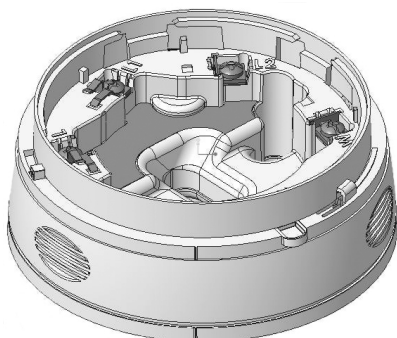


## Detector Base Sounder

	<p>The Detector Base Sounder is a loop powered device that is controlled by the detector plugged into it.</p> <p>A DIL switch sets the required tone and volume level.</p>
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### Summary of the device

Product	Details	Order number	In scope/fitted
<b>Sounder - detector base</b>			
FC440DSB	Detector Base Sounder	576.440.001	<input type="checkbox"/>
<b>Accessories</b>			
A-CON	Conduit Adaptor for Sounder/VID/VAD bases	557.080.002	<input type="checkbox"/>

### Performance characteristics

Weight (g)	144
Housing material	PC-ABS
Housing colour	White
Operating temperature (°C)	-25 to +70
Storage temperature (°C)	-25 to +70
Humidity	Up to 95% non-condensing
Pressure	Sounder SPL output quoted for 1000 mBar
EN54-3 sounder	Yes
Vibration, shock, corrosion	Complies with EN54-3 series requirements
Ingress protection	IP21C
Indoor	Type A
EMC	EN50130-4, EN61000-6-3
<b>Typical Sounder output at 1 metre</b>	
High volume	90 dBA
Mid High volume	80 dBA
Mid Low volume	70 dBA
Low volume	60 dBA*
<b>Electrical characteristics</b>	
Addressable loop voltage	20 V - 40 V, 35 V Typical
<b>Loop loading</b>	
Quiescent	90 uA (without detector fitted)
Sounder only - Low/Mid Low volume	2.1 mA (without detector fitted)
Sounder only - High/Mid High volume	3.9 mA (without detector fitted)

\*The Low setting on the FC440DSB does not meet the volume level requirements of EN54-3.

**Note:** For IP21C protection a fire detector must be fitted

## Detector Base Sounder configuration

The sounder tone and volume are set by a DIL switch. The DIL switch is accessible when the addressable detector is not fitted to the detector base sounder. Positions 1 to 4 set the required tone and positions 7 and 8 set the required volume level. Position 6 is used to force the sounder on during commissioning but it remains off during normal operation.

DIL switch setting positions 1-4	Tone / volume
0 0 0 1	DIN 1 Hz Sweep
0 0 0 0	Dutch Slow Whoop
0 0 1 X	Temporal 4
0 1 0 X	BS 1 Hz Sweep
0 1 1 X	March Time Beep
1 0 0 X	7 Hz Fast Sweep
1 0 1 X	Temporal 3
1 1 0 X	2 Tone
1 1 1 X	Continuous 970
DIL switch setting positions 6 - 8	
0 X X	Normal operation
1 X X	SOUNDER ON (test mode)
X 0 0	Low Volume
X 1 0	Mid Low Volume
X 0 1	Mid High Volume
X 1 1	High Volume

## Sounder tone and description

Name	Tone description		
	Pattern	Frequency (Hz)	Rate
DIN 1 Hz Sweep	Sweep	1200 to 500	Falling over 1 s
Dutch Slow Whoop	Sweep	500 to 1200	Rising over 3.5 s, 0.5 gap
Temporal 4	Intermittent	880	500 ms On 500 ms Off x 4 then 1 second gap
BS 1 Hz Sweep	Sweep	800 to 970	1 Hz
March Time Beep	Intermittent	880	500 ms On 500 ms Off
7 Hz Fast Sweep	Sweep	800 to 970	142.8 ms ramp, 7 Hz
Temporal 3	Intermittent	880	500 ms On 500 ms Off x 3 then 1 second gap
2 Tone	Alternating	660 / 880	500 ms per tone
Continuous 970 Hz	Continuous	970	Steady

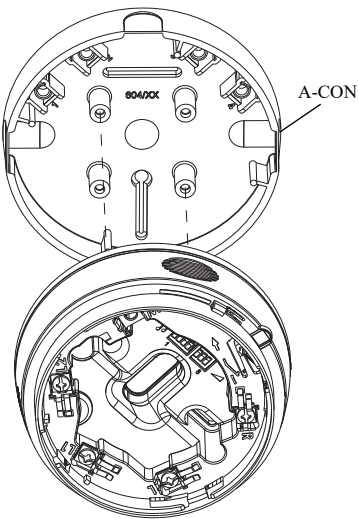
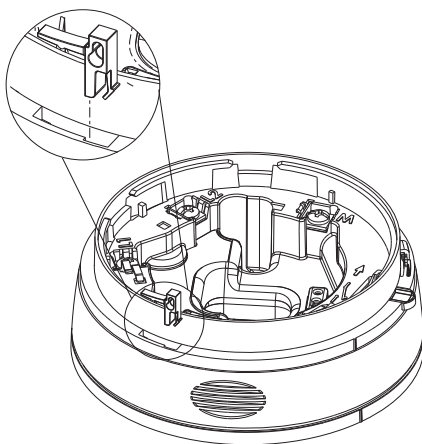
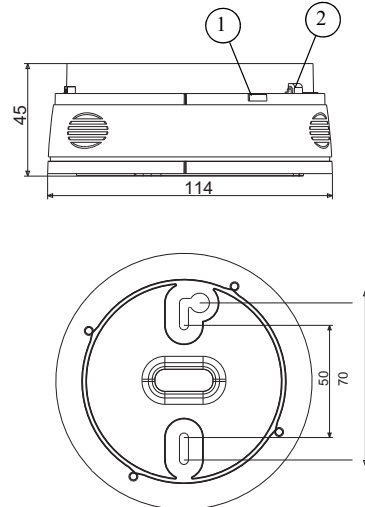
### Sounder performance Volume HIGH- ceiling devices FC440DSB

Volume HIGH		Ceiling devices - sound performance horizontal (dBA at 1 m)						Ceiling devices - sound performance vertical (dBA at 1 m)					
	Angle	15°	45°	75°	105°	135°	165°	15°	45°	75°	105°	135°	165°
Tone													
DIN 1 Hz Sweep	40V	> 94	> 86	> 81	> 79	> 78	> 78	> 93	> 86	> 81	> 81	> 82	> 87
	20V	> 91	> 83	> 79	> 77	> 75	> 75	> 91	> 83	> 80	> 79	> 81	> 86
Dutch Slow Whoop	40V	> 95	> 87	> 83	> 82	> 80	> 80	> 94	> 87	> 82	> 81	> 84	> 87
	20V	> 93	> 86	> 82	> 80	> 78	> 78	> 92	> 83	> 80	> 79	> 82	> 87
Temporal 4	40V	> 98	> 90	> 87	> 85	> 80	> 84	> 97	> 89	> 84	> 84	> 88	> 92
	20V	> 93	> 87	> 84	> 82	> 77	> 81	> 95	> 87	> 79	> 79	> 82	> 89
BS 1 Hz Sweep	40V	> 94	> 86	> 82	> 81	> 78	> 79	> 93	> 86	> 82	> 80	> 83	> 88
	20V	> 92	> 85	> 81	> 79	> 77	> 77	> 91	> 83	> 79	> 79	> 82	> 86
March Time Beep	40V	> 98	> 90	> 87	> 85	> 80	> 84	> 97	> 90	> 84	> 84	> 87	> 91
	20V	> 95	> 87	> 84	> 82	> 77	> 81	> 96	> 88	> 81	> 81	> 87	> 91
7 Hz Fast Sweep	40V	> 93	> 85	> 81	> 79	> 77	> 78	> 92	> 85	> 81	> 80	> 81	> 87
	20V	> 91	> 83	> 79	> 77	> 76	> 76	> 90	> 82	> 79	> 78	> 80	> 86
Temporal 3	40V	> 98	> 90	> 87	> 85	> 80	> 84	> 97	> 90	> 84	> 84	> 88	> 92
	20V	> 95	> 87	> 84	> 82	> 77	> 81	> 95	> 88	> 82	> 82	> 85	> 89
2 Tone	40V	> 94	> 86	> 83	> 82	> 76	> 80	> 94	> 86	> 82	> 80	> 84	> 88
	20V	> 93	> 85	> 82	> 80	> 76	> 78	> 91	> 83	> 79	> 79	> 82	> 85
Continuous 970 Hz	40V	> 92	> 82	> 79	> 77	> 77	> 74	> 92	> 83	> 79	> 76	> 79	> 83
	20V	> 91	> 79	> 77	> 75	> 75	> 72	> 90	> 81	> 79	> 75	> 79	> 83

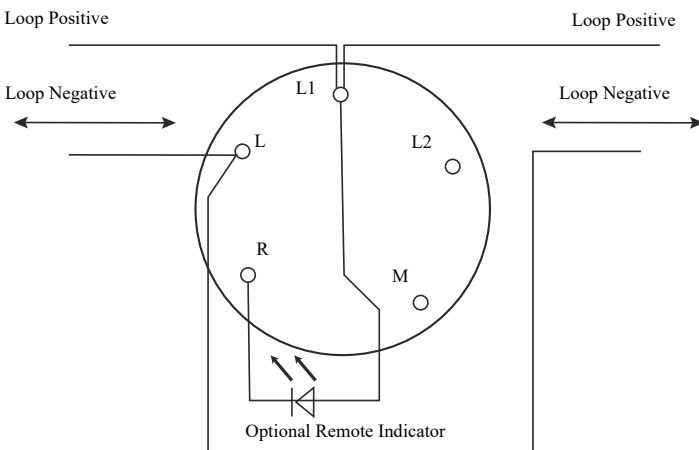
### Sounder performance Volume MID-LOW- ceiling devices FC440DSB

Volume MID-LOW		Ceiling devices - sound performance horizontal (dBA at 1 m)						Ceiling devices - sound performance vertical (dBA at 1 m)					
	Angle	15°	45°	75°	105°	135°	165°	15°	45°	75°	105°	135°	165°
Tone													
DIN 1 Hz Sweep	40V	> 73	> 66	> 61	> 61	> 62	> 67	> 74	> 66	> 62	> 61	> 63	> 68
	20V	> 73	> 66	> 61	> 61	> 62	> 67	> 74	> 66	> 62	> 61	> 63	> 68
Dutch Slow Whoop	40V	> 77	> 69	> 64	> 63	> 61	> 62	> 75	> 68	> 64	> 62	> 66	> 71
	20V	> 77	> 69	> 64	> 63	> 61	> 62	> 75	> 68	> 64	> 62	> 66	> 71
Temporal 4	40V	> 80	> 72	> 67	> 66	> 62	> 65	> 79	> 71	> 66	> 66	> 69	> 73
	20V	> 80	> 72	> 67	> 66	> 62	> 65	> 79	> 71	> 66	> 66	> 69	> 73
BS 1 Hz Sweep	40V	> 71	> 64	> 60	> 60	> 61	> 66	> 71	> 62	> 62	> 58	> 57	> 55
	20V	> 71	> 64	> 60	> 60	> 61	> 66	> 71	> 62	> 62	> 58	> 57	> 55
March Time Beep	40V	> 79	> 72	> 69	> 67	> 62	> 65	> 79	> 72	> 65	> 65	> 70	> 73
	20V	> 79	> 72	> 69	> 67	> 62	> 65	> 79	> 72	> 65	> 65	> 70	> 73
7 Hz Fast Sweep	40V	> 71	> 63	> 59	> 59	> 59	> 65	> 70	> 63	> 59	> 59	> 61	> 66
	20V	> 71	> 63	> 59	> 59	> 59	> 65	> 70	> 63	> 59	> 59	> 61	> 66
Temporal 3	40V	> 80	> 72	> 67	> 66	> 62	> 65	> 79	> 71	> 66	> 66	> 69	> 73
	20V	> 80	> 72	> 67	> 66	> 62	> 65	> 79	> 71	> 66	> 66	> 69	> 73
2 Tone	40V	> 72	> 65	> 59	> 59	> 61	> 66	> 73	> 63	> 61	> 59	> 57	> 56
	20V	> 72	> 65	> 59	> 59	> 61	> 66	> 73	> 63	> 61	> 59	> 57	> 56
Continuous 970 Hz	40V	> 72	> 62	> 60	> 60	> 59	> 61	> 72	> 61	> 59	> 59	> 59	> 61
	20V	> 72	> 62	> 60	> 60	> 59	> 61	> 72	> 61	> 59	> 59	> 59	> 61

## Installation information

Mounting		Dimensions
<p>These units either fit directly to the ceiling or to an optional ceiling adaptor. See Fig 1.</p> <p>See Fig 2 for fitting the locking pin. To remove a detector from a base with a locking pin, complete these steps:</p> <ol style="list-style-type: none"> <li>1 Insert a suitable tool into the access hole to depress the locking pin in the detector cover.</li> <li>2 Rotate the detector to remove.</li> </ol> <p>These units can be used with the Ceiling Tile adaptor (CTA) kit (517.050.060) by using the CTA Adaptor Plate, CTA-AP (517.050.058).</p> <p>Use the knock outs for the cabling as required.</p>		<p>Fig 3 contains the dimensions of the Detector Base Sounder.</p>
 <p>Fig. 1: Mounting the Detector Base Sounder</p>	 <p>Fig. 2: Fitting the locking pin</p>	 <p>Fig. 3: Detector Base Sounder dimensions 1- Temporary park plunger 2- Address flag holder.</p>

## Detector Base Sounder cabling

Contact	Function	Cabling
L	Negative line in and out	 <p>Fig. 4: Detector Base Sounder cabling</p>
L1	Positive line in and out	
L2	Must not be wired	
M	Not wired	
R	Remote LED out, wired only if a remote indicator is required	

## Wiring notes

- All wiring must comply with local installation regulations and local fire system design requirements.
- Ensure all conductors are free of earths.
- Verify correct wiring and wiring polarity before connecting the devices to the addressable loop.

## Approvals

	TYCO FIRE & SECURITY GMBH NEUHAUSEN AM RHEINFALL 8212 SWITZERLAND 18/2831 21/0832	CPR APPROVAL				EUROPEAN TYPE APPROVALS					INTERNATIONAL LISTINGS		
		EN54-3	EN54-7	EN54-17	MED	LPCB	VDS	AFNOR	FNO	DBI	FPANZ	HKFSD	TFTF
FC440DSB	DoP-2017-4232 / 2831-CPR-F2060 / 0832-UKCA-CPR-F0126	●				●							

All required Declarations and certificates are publically available on the website [www.fireclass.co.uk](http://www.fireclass.co.uk) and are searchable by number or model name.

The above fire detection products are components designed for use in Addressable Systems exclusively available to registered partners only. They are intended for installation by trained registered personnel only. Systems should be installed and configured according to local regulations.