

KB-1

Wireless Button Systems



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.



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

1.DEFINITION

KB1 is a battery-powered control unit that allows users to initiate the passage process by pressing a button. When the button is pressed, the system transmits a wireless signal to the receiver unit, PESA (Receiver). Upon receiving this signal, the PESA (Receiver) activates its relay output to trigger the access control mechanism. This enables a secure and convenient passage.

1.1 BOX CONTENT

KB-1 BOX CONTENT

1x KB-1-Wireless Button	1x User Manual 1x KB-1 Wall Mounting Bracket 2x Double-Sided Adhesive Tape 2x 12V Battery
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PESA BOX CONTENT

1x PESA-PES/KB-1 RECEIVER	1x User Manual 1x Built-in Cable Antenna
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**For special orders, the box contents may vary depending on the project or customer requirements.*

2.TECHNICAL SPECIFICATIONS

Transmitter

Model	KB-1
Product Code	K214-01
Operating Voltage	Battery (2x 12V DC)
Operating Current	20mA (Max.)
Operating Temperature	-20 °C +55 °C
Operating Frequency	433,92MHz
Battery Life	Günlük 100 basım / 2yıl *
Wight	75.5gr
Dimensions (W X H X D)	30 x 84 x 45,40 mm

Receiver

Model	PESA
Product Code	K172-01
Operating Voltage	12/24V DC
Operating Current	9,5mA @ 24V DC
Operating Temperature	-20 °C +55 °C
Operating Frequency	433,92MHz
Contact Type	Dry Contact (NO)
Transmitter Capacity	40
Weight	28gr
Dimensions (W X H X D)	30 x 84 x 45,40 mm

3. USER ADJUSTMENT

J1: This component allows you to set the operating voltage of your receiver board.
(See also section 4)

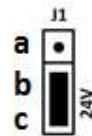
BUTTON: Using this component, you can program or delete transmitters on your receiver board. (See also section 4)

4. Programming the KB-1 to the PESA

- Set the Operating Voltage of Your Receiver Board.



PESA 12V Jumper Selection



PESA 24V Jumper Selection

- Connect the Power Supply to Your Receiver Board.



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

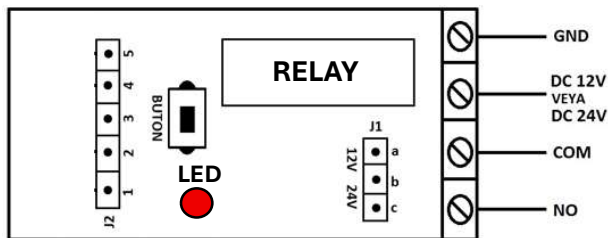


When connecting the power supply, pay close attention to the “+” and “-” polarity!



Do not touch the connection terminals after the power supply has been connected!

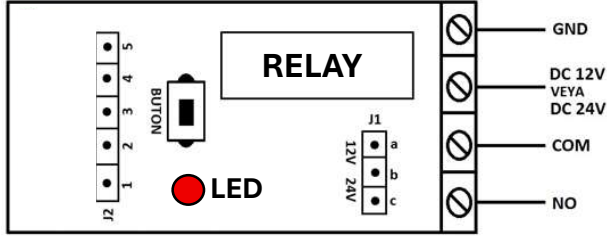
- Press and release the button on your receiver board for approximately 1 second.
- Then, press and release the KB-1 button once to complete the programming process. (When the receiver board recognizes a transmitter, its LED will blink on and off approximately 2 to 3 times.)



5. KB-1 LED STATUS INDICATOR

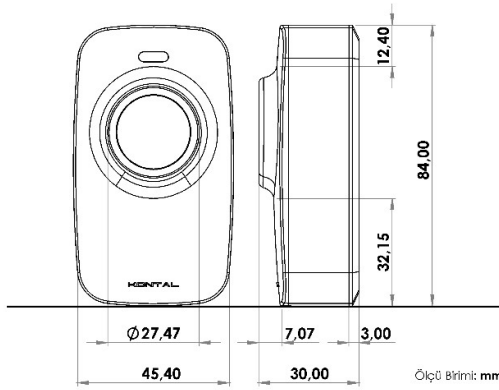
- KB-1 LED STATUS INDICATOR;
 - When the button on the KB-1 is pressed, the LED will light up, and the receiver will continuously output as long as the button is held down.

6. Deleting the KB-1 from the Receiver's Memory

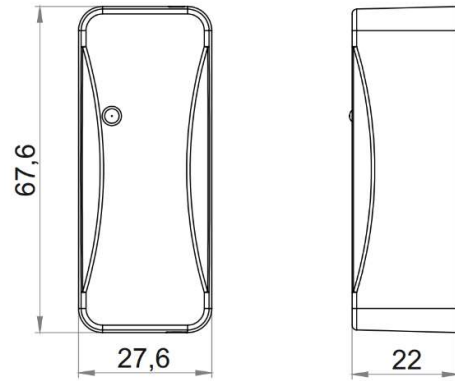


- Disconnect the power supply of your receiver board.
- Press and hold the button on your receiver board. While holding the button, reconnect the power supply.
- The LED on the receiver board will stay lit for approximately 3–4 seconds, then start blinking. At this point, all transmitters stored in the receiver's memory will be deleted.

7. MOUNTING



KB-1 Dimensions (Unit; mm)



PESA Dimensions (Unit; mm)

7.1 Installing the KB-1 on a Flat Surface

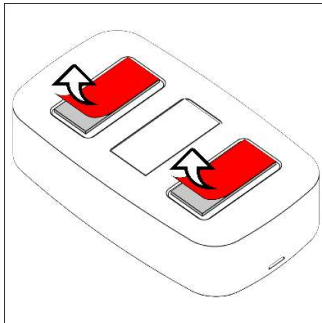
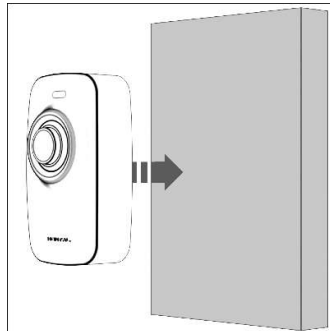


Figure 7.1.1 – Attaching Double-Sided Adhesive Tapes to the KB-1

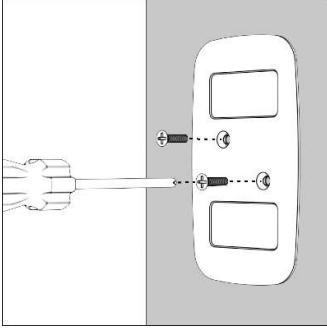


****Figure 7.1.2 – Attaching the KB-1 to a Flat Surface Using Double-Sided Tape****



****Figure 7.1.3 – KB-1 Mounted on a Flat Surface****

7.2 Mounting the KB-1 on the Wall Mount Bracket



****Figure 7.2.1 – Screwing the Wall Mount Bracket for KB-1 onto the Wall****

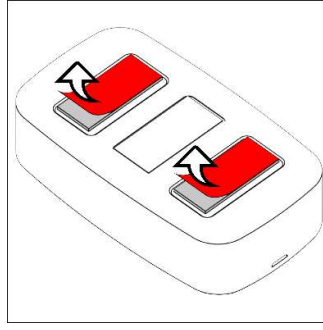


Figure 7.2.2 – Attaching Double-Sided Tape to the KB-1

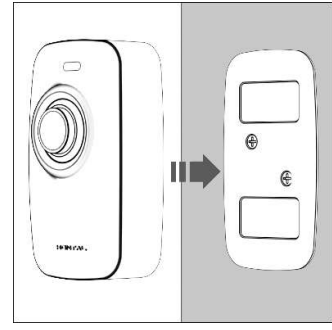


Figure 7.2.3 – Attaching the KB-1 to the Wall Mount Bracket Using Double-Sided Tape

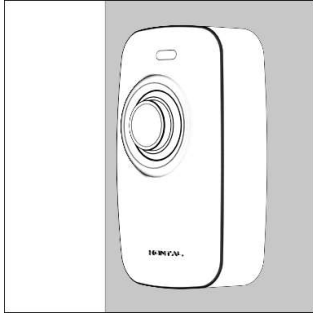


Figure 7.2.4 – Mounting the KB-1 onto the Wall Mount Bracket

7.3 Replacing the KB-1 Battery

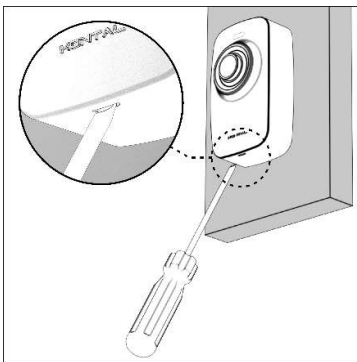


Figure 7.3.1 – Removing the Top Cover of the KB-1

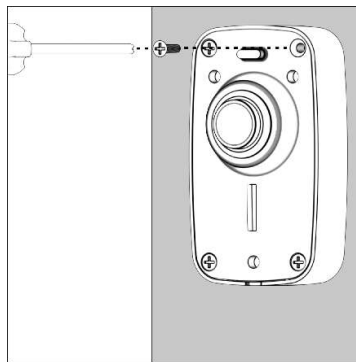


Figure 7.3.2 – Removing the Bottom Cover of the KB-1

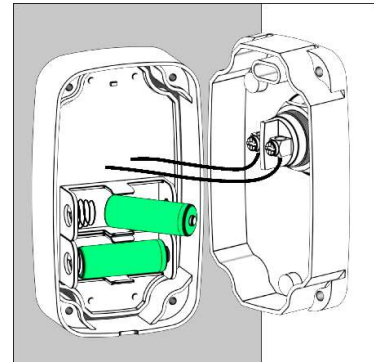


Figure 7.3.3 – Replacing the Battery of the KB-1

8.CONNETION SCHEMA

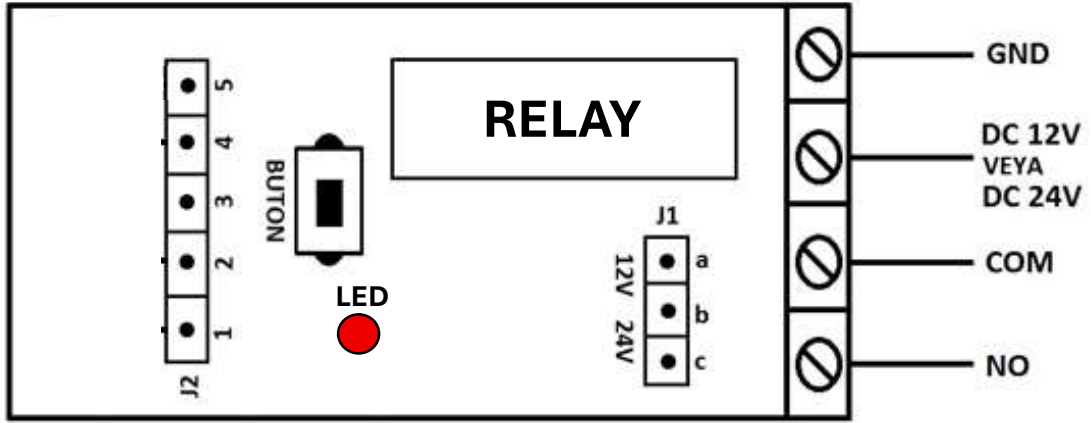


Figure 8.1 – PESA Connection Diagram



Manufacturer / Authorized Service

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