

RKA

Rolan Control Receivers

RKA/RKA2



Before operating the device, be sure to read this user manual carefully. Follow the steps described in the installation, electrical connection, and initial startup sections with attention. After completing these steps, the product owner/user must keep this manual in a known and easily accessible location for the entire service life of the product.



- Store the product in a dry environment. Otherwise, malfunctions may occur.
- In battery- or accumulator-powered products, batteries and accumulators are not covered under warranty. Similarly, failures caused by battery discharge or leakage in products that have exceeded their shelf life are not covered under warranty.
- All service and repair operations must be carried out exclusively by Kontal Elektronik technical service. The product must not be tampered with by unauthorized personnel.
- The operating voltage of each product is indicated on the label. Do not supply the device with a voltage different from the specified value.



- ✓ Failure to comply with the above-mentioned conditions may result in fire, serious personal injury, or damage to the product or the structure in which it is installed. In such cases caused by user negligence or misuse, **Kontal Elektronik San. ve Tic. Ltd. Şti.** assumes no responsibility.
- ✓ This symbol will be used to highlight important notes in the following sections.



- ✓ Do not touch the power supply terminals of the device with bare hands.
- ✓ This symbol will be used to indicate warnings related to voltage in the following sections.



- ✓ This symbol on the label indicates that the device operates with a DC supply voltage.



- ✓ This symbol on the label indicates that the device is equipped with reinforced insulation.



- ✓ This symbol on the product or its packaging indicates that the product must not be disposed of as household waste. Instead, it should be delivered to designated collection points for the recycling of electrical and electronic equipment. Improper disposal or destruction of the product may have adverse effects on the environment and human health.



- ✓ This document and its revisions are the legal property and responsibility of **KONTAL ELEKTRONİK SAN. VE TİC. LTD. ŞTİ.** Any unauthorized modification or alteration is strictly prohibited.



- ✓ Ensure that the system is properly grounded for the device to operate reliably.

1. DEFINITION

RKA is a remote control receiver that operates with ROLAN series transmitters and provides a dry contact NO (Normally Open) relay output. It can store up to 650 different transmitters in its memory. Thanks to its automatic learning feature, new transmitters can be easily registered without the need for any software or complex programming. Designed for use in garage doors, barrier systems, lighting, and similar automation applications, RKA offers a reliable, flexible, and scalable control solution with its user-friendly interface and quick installation.

1.1 BOX CONTENT

1x RKA - ROLAN Remote Control Receiver	1x Built-in Wire Antenna (17 cm)
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**For special orders, the box contents may vary depending on the project or customer requirements.*

2. TECHNICAL SPECIFICATIONS

Model	RKA	RKA2
Product Code	K003-01	K004-01
Working Voltage	12/24 V DC	12/24 V DC
Working Current	14mA @ 24V DC	14mA @ 24V DC
Working Frequency	433,92MHz	433,92MHz
Number Of Channel	1	2
Contact Type	Dry Contact (NO)	Dry Contact (NO)
Contact Capacity	250V AC 10A (Max.)	250V AC 10A(Max.)
Remote Capacity	650	650
Weight	95gr	106gr
Dimensions (Width x Height x Depth)	82.5 x 108.5 x 35mm	82.5 x 108.5 x 35mm

3. ADJUSTMENT COMPONENT

JMP: This component allows you to adjust the operating voltage of your product.

(See also Section 4.a)

BTN: This component allows you to perform transmitter programming and deletion operations on your product. (See also Section 4.c)

DPSW: This component allows you to adjust the operating modes of your product. (See also Section 4.b)

4. RKA Control Board Installation and Initial Startup

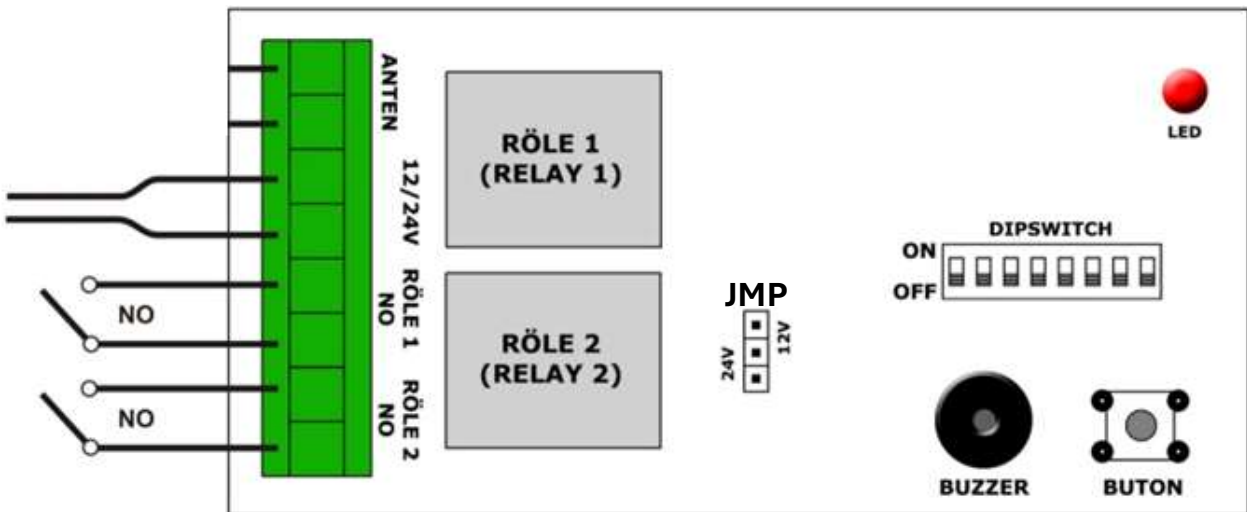


Figure 4.1 RKA / RKA2 Control Board

- Set the operating voltage of the product using JMP.



JMP Setting for 12V
DC Operating
Voltage

JMP Setting for 24V
DC Operating
Voltage



Do not supply power outside the specified operating voltage range.
Otherwise, the device may be damaged!



Do not touch the connection points after the product's power
connections have been made!



For correct and stable operation of the device, it is recommended to use
a power supply with a minimum output power of 2.5 W on the supply line.

- Adjust the operating functions of the product using the **DIPSWITCH**.
(See also Section 8: RKA – DIPSWITCH FUNCTIONS)
- Use the **button** to register a transmitter to your product.
(See also Section 5: RKA – Transmitter Programming)

5. RKA – REMOTE PROGRAMMING

- ✓ Transmitter Programming:

Before registering a new transmitter to the receiver board, ensure your Rolan model transmitter is properly programmed using the LCD CODER device.

- ✓ Powering the Board:

Activate the system by applying the appropriate supply voltage to the control board.

- ✓ Startup Notification:

When powered, the buzzer on the board will emit an audible alert:

- ✓ 3 short beeps: No transmitter has been previously registered.

- ✓ 1 short beep: Transmitters have been previously registered.

- ✓ Transmitter Learning and Deletion Procedures:

The single button on the receiver board is used for the following operations:

- ✓ New Transmitter Registration:

Press and hold the button for approximately 1–2 seconds, then release. The board will enter learning mode, and the buzzer will sound continuously for about 6–7 seconds. During this time, press the desired button on the transmitter to be registered. If registration is successful, the buzzer will emit 3–4 short, rapid beeps.

If the transmitter is not registered, learning mode will end and the buzzer will stop.

- ✓ First Transmitter Registration:

If this is the first transmitter being registered to the receiver board, the channel associated with the registered button will be set as the system's operating channel. All subsequently registered transmitters must share this same channel. In other words, only transmitters with the same channel can be registered to a single receiver board.

- ✓ Channel and Relay Mapping:

For 2- and 4-channel receivers, the channel of the registered transmitter controls relay 1. Subsequent channels automatically trigger the following relays in sequence.

For example:

- Transmitter button 1 → Relay 1
- Transmitter button 2 → Relay 2
- Transmitter button 3 → Relay 3
- Transmitter button 4 → Relay 4

There is no need to separately register these channels to the receiver board. The control board automatically recognizes sequential channels.

6.RKA- REMOTE DELETE

1. Cut the Power Supply:

Disconnect the power to the receiver board.

2. Press the Button:

While the board is unpowered, press and hold the learning button on the receiver board without releasing your finger.

3. Restore Power:

While still holding the button, supply power to the receiver board. When the board powers on, a continuous “Beep” sound will be heard from the buzzer.

4. Complete the Deletion Process:

Keep holding the button until the beep sound stops. Once the sound ceases, all previously registered transmitters will be completely erased from the control board’s memory.

7.INSTALLATION

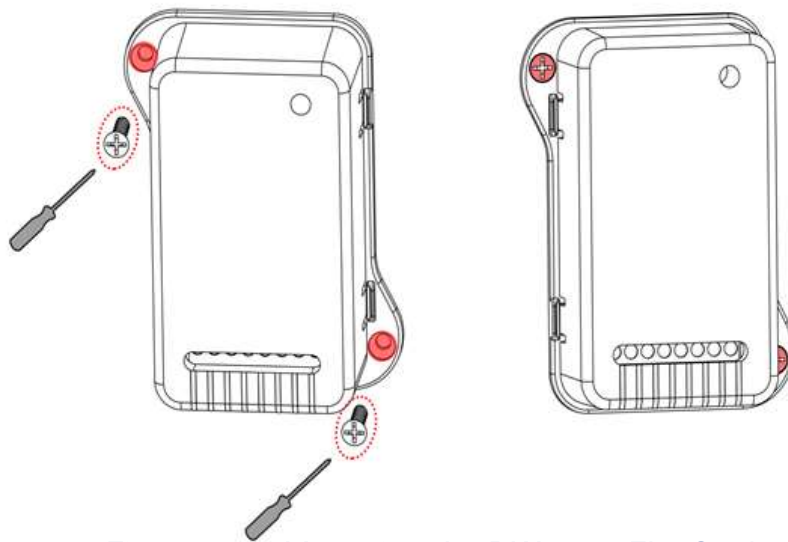


Figure 7.1 – Mounting the RKA on a Flat Surface

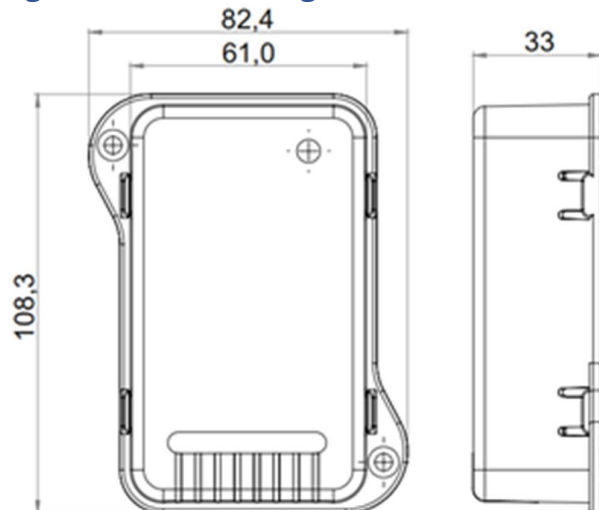
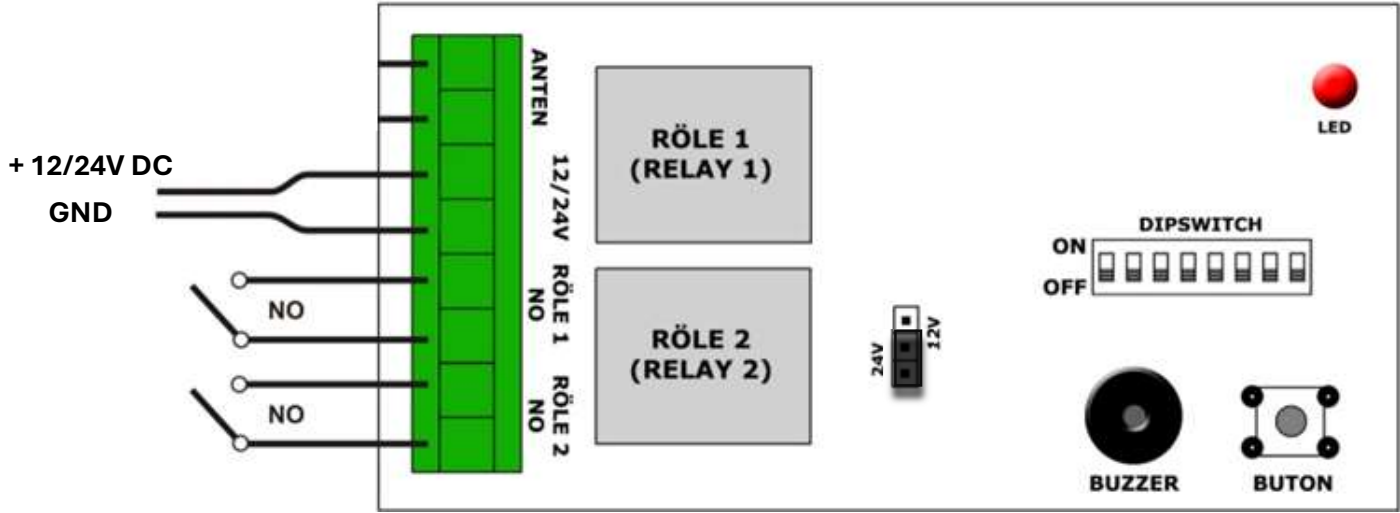


Figure 7.2 – RKA Dimensions (Unit: mm)

8. RKA – DIPSWITCH FUNCTION

FUNCTION	DIPS. NO	DIPS. STATE	FUNCTION DESCRIPTION
AUTOMATIC LEARN	NO 1	ON	Automatic learning is actively read. Thus, new remote controls are included in the system without intervening in the receiver card.
		OFF	Automatic Learning is disabled.
1. RELAY OPERATING MODE AND ADDITIONAL TIME SETTINGS	NO 2	ON	The first relay output operates in Toggle mode. In other words, when a signal comes from the remote control, the relay pulls but does not release. In order for the relay to release, a signal from the remote control must come again.
		OFF	The first relay output operates in Pulse mode. In other words, when a signal comes from the remote control, the relay is pulled and remains pulled for approximately 0.3 seconds and then the relay is released.
	NO 3	ON	If the first relay operates in Pulse mode (dipswitch no. 2 is in OFF position), it adds 1 second to the relay's pull-in time.
		OFF	It does not add any additional time to the operation of the first relay in pulse mode.
2. RELAY OPERATING MODE AND ADDITIONAL TIME SETTINGS	NO 4	ON	The second relay output operates in Toggle mode. In other words, when a signal comes from the remote control, the relay pulls but does not release. In order for the relay to release, a signal from the remote control must come again.
		OFF	The second relay output operates in Pulse mode. That is, when a signal comes from the remote control, the relay is pulled and remains pulled for approximately 0.3 seconds, and then the relay is released.
	NO 5	ON	If the second relay operates in Pulse mode (dipswitch no. 4 is in OFF position), it adds 1 second to the relay's pull-in time.
		OFF	It does not add any additional time to the second relay operating in pulse mode.
CHANNEL LOCK	NO 6	ON	Channel locking is active. This function prevents any relay from being activated while the other relay is activated.
		OFF	Channel locking is passive.
SYNCHRONOUS WORKING MODE	NO 7	ON	It provides synchronous operation of two relays at the same time. Dip switch number 8 is effective in the operation of this function.
		OFF	Synchronous operation mode is passive.
SYNCHRONOUS WORKING CHANNEL	NO 8	ON	For synchronous operation mode, relay settings number 2 are valid and the control channel driving relay number 2 controls the system. Dipswitch number 7 must be in the ON position for this function to be valid.
		OFF	For synchronous operation mode, relay number 1 settings are valid and the control channel driving relay number 1 controls the system. Dipswitch number 7 must be in the ON position for this function to be valid.

9. CONNECTION SCHEMA



Şekil 8.1 RKA/RKA2 Connection Schema



Manufacturer / Authorized Service

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