



# Smart Security

TR-KPD

User Guide

ESUGSS070

Version 1.0

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## 1. Product Description

The TR-KPD (keypad) is an encrypted, battery operated, wireless, access control and system arming device.

Key features include:

- User identity verification using a proximity RFID tag or passcode
- MiFare® DESFire® RFID technology
- Five-button design provides system activation controls and status indications
- Full numeric keypad
- Functions:
  - Arm
  - Disarm
  - Partial arm
  - Panic alarm
- Efficient power consumption to extend battery life
- Supports automatic over-the-air software programming and configuration upgrade (RSU)



## 2. Installing the Keypad

Ensure that you have:

- Four AA batteries
- A screw and wall anchor
- Screwdriver
- Drill

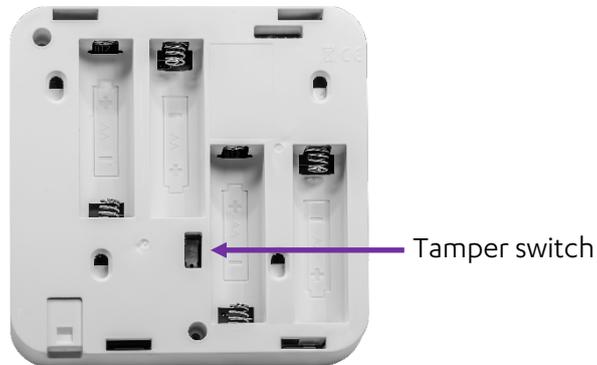
To install the keypad:

1. Choose a smooth, flat indoor wall near the door.
2. Release the keypad's mounting base by lifting the tab and sliding the base in the tab's direction.



## Installing the Keypad

3. Press the tamper switch several times.



4. Insert four fresh new AA alkaline batteries, according to the correct polarity.



**WARNING!** A new battery can explode if it is incorrectly installed.

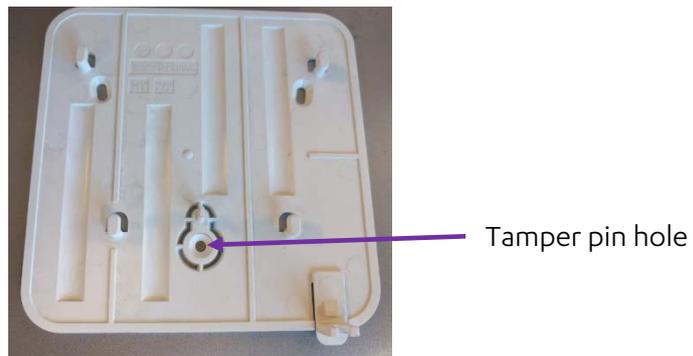
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5. Drill a hole in the wall and insert a wall anchor.
6. Clean and dry the wall.

7. Peel off the mounting-tape protective strips.



8. Ensure that the wall anchor and tamper pin holes are aligned.



9. Press the wall mount into place.
10. Insert a screw in the tamper pin hole and tighten.
11. Align the keypad onto the mounting base, and slide the keypad into place.

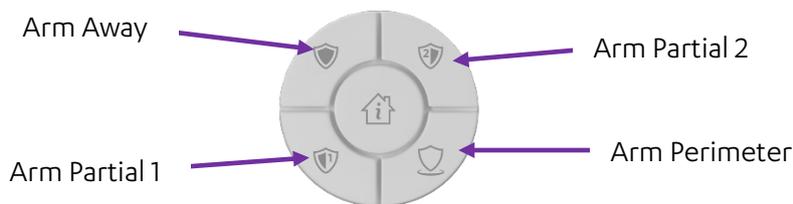


### 3. Arming and Disarming

You can use the keypad to activate the following arming modes:

- **Armed Away** - Arms all devices
- **Armed Partial**- Arms a specified group of devices
- **Armed Perimeter** - Arms perimeter devices
- **Disarmed**

#### 3.1. Arming



To arm:

1. Press the button for the arming mode you want.
2. If your installation requires authentication for arming, enter your numeric passcode or place your tag over the  $(((\circ)))$ .

Partial and perimeter arming modes can be activated at the same time.

#### 3.2. Disarming

To disarm:

- If your user does not require a passcode, place the tag over the  $(((\circ)))$ .
- If your user is configured for passcode only, enter the passcode and press **✓**.
- If your user requires a tag and a passcode, enter the passcode and then place the tag over the  $(((\circ)))$ .

### 3.3. Checking Arming Status

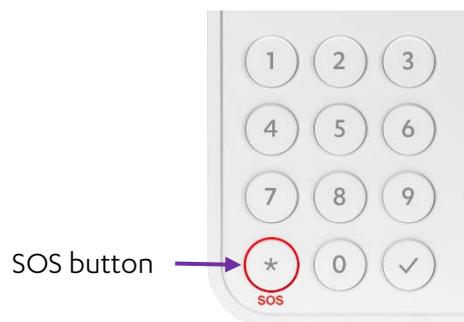
To check the system's arming status, press .

■ If  lights green, the system is disarmed.

■ If  light red, the system is armed. The button or buttons that light indicate the arming mode.

### 3.4. Triggering a Panic Alarm

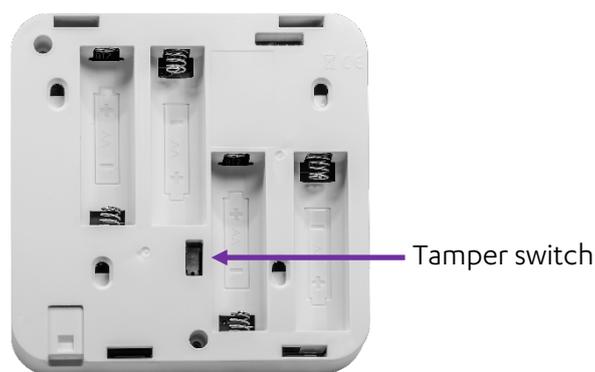
In case of an emergency, you can trigger a panic alarm. To trigger a panic alarm, press and hold the keypad's **SOS** button for at least five seconds.



## 4. Changing the Batteries

To change the keypad's batteries:

1. Release the keypad's mounting base by lifting the tab and sliding the keypad away from the tab.
2. Remove the old batteries.
3. Press the tamper switch several times.



4. Insert four new fresh AA alkaline batteries, according to the correct polarity.



**WARNING!** A new battery can explode if it is incorrectly installed.

5. Align the keypad onto the mounting base, and slide the keypad into place.

## 5. Specifications

Item	Data
Part Number	ES700TRKPD
Communications	<ul style="list-style-type: none"> <li>■ Bi-directional protocol: ECOP – Essence proprietary communication protocol</li> <li>■ Maximum RF range: Up to 700m (2,296 ft.) – open air</li> <li>■ Modulation and frequency:               <ul style="list-style-type: none"> <li>● Europe: 868.3 MHz 2FSK</li> <li>● The Americas: 916.5 MHz 2FSK</li> <li>● RFID 106 kbps, 13.56 Mhz</li> </ul> </li> <li>■ Data Security               <ul style="list-style-type: none"> <li>● RF: 32-bit ID, over four billion combinations</li> <li>● RFID: 128-bit ID, DES, AES, and ECC</li> </ul> </li> </ul>
Security and safety	<ul style="list-style-type: none"> <li>■ Tamper mechanism – wall tamper</li> <li>■ Unique electronic serial number</li> </ul>
Power supply	<ul style="list-style-type: none"> <li>■ Keypad               <ul style="list-style-type: none"> <li>● Batteries: Four 1.5V AA alkaline batteries</li> <li>● Battery life: Three years with 10 tag-reads and 10 code entries per day</li> </ul> </li> <li>■ Tag: No batteries required</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>■ Size (H x W x D):               <ul style="list-style-type: none"> <li>● Keypad: 103 x 103 x 20 mm (4.1 x 4.1 x 1.2 in.)</li> <li>● Tag: 10 x 34 x 50 mm (0.39 x 1.34 x 1.97 in.)</li> </ul> </li> <li>■ Weight:               <ul style="list-style-type: none"> <li>● Keypad: 135 g (0.3 lbs.) – battery not included</li> <li>● Tag: 10 g (0.02 lbs.)</li> </ul> </li> </ul>
Environment	<ul style="list-style-type: none"> <li>■ Operating ambient temperature range: -10° C - 55° C (14° F – 131° F)</li> <li>■ Storage ambient temperature range: -20°C – 60°C (-4°F – 140°F)</li> <li>■ Operating humidity: Up to 95% non-condensing</li> </ul>

Item	Data
Compliance Pending	<ul style="list-style-type: none"> <li>■ EMC and Radio               <ul style="list-style-type: none"> <li>● EN 300 220-1: V3.1.1</li> <li>● EN 300 220-2: V3.1.1</li> <li>● EN 300 330: V2.1.1</li> <li>● EN 301 489-1 v 1.9.2</li> <li>● EN 301 489-3 v 1.6.1</li> <li>● EN 61000-6-3: 2007 + A1:2011</li> <li>● EN 50130-4:2011 + A1:2014</li> <li>● FCC CFR 47, Part 15</li> <li>● IC: RSS-210</li> </ul> </li> <li>■ Safety: EN 62368: 2014</li> <li>■ Performance:               <ul style="list-style-type: none"> <li>● EN 50131-3: 2009</li> <li>● EN 50131-1:2006 + A2:2017 Grade 2</li> <li>● EN 50131-6:2017</li> <li>● EN 50131-5-3: 2017</li> <li>● UL 2610: 2018</li> </ul> </li> <li>■ Environmental: EN 50130-5 Class II</li> <li>■ RoHS: EN 50581</li> <li>■ ISO: ISO 9001:2008, ISO 14000</li> <li>■ RFID: ISO/IEC 14443 MIFARE Identification cards</li> </ul>

This device complies with FCC Rules Part 15 and with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) this device must accept any interference received including interference that may cause undesired operation.

For Industry Canada:

*Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :*

- (1) l'appareil ne doit pas produire de brouillage;*
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For Industry Canada:

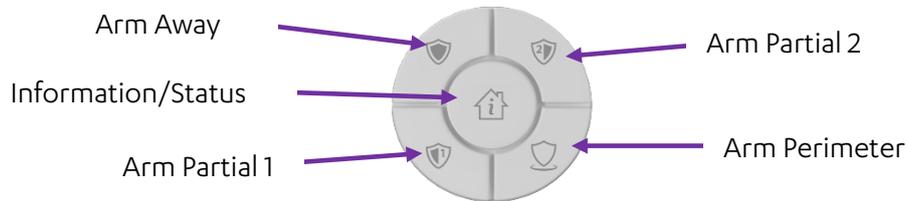
- This Class B digital apparatus complies with Canadian ICES-003.
- Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



**WARNING!** To comply with FCC RF exposure compliance requirements, the device should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located or operated in conjunction with any other antenna or transmitter.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Essence Security International Ltd.) could void the user's authority to operate the equipment.

## Appendix A Keypad Indications and Actions



The following table describes the keypad's indications and actions.

Action/Status	Sound	Indication				
						
<b>Arm Away - Success</b>	Three short beeps		Lights red for two seconds			
<b>Arm Partial 2- Success</b>	Three short beeps			Lights red for two seconds		
<b>Arm Partial 1 - Success</b>	Three short beeps				Lights red for two seconds	
<b>Arm Perimeter - Success</b>	Three short beeps					Lights red for two seconds
<b>Arm - Failure</b>	One long beep	Blinks red for two seconds				
<b>Delay Arm - Countdown</b>	Countdown beeps	Orange clockwise				
<b>Delay Arm - Success</b>	Three short beeps		Lights red for two seconds			
<b>Attempt to arm when armed away</b>	One long beep		Lights red for two seconds			

Action/Status	Indication					
	Sound					
<b>Attempt to arm with no devices associated with arming profile</b>	One long beep	Flashes red for two seconds				
<b>Entry delay countdown</b>		Orange clockwise				
<b>Disarm - Success</b>	Three short beeps	Lights green for two seconds				
<b>Disarm - Failure</b>	One long beep	Blinks red for two seconds				
<b>Attempt to disarm when already disarmed</b>	Three short beeps	Lights green for two seconds				
<b>Panic - Success</b>	Three short beeps	Red clockwise for 30 seconds				
<b>Panic - Failure</b>	One long beep	Blinks red for two seconds				
<b>Press non-numeric key when alarm in memory</b>		Red clockwise for two seconds				
<b>Press information - Disarmed</b>		Lights green for two seconds				

## Keypad Indications and Actions

Action/Status	Indication					
	Sound					
Press information-Armed Away			Lights red for two seconds			
Press information-Armed Partial 2				Lights red for two seconds		
Press information-Armed Partial 1					Lights red for two seconds	
Press information - Armed Perimeter						Lights red for two seconds
Press information-Alarm in memory		Red clockwise for two seconds				
Press keys when the keypad is locked	One long beep	Flashes red for two seconds				
Tag Learn - Success	Three short beeps	Lights green for two seconds				
Tag Learn - Failure	One long beep	Flashes red for two seconds				
No response from panel	One long beep	Blinks red for two seconds				

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