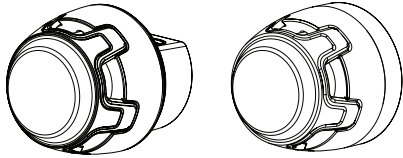


**INSTALLATION INSTRUCTIONS FOR CONVENTIONAL WALL & CEILING MOUNT SOUNDER BEACON - W AND C CLASS**

**MODELS**

CWSS-xx-S5 = Sounder Beacon, Shallow Base, W Class, C Class  
 CWSS-xx-S6 = Sounder Beacon, Shallow Base, W Class, First Fix, C Class  
 CWSS-xx-W5 = Sounder Beacon, Deep Base, W Class, C Class  
 CWSS-xx-W6 = Sounder Beacon, Deep Base, W Class, First Fix, C Class

xx Denotes Body & Lens Colour



**TECHNICAL INFORMATION**

VOLTAGE RANGE (OPERATING) C/W Class	12-29V
VOLTAGE RANGE (EN54- 23) C/W Class approved at	12-29V
AVERAGE PEAK CURRENT - C/W Class	73.5mA @24V
AVERAGE PEAK POWER - C/W Class	1.75W @24V
VOLTAGE RANGE (EN54-3)	9-14V 18-29V
No. OF STAGES	2
BEACON FLASH RATE	0.5Hz
MONITORING	Reverse polarity
RELATIVE HUMIDITY	Up to 93% (± 3%) - non condensing
WIRE GAUGE FOR TERMINAL	0.5mm <sup>2</sup> - 2.5mm <sup>2</sup> (max)
OPERATING TEMPERATURE	-25 to +70 °C

Peak and average current consumption can be found in the full tone table overleaf.

**VOLUME SETTINGS**

Volume setting is adjusted by switch 6 on the 6-way DIP switch on the bottom of the product. (See switch diagram overleaf).

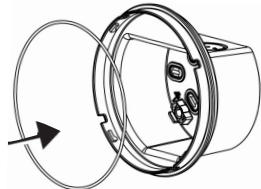
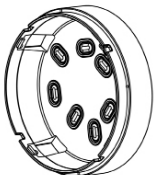
**TOE SETTINGS**

The tone setting is selected by switches 1 to 5 on the 6-way DIP switch. The switch diagram and tone table are overleaf. The second stage tone is related to the first stage tone selection made via the DIP switch. The second stage is controlled by the fire panel and becomes active through the wiring configuration.

**BASES/IP RATING**

Shallow Base (IP21C)

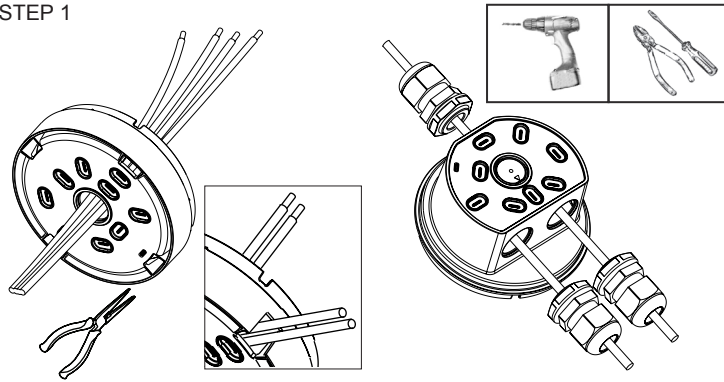
Deep Base (IP65)



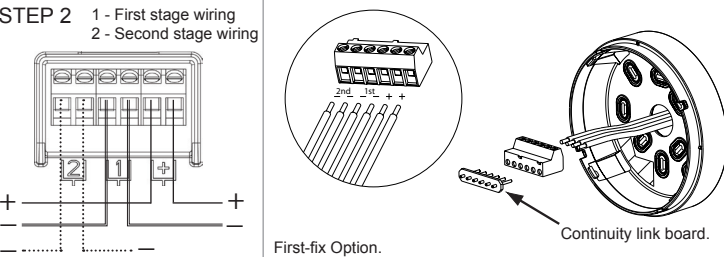
If the Deep Base IP65 option is used, the o-ring seal must be fitted to the base as shown. If required, the deep base gasket accessory can be installed between the base and the mounting surface.

**INSTALLATION**

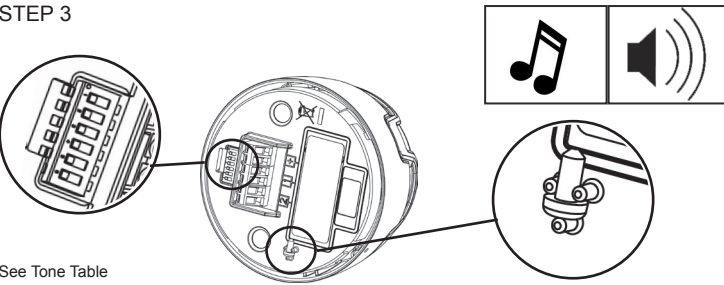
**STEP 1**



**STEP 2** 1 - First stage wiring  
2 - Second stage wiring



**STEP 3**

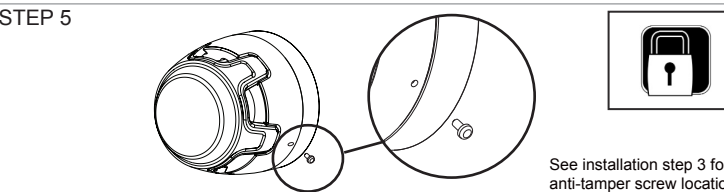


See Tone Table on reverse.

**STEP 4**



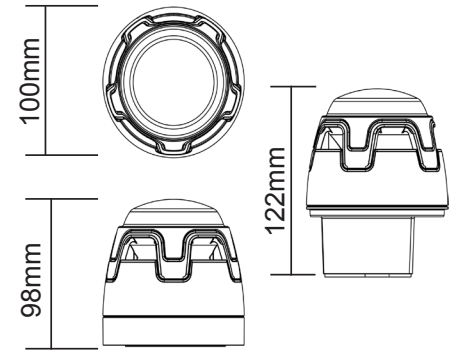
**STEP 5**



See installation step 3 for anti-tamper screw location.

**DIMENSIONS**

Shallow and Deep Base



**INSTALLATION TIPS**

These products are universal devices suitable for wall & ceiling mount installations.

These products are not designed for use with pulsed panel outputs. If more than 1 mode is required use the second stage tone.

Drill out the required mounting and wiring holes in the rear of the base. Do not attempt to "knock-out" the holes with a screwdriver.

Factory setting is Tone 1 at medium volume.

Installation tools required: Pliers, Screwdriver, Drill.

Accessories: -  
 SC076 = 5x Earth Strap/ SC077 = 5x Terminal Block/  
 SC078 = 5x Installer Link/ P310 = 5x Deep Base O-Ring/  
 P311 = 5x Deep Base Gasket/ CSR = 5x Shallow Base-Red/  
 CSW = 5x Shallow Base-White/ CWW=5x IP65 Deep Base-White/  
 CWR = 5x IP65 Deep Base-Red.

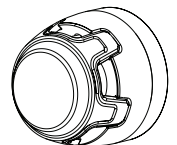
**WARNING:** Use extreme caution when adjusting the switches on the 6-way DIP switch. The switch contacts and exposed PCB can be affected by electro-static discharge.

**WARNING:** Care must be taken when installing first-fix model types with the KAC continuity link board. DO NOT touch the exposed link board contacts when load is applied as this may result in an electrical shock.

The sounder minimum voltage is limited to 12V to maintain beacon performance.

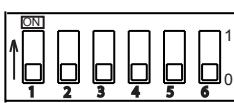
**WALL & CEILING MOUNT SOUNDER BEACON MODELS:**

- CWSS-xx-S5
- CWSS-xx-S6
- CWSS-xx-W5
- CWSS-xx-W6

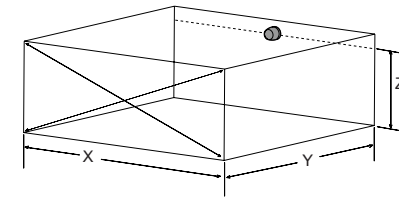


# STONE TABLE

SW6	Volume Setting
ON	HIGH
OFF	MEDIUM

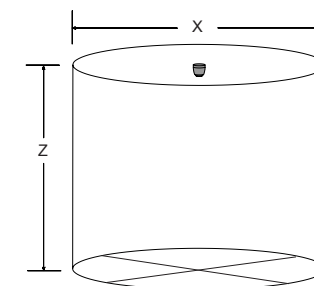


## Wall mount device example



Class of approvals	Device	Led colour	Operating voltage	Installation height (Z)	Coverage cube X-Y (Max)	Approvals classification
W	WMSS	WHITE	12V	2.4m	9.10m	W-2.4-9.1
W	WMSS	WHITE	24V (NOM)	2.4m	9.10m	W-2.4-9.1
W	WMSS	WHITE	30V	2.4m	9.10m	W-2.4-9.1
W	WMSS	RED	12V	2.4m	6.2m	W-2.4-6.2
W	WMSS	RED	24V (NOM)	2.4m	6.2m	W-2.4-6.2
W	WMSS	RED	30V	2.4m	6.2m	W-2.4-6.2

## Ceiling mount device example



Class of approvals	Device	Led colour	Operating voltage	Installation height (Max)	Coverage cylinder diameter (Max)	Approvals classification
C	WMSS	WHITE	12V	3m	10m	C-3-10
C	WMSS	WHITE	12V	6m	10m	C-6-10
C	WMSS	WHITE	12V	9m	10m	C-9-10
C	WMSS	WHITE	30V	3m	10m	C-3-10
C	WMSS	WHITE	30V	6m	10m	C-6-10
C	WMSS	WHITE	30V	9m	10m	C-9-10
C	WMSS	RED	12V	3m	9.3m	C-3-9.3
C	WMSS	RED	12V	6m	8.5m	C-6-8.5
C	WMSS	RED	30V	3m	9.3m	C-3-9.3
C	WMSS	RED	30V	6m	8.5m	C-6-8.5

Dip Switch	Tone Nos.	Pattern	Nominal Freq	Typical consumption (mA)								Switching Freq	Description	Market	Standard	2nd Stage Tone	
				24V High dB	24V High mA	24V Med dB	24V Med mA	12V High dB	12V High mA	12V Med dB	12V Med mA						
0,0,0,0,0	1	Alternating	554/440	101.7	61.2	95.9	41.9	95.8	61.3	90	52.2	2Hz (100ms/400ms)	French Fire Sound AFNOR	France	NFS 32-001	7	
1,0,0,0,0	2	Alternating	800/970	102.1	57.9	91.5	38.9	95.8	59.8	84.6	51.3	1Hz		UK	BS5839 Pt1	8	
0,1,0,0,0	3	Alternating	800/970	101.9	57.6	91.4	39.8	95.6	59.9	84.3	51.4	2Hz	Alternating tone telecoms	UK	BS5839 Pt1, FP1063.1	8	
1,1,0,0,0	4	Alternating	2400/2900	107.2	72.9	99.2	49.2	100.3	66.4	91.9	55.5	3Hz	Alternating High Frequency			10	
0,0,1,0,0	5	Alternating	2500/3100	107.7	72.9	99.5	49.2	100.7	66.1	92.2	55.9	2Hz	Security Alarm			10	
1,0,1,0,0	6	Alternating	988/645	100.6	54.5	97.3	42	94.5	57.6	90.8	52.6	2Hz				8	
0,1,1,0,0	7	Continuous	660	101	52	97.2	45.7	94.8	57.2	87.5	53.6		All clear	Sweden		1	
1,1,1,0,0	8	Continuous	970	98.6	59.1	88.7	40.3	92.4	59.9	81.7	51.7				BS 5839 Pt 1	2	
0,0,0,1,0	9	Continuous	1200	104.2	63.9	103.1	56	97.8	61.9	96.6	59					2	
1,0,0,1,0	10	Continuous	2850	99.1	73.5	93.2	51.9	92.4	66.2	86	56.1		HF Continuous			4	
0,1,0,1,0	11	Bell	2400	106.8	72.4	98.7	47.7	99.9	66.1	91.4	55.5	Alternate between frequencies 2400Hz, 3100Hz and 988Hz	Simulated bell				16
1,1,0,1,0	12	Intermittent	420	101	50	96.1	38.3	95.2	55.4	89.6	51.1	0.625s on, 0.625 sec off	AS2220 alert tone	NZ, Aus	AS2220	13	
0,0,1,1,0	13	Sweep	500-1200	104	65.2	103.1	57.6	97.4	62.7	96.9	59.3	0.25 sec off, 3.75 sec on	AS2220 evacuate tone	NZ, Aus	AS2220	12	
1,0,1,1,0	14	Intermittent	660	99.8	45	96.7	39	93.7	53.2	90.2	51.3	3.33Hz 150ms on, 150ms off	Swedish alarm tone	Sweden		7	
0,1,1,1,0	15	Intermittent	970	98.2	40.8	88.2	35.6	92	51.7	81.3	49.9	0.8Hz 0.25s on, 1s off	Intermittent Tone	UK	BS 5839 Pt 1	8	
1,1,1,1,0	16	Intermittent	970	98.8	48.5	88.6	38.2	92.6	54.6	81.7	50.6	0.5Hz 1s on, 1s off	Back up alarm LF & BS5839 Pt 1	UK	BS5839 Pt 1	8	
0,0,0,0,1	17	Intermittent	2850	98.9	53.5	92.9	43.9	92.2	57.1	85.4	52.6	1Hz	Back up alarm HF & BS5839 Pt 1 2nd tone	UK	BS5839 Pt 1	10	
1,0,0,0,1	18	Intermittent	970	98.5	47.5	88.7	38.2	92.4	54.4	81.7	50.3	1Hz 500ms on, 500ms off	LF BS5839 Pt 1	UK	BS5839 Pt 1	8	
0,1,0,0,1	19	Intermittent	950	97.5	44.3	87.6	37.3	91.8	53.4	80.7	50	0.22Hz (0.5s on, 0.5s off)*3, 1.5s off		Australia	ISO8201 Temporal 3	12	
1,1,0,0,1	20	Continuous	800	101.9	56.8	91.3	39.5	95.6	59	84.4	50.9				BS 5839 Pt 1	22	
0,0,1,0,1	21	Sweep	400-1200	102.3	50.2	101.6	43.8	96.2	54.3	95.4	53.2	(0.5s on, 0.5s off)*3, 1.5s off	Temporal 3 Evacuation tone	Australia	ISO8201 Temporal 3	12	
1,0,1,0,1	22	Sweep	1200 - 500	102.7	69.9	102.1	60.1	97	63.9	96	60.5	0.99Hz 1s on, 0.01s off	Evacuate, DIN tone & PFEER	Germany	DIN, PFEER	20	
0,1,1,0,1	23	Sweep	2400 - 2850	108	71.7	99.8	45.3	100.9	66	92.6	54.5	7Hz	Fast sweep VdS	Germany	VdS	10	
1,1,1,0,1	24	Sweep	500 - 1200	104.2	61.7	103.1	56.5	97.7	61.9	96.9	58.5	(0.5s off, 3.5s on)	Slow whoop evacuate Netherlands	Netherlands	NEN 2575	8	
0,0,0,1,1	25	Sweep	800 - 970	101.7	55.6	90.8	38.5	95.3	58.2	83.9	51.1	50Hz	LF Buzz BS5839 Pt 1	UK	BS5839 Pt 1	8	
1,0,0,1,1	26	Sweep	800 - 970	100.9	54	91.1	39.8	94.9	58.2	84.2	51.3	7Hz	Fast sweep LF BS5839 Pt 1	UK	BS5839 Pt 1	8	
0,1,0,1,1	27	Sweep	800 - 970	103.1	56.7	94.7	40.6	97.1	58.6	87.8	51.6	1Hz	Medium sweep L.F. BS5839 Pt 1, VdS	UK, Germany	BS5839 Pt 1 VdS	8	
1,1,0,1,1	28	Sweep	2400 - 2850	107	67.4	98.2	44.1	99.7	64	91.2	53.8	50Hz	High frequency buzz			10	
0,0,1,1,1	29	Sweep	500 - 1000	101.7	57.2	90.4	38.5	95.7	59.4	83.5	50.9	7Hz	Fast whoop			8	
1,0,1,1,1	30	Sweep	500-1200-500	104.2	66.2	102.9	59.1	97.8	63.2	96.3	60.3	0.166Hz rise 1s, stable 4s, fall 1s	Siren style tone			8	
0,1,1,1,1	31	Sweep	800 - 1000	102.2	55.7	93.6	41.3	95.8	58.8	86.7	52	2Hz				8	
1,1,1,1,1	32	Sweep	2400 - 2850	102.7	55.3	94.2	42	96.2	58.9	87.3	52	1Hz				10	

### IMPORTANT NOTES:

Model types using a translucent red or amber lens are not EN54-23 approved. These model types must not be used as visual alarm devices to provide a primary warning notification of fire.

Only products with a clear lens will be EN54:23 approved.

Sounder output data is in accordance with EN54-3; and is available on Document Ref: D 1082.

Deep Base models reduce the dB output by an average of 4dB.

KAC reserves the right to amend the content of this document without prior notice. Pending LPCB approvals.

0832

For CPR Data on all relevant devices please request document D 974

Only product variants supplied with a clear lens are approved to the W and C category EN54-23 standard. The part numbers for these products ends in 5 or 6.

Additional coverage information can be obtained by downloading the following drawings from the KAC website:  
 C Class - 132997\_ENSCAPE\_EN54-23\_W\_OUTPUT.pdf  
 W Class - 132998\_ENSCAPE\_EN54-23\_W\_OUTPUT.pdf