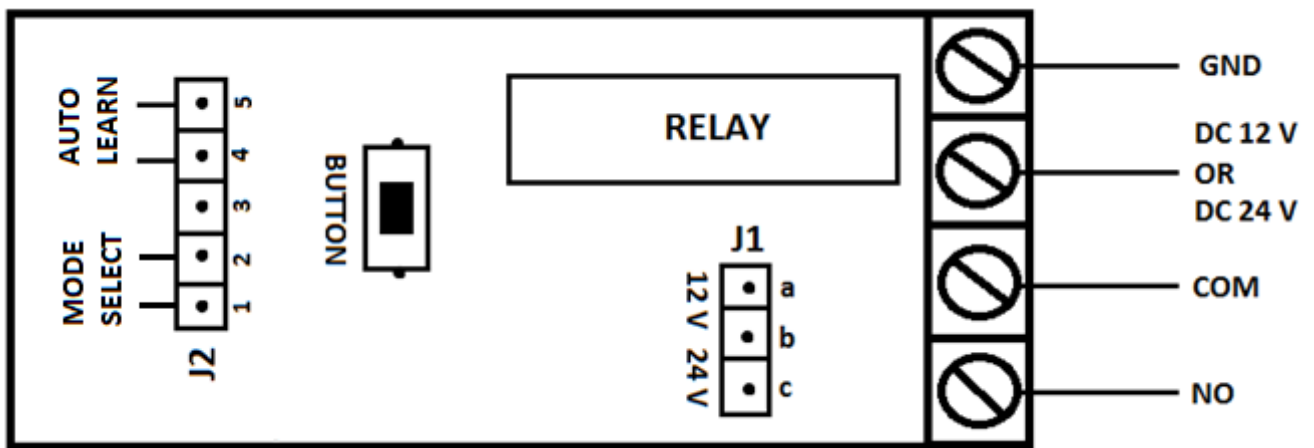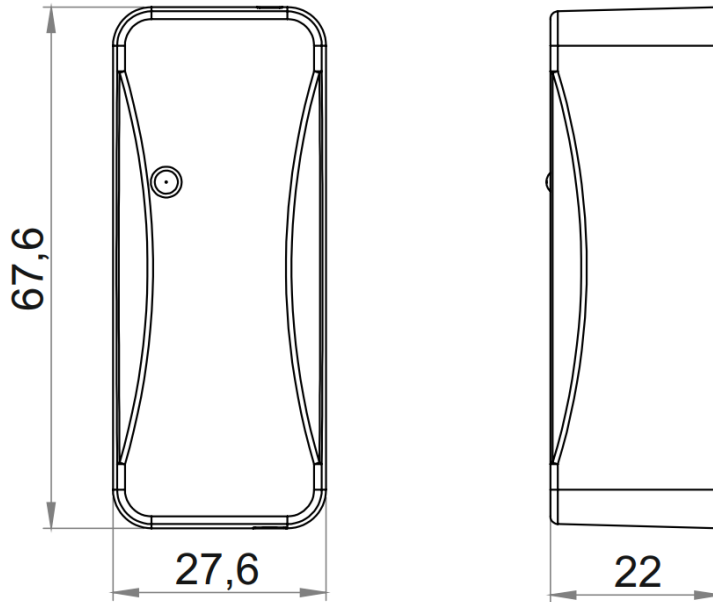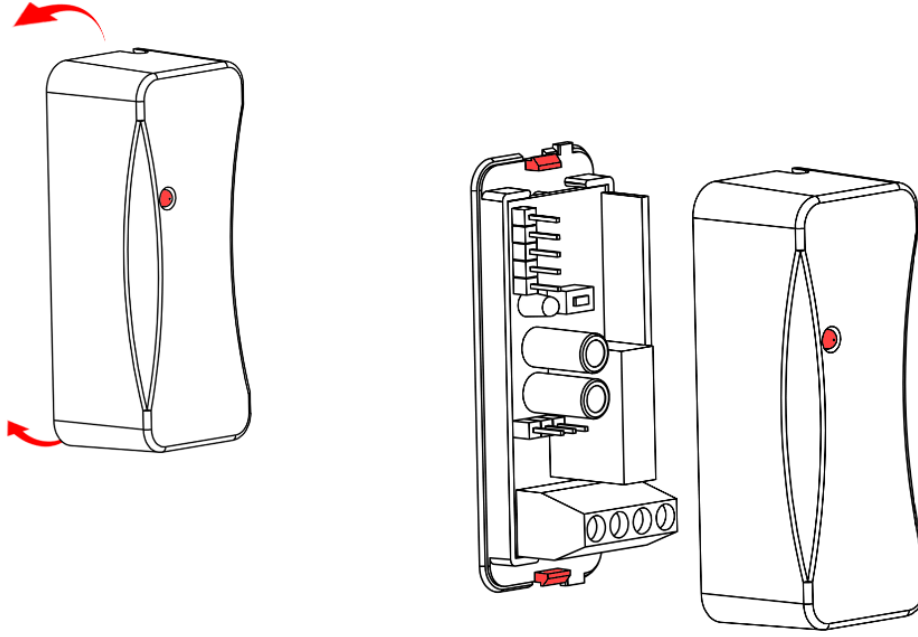
3. CONNECTION SCHEMA

Figure 6 - MKA Top View

4. INSTALLATION

Please install the device in an easy-to-access location for easy separation during installation.

It is recommended to use a maximum cable length of 40 cm when connecting the unit.

Manufacturer/Authorized Service

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