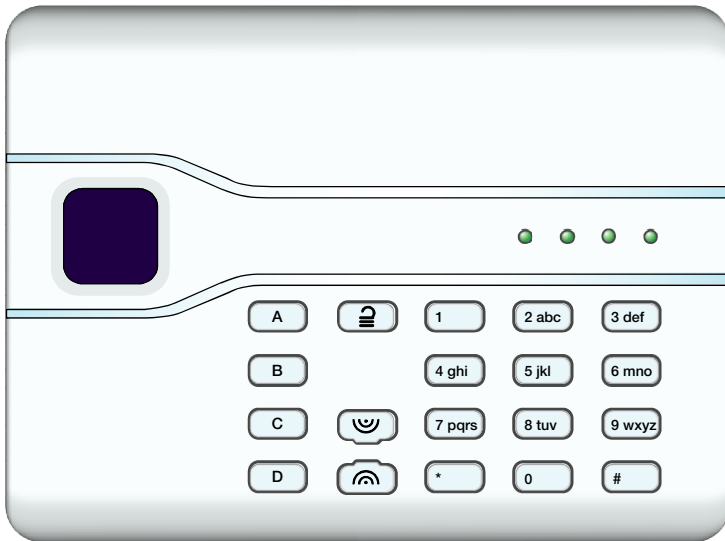


I-RK01 Radio Keypad



Installation Guide

Introduction

The I-RK01 Radio Keypad is designed to work with the I-ON16 control unit. This unit allows you to set and unset an i-on alarm system remotely. Figure 1 shows the main controls and displays.

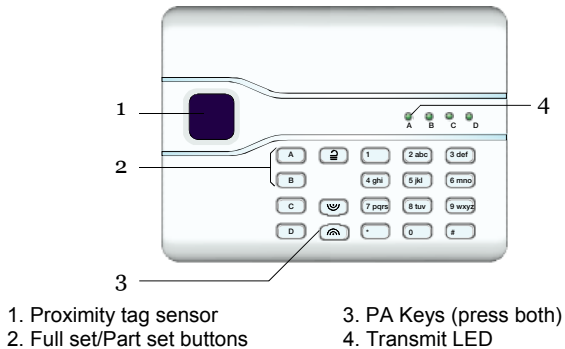


Figure 1. Radio Keypad controls and displays.

To open the unit, unclip the trim from the front and remove the two screws hidden underneath (see Figure 2). Then gently lever the front from the back box using a flat bladed screwdriver on the recessed slots at the bottom or top. Note that the front plastic housing contains the printed circuit board (pcb) and battery holder (see Figure 3).

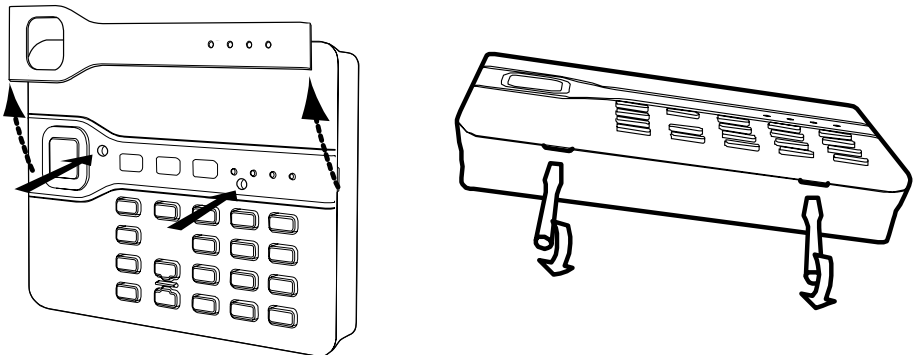


Figure 2. Opening the Radio Keypad

I-RK01

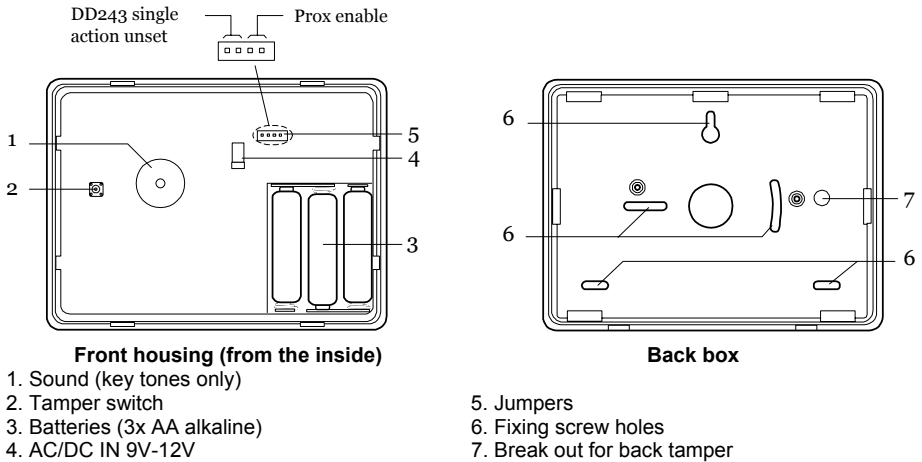


Figure 3. Inside the Radio Keypad

Technical Specifications

General

Sales number	I-RK01
Product Description	Radio keypad.
Environmental	EN50131-1 Class II.
Operating temperature	-10 to +55°C.
Relative Humidity	<75% non-condensing
Dimensions:	115 x 156 x 34, mm HxWxD
Keypad weight:	0.32 kg
Case material	ABS

Security

Security Grade	EN50131-1 Grade 2
Access code	4 digits, all four digits may be any number 0 to 9, giving 10,000 differs.
Number of user codes	Dependant on panel
Code blocking	Dependant on panel
Proximity tag differs	4,294,967,296

Radio

Radio Supervision	Transmits supervision signals every four minutes
Operating frequency	868.6625MHz Narrowband.
Transmitter range	Depends on location and type of control unit. As a guideline, up 200m range in free space conditions.

Power Supply

Battery	3 x AA Alkaline 1.5V
External PSU	9V to 12V, AC or DC. 2.1mm jack.
External PSU Consumption	50mA max. 5mA quiescent.
Monitoring includes	Battery low voltage.

**Compliance
Statements**

This product is suitable for use in systems designed to comply with PD 6662: 2004.
Conforms to 1999/5/EC R&TTE directive. See declaration of conformity at www2.coopersecurity.co.uk.

Installation

Preparation

Before installation you should carry out a radio survey of the site to assess where to place the keypad so that the control unit can receive signals from it successfully.

To do this you should conduct signal strength tests. Cooper Security produces the Scantronic 790r hand held signal strength meter for this purpose.

Siting the Keypad

Do site the keypad:

- Within the area protected by the alarm system.
- At a convenient height and location for the user.
- Out of sight of potential intruders.

Do NOT site the keypad:

- Outside the area covered by the alarm system.
- Close to or on large metal structures.
- Closer than one metre to mains wiring and metal water or gas pipes.
- Inside steel enclosures.
- Next to electronic equipment, particularly computers, photocopiers or other radio equipment, CAT 5 data lines or industrial mains equipment.

Note that some window glasses, especially those sold as "insulating" or "energy conserving" may be coated with thin metal or conducting films. These glasses are particularly poor at transmitting radio waves.

Fitting

Use M3 25mm roundhead screws in at least three fixing holes when mounting the back of the keypad on the wall. (If using a UK back box then two point fixing is sufficient.)

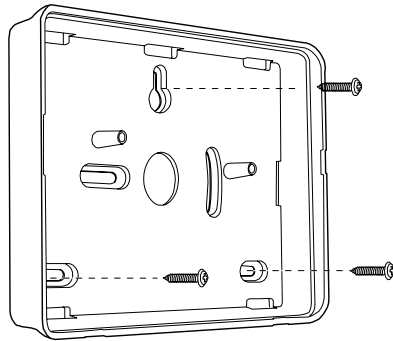


Figure 4. Screw Keypad Back Box to Wall

Setting the Jumpers

There are two jumpers (4 on figure 3) that affect the operation of the keypad:

DD243 Single
action unset

Fitted: the keypad transmits an unset command two seconds after the user presents a recognised proximity tag. This feature is designed for use when the keypad is working with DD243 compliant systems.

(Note that this delay does not apply to the setting procedure.)

Not fitted: the keypad transmits a command after a user has presented their proximity tag, and then pressed another key (A, B, or unset).

Proximity enable

Fitted: the keypad will respond to proximity tags presented to it.

Not fitted: the proximity tag reader ignores all tags. (This will extend the battery life of the keypad considerably.)

Power

Insert three AA 1.5V alkaline batteries into the holder (3 on figure 3).

If required you can use a standard plug-top power supply that provides between 9 to 12 V, either AC or DC, via a 2.1mm jack. Connect the jack to the AC/DC IN socket (4 in figure 3). Note that the power supply will not recharge any batteries fitted.

Programming

Before fitting the front of the keypad to the back box you should make the i-on control unit learn the keypad's identity. To do this you must first enter the Installer Menu at a wired keypad.

To Add a Radio Keypad

1. Select *Detectors/Devices–Radio Keypads-Add/Del Radio Keypad*.

The display lists the available Radio Keypads. Each line is a "memory slot" for learning the identity of an individual Radio Keypad.

If a memory slot is already occupied then the beginning of the line shows a "*".

2. Select the memory slot that you wish to use.

The display asks you to activate the tamper switch on the Radio Keypad.

3. Activate the Radio Keypad tamper.

The Radio Keypad signals its identity to the I-ON16 control unit. When the control unit learns the Radio Keypad's identity it gives a double beep.

To Delete a Radio Keypad

1. Select *Detectors/Devices–Radio Keypad-ADD/DEL Radio Keypad*.

2. Select the Radio Keypad that you wish to delete.

The display asks you to confirm that you wish to delete the selected Radio Keypad.

3. Press ✓.

The control unit deletes the Radio Keypad's identity and gives a double beep.

User Operation

LED A glows while the keypad is transmitting. The keypad ignores any key presses while the LED is alight. (LED A does NOT indicate the system status.)

The radio keypad does not provide any status information about the alarm system. To read alerts or reset the system after an alarm the

user must go to a wired keypad and press ✓ as described in the User Guide.

Setting/Unsetting With Access Code

A user can always set and unset the system with a valid access code from the radio keypad.

To Set the System

1. Key in a valid access code.
2. Either Press A to Full Set
Or press B to Part Set.
(If you wish to stop setting while the exit tone sounds, then press $\underline{\text{A}}$.)

To Unset the System

1. Key in a valid access code.
2. Press $\underline{\text{A}}$.

Silencing an Alarm

1. Key in a valid access code.
2. Press $\underline{\text{A}}$.

Setting/Unsetting With Proximity Tag

If the user wishes to set and unset the system using an proximity tag then make sure that you have fitted the prox enable jumper (see figure 3). The admin user will also have to make the system learn the identity of a proximity tag and assign it to a user.

To Set the System

1. Momentarily hold the tag up against the proximity tag sensor (1 in figure 1). The keypad glows blue and gives a "click" to show that it has recognised the tag.
2. Either Press A to Full Set
Or press B to Part Set.

To Unset the System

1. Momentarily hold the tag up against the proximity tag sensor. The keypad glows blue and gives a "click" to show that it has recognised the tag.
2. Press $\underline{\text{A}}$.

Silencing an Alarm

1. Hold the tag up against the proximity tag sensor.
2. Press $\underline{\text{A}}$.

Quick Set

If the user wishes to employ Quick Set then make sure that *Installer Menu - System Options - User Access - Quick Set* is set to "Yes".

To Set the System

1. Either Press A to Full Set
Or press B to Part Set.

Panic Alarm

If the user needs the PA function then make sure that *Installer Menu - System Options - User Access - PA Keys active* is set to "Yes"

To start a PA press both PA buttons at the same time (3 on Figure 1).

Maintenance

The radio keypad batteries typically last for two years. When the batteries are low the control unit reports an alert with the text "Radio Kpd Low Batt". The batteries should be replaced by an installer.

Cleaning

Clean the outside of the case with a soft dry cloth. Do not use water, solvents or any proprietary cleaning agents.

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This manual applies to software used in the I-ON16 control unit with version 1.xx.xx software.

www.coopersecurity.co.uk

Product Support (UK) Tel: +44 (0) 870 757 5400.

Available between:

08:15 and 17:00 Monday to Friday.

Product Support Fax: (01594) 545401

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