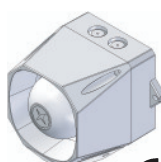
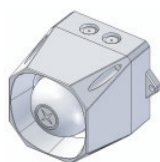


AVISA line

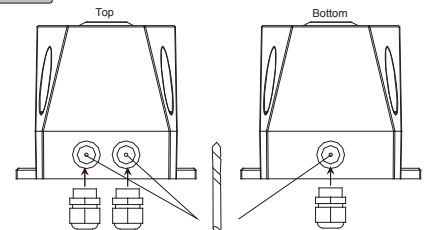
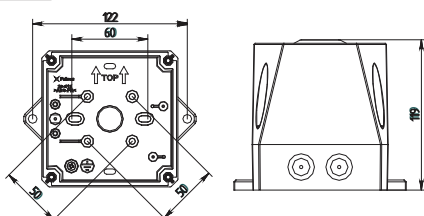
AX03

AXL04

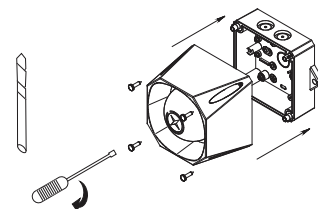
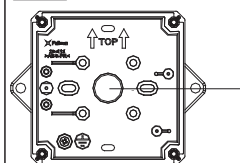
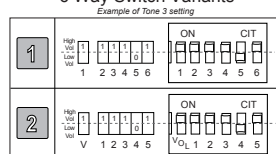


	Sounder + Mains Module		Sounder/Beacon	
	Mains Module	110VAC ~ 240VAC	115VAC	230VAC
	Sounder 24VDC			
		<20mA	80mA	68mA
		0.28mm ² ~ 2.5mm ²	0.28mm ² ~ 2.5mm ²	
		-25°C ~ +70°C	-25°C ~ +70°C	
		ABS V0	ABS V0	
		Type B = IP66	Type B = IP66	
		32	32	
		-	1Hz	

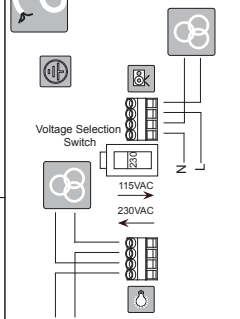
Product exceeds minimum requirements of EN54-3
See www.fulleon.com
Le produit dépasse les exigences minimum de EN54-3
Voir www.fulleon.com
Das Erzeugnis erfüllt die Mindestanforderungen von EN54-3.
Siehe www.fulleon.com
Il prodotto supera i requisiti minimi previsti dalla norma EN54-3
Vedi www.fulleon.com
Product overtreft de minimale vereisten van EN54-3.
Zie www.fulleon.com
El producto excede los requisitos mínimos de la norma EN54-3
Véase www.fulleon.com
Produkten överträffar minsta krav enligt EN54-3
Se www.fulleon.com



6 Way Switch Variants



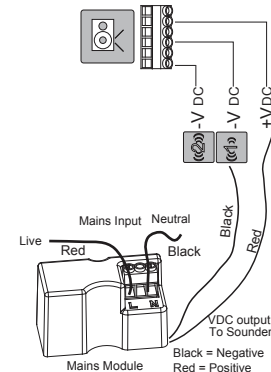
Mains Sounder/Beacon



Installation must be in accordance with relevant national wiring regulations or codes for the intended application and voltages employed.

A suitable and readily accessible disconnect device shall be incorporated external to the equipment. An external 1A Anti Surge device is required to protect the installation.

Sounder + Mains Module

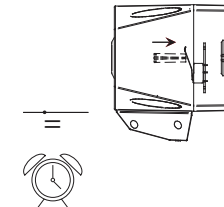
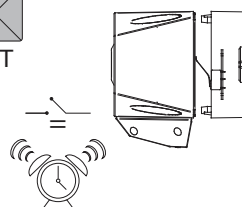


!! Warning !!

Mains to be wired to the module in base only. Do not wire directly to sounder.



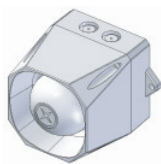
A/T



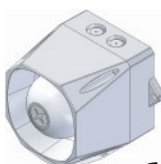
								@20°C					
								Sounder + Mains Module		115VAC Sounder + Beacon		230VAC Sounder + Beacon	
								mA	dB(A)	mA	dB(A)	mA	dB(A)
1	14	11111		800 & 970Hz	2Hz (250ms~250ms)	BS Fire Tone	13	100	67	104	43	103	103
2	14	11110		800 & 970Hz	7Hz (7/s)	BS Fire Tone	13	103	64	104	42	103	103
3	14	11101		800 & 970Hz	1Hz (1/s)	BS Fire Tone	13	105	61	105	41	105	105
4	14	11100		2850Hz	Steady		28	104	66	106	41	107	107
5	4	11011		2400 ~ 2850Hz	7Hz		32	111	64	110	41	109	109
6	4	11010		2400 ~ 2850Hz	1Hz		33	112	63	111	41	110	110
7	14	11001		500 ~ 1200Hz	3.5s Sweep, 0.5s silence, then repeat	Dutch Fire Tone	11	106	60	106	41	106	106
8	14	11000		1200 ~ 500Hz	1Hz		15	105	67	105	42	106	106
9	4	10111		2400 & 2850Hz	2Hz (250ms~250ms)	DIN Tone	30	109	65	108	41	107	107
10	14	10110		970Hz	0.5Hz (1s On / 1s Off)		9	102	64	104	42	104	104
11	14	10101		800 & 970Hz	1Hz (500ms~500ms)	BS Fire Tone	13	102	62	104	43	104	104
12	4	10100		2850Hz	0.5Hz (1s On / 1s Off)		13	105	65	106	41	106	106
13	14	10011		970Hz	0.8Hz (250ms On / 1s Off)		6	102	67	103	40	103	103
14	14	10010		970Hz	Steady	BS Fire Tone	14	102	64	104	42	104	104
15	14	10001		554 & 440Hz	100ms ~ 400ms	French Fire Tone	17	105	64	106	41	106	106
16	16	10000		660Hz	3.3Hz (150ms On / 150ms Off)	Swedish Fire Tone	8	101	65	102	42	102	102
17	17	01111		660Hz	0.28Hz (1.8s On / 1.8s Off)	Swedish Fire Tone	7	102	60	103	52	103	103
18	18	01110		660Hz	0.05Hz (13s Off / 6.5Hz On)	Swedish Fire Tone	6	102	66	103	40	103	103
19	19	01101		660Hz	Steady	Swedish Fire Tone	12	102	66	103	39	103	103
20	20	01100		554 & 440Hz	0.5Hz (1s On / 1s Off)	Swedish Fire Tone	15	105	64	107	39	106	106
21	21	01011		660Hz	1Hz (500ms ~ 500ms)	Swedish Fire Tone	8	102	62	103	41	103	103
22	14	01010		2850Hz	4Hz (150ms On / 100ms Off)	Pelican Crossing	19	104	64	106	42	107	107
23	14	01001		800 ~ 970Hz	50Hz	BS Fire Tone	13	103	66	104	43	104	104
24	4	01000		2400 ~ 2850Hz	50Hz		32	110	66	110	42	110	110
25	25	00111		970Hz	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201	7	102	66	104	40	104	104
26	26	00110		970 & 800Hz	3 x 500ms pulsed sweep followed by 1.5s silence	ISO 8201	7	104	66	105	40	106	106
27	27	00101		970 & 800Hz	3 x 500ms pulsed two tone followed by 1.5s silence		7	102	67	104	39	103	103
28	10	00100		800 & 970Hz	2Hz (250ms ~ 250ms)	BS Fire Tone	13	102	66	104	40	104	104
29	988Hz	00011		990 & 650Hz	2Hz (250ms ~ 250ms) (Symphoni Tones)	BS Fire Tone	21	105	67	106	42	106	106
30	510Hz	00010		510 & 610Hz	2Hz (250ms ~ 250ms) (Squashni Micro Tones)	BS Fire Tone	17	104	63	106	41	105	105
31	14	00001		300 ~ 1200Hz	1Hz		21	107	63	107	39	108	108
32	32	00000		510 & 610Hz	1Hz (500ms ~ 500ms)		17	105	63	106	40	106	106

AVISA line

AX03

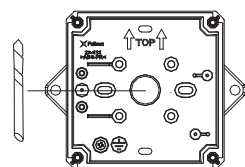
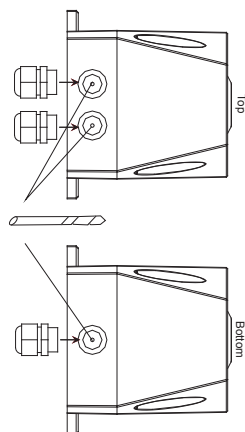
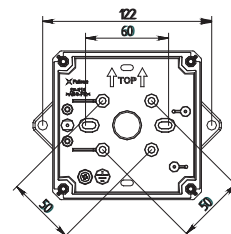
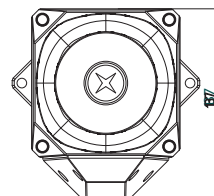
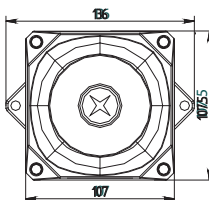
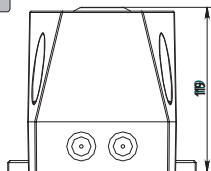


AXL04

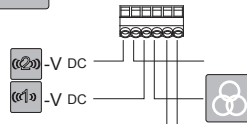


	Sounder	Sounder/Beacon
V	9 ~ 60V	9 ~ 60V
I	6 ~ 33mA	118 ~ 224mA
A	0.28mm² ~ 2.5mm²	0.28mm² ~ 2.5mm²
°C	-25°C ~ +70°C	-25°C ~ +70°C
ABS	ABS V0	ABS V0
Type B	Type B = IP66	Type B = IP66
Music	32	32
Hz	-	1Hz

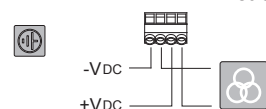
Product exceeds minimum requirements of EN54-3
 See www.cooperfulleoon.com
 Le produit dépasse les exigences minimum de EN54-3
 Voir www.cooperfulleoon.com
 Das Erzeugnis erfüllt die Mindestanforderungen von EN54-3.
 Siehe www.cooperfulleoon.com
 Il prodotto supera i requisiti minimi previsti dalla norma EN54-3
 Vedi www.cooperfulleoon.com
 Product overtreft de minimale vereisten van EN54-3.
 Zie www.cooperfulleoon.com
 El producto excede los requisitos mínimos de la norma EN54-3
 Véase www.cooperfulleoon.com
 Produkten överträffar minsta krav enligt EN54-3
 Se www.cooperfulleoon.com



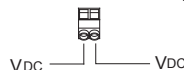
Sounder



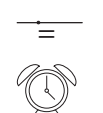
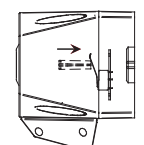
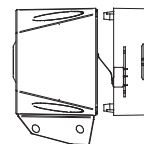
Beacon



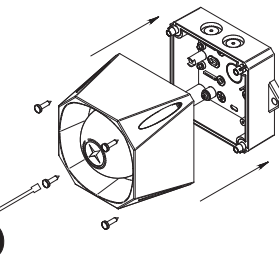
A/T



A/T

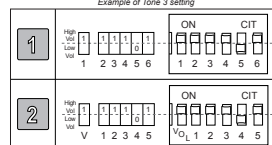


A/T



6 Way Switch Variants

Example of Tone 3 setting



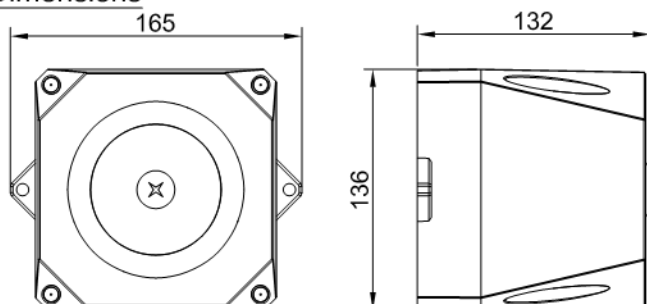
									Sounder		Sounder & Beacon	
									mA	dB(A)	mA	dB(A)
1	14	11111		800 & 970Hz	2Hz (250ms~250ms)	BS Fire Tone	13	100	197	102		
2	14	11110		800 & 970Hz	7Hz (7/s)	BS Fire Tone	13	103	198	103		
3	14	11101		800 & 970Hz	1Hz (1/s)	BS Fire Tone	13	105	198	105		
4	14	11100		2850Hz	Steady		28	104	223	107		
5	4	11011		2400 ~ 2850Hz	7Hz		32	111	224	111		
6	4	11010		2400 ~ 2850Hz	1Hz		33	112	223	113		
7	14	11001		500 ~ 1200Hz	3.5s Sweep, 0.5s silence, then repeat	Dutch Fire Tone	11	106	197	106		
8	14	11000		1200 ~ 500Hz	1Hz		15	105	118	107		
9	4	10111		2400 & 2850Hz	2Hz (250ms~250ms)	DIN Tone	30	109	220	108		
10	14	10110		970Hz	0.5Hz (1s On / 1s Off)		9	102	195	103		
11	14	10101		800 & 970Hz	1Hz (500ms~500ms)	BS Fire Tone	13	102	195	103		
12	4	10100		2850Hz	0.5Hz (1s On / 1s Off)		13	105	200	107		
13	14	10011		970Hz	0.8Hz (250ms On / 1s Off)		6	102	188	102		
14	14	10010		970Hz	Steady	BS Fire Tone	14	102	198	103		
15	14	10001		554 & 440Hz	100ms ~ 400ms	French Fire Tone	17	105	200	105		
16	16	10000		660Hz	3.3Hz (150ms On / 150ms Off)	Swedish Fire Tone	8	101	195	101		
17	17	01111		660Hz	0.28Hz (1.8s On / 1.8s Off)	Swedish Fire Tone	7	102	200	102		
18	18	01110		660Hz	0.05Hz (13s Off / 6.5Hz On)	Swedish Fire Tone	6	102	189	102		
19	19	01101		660Hz	Steady	Swedish Fire Tone	12	102	198	102		
20	20	01100		554 & 440Hz	0.5Hz (1s On / 1s Off)	Swedish Fire Tone	15	105	200	105		
21	21	01011		660Hz	1Hz (500ms ~ 500ms)	Swedish Fire Tone	8	102	193	102		
22	14	01010		2850Hz	4Hz (150ms On / 100ms Off)	Pelican Crossing	19	104	210	106		
23	14	01001		800 ~ 970Hz	50Hz	BS Fire Tone	13	103	197	103		
24	4	01000		2400 ~ 2850Hz	50Hz		32	110	202	110		
25	25	00111		970Hz	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201	7	102	194	103		
26	26	00110		970 & 800Hz	3 x 500ms pulsed sweep followed by 1.5s silence	ISO 8201	7	104	196	104		
27	27	00101		970 & 800Hz	3 x 500ms pulsed two tone followed by 1.5s silence		7	102	190	103		
28	10	00100		800 & 970Hz	2Hz (250ms ~ 250ms)	BS Fire Tone	13	102	200	103		
29	988Hz	00011		990 & 650Hz	2Hz (250ms ~ 250ms) (Symphoni Tones)	BS Fire Tone	21	105	210	105		
30	510Hz	00010		510 & 610Hz	2Hz (250ms ~ 250ms) (Squashni Micro Tones)	BS Fire Tone	17	104	202	104		
31	14	00001		300 ~ 1200Hz	1Hz		21	107	211	106		
32	510Hz	00000		510 & 610Hz	1Hz (500ms ~ 500ms)		17	105	205	105		

AVISA line **AX05** Sounder (115/230 VAC)

Specification

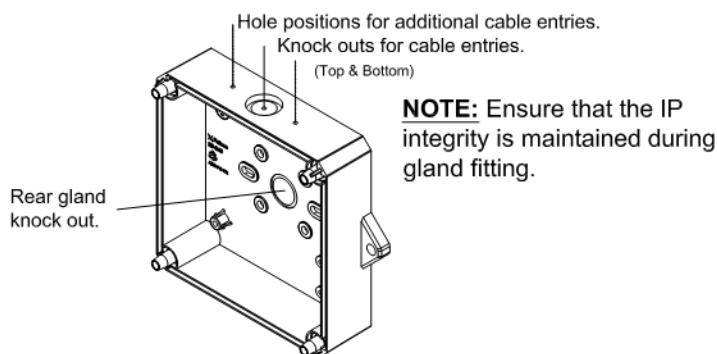
	115VAC	230VAC
Operation	Continuous	Continuous
Operating Voltage Range	115Vac	230Vac
Sound Output @ 1m	See table overleaf	See table overleaf
Current Consumption	See table overleaf	See table overleaf
Tones	32 see table overleaf	32 see table overleaf
Operating Temperature	-20°C to +70°C	-20°C to +70°C
Line Monitoring Method	N/A	N/A
Construction	ABS /PC Plastic Case	ABS /PC Plastic Case
Ingress Protection	IP66	IP66

Dimensions



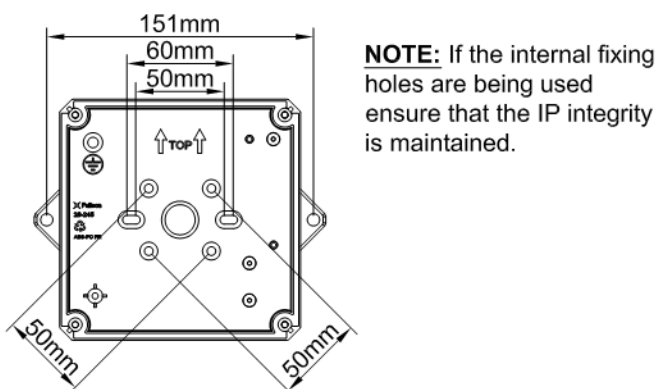
1. Installation

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



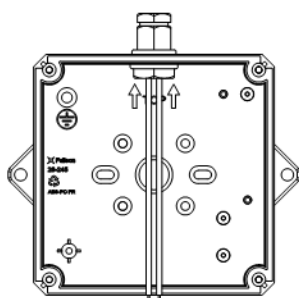
2. Fixing Details

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



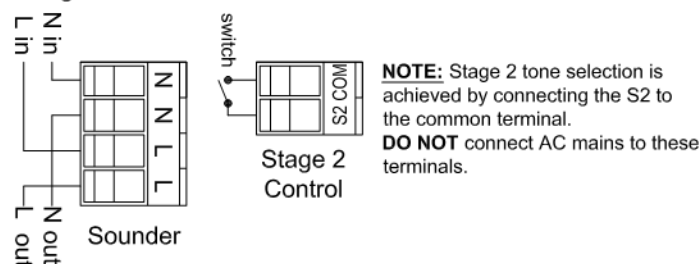
3. Cable Preparation

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



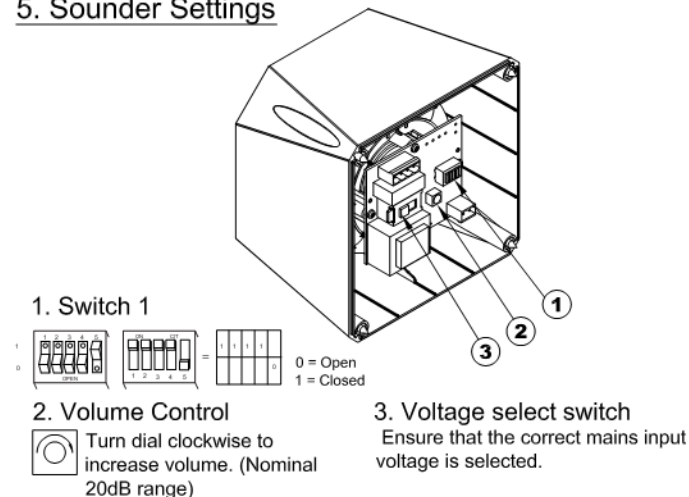
4. Connection Details

Remove the terminal blocks from the sounder for cable wiring.

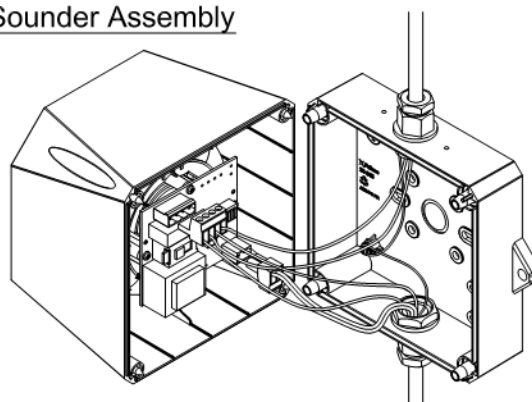


NB: A readily accessible disconnect device must be incorporated in the mains supply wiring to this unit.

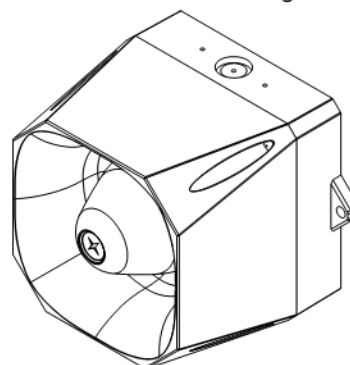
5. Sounder Settings



6. Sounder Assembly



1. Plug the 4 way terminal block into the sounder header on the 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:M04-005)



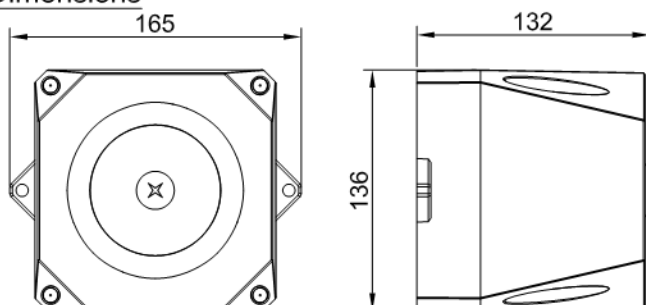
Primary Tone	Secondary Tone	CODE	TONE					Stage 1 & 2			
			Description	Frequencies	Pattern	Use		115Vac		230Vac	
12345								I (mA)	dB(A)@1m	I (mA)	dB(A)@1m
1	14	11111	Alternating	800 & 970	2Hz (250ms-250ms)	BS5839 Part 1 1988		26	110	13	110
2	14	11110	Sweep	800 & 970	7Hz (7/s)	Fast Sweep (LF) BS5839 Part 1 1988		25	111	12	111
3	14	11101	Sweep	800 & 970	1Hz (1/s)	Medium Sweep (LF) BS5839 Part 1 1988		25	112	12	112
4	14	11100	Continuous	2850	Steady			27	109	14	109
5	4	11011	Sweep	2400 to 2850	7Hz	Fast Sweep		26	110	13	110
6	4	11010	Sweep	2400 to 2850	1Hz			26	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
8	14	11000	Sweep	1200 to 500	1Hz	Din Tone		26	112	13	112
9	4	10111	Alternating	2400 & 2850	2Hz (250ms-250ms)			26	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
11	14	10101	Alternating	800 & 970	1Hz (500ms-500ms)	BS5839 Part 1 1988		26	110	13	110
12	4	10100	Intermittent	2850	0.5Hz (1s On/1s Off)	Back-up Alarm (HF)		26	109	13	109
13	14	10011	Intermittent	970	0.8Hz (250ms On/1s Off)	BS5839 Part 1 1988		24	110	12	110
14	14	10010	Continuous	970	Steady	BS5839 Part 1 1988		26	111	13	111
15	14	10001	Alternating	554 & 440	100ms-400ms	French Fire Sound		26	110	13	110
16	16	10000	Intermittent	660	3.3Hz (150ms On/150ms Off)	Swedish Alarm Tone		24	109	12	109
17	17	01111	Intermittent	660	0.28Hz (1.8s On/1.8s Off)	Swedish Alarm Tone		25	110	12	110
18	18	01110	Intermittent	660	0.05Hz (6.5s On/13s Off)	Swedish Alarm Tone		25	110	13	110
19	19	01101	Continuous	660	Steady	Swedish Alarm Tone		25	110	13	110
20	20	01100	Alternating	554 & 440	0.5Hz (1s On/1s Off)	Swedish Alarm Tone		26	110	13	110
21	21	01011	Intermittent	660	1Hz (500ms-500ms)	Swedish Alarm Tone		24	110	12	110
22	14	01010	Intermittent	2850	4Hz (150ms On/100ms Off)	Pelican Crossing		25	109	12	109
23	14	01001	Sweep	800 to 970	50Hz	Low Frequency Buzz BS5839 Part 1 1988		24	111	12	111
24	4	01000	Sweep	2400 to 2850	50Hz	High Frequency Buzz		25	109	13	109
25	25	00111	Intermittent	970	500mS On/500mS Off	ISO 8201 Low Frequency		25	110	12	110
26	26	00110	Intermittent	2850	500mS On/500mS Off	ISO 8201 High Frequency		26	109	12	109
27	27	00101	Continuous	4000	Steady			26	106	13	106
28	10	00100	Alternating	800 & 970	2Hz (250ms-250ms)	FP1063.1-Telecom		26	110	13	110
29	988Hz	00011	Alternating	990 & 650	2Hz (250ms-250ms)(Symphoni tones)	Symphoni Tones		25	109	12	109
30	510Hz	00010	Alternating	510 & 610	2Hz (250ms-250ms)(Squashni Micro tones)	Squashni Micro		26	111	13	111
31	31	00001	Sweep	300 to 1200	1Hz			27	111	13	111
32	27	00000	Alternating	510 & 610	1Hz (500ms-500ms)			26	111	13	111

AVISA line AX05 Sounder (9-60Vdc)

Specification

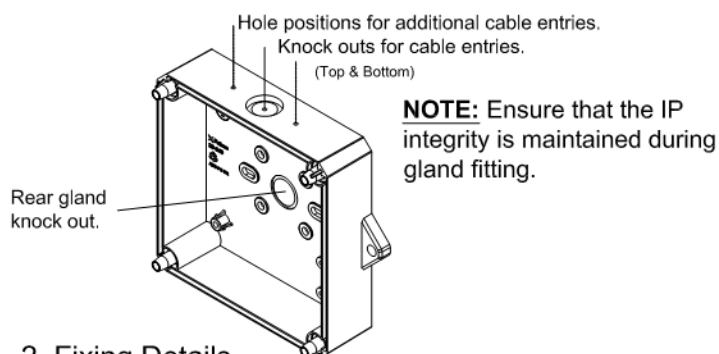
Specification	9-60Vdc
Operation	Continuous
Operating Voltage Range	9Vdc-15Vdc (Non-fire use) 15Vdc-60Vdc (EN54-3)
Sound Output @ 1m	See table overleaf
Current Consumption	See table overleaf
Tones	32 see table overleaf
Operating Temperature	-25°C to +70°C
Line Monitoring Method	Polarised Input
Construction	ABS /PC Plastic Case
Environment Category	Type A
Ingress Protection	IP66
Compliance	EN54-3
	Fire Alarm device-Sounder

Dimensions



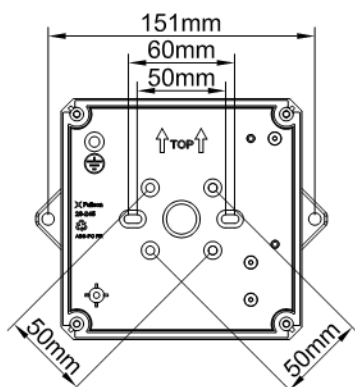
1. Installation

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



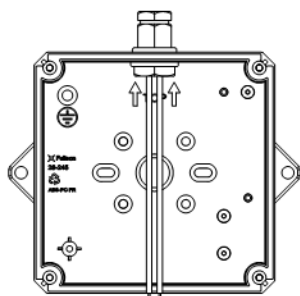
2. Fixing Details

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



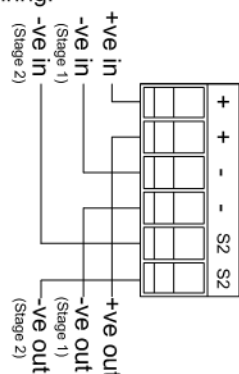
3. Cable Preparation

Cut cable to $\pm 130\text{mm}$. (use the opposite side of the base as a guide)



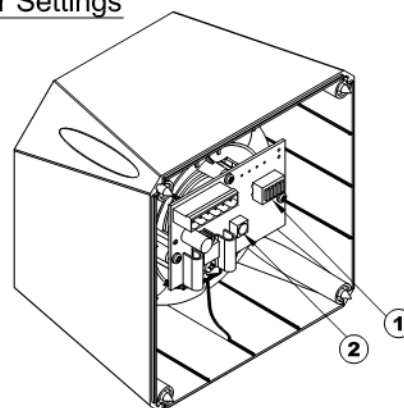
4. Connection Details

Remove the terminal blocks from the sounder 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



See table overleaf.

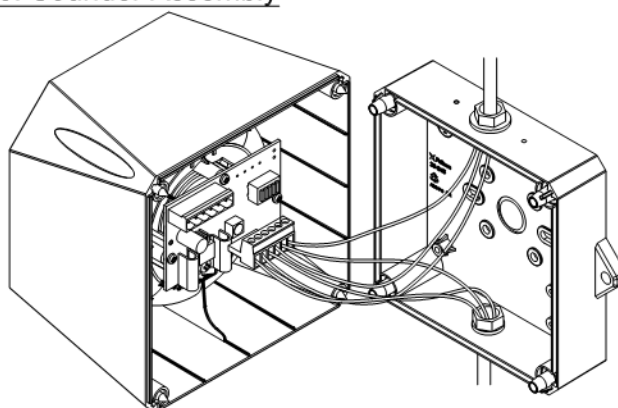
0 = Open
1 = Closed

2. Volume Control

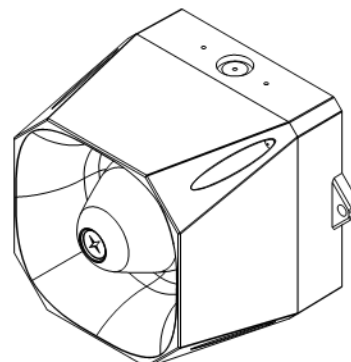


Turn dial clockwise to increase volume. (Nominal 10dB range)

6. Sounder Assembly



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

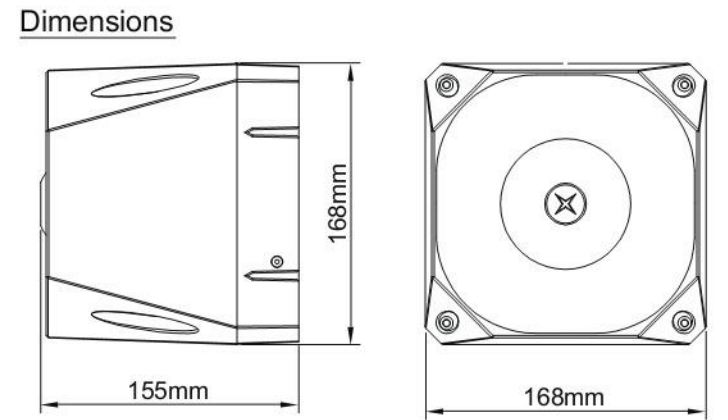


NOTE : Polar dispersion information available in the technical manual. (Ref:M04-005)

CE marking under CPD was affixed on: (see batch code on product)
Fulleon Ltd, Cwmbran, South Wales, UK.

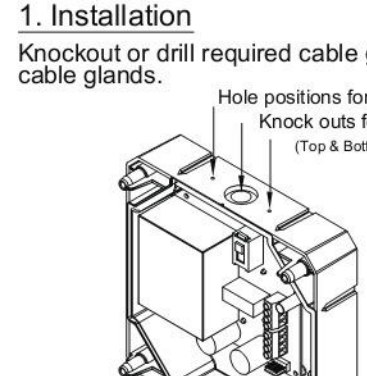


Specification	115Vac/230Vac 110dB(A)	115Vac/230Vac 120dB(A)
Operation	Continuous	Continuous
Operating Voltage Range	115Vac/230Vac 50/60Hz	115Vac/230Vac 50/60Hz
Sound Output @ 1m	See table overleaf	See table overleaf
Current Consumption	0-80mA@115Vac 0-40mA@230Vac	0-130mA@115Vac 0-65mA@230Vac
Maximum Power	9W	15W
Tones	42 see table overleaf	42 see table overleaf
Operating Temperature	-25°C to +75°C	-25°C to +75°C
Construction	ABS /PC Plastic Case	ABS /PC Plastic Case
Ingress Protection	IP66	IP66
Fuse	80mA Anti surge, 20mm	80mA Anti surge, 20mm



1. Installation

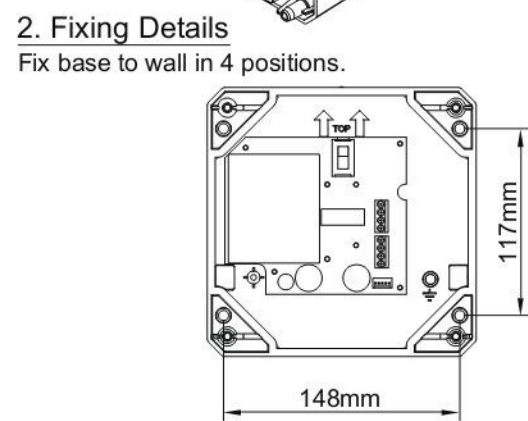
Knockout or drill required cable gland holes, and fix required cable glands.



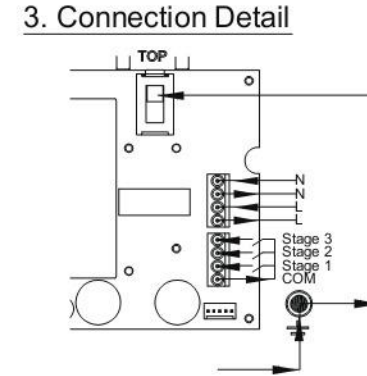
NOTE: Ensure that the IP integrity is maintained during gland fitting.
(Take care not to disturb the electronics while drilling.
Remove PCB if required)

2. Fixing Details

Fix base to wall in 4 positions.



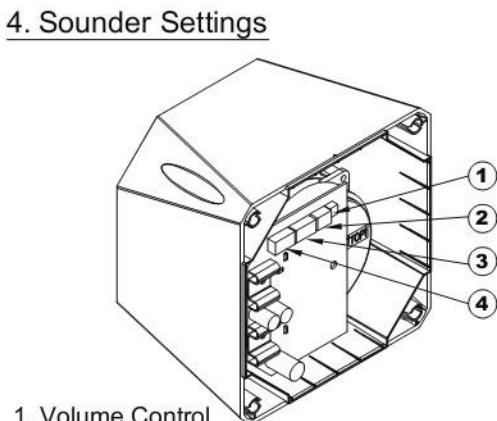
3. Connection Detail



Set switch to correct requirement for installation. (115Vac or 230Vac)

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

4. Sounder Settings



1. Volume Control



Turn dial clockwise to increase volume.
(nominal 20dB Range)

2. Switch 1 (Time out setting)



BIT 123X	Minutes	BIT 123X	Minutes
111X	5	011X	25
110X	10	010X	30
101X	15	001X	40
100X	20	000X	∞

0 = Open
1 = Closed

Switch 1 bit 4 is to select voice (0)/ no voice (1). (Where fitted)

3. Switch 2 (Stage1 tone selection)



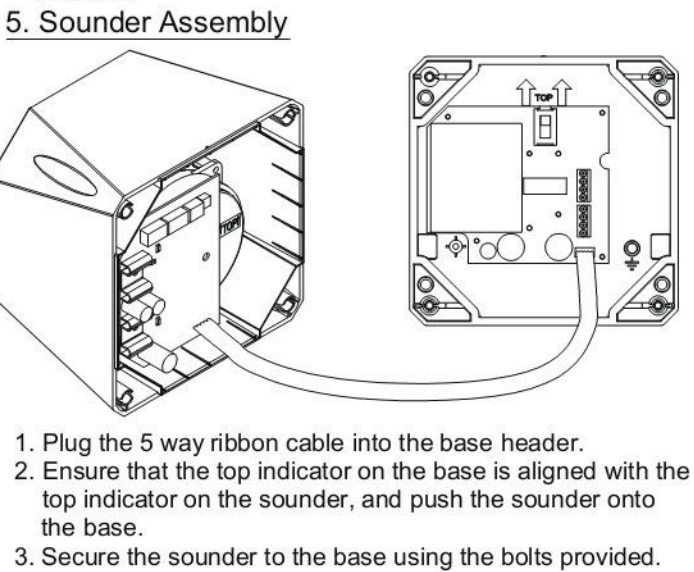
See table overleaf.

4. Switch 3 (Stage 2 tone selection)



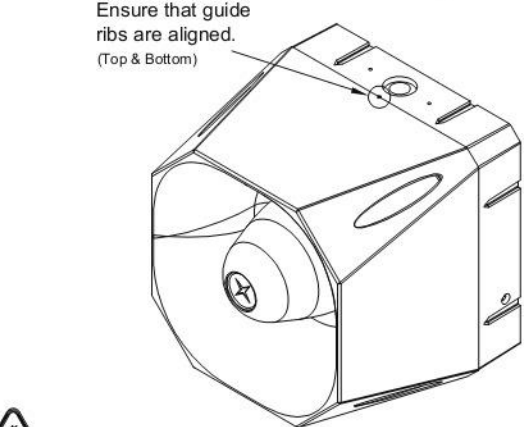
See table overleaf.
(Stage 3 Tone is dependent on the setting of switch 2)

5. Sounder Assembly



1. Plug the 5 way ribbon cable into the base header.
2. Ensure that the top indicator on the base is aligned with the top indicator on the sounder, and push the sounder onto the base.
3. Secure the sounder to the base using the bolts provided.

Ensure that guide ribs are aligned.
(Top & Bottom)



 **WARNING :** On some tones the output level can exceed 120dB(A) @ 1m.
: Consult the relevant or appropriate health and safety regulations for guidelines.
Tones Table overleaf.
 **NOTE :** Do not remove cover, refer servicing to qualified personnel.
: High voltage present within this equipment.

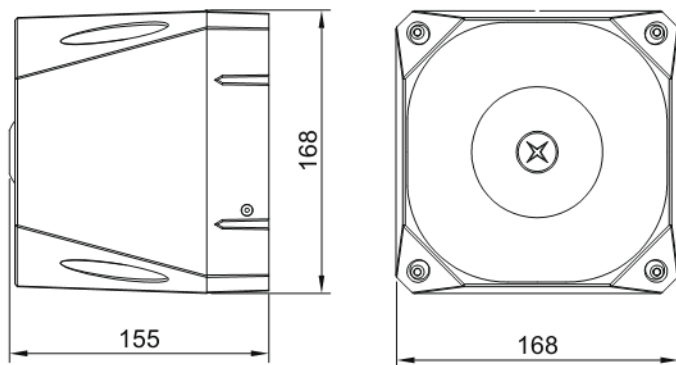
NOTE : Polar dispersion information available in the technical manual. (Ref:M03-003)



No	CODE 123456	TONE				Use	Stage 1 & 2		STAGE 3
		Description	Frequencies	Pattern	115Vac/230Vac LP		115Vac/230Vac HP		
					dB(A)@1m		dB(A)@1m		
A1	111111	Alternating	800 & 970	2Hz (250ms-250ms)		111	120	A14	
A2	111110	Sweep	800 & 970	7Hz (7/s)		112	120	A14	
A3	111101	Sweep	800 & 970	1Hz (1/s)		112	120	A14	
A4	111100	Continuous	2850	Steady		106	111	A9	
A5	111011	Sweep	2400 to 2850	7Hz		103	109	A4	
A6	111010	Sweep	2400 to 2850	1Hz		105	110	A4	
A7	111001	Slow Whoop	500 to 1200	3s sweep, 0.5s silence, then repeat (rep)		111	119	A14	
A8	111000	Sweep	1200 to 500	1Hz		111	119	A14	
A9	110111	Alternating	2400 & 2850	2Hz (250ms-250ms)		108	113	A4	
A10	110110	Intermittent	970	0.5Hz (1s On/1s Off)		108	117	A14	
A11	110101	Alternating	800 & 970	1Hz (500ms-500ms)		109	118	A14	
A12	110100	Intermittent	2850	0.5Hz (1s On/1s Off)		107	112	A4	
A13	110011	Intermittent	970	0.8Hz (250ms On/1s Off)		108	117	A14	
A14	110010	Continuous	970	Steady		109	118	A8	
A15	110001	Alternating	554 & 440	100ms-400ms		106	115	A14	
A16	110000	Intermittent	660	3.3Hz (150ms On/150ms Off)		106	114	A14	
A17	101111	Intermittent	660	0.28Hz (1.8s On/1.8s Off)		106	115	A14	
A18	101110	Intermittent	660	0.05Hz (6.5s On/13s Off)		106	115	A14	
A19	101101	Continuous	660	Steady		107	116	A1	
A20	101100	Alternating	554 & 440	0.5Hz (1s On/1s Off)		106	115	A19	
A21	101011	Intermittent	660	1HZ (500ms-500ms)		106	115	A4	
A22	101010	Intermittent	2850	4Hz (150ms On/100ms Off)		105	110	A4	
A23	101001	Sweep	800 to 970	50Hz		109	117	A14	
A24	101000	Sweep	2400 to 2850	50Hz		106	110	A4	
A25	100111	Intermittent	970	3X500ms pulses followed by 1.5s silence then repeat		109	118	A14	
A26	100110	Intermittent	2850	3X500ms pulses followed by 1.5s silence then repeat		107	112	A4	
A27	100101	Continuous	4000	Steady		101	105	A6	
A28	100100	Alternating	800 & 970	2Hz (250ms-250ms)		109	118	A14	
A29	100011	Alternating	990 & 650	2Hz (250ms-250ms)(Symphoni tones)		109	117	A14	
A30	100010	Alternating	510&610	2Hz (250ms-250ms)(Squashni Micro tones)		107	116	A14	
A31	100001	Sweep	300 to 1200	1Hz		110	118	A14	
A32	100000	Continuous	Bell	Steady	See attached for waveform details	111	117	A3	
A33	011111	Continuous	Bell	3X500ms pulses followed by 1.5s silence then repeat	Bell/US Temporal	111	117	A14	
A34	011110	Alternating	1000 & 2000	1Hz (500ms-500ms)	Singapore	107	115	A4	
A35	011101	Intermittent	420	pulsed @ 0.625s	Australian alert	108	118	A14	
A36	011100	Sweep	500 to 1200	Sweep 3.75s followed by 0.25s gap	Australian evac	109	117	A14	
A37	011011	Sweep	1400 to 1600	Sweep up 1s, sweep down 0.5s	NF C 48-265	108	116	A14	
A38	011010	Sweep	500 to 1200	Sweep up & down over 3s	Siren	109	117	A14	
A39	011001	Intermittent	720	0.7s On, 0.3 Off	German ind alarm	110	118	A14	
A40	011000	Sweep	422 to 775	Sweep for 0.85s, 1s delay, repeat	NFPA Whoop	109	118	A14	
A41	010111	Continuous	470	Steady	Horn (USA)	104	114	A3	
A42	010110	Continuous	370	Steady	Air Horn (USA)	104	113	A3	

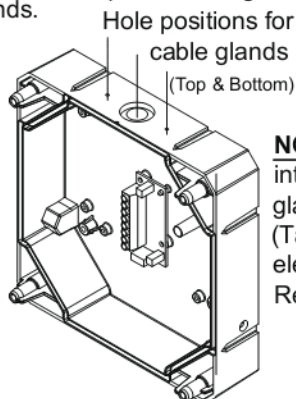
Operation	Continuous
Operating Voltage Range	18Vdc-30Vdc
Sound Output @ 1 Meter	See table overleaf
Current Consumption	See table overleaf
Tones	1 to 44 see table overleaf
Operating Temperature	-25°C to +75°C
Line Monitoring Method	Polarized Input
Construction	ABS /PC Plastic Case
Ingress Protection	IP66

Dimensions



1. Installation

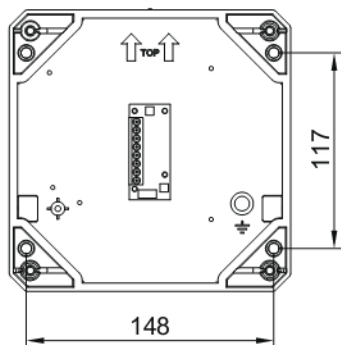
Knockout or drill required cable gland holes, and fix required cable glands.



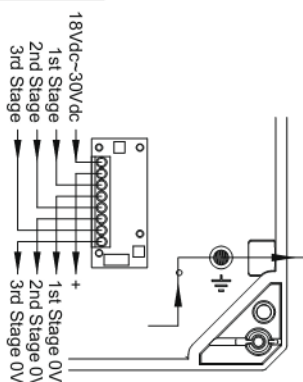
NOTE: Ensure that the IP integrity is maintained during gland fitting.
(Take care not to disturb the electronics while drilling.
Remove PCB if required)

2. Fixing Details

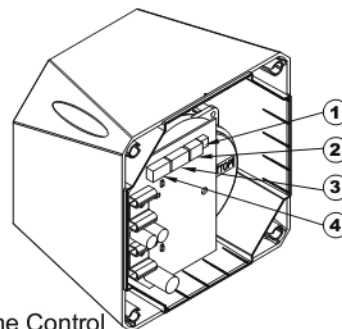
Fix base to wall in 4 positions.



3. Connection Detail



4. Sounder Settings



1. Volume Control



Turn dial clockwise to increase volume.
(20dB Range)

2. Switch 1 (Time out setting)



0 = Open
1 = Closed

BIT 123X	Minutes	BIT 123X	Minutes
111X	5	011X	25
110X	10	010X	30
101X	15	001X	40
100X	20	000X	∞

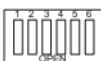
Switch 1 bit 4 is to select voice (0)/ no voice (1).

3. Switch 2 (Stage1 tone selection)



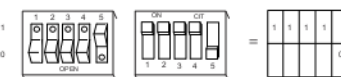
See table overleaf.

4. Switch 3 (Stage 2 tone selection)

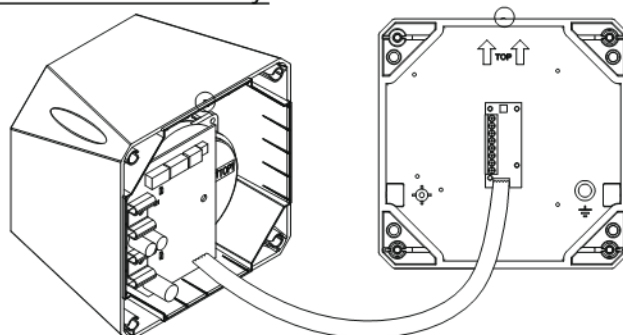


See table overleaf.
(Stage 3 Tone is dependent on the setting of switch 2)

5. Switch positions

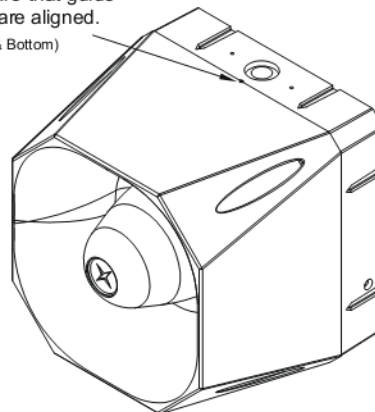


5. Sounder Assembly



1. Plug the 5 way ribbon cable into the base header.
2. Ensure that the top indicator on the base is aligned with the top indicator on the sounder, and push the sounder onto the base.
3. Secure the sounder to the base using the bolts provided.

Ensure that guide ribs are aligned.
(Top & Bottom)



WARNING : On some tones the output level can exceed 120dB(A) @ 1m. Consult the relevant or appropriate health and safety regulations for guidelines. Tones Table overleaf.
NOTE : Polar dispersion information available in the technical manual. (Ref:M03-003)



0832-CPD-0566
0832-CPD-0520

1st & 2nd Tone bank	3rd Tone bank	Switch Setting (Open=0)	Tone Description					AX08 110		AX08 120			
			Pattern	Frequency (Hz)	Rate	Market	Depiction	Average current @ max vol @ 24VDC	24Vdc on axis @1M	EN54-3 30Vdc on axis see notes	Average current @ max vol @ 24VDC	*24Vdc on axis @1M	EN54-3 30Vdc on axis see notes
A 1	A14	111111	Alternating	970 then 800	2Hz (250ms-250ms)	EVIAN		108	111	*	450	117	*
A 2	A14	111110	Sweep	800 to 970	7Hz (7/s)			103	112	*	450	120	*
A 3	A14	111101	Sweep	800 to 970	1Hz (1/s)			105	112	112	450	120	116
A 4	A9	111100	Continuous	2850	Steady			122	106	*	445	109	*
A 5	A4	111011	Sweep	2400 to 2850	7Hz			119	103	*	447	109	*
A 6	A4	111010	Sweep	2400 to 2850	1Hz			121	105	*	446	110	*
A 7	A14	111001	Slow whoop	500 to 1200	3s sweep, 0.5 s silence, then repeat (rep)	Slow Whoop Netherlands		115	111	112	340	119	116
A 8	A14	111000	Sweep (DIN)	1200 to 500	1Hz	Din / PFEER (PAPA)		115	111	112	430	119	116
A 9	A4	110111	Alternating	2850 then 2400	2Hz (250ms-250ms)			121	108	*	450	112	*
A 10	A14	110110	Intermittent	970	0.5Hz (1s On/1s Off)	PFEER alert		71	108	*	229	117	*
A 11	A14	110101	Alternating	970 then 800	1Hz (500ms-500ms)			106	109	*	375	116	*
A 12	A4	110100	Intermittent	2850	0.5Hz (1s On/1s Off)			89	107	*	235	109	*
A 13	A14	110011	Intermittent	970	0.8Hz (250ms On/1s Off)	ASP		35	108	*	100	117	*
A 14	A8	110010	Continuous	970	Steady	PFEER - Toxic gas		104	109	111	450	117	115
A 15	A14	110001	Alternating	440 then 554	100ms-400ms	France NFS 32 S 32-001		76	106	*	294	115	*
A 16	A14	110000	Intermittent	660	3.3Hz (150ms On/150msOff)	Swedish (Air raid)		60	106	*	232	114	*
A 17	A14	101111	Intermittent	660	0.28Hz(1.8s On/1.8s Off)	Swedish (Local warning)		88	106	*	220	115	*
A 18	A14	101110	Intermittent	660	0.05Hz (6.5s On/13s Off)	Swedish (Pre-mess)		101	106	*	150	115	*
A 19	A1	101101	Continuous	660	Steady	Swedish (All clear)		103	107	*	429	116	*
A 20	A19	101100	Alternating	440 then 554	0.5Hz (1s On/1s Off)	Swedish (Turn out)		83	106	*	312	115	*
A 21	A4	101011	Intermittent	660	1Hz (500ms-500ms)	Swedish		66	106	*	220	115	*
A 22	A4	101010	Intermittent	2850	4Hz (150ms On/100ms Off)			83	105	*	286	108	*
A 23	A14	101001	Sweep	800 to 970	50Hz			102	109	*	419	117	*
A 24	A4	101000	Sweep	2400 to 2850	50Hz			120	106	*	440	110	*
A 25	A14	100111	Intermittent	970	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201/US Temporal		62	109	*	180	117	*
A 26	A4	100110	Intermittent	2850	3 x 500ms pulses followed by 1.5s silence then repeat	ISO 8201/US Temporal		64	107	*	180	109	*
A 27	A6	100101	Continuous	4000	Steady			109	101	*	450	105	*
A 28	A14	100100	Alternating	970 then 800	2Hz (250ms-250ms)			106	109	*	414	116	*
A 29	A14	100011	Alternating	990 then 650	2Hz (250ms-250ms) (Symphoni tones)			104	109	111	444	117	115
A 30	A14	100010	Alternating	510 then 610	2Hz (250ms-250ms) (Squashmi Micro tones)			96	107	109	370	116	113
A 31	A14	100001	Sweep	300 to 1200	1Hz			84	110	*	285	118	*
A 32	A3	100000	Continuous	Bell	Steady	See attached for waveform details		120	111	*	450	117	*
A 33	A14	111111	Intermittent	Bell	3 x 500ms pulses followed by 1.5s silence then repeat	Bell / US temporal		69	111	*	180	117	*
A 34	A4	111110	Alternating	1000 then 2000	1Hz (500ms-500ms)	Singapore		112	107	*	450	115	*
A 35	A14	111011	Intermittent	420	6 step ramped start pulsed @ 0.625S ON / 0.625S OFF	Australian alert		46	108	*	140	116	*
A 36	A14	111001	Sweep	500 to 1200	Sweep 3.75s followed by 0.25s gap	Australian evac		91	109	*	340	117	*
A 37	A14	110111	Sweep	1400 to 1600	Sweep up 1s, sweep down 0.5s	NF C 48-265		122	108	*	448	116	*
A 38	A14	110110	Sweep	500 to 1200	Sweep UP & DOWN over 3s	Siren		94	109	*	310	117	*
A 39	A14	110011	Intermittent	720	0.7s ON, 0.3OFF	German ind alarm		90	110	*	310	117	*
A 40	A14	110001	Sweep	422 to 775	Sweep for 0.85s, 1s delay, repeat	NFPA Whoop		60	109	*	180	118	*
A 41	A3	101111	Continuous	470	Steady	Horn (USA)		85	104	*	340	114	*
A 42	A3	101110	Continuous	370	Steady	Air horn (USA)		76	104	*	272	113	*

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 are not verified by a Notified body.
Note (d): Detailed EN54-3 polar SPL measurements are available in the Product Manual for the appropriate sounder.
Note (e): All measurements taken at 20°C operating temperature.