EMS � FireCell

Radio Hub
Installation Guide

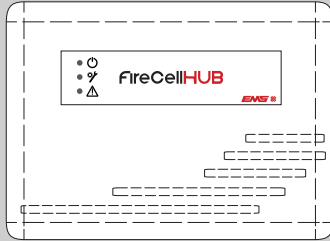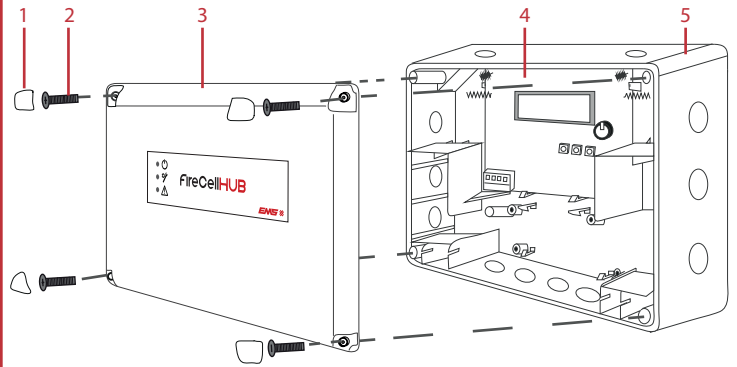| Part no	Product description
FCX-500-004	4 Loop Radio Hub
FCX-500-444	4 Loop Radio Hub c/w Remote Aerial Facility

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1 Pre installation

⚠ Installation must conform to applicable local installation codes and should only be installed by a fully trained competent person.

- Ensure the Hub is installed as per the site survey.

- Refer to step 3 to ensure optimised wireless performance.

- If using remote aerials with this product, refer to the remote aerial installation guide *(MK293)* for more information.

- This device contains electronics that may be susceptible to damage from Electrostatic Discharge *(ESD)*. Take appropriate precautions when handling electronic boards.
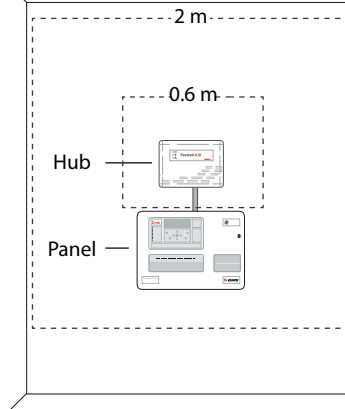
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2 Components

1 4x corner covers, 2 4 x lid screws, 3 Hub lid,
4 Hub PCB, 5 Hub back box
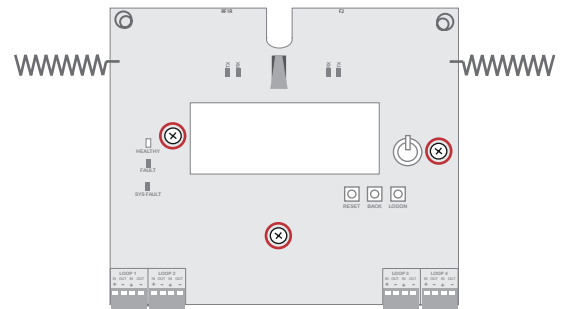
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3 Mounting location guidelines

For optimum wireless performance, the following must be observed:

- Ensure the Hub is not installed within 2 m of other wireless or electrical equipment *(not including the panel)*.

- Ensure the Hub is not installed within 0.6 m of metal work.

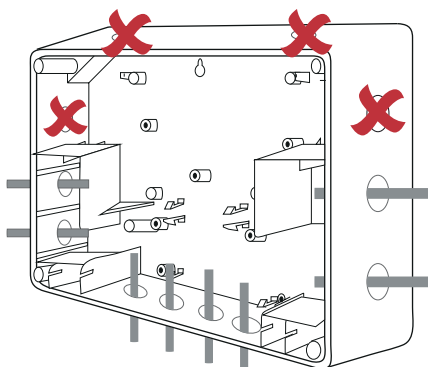- Ensure the Hub is close coupled above the panel.

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4 Optional PCB removal

- Remove the three circled retaining screws, before unclipping the PCB.

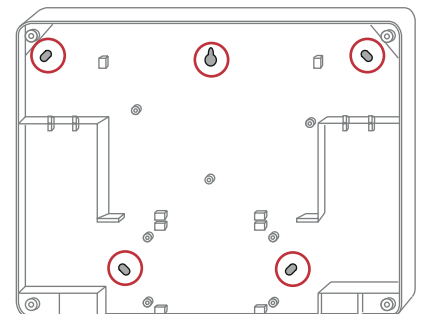---

5 Remove cable entry points

- Drill the cable entry points as necessary.

✖ = DO NOT use

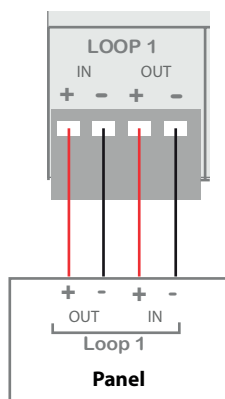▬ = Available cable entry points

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6 Fix to the wall

- All five circled fixing positions are available for use as required.

- The key hole can also be used for locating and fixing where required.

         TSD052-99 (Issue 21) 18/09/2024 AJM

7 Connection wiring

- Loop cables should only be passed via the access points available.

- Flame retardant cable glands must be used.

- DO NOT leave excess cable in the radio hub.
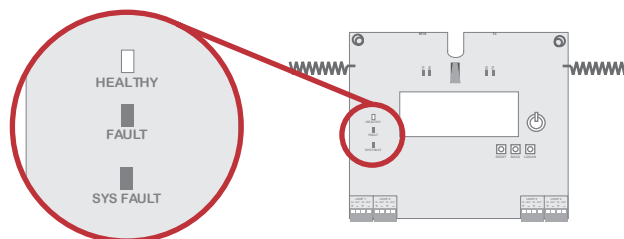
Hub 1 loop connection

LOOP 1
IN   OUT
+   -   +   -

+   -   +   -
OUT   IN
Loop 1

Repeat for loops 2, 3 and 4 if used.

Panel

8 Apply power

Apply power to the control panel. The normal LED states for the Hub are as below:

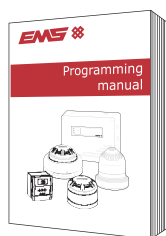- The green HEALTHY LED will illuminate.

- The yellow FAULT LED will be extinguished

- The yellow SYS FAULT LED will be extinguished.

HEALTHY

FAULT

SYS FAULT

9 Configuration

The Hub's programming and loop address are configured within the menu structure of the Hub.
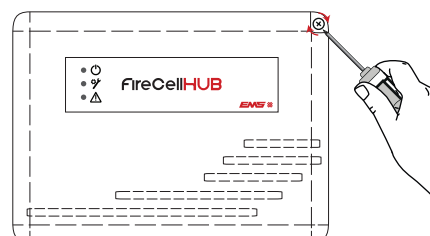
- Refer to the programming manual *(MK98)* for details of compatible FireCell devices and full programming information.

Programming manual

Free to download from www.emsgroup.co.uk

10 Close the Hub

- Ensure that the Hub PCB is correctly inserted and that the PCB retaining screws are refitted.

- Refit the Hub lid, ensuring the LEDs are not damaged by the light pipe when refitting.

FireCellHUB

Specification

Operating temperature	-10 to +55 °C	
Storage temperature	5 to 30 °C	
Humidity	0 to 95% non-condensing	
Operating voltage	17 to 28 VDC	
Operating current	Loop 1	27 mA *(typical)*
		63 mA *(max.)*
	Loops 2 to 4	4 mA* *(typical)*
		4 mA* *(max.)*
	* Per each connected loop	
IP rating	IP54	
Operating frequency	868 MHz	
Output transmitter power	0 to 14 dBm *(0 to 25 mW)*	
Signalling protocol	X	
Panel protocol	XP	
Dimensions *(W x H x D)*	270 x 205 x 85 mm	
Weight	0.95 kg	
Location	Type A: For indoor use	

Regulatory information

Manufacturer	Carrier Manufacturing Poland Sp. z o.o. Ul. Kolejowa 24. 39-100 Ropczyce, Poland
Year of manufacture	See devices serial number label
Certification	CE 10 0905 UKCA 24 0359
DoP number	0359-CPR-0028
Approved to	EN54-18:2005. Fire detection and fire alarm systems. Part 18:Input/output devices.
	EN54-25:2008. Incorporating corrigenda September 2010 and March 2012. Fire detection and fire alarm systems.
European Union Directives	EMS declares that this device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.emsgroup.co.uk
	2012/19/EU *(WEEE directive)*: Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see www.recyclethis.info
	Dispose of your batteries in an environmentally friendly manner according to your local regulations.