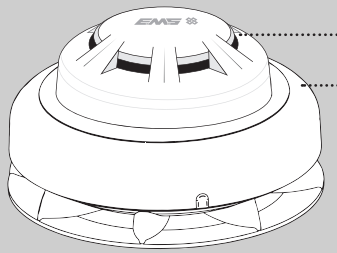
Combined Sounder/Detector/Visual Indicator
Installation Guide

Example shown:



Part no	Description	CPR
FCX-174-001	Multisensor Smoke Detector Only	[1]
FCX-175-001	Heat A1R Detector Only	[2]
FCX-176-001	Heat CS Detector Only	[2]
FCX-177-001	Optical Smoke Detector Only	[3]
FCX-191-000	Sounder/Detector Base Only	[4]
FCX-191-200	Sounder/Detector/Red Visual Indicator Base Only	[4]

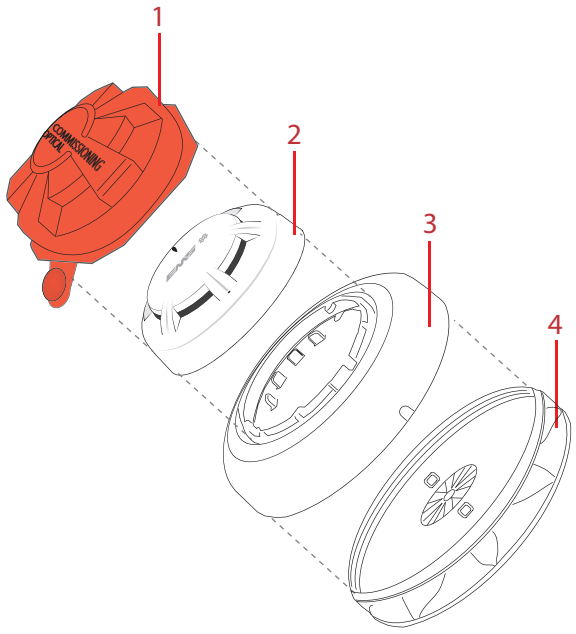
See the Specification section for compliance information.

1 Pre installation

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

- Ensure that the device is installed as per the site survey.
- The use of a non-metallic spacer should be considered if mounting the device on to a metal surface.
- Do NOT press the log on button on a pre-programmed device, as this will cause communication with the control panel to be lost. Should this happen, delete the device from the system and add it back on.
- This device contains electronics that may be susceptible to damage from Electrostatic Discharge (ESD). Take appropriate precautions when handling electronic boards.
- For pre-2024 versions of this device with a 4-way power/sounder configuration switch, refer to the legacy version of this manual.

2 Components

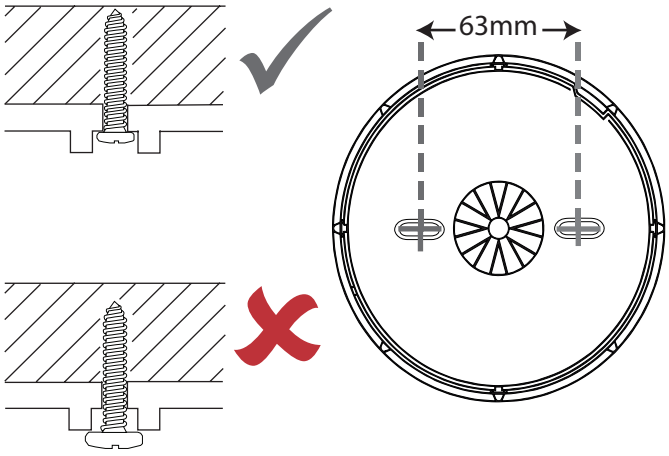


1 Dust cover, 2 Detector, 3 Wireless module, 4 Mounting plate

3 Fix mounting plate

Remove the mounting plate by turning the device ANTICLOCKWISE, to release it from the mounting plate.

- Use both fixing positions to ensure a firm fixing.
- Use suitable fasteners and fixings.



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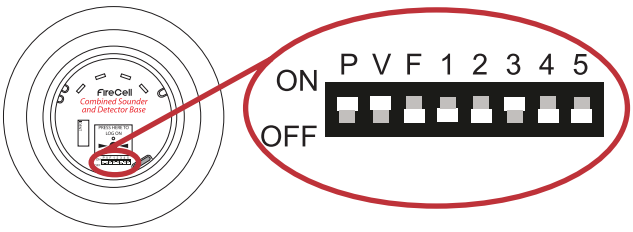
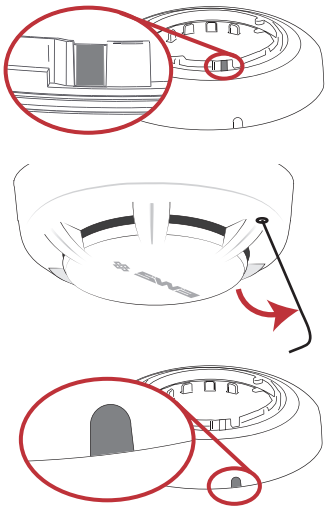
4 Power device

- When fitting / replacing batteries; observe correct polarity, using only specified batteries.
- Set the P (*POWER)* switch to the ON position to power the device. See the 'Switches' section for other available switch settings.
- Once powered, reassemble the device.



5 Device locking

- To lock the detector into the wireless module, remove the cut out *(shaded)* section as shown.
- To unlock the detector, insert a 1.5 mm allen key and lever the allen key towards the outside of the device and turn the detector anticlockwise to release.
- The wireless module can also be locked into the mounting plate by removing the shaded section shown and fitting a 5/16 Phillips pan head screw.



6 Important

- Remove dust cover before use.
- The device should be tested upon installation and in accordance with local requirements.
- Testing should only be carried out by a fully trained competent person.
- The manufacturer recommends regular functional testing of at least once per annum or in accordance with local codes of practice.
- Cleaning and repairs must be undertaken by the manufacturers authorised representative.
- Do not open the case to clean inside the detector.
- When activated, the device will sound for a maximum of 30 minutes before switching off to conserve battery life.

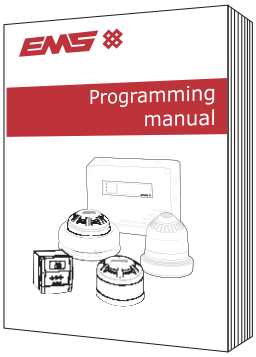
7 Configuration

This device is intended to form part of a wireless fire alarm system. The device's loop address is configured within the user interface's menu structure.

- Refer to the programming manual for full programming details.

FireCell = MK98
Fusion = TSD062
WZM = TSD143

Free to download from www.emsgroup.co.uk



8 Switches

Device power/volume/flash only *(set on wireless module)*

The PVF switches control the device's power supply, adjust the sounder volume and, if necessary, initiate flash only mode (sounder off).

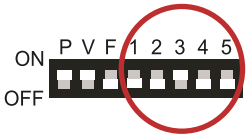
= Default setting.

**** Flash only mode is applicable to the FCX-191-200 model only. If selected, this is not within the scope of EN54-3.***

SWITCHES	POWER (P)	VOLUME (V)	FLASH ONLY (F)
P V F ON OFF	OFF	+ HIGH	
ON OFF	ON	+ HIGH	
ON OFF	ON	− LOW	
ON OFF	ON	− LOW	X *
ON OFF	ON	+ HIGH	X *

Sounder tone *(set on wireless module)*

Switches 1 to 5 select the sounder tone.



= Default setting.

Note: Tones 1, 2, 3, 5, 6, 7, 10, 13, 21 are EN54-3 approved tones. Secondary tones and low volume settings are not approved.

SWITCHES 1 2 3 4 5	PRIMARY TONE	TONE TYPE	TONE DESCRIPTION / APPLICATION	SECONDARY TONE
ON OFF	1		970Hz	18
ON OFF	2		800Hz/970Hz at 2Hz	1
ON OFF	3		800Hz - 970Hz at 1Hz	1
ON OFF	4		970Hz 1s OFF / 1s ON	1
ON OFF	5		970Hz, 0.5s / 630Hz, 0.5s	4
ON OFF	6		554Hz, 0.1s / 440Hz, 0.4s *(AFNOR NF S 32 001)*	1
ON OFF	7		500 - 1200Hz, 3.5s / 0.5s OFF *(NEN 2575:2000)*	1
ON OFF	8		420Hz 0.625s ON / 0.625s OFF *(Australia AS1670 Alert tone)*	9
ON OFF	9		500 - 1200Hz, 0.5s / 0.5s OFF x 3 / 1.5s OFF *(AS1670 Evacuation)*	1
ON OFF	10		550Hz / 440Hz at 0.5Hz	19
ON OFF	11		970Hz, 0.5 ON / 0.5s OFF x 3 / 1.5s OFF *(ISO 8201)*	1
ON OFF	12		2850Hz, 0.5s ON / 0.5s OFF x 3 / 1.5s OFF *(ISO 8201)*	1
ON OFF	13		1200Hz - 500Hz at 1Hz *(DIN 33 404)*	1
ON OFF	14		400Hz	18
ON OFF	15		550Hz, 0.7s / 1000Hz, 0.33s	1
ON OFF	16		1500Hz - 2700Hz at 3Hz	1
ON OFF	17		750Hz	1
ON OFF	18		2400Hz	1
ON OFF	19		660Hz	18
ON OFF	20		660Hz 1.8s ON / 1.8s OFF	19
ON OFF	21		660Hz 0.15s ON / 0.15s OFF	19
ON OFF	22		510Hz, 0.25s / 610Hz, 0.25s	1
ON OFF	23		800 / 100Hz 0.5s each *(1Hz)*	1
ON OFF	24		250Hz - 1200Hz at 12Hz	1
ON OFF	25		500Hz - 1200Hz at 0.33Hz	1
ON OFF	26		2400Hz - 2900Hz at 9Hz	18
ON OFF	27		2400Hz - 2900Hz at 3Hz	18
ON OFF	28		800Hz - 970Hz at 100Hz	8
ON OFF	29		800Hz - 970Hz at 9Hz	1
ON OFF	30		800Hz - 970Hz at 3Hz	1
ON OFF	31		800Hz, 0.25s ON / 1s OFF	1
ON OFF	32		500Hz - 1200Hz, 3.75s / 0.25s OFF *(AS2220)*	8

Specification

Operating temperature	-10 to +55 °C
Storage temperature	5 to 30 °C
Humidity	0 to 95% non-condensing
Supply	3 x AA alkaline *(Panasonic LR6AD Powerline / Varta 4006 Industrial)* & 3 x C alkaline *(Panasonic LR14AD Powerline / Varta 4014 Industrial)*

CAUTION!
Fitting of an incorrect battery type invalidates the product certification and may result in poor performance.

IP rating	IP21
Operating voltage	3.3 to 4.5 VDC
Current consumption	120 µA
Battery life	Up to 5 years *(based on weekly 30 second test)*
Operating frequency	868 MHz
Output transmitter power	Auto adjusting 0 to 14 dBm *(0 to 25 mW)*
Signalling protocol	X
Sounder output	Up to 99.5 dB(A) at 1 m *(as dispatched)*. Low setting typically reduces volume by 10 dB.

Refer to the sounder data document *(MK187)* for full details. *Free to download from www.emsgroup.co.uk*

Dimensions *(Ø x D)*	146 x 53 mm *(without detector)* | 146 x 89 mm *(with smoke detector)* | 146 x 94 mm *(with heat detector)* | 146 x 100 mm *(with multisensor detector)*
Weight	0.70 kg *(with detector)*
Location	Type A: For indoor use
Intended use	Fire safety for fire detection and fire alarm systems with components using RF links.

Regulatory information

Manufacturing location	KGS Manufacturing Poland Sp. z o.o. Ul. Kolejowa 24. 39-100 Ropczyce, Poland
Placed on the market by	EMS Ltd. Technology House, Sea Street, Herne Bay, Kent, CT6 8JZ
Year of manufacture	See devices serial number label
Certification	CE 20 **0905** [1] CE 10 **0905** [2][3] CE 25 **2821** [4] UKCA 24 **0359** [1][2][3] UKCA 25 **0843** [4]
CPR DoP	See part listing for associated products: [1]0905-CPR-202126, [2]0359-CPR-0015, [3]0359-CPR-0017 & [4]DoP0012
Approved to	See part listing for associated products: EN54-5:2017+A1:2018. Incorporating Amendment No. 1. Fire detection and fire alarm systems. Part 5: Heat detectors - Point Detectors. [2] EN54-7:2018. Incorporating Amendment No. 1. Fire detection and fire alarm systems. Part 7: Smoke detectors - Point detectors using scattered light, transmitted light or ionization. [1][3] EN54-25:2008. Incorporating corrigenda September 2010 and March 2012. Fire detection and fire alarm systems. Part 25: Components using radio links. [4]
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). For more information see www.recyclethis.info Dispose of your batteries in an environmentally friendly manner according to your local regulations.
Additional approvals	ULeu Certified to EN 54-3:2014+A1:2019. This is an accredited certification scheme run by UL Solutions and is in addition to EU regulatory requirements [4]
FD BOSEC 9357 UL EU S36783	BOSEC Certification to EN 54-13:2017 system certification. This component is approved by ANPi for the BOSEC mark when used with FireCell Fusion, HUB and RCC combinations.