

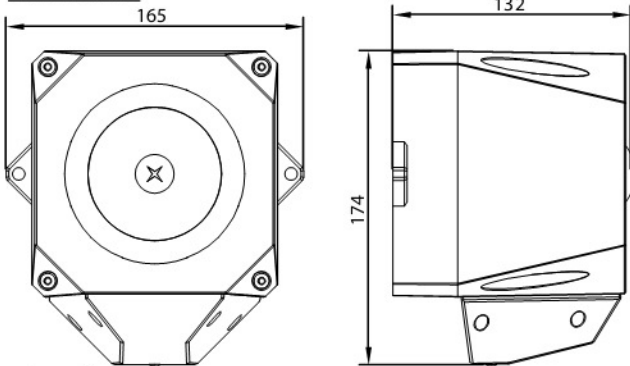
Specification

NOTE: 115 & 230VAC are separate products

Sounder	115V AC	230V AC
Operation	Continuous	Continuous
Operating Voltage Range	115Vac 50/60Hz	230Vac 50/60Hz
Sound Output @ 1m	See table overleaf	See table overleaf
Current Consumption	See table overleaf	See table overleaf
Tones	32 see table overleaf	32 see table overleaf
Operating Temperature	-20°C to +70°C	-20°C to +70°C
Construction	ABS /PC FR plastic	ABS /PC FR plastic
Termination	0.28~2.5mm ² cable	0.28~2.5mm ² cable
Ingress Protection	IP66	IP66
Fuse	32mA Antisurge, 20mm	32mA Antisurge, 20mm

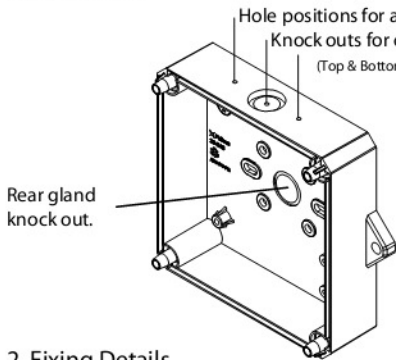
Beacon	115V AC	230V AC
Operating Voltage Range	115Vac 50/60Hz	230Vac 50/60Hz
Current Consumption	60mA	30mA
Rating	2.5 Joules	2.5 Joules
Operating Temperature	-20°C to +70°C	-20°C to +70°C
Construction	ABS /PC FR plastic	ABS /PC FR plastic
Termination	0.28~2.5mm ² cable	0.28~2.5mm ² cable
Ingress Protection	IP66	IP66
Fuse	315mA Antisurge, 20mm	315mA Antisurge, 20mm

Dimensions



1. Installation

Knockout or drill required cable gland holes, and fix required cable glands.

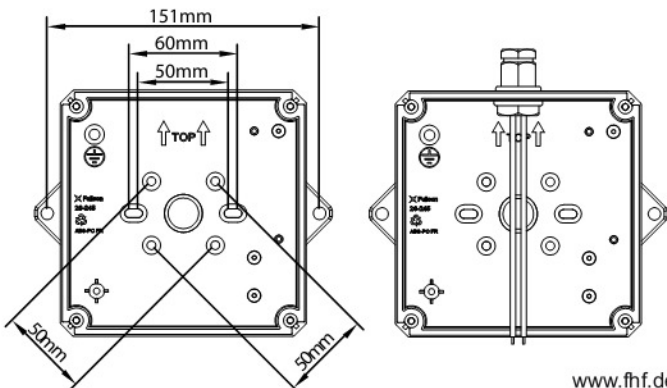


NOTE: Ensure that the IP integrity is maintained during gland fitting.

2. Fixing Details

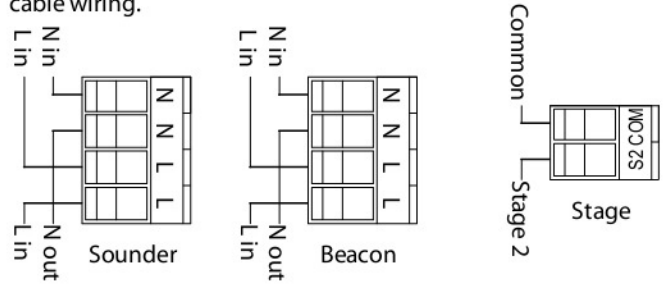
Fix base to wall using the two external lugs, or to a suitable junction box using the positions indicated in the base. Cut cable to ±130mm. (use the opposite side of the base as a guide)

NOTE: If the internal fixing holes are being used ensure that the IP integrity is maintained.



3. Connection

Remove the terminal blocks from the sounder PCB for cable wiring.

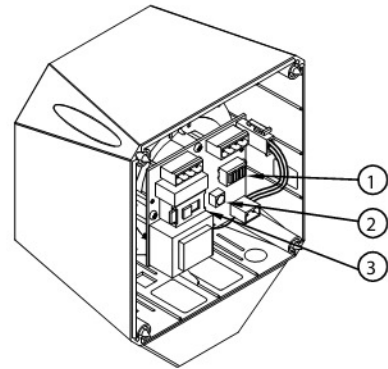


NOTE: Stage 2 tone selection is achieved by connecting the S2 to the common terminal.

DO NOT connect AC mains to these terminals.

NB: A readily accessible disconnect device must be incorporated in the mains supply wiring to this unit.

4. Sounder Settings



1. Tone Switch

See table overleaf.
0 = Open
1 = Closed

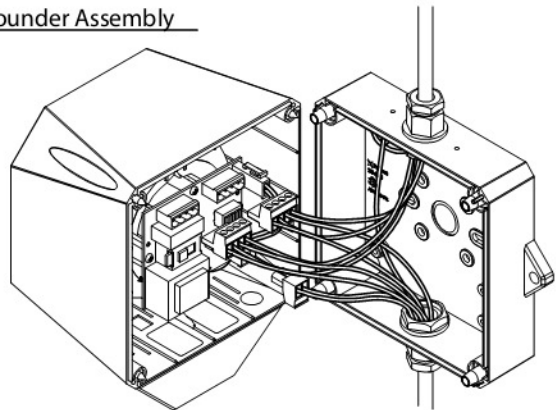
2. Volume Control

Turn dial clockwise to increase volume. (Nominal 10dB range)

3. Voltage Select Switch

Ensure that the correct mains input voltage is selected.

5. Sounder Assembly



1. Plug the two 4 way terminal blocks into the 4 way headers on the sounder PCB.
2. Plug the 2 way terminal block into the sounder header on the PCB.
3. Secure the sounder to the base using the bolts provided.



WARNING : Do not remove cover, refer servicing to qualified personnel. : High voltage present within this equipment.



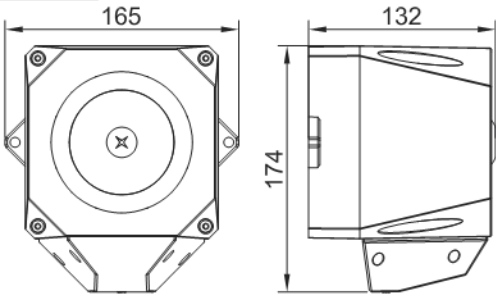
NOTE : Polar dispersion information available in the technical manual. (Ref:M03-003)

Primary Tone	Secondary Tone	CODE	TONE							Stage 1 & 2			
			Description	Frequencies	Pattern	Use	I (mA)	dB(A)@1m	I (mA)	dB(A)@1m	I (mA)	dB(A)@1m	
1	14	12345	Alternating	800 & 970	2Hz (250ms-250ms)	BS5839 Part 1 1988	26	110	13	110	13	110	
2	14	11111	Sweep	800 & 970	7Hz (7/s)	Fast Sweep (LF) BS5839 Part 1 1988	25	111	12	111	12	111	
3	14	11101	Sweep	800 & 970	1Hz (1/s)	Medium Sweep (LF) BS5839 Part 1 1988	25	112	12	112	12	112	
4	14	11100	Continuous	2850	Steady	Fast Sweep	27	109	14	109	14	109	
5	4	11011	Sweep	2400 to 2850	7Hz	Fast Sweep	26	110	13	110	13	110	
6	4	11010	Sweep	2400 to 2850	1Hz	Fast Sweep	26	111	13	111	13	111	
7	14	11001	Slow Whoop	300 to 1200	3s sweep, 0.5s silence, then repeat (rep)	Slow Whoop	27	113	13	113	13	113	
8	14	11000	Sweep	1200 to 500	1Hz	Din Tone	26	112	13	112	13	112	
9	4	10111	Alternating	2400 & 2850	2Hz (250ms-250ms)	Fast Sweep	26	110	13	110	13	110	
10	14	10110	Intermittent	970	0.5Hz (1s On/1s Off)	Back-up Alarm (LF) BS5839 Part 1 1988	26	111	13	111	13	111	
11	14	10101	Alternating	800 & 970	1Hz (500ms-500ms)	BS5839 Part 1 1988	26	110	13	110	13	110	
12	4	10100	Intermittent	2850	0.5Hz (1s On/1s Off)	Back-up Alarm (HF)	26	109	13	109	13	109	
13	14	10011	Intermittent	970	0.8Hz (250ms On/1s Off)	BS5839 Part 1 1988	24	110	12	110	12	110	
14	14	10010	Continuous	970	Steady	BS5839 Part 1 1988	26	111	13	111	13	111	
15	14	10001	Alternating	554 & 440	100ms-400ms	French Fire Sound	26	110	13	110	13	110	
16	16	10000	Intermittent	660	3.3Hz (150ms On/150ms Off)	Swedish Alarm Tone	24	109	12	109	12	109	
17	17	01111	Intermittent	660	0.28Hz (1.8s On/1.8s Off)	Swedish Alarm Tone	25	110	12	110	12	110	
18	18	01110	Intermittent	660	0.05Hz (6.5s On/13s Off)	Swedish Alarm Tone	25	110	13	110	13	110	
19	19	01101	Continuous	660	Steady	Swedish Alarm Tone	25	110	13	110	13	110	
20	20	01100	Alternating	554 & 440	0.5Hz (1s On/1s Off)	Swedish Alarm Tone	26	110	13	110	13	110	
21	21	01011	Intermittent	660	1Hz (500ms-500ms)	Swedish Alarm Tone	24	110	12	110	12	110	
22	14	01010	Intermittent	2850	4Hz (150ms On/100ms Off)	Pelican Crossing	25	109	12	109	12	109	
23	14	01001	Sweep	800 to 970	50Hz	Low Frequency Buzz BS5839 Part 1 1988	24	111	12	111	12	111	
24	4	01000	Sweep	2400 to 2850	50Hz	High Frequency Buzz	25	109	13	109	13	109	
25	25	00111	Intermittent	970	500mS On/500mS Off	ISO 8201 Low Frequency	25	110	12	110	12	110	
26	26	00110	Intermittent	2850	500mS On/500mS Off	ISO 8201 High Frequency	26	109	12	109	12	109	
27	27	00101	Continuous	4000	Steady	FP1063.1-Telecom	26	106	13	106	13	106	
28	10	00100	Alternating	800 & 970	2Hz (250ms-250ms)	Symphoni Tones	26	110	13	110	13	110	
29	988Hz	00011	Alternating	990 & 650	2Hz (250ms-250ms)(Symphoni tones)	Symphoni Tones	25	109	12	109	12	109	
30	510Hz	00010	Alternating	510 & 610	2Hz (250ms-250ms)(Squashni Micro tones)	Squashni Micro	26	111	13	111	13	111	
31	31	00001	Sweep	300 to 1200	1Hz	Fast Sweep	27	111	13	111	13	111	
32	27	00000	Alternating	510 & 610	1Hz (500ms-500ms)	Fast Sweep	26	111	13	111	13	111	

Specification

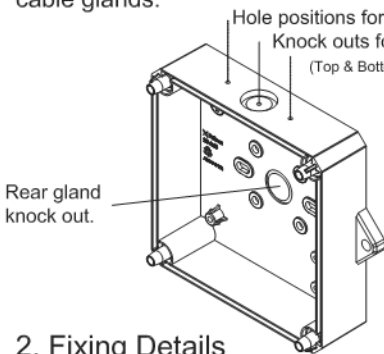
	Sounder	Beacon
Operation	Continuous	Continuous
Operating Voltage Range	9Vdc-15Vdc (Non-Fire) 15Vdc-60Vdc (EN54-3)	9Vdc-15Vdc (Non-Fire) 15Vdc-60Vdc (EN54-3)
Output	See table overleaf	2.5 Joules
Current Consumption	See table overleaf	615mA@9V - 90mA@60V
Tones	32 see table overleaf	N/A
Operating Temperature	-25°C to +70°C	-25°C to +70°C
Line Monitoring Method	Polarised Input	Polarised Input
Construction	ABS /PC FR Plastic Case	ABS /PC FR Plastic Case
Ingress Protection	IP66	IP66
Termination	0.28~2.5mm ² cable	0.28~2.5mm ² cable
Environment Category	Type A/B	Type A/B
Compliance	EN54-3 Fire Alarm device-Sounder	

Dimensions



1. Installation

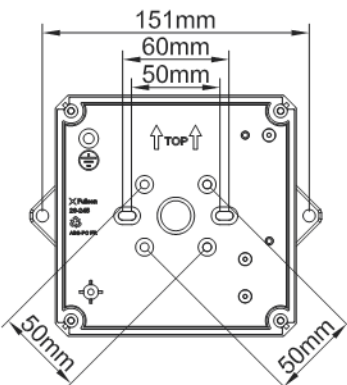
Knockout or drill required cable gland holes, and fix required cable glands.



NOTE: Ensure that the IP integrity is maintained during gland fitting.

2. Fixing Details

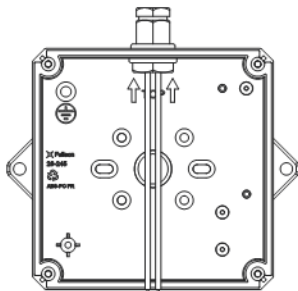
Fix base to wall using the two external lugs, or to a suitable junction box using the positions indicated in the base.



NOTE: If the internal fixing holes are being used ensure that the IP integrity is maintained.

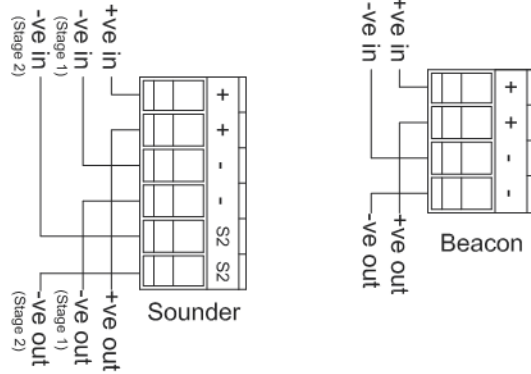
3. Cable Preparation

Cut cable to ±130mm. (use the opposite side of the base as a guide)



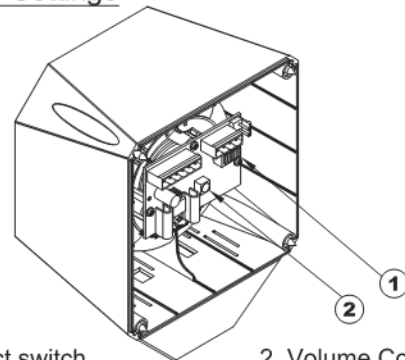
4. Connection Details

Remove the terminal blocks from the sounder PCB for cable wiring.

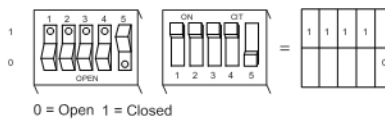


NOTE: Stage 2 tone selection is achieved by connecting the S2 input to the -ve (Stage 1) supply.

5. Sounder Settings



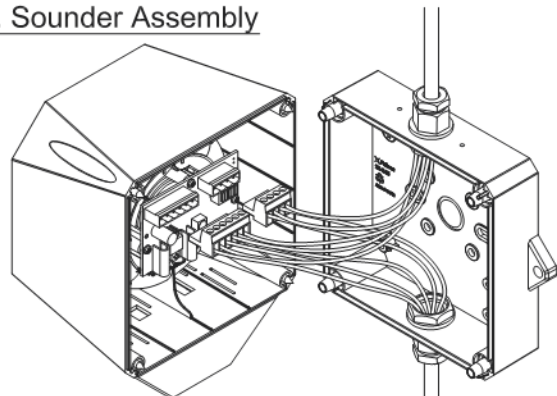
1. Tone select switch



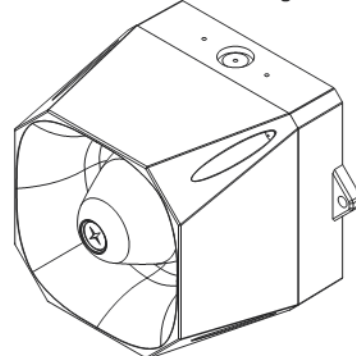
2. Volume Control

Turn dial clockwise to increase volume. (Nominal 10dB range)

6. Sounder Assembly



1. Plug the 4 way terminal block into the 4 way header and the 6 way terminal block into the 6 way header on the sounder PCB.
2. Secure the sounder to the base using the bolts provided.



NOTE : Polar dispersion information available in the technical manual. (Ref:M04-005)
CE marking under CPD was affixed on: (see batch code on product)
Fulleon Ltd, Cwmbran, South Wales, UK.

Primary Tone	Secondary Tone	CODE	TONE			Operating Current			SPL	EN54-3 (1.5-30Vdc) 60Vdc See Notes dB(A)@1m	
			Description	Frequencies	Pattern	Use	12Vdc I (mA)	24Vdc I (mA)			48Vdc I (mA)
1	14	11111	Alternating	800 & 970	2Hz (250ms-250ms)	BS5839 Part 1 1988	15	32	35	108	-
2	14	11110	Sweep	800 & 970	7Hz (7/s)	Fast Sweep (LF) BS5839 Part 1 1988	11	24	26	107	-
3	14	11101	Sweep	800 & 970	1Hz (1/s)	Medium Sweep (LF) BS5839 Part 1 1988	11	23	27	108	104
4	14	11100	Continuous	2850	Steady		19	40	44	107	-
5	4	11011	Sweep	2400 to 2850	7Hz	Fast Sweep	15	31	35	107	-
6	4	11010	Sweep	2400 to 2850	1Hz		15	31	35	109	-
7	14	11001	Slow Whoop	300 to 1200	3s sweep, 0.5s silence, then repeat (rep)	Slow Whoop	17	38	42	111	108
8	14	11000	Sweep	1200 to 500	1Hz	Din Tone	14	31	35	109	107
9	4	10111	Alternating	2400 & 2850	2Hz (250ms-250ms)		16	35	38	108	-
10	14	10110	Intermittent	970	0.5Hz (1s On/1s Off)	Back-up Alarm (LF) BS5839 Part 1 1988	13	30	33	108	-
11	14	10101	Alternating	800 & 970	1Hz (500ms-500ms)	BS5839 Part 1 1988	15	33	37	108	-
12	4	10100	Intermittent	2850	0.5Hz (1s On/1s Off)	Back-up Alarm (HF)	13	29	32	107	-
13	14	10011	Intermittent	970	0.8Hz (250ms On/1s Off)	BS5839 Part 1 1988	6	14	16	108	-
14	14	10010	Continuous	970	Steady	BS5839 Part 1 1988	18	41	45	108	107
15	14	10001	Alternating	554 & 440	100ms-400ms	French Fire Sound	13	32	36	108	-
16	16	10000	Intermittent	660	3.3Hz (150ms On/150ms Off)	Swedish Alarm Tone	8	17	21	106	-
17	17	01111	Intermittent	660	0.28Hz (1.8s On/1.8s Off)	Swedish Alarm Tone	11	26	29	106	-
18	18	01110	Intermittent	660	0.05Hz (6.5s On/13s Off)	Swedish Alarm Tone	13	30	32	107	-
19	19	01101	Continuous	660	Steady	Swedish Alarm Tone	13	30	33	107	-
20	20	01100	Alternating	554 & 440	0.5Hz (1s On/1s Off)	Swedish Alarm Tone	13	32	35	107	-
21	21	01011	Intermittent	660	1Hz (500ms-500ms)	Swedish Alarm Tone	9	20	23	106	-
22	14	01010	Intermittent	2850	4Hz (150ms On/100ms Off)	Pelican Crossing	12	25	28	106	-
23	14	01001	Sweep	800 to 970	50Hz	Low Frequency Buzz BS5839 Part 1 1988	11	24	26	107	-
24	4	01000	Sweep	2400 to 2850	50Hz	High Frequency Buzz	15	31	34	107	-
25	25	00111	Intermittent	970	500mS On/500mS Off	ISO 8201 Low Frequency	11	25	29	108	-
26	26	00110	Intermittent	2850	500mS On/500mS Off	ISO 8201 High Frequency	12	25	28	107	-
27	27	00101	Continuous	4000	Steady		16	32	39	105	-
28	10	00100	Alternating	800 & 970	2Hz (250ms-250ms)	FP1063.1-Telecom	14	32	36	108	-
29	988Hz	00011	Alternating	990 & 650	2Hz (250ms-250ms)(Symphoni tones)	Symphoni Tones	11	23	26	106	105
30	510Hz	00010	Alternating	510 & 610	2Hz (250ms-250ms)(Squashmi Micro tones)	Squashmi Micro	14	34	37	108	105
31	31	00001	Sweep	300 to 1200	1Hz		16	41	44	109	-
32	27	00000	Alternating	510 & 610	1Hz (500ms-500ms)		14	34	38	108	-

Note (a): Tones approved under the Construction Products Directive for Fire Alarm Applications, are shown in the column marked EN54-3.
 Note (b): EN54-3 measurements shown reflect minimum expected SPL readings at Maximum Volume at the Loudest Point around the EN54-3 defined sounder axis.
 Note (c): All other tone measurements reflect manufacturers data based on 'on axis' measurements, and not verified by a Notified body.
 Note (d): Detailed EN54-3 polar SPL measurements are available in the Product Manual M04-005.
 Note (e): All measurements taken at 20°C operating temperature.
 Note (f): For measurements at 12V, subtract 6dB off figure at 24V
 Note (g): For measurements at 48V, add 1dB onto figure at 24V