



## Combined Radio Sounder and Detector Installation Guide

### General

The Combined Radio Sounder and detector variants and ancillary equipment are available under the following part numbers;

Part No	Variant Type	CE
FCX-190-001	Combined Sounder & Multisensor Detector	0359-CPR-0121
FCX-190-101	Combined Sounder- Visual Indicator (Clear) & Multisensor Detector	0359-CPR-0121
FCX-190-201	Combined Sounder- Visual Indicator (Red) & Multisensor Detector	0359-CPR-0121
FCX-191-000	Combined Sounder & Detector Base	0359-CPR-0121
FCX-191-001	Combined Sounder & Optical Smoke Detector	0359-CPR-0121
FCX-191-100	Combined Sounder-Visual Indicator (Clear) & Detector Base	0359-CPR-0121
FCX-191-101	Combined Sounder- Visual Indicator (Clear) & Optical Smoke Detector	0359-CPR-0121
FCX-191-200	Combined Sounder- Visual Indicator (Red) & Detector Base	0359-CPR-0121
FCX-191-201	Combined Sounder- Visual Indicator (Red) & Optical Smoke Detector	0359-CPR-0121
FCX-192-001	Combined Sounder & Heat Detector (Class A1R)	0359-CPR-0121
FCX-192-011	Combined Sounder & Heat Detector (Class CS)	0359-CPR-0121
FCX-192-101	Combined Sounder- Visual Indicator (Clear) & Heat Detector (Class A1R)	0359-CPR-0121
FCX-192-111	Combined Sounder- Visual Indicator (Clear) & Heat Detector (Class CS)	0359-CPR-0121
FCX-192-201	Combined Sounder- Visual Indicator (Red) & Heat Detector (Class A1R)	0359-CPR-0121
FCX-192-211	Combined Sounder- Visual Indicator (Red) & Heat Detector (Class CS)	0359-CPR-0121
FCX-195-101	Combined Visual Indicator (Clear) & Multisensor Detector	0359-CPR-0121
FCX-193-100	Combined Visual Indicator (Clear) & Detector Base	0359-CPR-0123
FCX-193-101	Combined Visual Indicator (Clear) & Optical Smoke Detector	0359-CPR-0123
FCX-195-201	Combined Visual Indicator (Red) & Multisensor Detector	0359-CPR-0123
FCX-193-200	Combined Visual Indicator (Red) & Detector Base	0359-CPR-0123
FCX-193-201	Combined Visual Indicator (Red) & Optical Smoke Detector	0359-CPR-0123
FCX-194-101	Combined Visual Indicator (Clear) & Heat Detector (Class A1R)	0359-CPR-0123
FCX-194-111	Combined Visual Indicator (Clear) & Heat Detector (Class CS)	0359-CPR-0123
FCX-194-201	Combined Visual Indicator (Red) & Heat Detector (Class A1R)	0359-CPR-0123
FCX-194-211	Combined Visual Indicator (Red) & Heat Detector (Class CS)	0359-CPR-0123

The above listed products are third party approved to: -

EN54-3:2001 – for fire detection and fire alarm systems for buildings – fire alarm devices – sounders  
 EN54-25:2008 – for fire detection and fire alarm systems for buildings – components using radio links  
 IP21C to EN 60529:1991

The address of the unit is set when programming the device to the system (see commissioning manual for details). The installation must conform to BS5839:Part 1 (or applicable local codes).  
*This combined radio sounder and detector is suitable for indoor use only.*

### **Installation of Combined Radio Sounder and Detector**

Ensure that all Combined Radio Sounder Detectors are sited in accordance with the survey and design details. Wherever practical, the red LED should face the main entrance to the room.

Remove the ceiling mounting plate by turning it counter clockwise. This dis-assembles the mounting plate from the sounder detector module. The ceiling mount will now be available for fixing to the ceiling.

Ensure that the sounder detector module is suitably stored so as to prevent the possibility of accidental damage.

Fix the ceiling mounting plate to the ceiling using suitable fixings and fasteners. Both mounting holes must be used. (See Figure 1)

It is important that fastener heads are flush or sub-flush with the internal surface of the ceiling mount to avoid the risk of damaging the battery PCB.

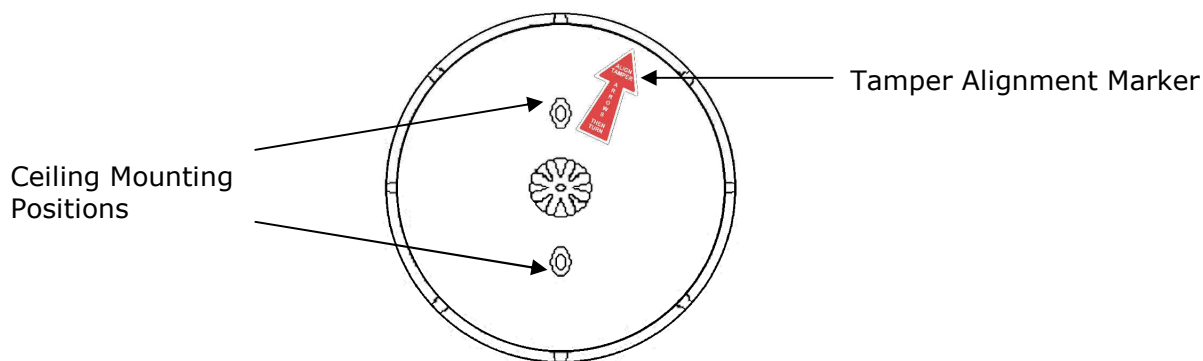


Figure 1

The unit is powered by 3 x Duracell AA MN1500 LR6 Alkaline Batteries and 3 x Duracell C MN1400 LR14 Alkaline Batteries. These are supplied fitted. Should batteries require replacement please ensure they are inserted to the correct polarity as shown below in Figure 2. Batteries that have been removed must be disposed of in accordance with your country's relevant Waste Electrical and Electronic Equipment (W.E.E.E) regulations.

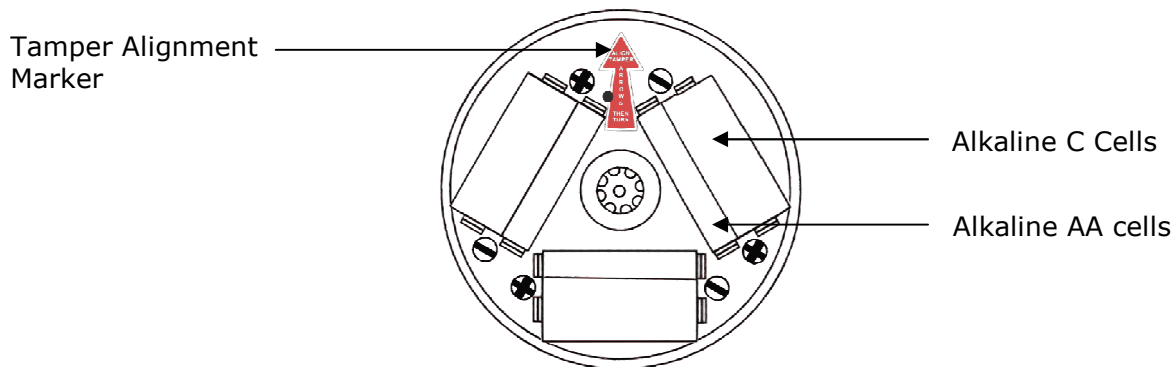


Figure 2

The detector head section can be removed by turning it counter clockwise. This dis-assembles the detector head section from the radio module section. The removal of the detector head section will expose the log on button and a 4 way dil switch. This can be seen below in figure 3.

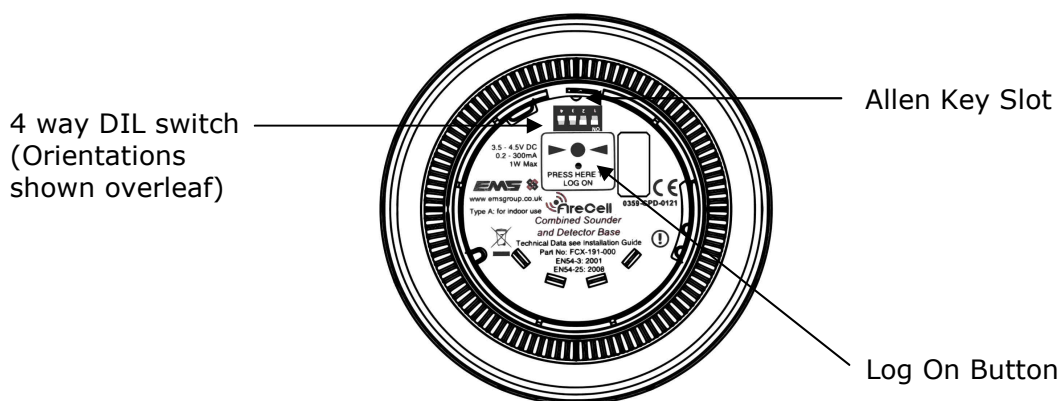


Figure 3

**To ensure correct operation, ensure switch number 1 on the 4 way dil switch is in the 'On' position (thus powering the device).**

Please see commissioning manual for log on procedure details.

To reassemble the unit, place the sounder detector module into the fixed ceiling mount, ensuring that the tamper alignment arrows starting position lines up prior to rotation (shown in Figure 4) and turn clockwise to achieve a positive location.

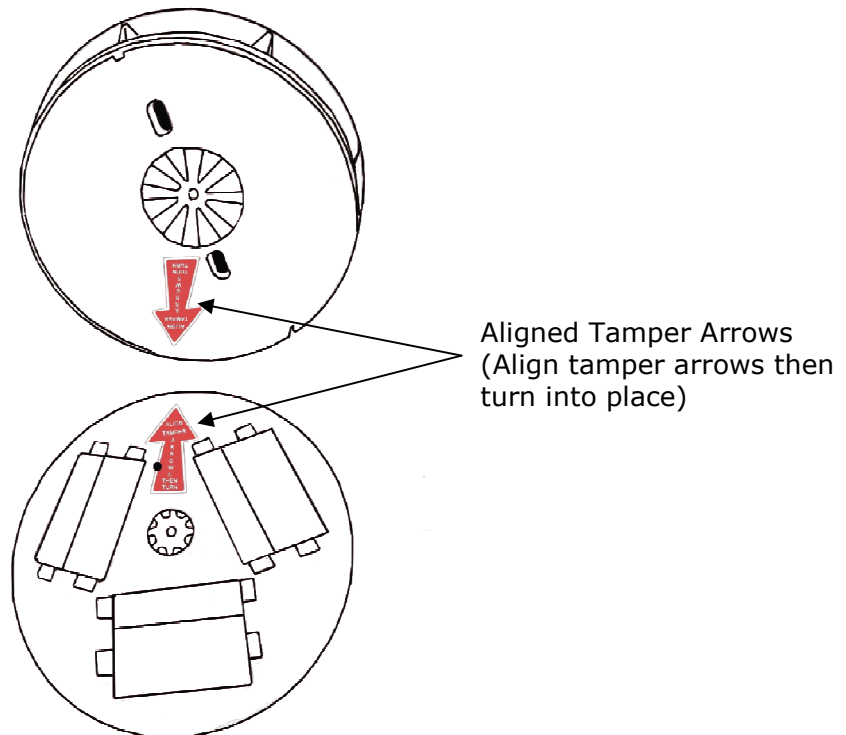


Figure 4

The detector head section must now be re fitted to the radio module section turning clockwise to achieve a positive location.

It is possible to lock the detector head into the radio base. An Allen key will be required once locked into place to unlock them.

Locking is made possible by removing the cut out section as shown in Figure 5.

To remove the detector head once locked, insert the Allen key into the Allen key slot (shown in Figure 6) and lever the Allen key towards the outside of the device (away from the centre). The detector head should unlock and can now be removed by turning it anti-clockwise.

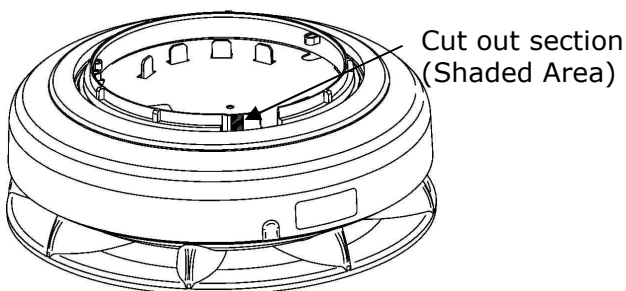


Figure 5

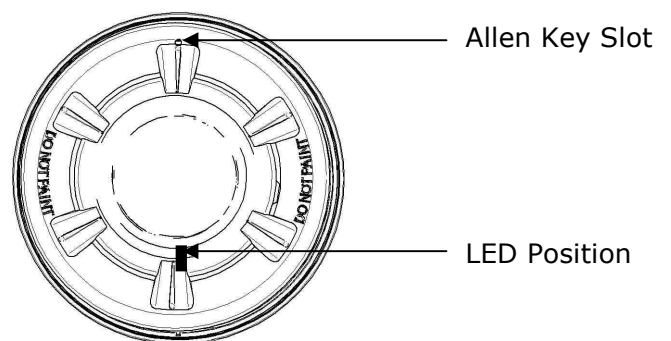
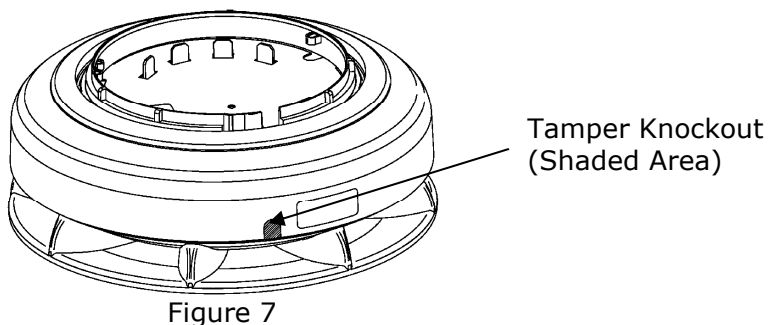


Figure 6

Additional locking of the sounder detector module into the fixed ceiling mount can be achieved by fitting an anti tamper screw. A 5/16 Phillips Pan Head Screw will be supplied inside each units packaging. To fit the anti tamper screw, the tamper knockout will require removal. The location of the tamper knockout is shown in Figure 7.



The tone pattern of the sounder is selected using dipswitches 3 & 4 on the radio module section. Refer to the table below for details of the available tones and the switch settings required to select them. As default the units are supplied with switch 3 and 4 off, which selects 970Hz, 0.5s/630Hz, 0.5s (BS 5839-1:2002)

**Tone Table:**

SWITCH SETTING 3 ORIENTATION	SWITCH SETTING 4 ORIENTATION	1ST STAGE TONE	TONE TYPE	TONE DESCRIPTION /APPLICATION	2ND STAGE TONE	TONE TYPE	TONE DESCRIPTION /APPLICATION	dB @ 1m	
								Low Vol	High Vol
ON	OFF	1	————	970Hz	18	————	2400Hz	74	87
OFF	ON	2	□□□□	800Hz/970Hz @ 2Hz	1	————	970Hz	74	87
ON	ON	3	▲▲▲▲	800Hz - 970Hz @ 1Hz	1	————	970Hz	74	87
OFF	OFF	5	□□□□	970Hz, 0.5s/630Hz, 0.5s	4	- - - -	970Hz 1s OFF/1s ON	74	87

The dB levels shown are subject to a tolerance of +/- 1dB.

The sound output of the unit is adjusted using dipswitch 2 on the radio module section.

**4 Way DIL switch Orientations:**

Switch 1	Power – On (on position) / Off (off position)
Switch 2	Sounder Volume – High (on position) / Low (off position)
Switch 3	Sounder Tone (See Tone Table)
Switch 4	Sounder Tone (See Tone Table)