

# INSTALLATION INSTRUCTIONS FOR CONVENTIONAL WALL & CEILING MOUNT SOUNDER BEACON - O CLASS AND SUPPLEMENTARY INDICATOR

**MODELS**

CWSS-xx-S3 = Sounder Beacon, Shallow Base, O Class  
 CWSS-xx-S4 = Sounder Beacon, Shallow Base, O Class, First Fix  
 CWSS-xx-S7 = Sounder Beacon, Shallow Base, EN54-3 Only  
 CWSS-xx-S8 = Sounder Beacon, Shallow Base, EN54-3 Only, First Fix  
 CWSS-xx-W3 = Sounder Beacon, Deep Base, O Class  
 CWSS-xx-W4 = Sounder Beacon, Deep Base, O Class, First Fix  
 CWSS-xx-W7 = Sounder Beacon, Deep Base, EN54-3 Only  
 CWSS-xx-W8 = Sounder Beacon, Deep Base, EN54-3 Only, First Fix

xx Denotes Body & Lens Colour

**TECHNICAL INFORMATION**

VOLTAGE RANGE (OPERATING) O Class	12-29V
VOLTAGE RANGE (EN54-23) O Class approved at	24-29V
VOLTAGE RANGE (SUPPLEMENTARY INDICATOR)	9-29V
VOLTAGE RANGE (EN54-3)	9-14V 18-29V
AVERAGE PEAK CURRENT - O Class	38mA @ 24V
AVERAGE PEAK POWER - O Class	0.9W @ 24V
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).

**STONE 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

First-fix Option.      Continuity link board.

**STEP 3**

See Tone Table on reverse.

**STEP 4**

“click”

**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-S3  
 CWSS-xx-S4  
 CWSS-xx-S7  
 CWSS-xx-S8  
 CWSS-xx-W3  
 CWSS-xx-W4  
 CWSS-xx-W7  
 CWSS-xx-W8

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**TONE TABLE**

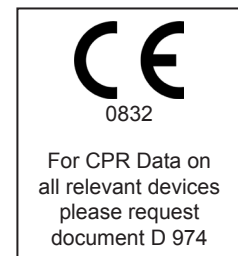
SW6	Volume Setting
ON	HIGH
OFF	MEDIUM



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	99.7	29.44	96.7	10.47	94.1	13.24	90.4	5.1	2Hz (100ms/400ms)	French Fire Sound AFNOR	France	NFS 32-001	7
1,0,0,0,0	2	Alternating	800/970	102.2	24.34	92.9	8.53	97	12.27	87	4.55	1Hz		UK	BS5839 Pt1	8
0,1,0,0,0	3	Alternating	800/970	102.5	24.41	93.1	8.55	96.2	11.31	86.2	4.3	2Hz	Alternating tone telecoms	UK	BS5839 Pt1, FP1063.1	8
1,1,0,0,0	4	Alternating	2400/2900	107.7	35.3	101	16.76	100.9	16.36	94.1	8.04	3Hz	Alternating High Frequency			10
0,0,1,0,0	5	Alternating	2500/3100	107.2	37.98	100.2	18.7	100.4	17.87	93.2	8.84	2Hz	Security Alarm			10
1,0,1,0,0	6	Alternating	988/645	102.7	21.2	99.6	11.18	96.9	10.09	93.4	5.57	2Hz				8
0,1,1,0,0	7	Continuous	660	103	20.61	99.8	12.84	97.3	9.77	93.5	6.32		All clear	Sweden		1
1,1,1,0,0	8	Continuous	970	102.8	25.44	93.5	8.91	96.2	11.96	86.7	4.6				BS 5839 Pt 1	2
0,0,0,1,0	9	Continuous	1200	104.5	28.73	103.5	23.42	98.2	13.36	97	11.03					2
1,0,0,1,0	10	Continuous	2850	106.6	36.24	101.2	18.47	99.8	16.7	94.3	8.76		HF Continuous			4
0,1,0,1,0	11	Bell	2400	106.7	37.12	99.7	17.24	99.9	17.41	92.7	8.4	Alternate between frequencies 2400Hz, 3100Hz and 988Hz	Simulated bell			16
1,1,0,1,0	12	Intermittent	420	98.9	17.43	95.6	7.52	93.8	7.59	89.4	3.55	0.625s on, 0.625 sec off	AS2220 alert tone	NZ, Aus	AS2220	13
0,0,1,1,0	13	Sweep	500-1200	103.8	32.81	103.1	23.26	98.2	15.14	97.6	11.86	0.25 sec off, 3.75 sec on	AS2220 evacuate tone	NZ, Aus	AS2220	12
1,0,1,1,0	14	Intermittent	660	101.3	12.11	98.4	8.5	95.8	6.35	92.1	4.37	3.33Hz 150ms on, 150ms off	Swedish alarm tone	Sweden		7
0,1,1,1,0	15	Intermittent	970	102	8.51	92.6	5.18	95.6	4.24	86	2.73	0.8Hz 0.25s on, 1s off	Intermittent Tone	UK	BS 5839 Pt 1	8
1,1,1,1,0	16	Intermittent	970	102.4	12.67	93.4	6.94	96.1	6.81	86.6	3.84	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	106.7	21.59	101.2	11.38	99.8	8.26	94.4	5.49	1Hz	Back up alarm HF & BS5839 Pt 1 2nd tone	UK	BS5839 Pt 1	10
1,0,0,0,1	18	Intermittent	970	102.4	14.68	93.2	6.25	96.2	6.8	86.4	3.24	1Hz 500ms on, 500ms off	LF BS5839 Pt 1	UK	BS5839 Pt 1	8
0,1,0,0,1	19	Intermittent	950	101.4	11.84	93.6	6.16	96.2	5.51	86.8	3.09	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	102.6	23.61	92.8	8.5	96.4	11.13	86	4.37				BS 5839 Pt 1	22
0,0,1,0,1	21	Sweep	400-1200	101.7	14.77	101.1	12.18	95.6	7.42	95.1	5.56	(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	102.1	36.19	101.6	28.35	96.2	16.21	95.8	12.88	0.99Hz 1s on, 0.01s off	Evacuate, DIN tone & PFEER	Germany	DIN, PFEER	20
0,1,1,0,1	23	Sweep	2400 - 2850	107.7	34.67	100.5	14.82	101	16.38	93.5	7.29	7Hz	Fast sweep VdS	Germany	VdS	10
1,1,1,0,1	24	Sweep	500 - 1200	103.9	30.12	103.2	23.94	98.2	13.91	97.5	11.13	(0.5s off, 3.5s on)	Slow whoop evacuate Netherlands	Netherlands	NEN 2575	8
0,0,0,1,1	25	Sweep	800 - 970	97.8	22.77	88.4	8.13	91.8	10.75	81.7	4.14	50Hz	LF Buzz BS5839 Pt 1	UK	BS5839 Pt 1	8
1,0,0,1,1	26	Sweep	800 - 970	99	23.02	91.4	9.1	92.9	10.98	84.7	4.68	7Hz	Fast sweep LF BS5839 Pt 1	UK	BS5839 Pt 1	8
0,1,0,1,1	27	Sweep	800 - 970	103	23.74	95.8	9.37	97.1	11.31	89	4.89	1Hz	Medium sweep LF, BS5839 Pt 1, VdS	UK, Germany	BS5839 Pt 1 VdS	8
1,1,0,1,1	28	Sweep	2400 - 2850	99.1	34.73	91.4	14.28	92.4	16.31	84.5	7.09	50Hz	High frequency buzz			10
0,0,1,1,1	29	Sweep	500 - 1000	100.4	25.96	90.4	7.72	94.6	11.98	83.7	4.01	7Hz	Fast whoop			8
1,0,1,1,1	30	Sweep	500-1200-500	104.3	30.74	103.5	25.86	98.1	14.9	97.2	12.08	0.166Hz rise 1s, stable 4s, fall 1s	Siren style tone			8
0,1,1,1,1	31	Sweep	800 - 1000	101.8	23.82	94.7	10.05	95.8	11.4	91	6.39	2Hz				8
1,1,1,1,1	32	Sweep	2400 - 2850	102.2	24.08	95.3	10.19	96.1	11.54	88.5	5.34	1Hz				10

Only product variants supplied with a clear lens are approved to the O category EN54-23 standard. The part number for these products ends in 3 or 4.

An exact coverage shape for both ceiling and wall mounted products can be seen by downloading the following drawing from the KAC website: 132999\_ENSCAPE\_EN54-23\_O\_OUTPUT.pdf



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

**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.