

## Controls and Displays

The 9940, 9941 and 9943 keypads have a two line by 20 character LCD display that shows "first to alarm" information, level status, and programming commands. In addition there are three LEDs with the following functions:

- ≈ Glows steadily when mains power is present. Flashes when the system is working from battery backup.
- △ Glows steadily when the system requires the user to acknowledge an alert.
- ↔ Glows steadily if:
  - A fault or tamper circuit is active while the system is unset.
  - The system needs an engineer or remote reset.
  - A telephone line fault is present.

The 9940 keypad provides the following keys:

- 9 - 0 Used to key in access codes or select programming commands.
- ✓ Used to enter programming and setting/unsetting commands.
- x Used to set the system with individual zones (including 24 hour zones) temporarily omitted.

ABCD Level or partition setting keys

In addition, some control units may support the Dual Key Alarm function to allow users to start an alarm by pressing the following pairs of keys:

- 1 + 3 Panic alarm
- 4 + 6 Medical assistance
- 7 + 9 Fire alarm

## Specifications

Sales number	9940EN, 9941EN or 9943EN
Security	Grade 3
Environmental	Class II
Operating temp.	-10° to +55°C
Humidity	96% RH
Dimensions	115mm W, 115mm H, 24mm D
Weight	0.2 kg
Current consumption	(9940) 30mA max continuous backlight off 70mA max continuous backlight on. (9941) 20mA max continuous backlight off 60mA max continuous backlight on. (9943) 30mA max continuous backlight off. 70mA continuous backlight on.
Compliance	EN51031-1 For further detail and Declaration of Conformity please go to <a href="http://www.coopersecurity.co.uk">www.coopersecurity.co.uk</a> . CE Telefication

Inputs	Used For:
Name	External wired PA button.
Panic	External tamper switch or wiring.
Ext Tamper	Exit Terminate button.
ET	Signal from control unit keypad bus.
Data, CLK	DC power supply.
12V, 0V	

## Compatible Equipment

9853, 9851, 9752, 9751, 9651  
This product conforms to the EMC (89/336/EEC) and LVD (73/23/EEC) directives. For a full declarations of conformity, please visit [www.coopersecurity.co.uk](http://www.coopersecurity.co.uk).

# 9940, 9941 and 9943 Keypad Installation Instructions

## Introduction

The 9940, 9941 and 9943 keypads are designed to work with 9853, 9851, 9752, 9751 and 9651 alarm system control units. These keypads are a direct replacement for the 9930, and offers the advantage of smaller size and improved appearance.

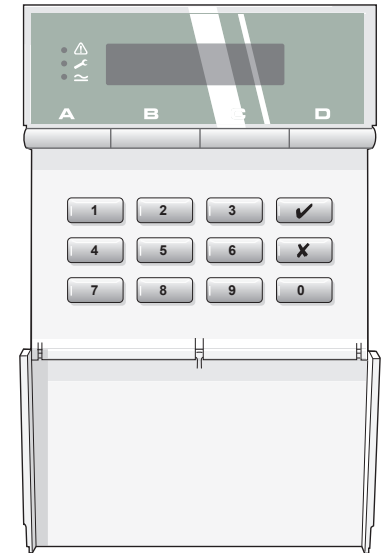
The 9940 and 9943 keypad have a proximity tag reader coil fitted inside the case and can work with the same proximity tags as the 934 proximity reader module. The 9941 has no detector coil fitted. The 9943 can also be connected to an external prox reader.

## Installation

To install the keypad:

- Ensure that all power (mains and battery) is removed from the control panel.
- If fitted, remove the two screws located under the bottom edge.
- Separate the cover and back plate of the keypad.
- Mount the keypad using M4/M3.5 screws. Mounting and cable holes on the back plate are shown in Figure 1.
- Connect all required wiring, as shown overleaf.
- Use the links to set the address of the keypad and to make any changes to standard operation.
- Clip the cover onto the base and refix the screws.

**Note: The power LED is operated by the control unit and may not be permanently lit. The control unit shows a mains fail condition as an alert on the display.**



## 9940 Mounting Locations

The 9940 and 9943 keypads contain a coil that detects proximity tags employed by users to set and unset the system. The coil works at a low radio frequency and has a spherical detection area, which extends for approximately 120mm from the keypad. Proximity tags can be detected through wood, brick, plaster, glass and plastic.

Excessive interference with external devices may lead to poor read performance. Follow these simple guidelines to prevent interference:

- Avoid mounting the keypad near magnetic devices, such as motors, door releases, entry phones, loudspeakers and PA systems.
- Avoid microwave devices such as ovens or detectors.
- Avoid mounting the keypad near large metal structures. Do not screw the keypad to a metal frame.
- Do not mount two readers back to back, even if there is a wall between them. This also applies to the AX10 reader: do not mount the 9943 back to back with the AX10.
- Warn users that holding a mobile phone in the same hand as a tag may seriously affect the reading performance.

If you are in doubt, test the operation of the keypad before finally fixing it in position.

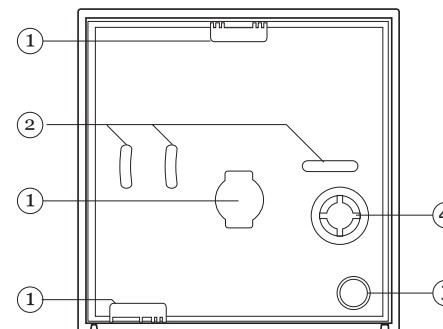


Figure 1: Cable entry (1), mounting holes (2), back tamper aperture (3), sounder aperture (4)

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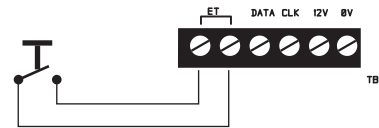
# Wiring and Link Instructions

## External Panic Attack Button

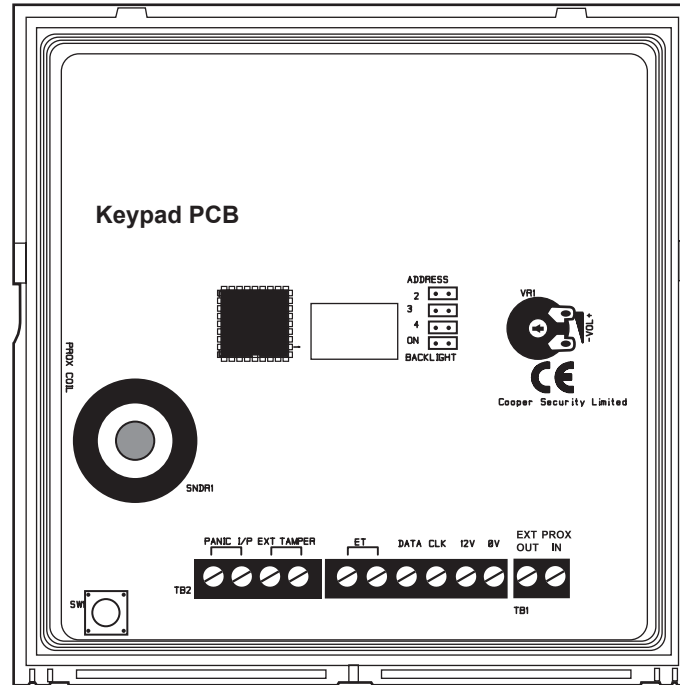


If the panic attack does not contain a tamper switch, link the pair of "EXT TAMPER" terminals. Separately link both pairs of terminals if no panic button is used.

## Lockswitch/ET button Wiring



Lock Switch  
OR  
Exit terminate button  
(NO, push to make)



Keypad 1



Keypad 2



Keypad 3



Keypad 4



### ADDRESS

Set the address of the keypad to 2, 3 or 4 by fitting the jumper across the appropriate link. Leave the link off to set the address to 1. No two keypads may have the same address. Re-apply power after changing the address.

### BACK LIGHT

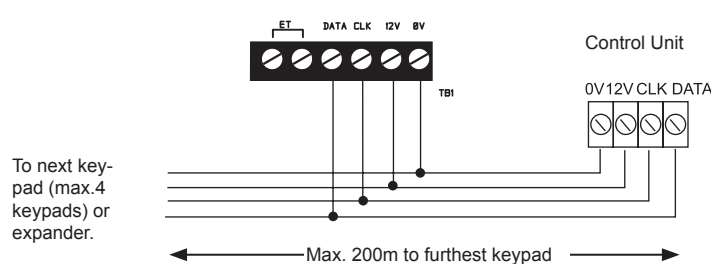
**Jumper not fitted** (default) – Display and keypad back lights are normally off. When a key is pressed, the lights will switch on at full brightness for 5 seconds.

**Jumper fitted** – Display and keypad back lights are permanently on.

### VOLUME CONTROL

Adjusts volume of keypad sounder.

## Keypad Wiring



To next keypad (max.4 keypads) or expander.

Cooper Security recommend that you use 8-core 7/0.2 or 16/0.2 alarm cable for wiring keypads

You can connect the keypads in either a star or bus configuration. If you are intending to use long cable runs then Cooper Security recommend that you use star wiring with no more than 200m of cable per branch.

## External Prox Wiring (9943 only)

Connect AX10 proximity reader to this terminal as shown.

