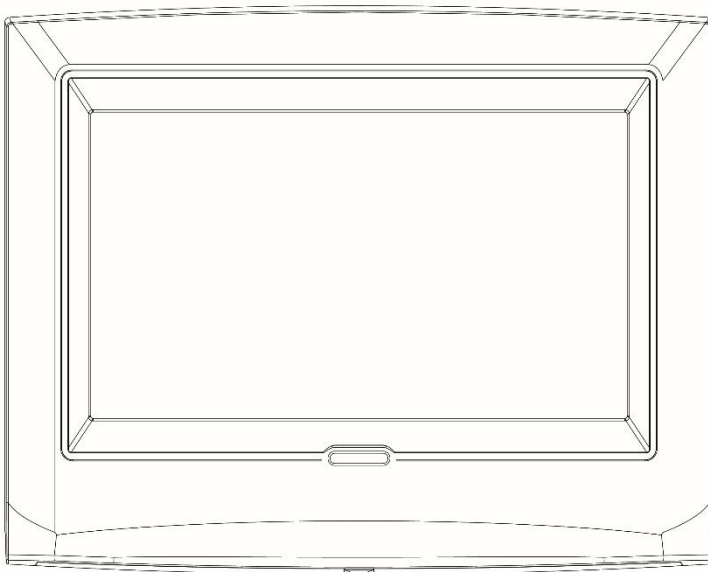




TK-1250

Keypad Installation Manual



**Designed and Manufactured
in the United Kingdom**

www.orisec.co.uk

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1. Introduction

This installation manual details how to install, setup and configure the TK-1250 keypad.

For detailed programming instructions please see the relevant control panel installation manual.

TK-1250 Features Include:

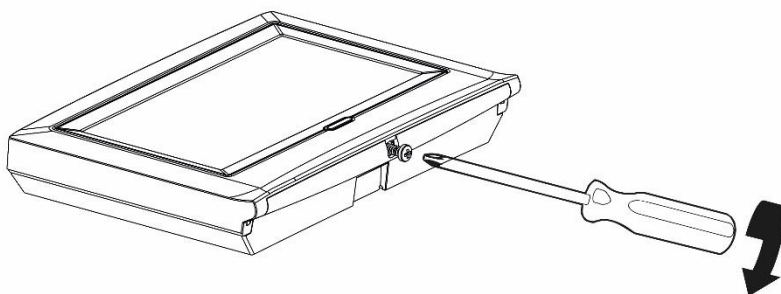
- ▶ Integrated Wireless Expander
- ▶ Voice Annunciation
- ▶ On-board Prox
- ▶ 16 Ohm Speaker Output
- ▶ Company Logo support
- ▶ Qwerty Keyboard for entering text
- ▶ Customisable Colour themes
- ▶ Up-to 3 programmable zones*
- ▶ Up-to 3 Programmable outputs*
- ▶ Keypad Scramble, for use with high secure operations. (Moves the key's physical locations during entry and alarm)
- ▶ Light Sensor – Self adjusting backlight
- ▶ Temperature Sensor

 On the CP-200 series of control panels, wireless expanders inbuilt on the Keypad (TK-1250) should not be enabled, if installed on network 2. For information on where to enable/ disable the wireless expander please see page 12.

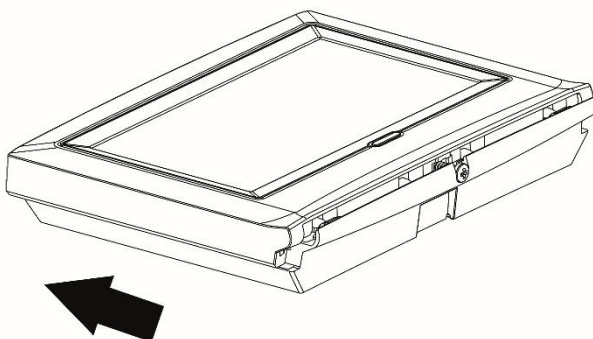
*A total of 3 input/ outputs are available on the TK-1250. The three available I/O's can be used in any configuration i.e. 2 zone inputs, 1 output / 3 zone inputs/ 3 outputs.

2. How to disassemble & assemble the keypad

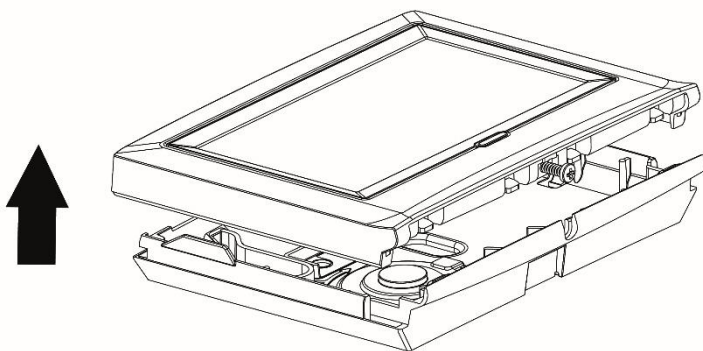
Loosen the screw on the underside of the Keypad:



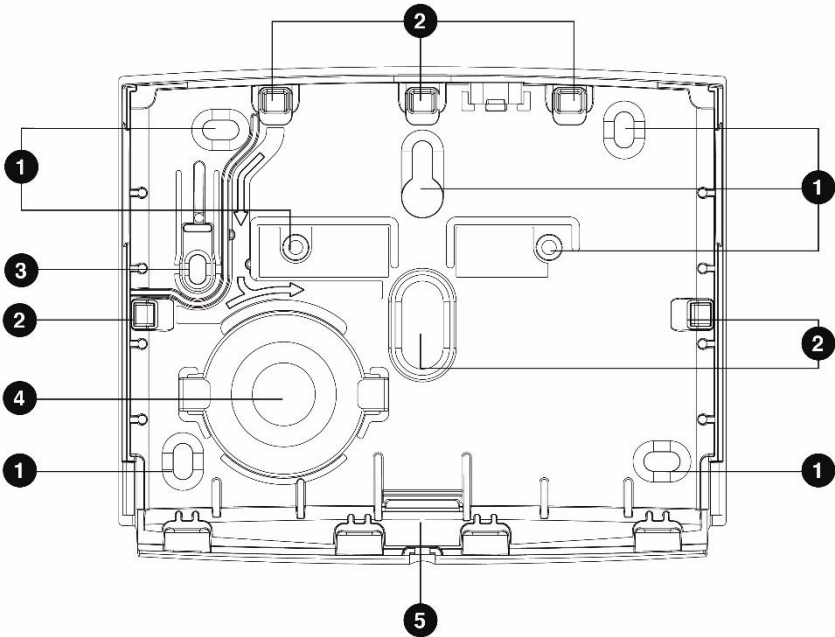
Slide the front cover up:



Lift the front cover off the back, noting that the PCB is attached to front cover:

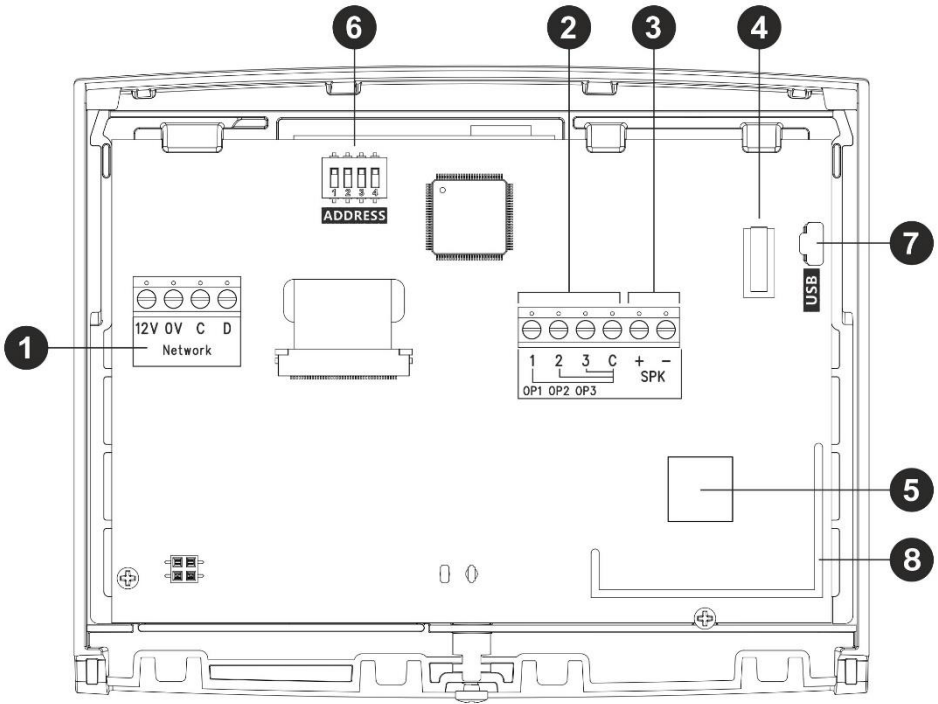


3. Fixing the Keypad to wall



1. Screw mounting holes
2. Cable entry holes
3. Breakaway rear tamper
4. Optional SPK-7 Location
5. Knock through that can be used with trunking / conduit for cable entry

4. PCB Layout



1. Network Connections

TK-1250 Keypad network connection.

2. Zone Input or Output Terminals 1-3

These terminals can be independently programmed from the main control panel to be detection devices OR outputs. If using one or more terminals as zone inputs each zone can be independently programmed for type, wiring, areas and options. If using one or more terminals as outputs each output (rated at 100ma) can be independently programmed.

3. Loudspeaker Terminals

These terminals are used for driving 16 Ohm extension loudspeakers. Each type of tone can be enabled or disabled for each keypad. (Programming Menu > Keypad Options > Sounds)

4. Tamper Switch

The screw and wall tamper micro switch will signal a tamper condition if the front cover is removed. On Grade 3 installations this will also signal a tamper if the unit is removed from the mounting surface.

5. Piezo Sounder

The piezo sounder generates low level alarm, key press, Entry and Exit, and warning tones. Each type of tone can be enabled or disabled for each Keypad. (Programming Menu > Keypad Options > Sounds)

6. Address DIP Switch

Each keypad must be assigned a different address using the Address DIP switch. Set the DIP switch to the required position. If addressed as 0, the address is defined by software utilising the Keypad programming menu.



Address 0
(Software address)



Address 1



Address 2



Address 3



Address 4



Address 5



Address 6



Address 7



Address 8



Address 9



Address 10

7. Micro USB

The Micro USB connection is used for flash updating the keypad (utilising 'Orisec Flash Programmer') and adding custom voice messages. (Utilising 'Orisec Voice Message Editor'). Both software programs can be downloaded from the installer portal; www.orisec.co.uk/installer

8. Wireless Expander

The TK-1250 has an onboard wireless expander which can be used to extend the range of wireless in the property.

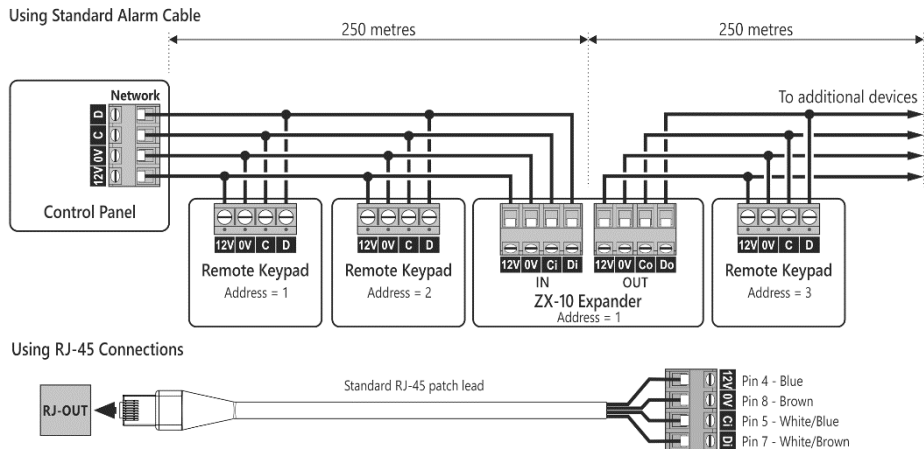
NOTE! A minimum of one of the following wireless expanders are required to be installed on the control panel to utilise the onboard wireless expander in the keypad:

- ▶ W-AP
- ▶ W-XP-R
- ▶ W-XP
- ▶ W-XP-EXT

5. Wiring

Network Connections

Ensure the system is powered down and the battery is disconnected before wiring the Keypad. The keypads can be networked in a star or daisy chain pattern, or a combination of the two. They can also be connected to the RJ-45 connections on both the control panel and on expanders.

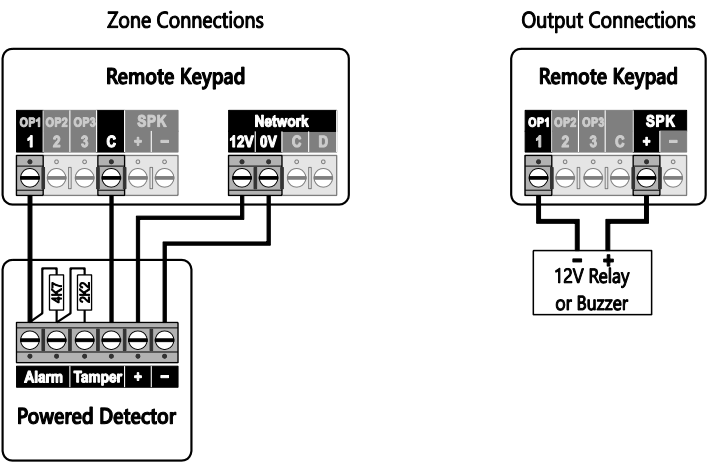


For most installations, it is recommended that 4-core stranded tinned annealed copper BS4737 7/0.2 alarm cable is used for network wiring. However, if the cable run is longer than 50m the use of 6/8-core is recommended, so that the power cores are doubled up to reduce voltage drop.

 The cable resistance should be no greater than 8Ω per 100metres. The use of low grade TCCA (tinned copper clad cable) should be avoided, especially on systems with long cable runs as it normally has much higher impedance characteristics.

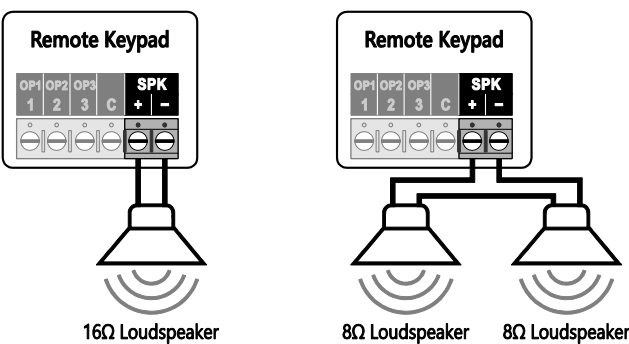
Zone and Output Connections

The keypads have three input/output terminals. They can be used as required and their operation is defined via the control panel's programming menus. Example of wiring types:



Loudspeaker Connections

The keypads have a 16Ω loudspeaker output, the wiring options are as follows:



6. Setup Menu

The Setup 'Icon' (Visible on the 'HOME' screen) will only appear under the following conditions.

- ▶ The control panel is currently in engineer's mode.
- ▶ A valid user code has been entered. (The setup 'Icon' will remain present for 30 seconds after exiting the menus)
- ▶ The lid tamper on the TK-1250 is open.

To enter the setup menu, press the 'Setup' icon which is located from the 'Home' menu on the keypad:



Network Address

If software addressing is enabled (DIP switch address set to 0), the network address can be changed using this option.

Display timeout

The keypad display brightness will change to the defined 'Dim Level' after the programmed period of no activity. (Default 1 minute)

Dim Level

The display brightness level that is used after 'Display timeout'. (Default 255)

Keypad timeout

When the keypad has not been used for programmed period it will display either the home screen/ Quick Keys screen/ logo screen or a blank screen (dependent on programming, please see 'Keypad Options'). (Default 1 minute)

Keypad Options

Use this option to set the following keypad options:

Visual feedback: If enabled button icons are highlighted when touched.

Secure keypad: If enabled the number keypad is scrambled during entry mode.

Quick keys when idle: if enabled the 'Quick Keys' are displayed on the bottom of the display after the programmed period of no activity from the 'Keypad timeout'.

Show Logo Screen: If enabled, the company logo screen is displayed after the 'Keypad timeout' period. The logo can also be displayed by selecting the 'Info' icon from the top right on the 'Home' screen. The company logo must be uploaded to the keypad via the Micro USB connection using the 'Orisec RKP Logo Editor' software.

Sync Colour Theme: If enabled the keypad colour themes are synced to all other TK-1250 keypads on the network.

Screen Blanking: If enabled, the RGB LED and Screen will be turned off following the 'Keypad Timeout'. Once activity is detected either by pressing on the screen or an alarm condition the RGB LED and Screen will revert to the programmed brightness settings.

Disable Radio: If enabled, the onboard wireless expander is switched off and will not be used for wireless devices.

Keypad Colours

Use this option to customise the display colours, there are 20 predefined colour themes to choose from or you can create your own theme.

Play Message

Allows any saved voice recordings to be played back locally. A 16 Ohm speaker is required. Voice messages are uploaded to the keypad from the 'Voice Message Uploader' program (Requires version 1.1 onwards). All PC software can be downloaded from; www.orisec.co.uk/installer

Back

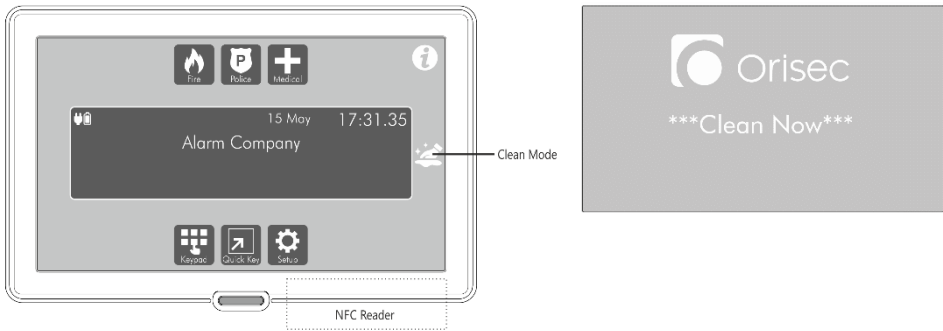
Touch the 'Back' icon to exit the 'Setup Menu' and return to the home screen.

7. NFC Reader & Clean Mode

The NFC reader allows NFC devices to be used for arming and disarming of the control panel. NFC devices are assigned to users in 'User Setup'. This menu can be accessed via engineers or the Master Users.

The NFC device (TAG) should be presented to the lower right hand section of the keypad, as highlighted below.

'Clean mode' is activated by pressing the clean icon (Highlighted below) from the 'Home' screen. Once the keypad is in 'Clean mode' it will remain in this state until a 5 second period has passed with no screen activity.



8. Onboard Wireless Expander

The TK-1250 keypad includes an onboard wireless expander. The onboard wireless expander can be used to communicate with ALL Orisec wireless equipment and provide increased signals for a site.

 A minimum of one of the following wireless expanders are required to operate the onboard wireless expander in the keypad:

- ▶ W-AP
- ▶ W-XP-R
- ▶ W-XP
- ▶ W-XPR-EXT

Please refer to the relevant wireless device installation manual for details on how to learn the device to the system.

9. Flash Updating

The TK-1250 keypad can be flash updated to facilitate new features and enhancements. The flash update process is performed via the Micro USB connection on the reverse of the keypad.

'Orisec Flash Programmer' (Version 1.19.1.3 and above) is required to flash update the TK-1250 keypad.

All PC software and product firmware can be downloaded from the installer portal; www.orisec.co.uk/installer.

For further information regards flash updating please refer to 'Flash Programmer Instructions'.

10. Specifications

Electrical

Input Voltage:	10 – 15Vdc
Current Consumption:	Idle: 85mA; Backlit: 160mA
Network:	4-Wire standard 7/0.2mm alarm cable up to 50m (250m with additional PSU)
Zone Inputs & Output:	3; Each programmable as zone input or 100mA output
Loudspeaker Output:	Minimum load of 16 Ohm
Proximity Reader:	NFC NTAG203
Display:	480 x 272 pixels, 16.7 million colours

Environmental

Operating Temperature:	-10°C to +55°C
Storage Temperature:	-20°C to +60°C
Max. Humidity:	95% non-condensing
EMC:	Residential, Commercial, Light Industrial & Industrial

Physical

Dimensions:	(HWD) 119 x 148 x 27mm
Housing:	3mm Acrylonitrile Styrene Acrylate (ASA)
Packed Weight:	340g



11. Standards

Security

PD 6662:2017

EN 50131-1:2006+A1:2009

EN 50131-3:2009

Grade 3, Class II

EMC

Hereby, Orisec Ltd declares that TK-1250 conform to: RE Directive 2014/53/EU, European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 2014/30/EU EMC Environment: Residential / Commercial / Light Industrial / Industrial.



CE: A copy of the Declaration of Conformity is available at: orisec.co.uk/compliance



WEEE Directive: 2012/19/EU Compliant: This symbol indicates that according to local laws and regulations, this product should not be disposed of as municipal/household waste. Instead, it should be disposed of at the appropriate collection points designated for the recycling of electrical and electronic equipment, or returned to Orisec upon purchase of new replacement products. This will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

RoHS

RoHS Directive: 2011/65/EU Compliant:

Orisec declares that this product complies with and conforms to RoHS legislation that it does not contain more than the agreed levels of: Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium (Cr6+), Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE)

Manufacturer: Orisec Ltd, 1 St Crispin Way, Haslingden, Lancashire. BB4 4PW. United Kingdom.

Warranty

The Orisec TK-1250 is guaranteed against defects in material or faulty workmanship for a period of 2 years from the date of purchase.

Disclaimer: Orisec will not accept any liability based on a claim that the Orisec TK-1250 failed to perform correctly as it is a component part of an installation and not a complete intruder alarm system.

www.orisec.co.uk

UK Based Technical Support

t: +44 (0) 1706 398740

e: support@orisec.co.uk

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