www.acornfiresecurity.com

Instruction Insert
VTB 24 Volt 32-Tone Spatial Sounder/Beacon

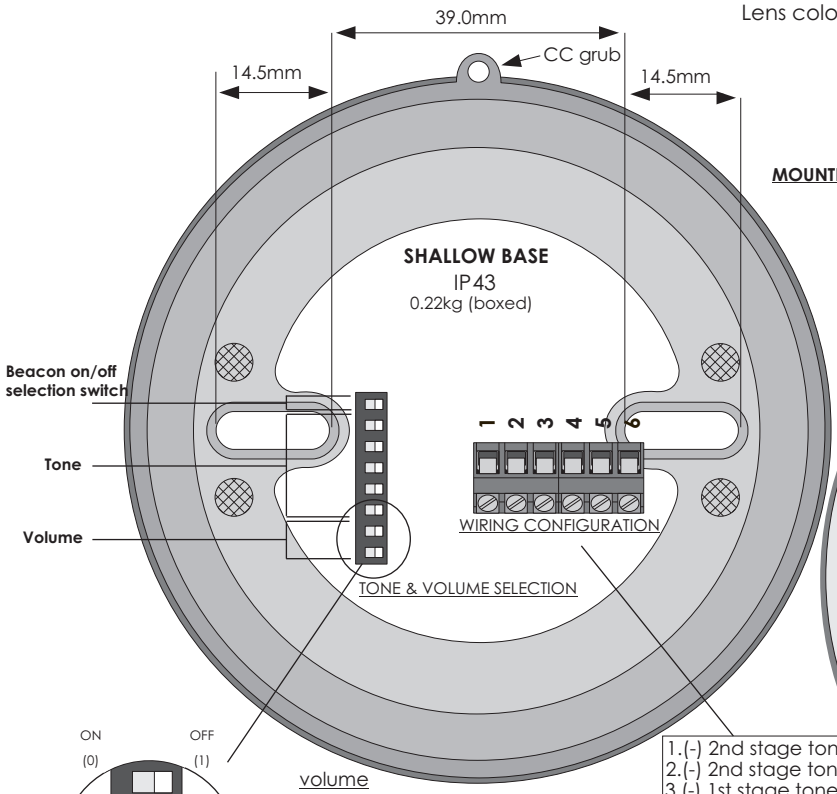
Part Number
511-XXX Series

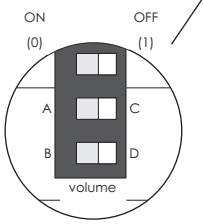
Description
VTB 24V 32-Tone Spatial Sounder/Beacon
Units are available with Deep or Shallow base,
Lens colour options available - red,amber,blue,clear

Voltage Range
18 - 35Vdc

All VTB sounder/beacons are delivered with the volume Set to high and tone set to 11111 (Cranford sweep)

For tone wire neg to term 3 and/or4
For 2nd tone wire neg to 1 and/or2
Note that the 2nd tone will over-ride tone



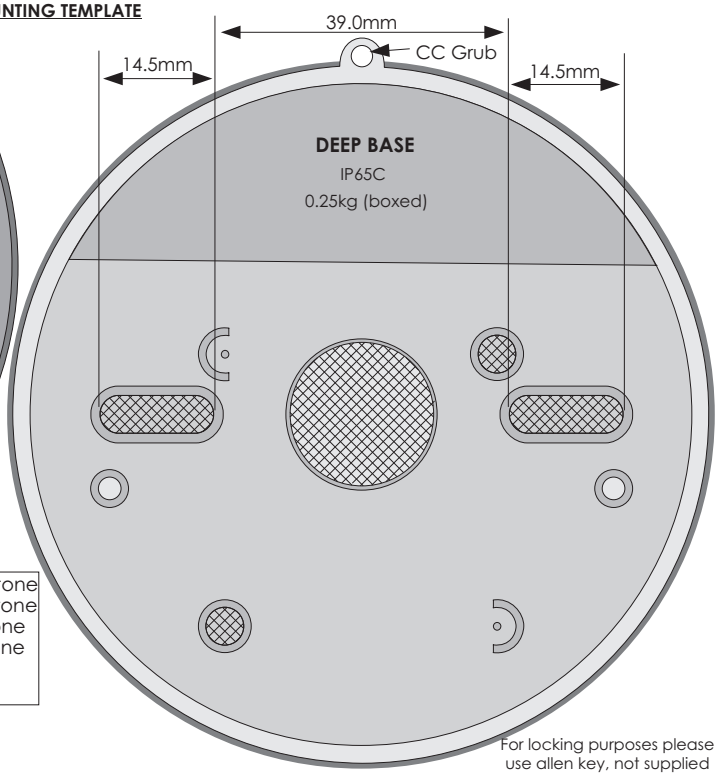


volume

high	C + D (shown)
medium	D + A
low	A + B

1.(-) 2nd stage tone
2.(-) 2nd stage tone
3.(-) 1st stage tone
4.(-) 1st stage tone
5.(+) Positive
6.(+) Positive

MOUNTING TEMPLATE



For locking purposes please use allen key, not supplied

Instruction Insert
VTB 24 Volt 32-Tone Spatial Sounder/Beacon

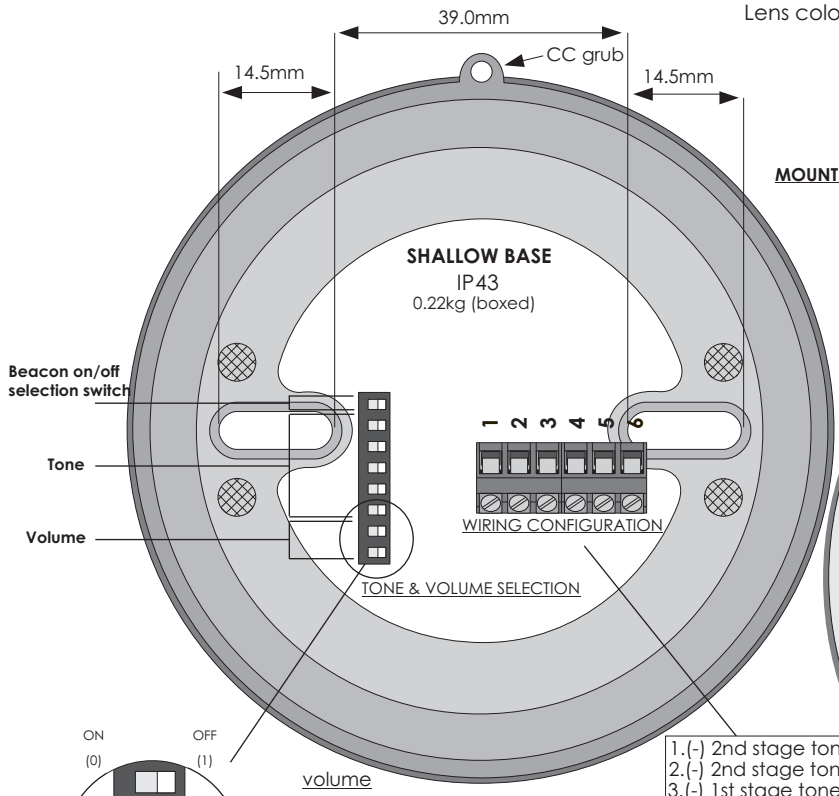
Part Number
511-XXX Series

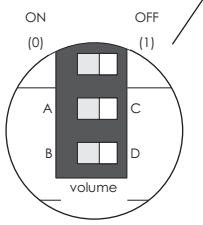
Description
VTB 24V 32-Tone Spatial Sounder/Beacon
Units are available with Deep or Shallow base,
Lens colour options available - red,amber,blue,clear

Voltage Range
18 - 35Vdc

All VTB sounder/beacons are delivered with the volume Set to high and tone set to 11111 (Cranford sweep)

For tone wire neg to term 3 and/or4
For 2nd tone wire neg to 1 and/or2
Note that the 2nd tone will over-ride tone



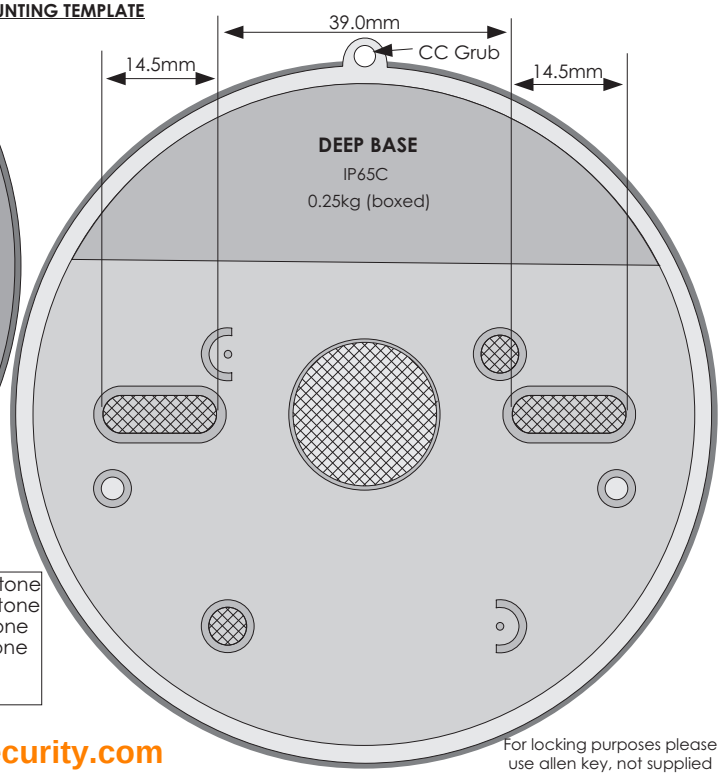


volume

high	C + D (shown)
medium	D + A
low	A + B

1.(-) 2nd stage tone
2.(-) 2nd stage tone
3.(-) 1st stage tone
4.(-) 1st stage tone
5.(+) Positive
6.(+) Positive

MOUNTING TEMPLATE



For locking purposes please use allen key, not supplied

www.acornfiresecurity.com

www.acornfiresecurity.com

TONE LIST - PERFORMANCE

no.	name	1st stage tone (2nd stage tone is continuous as standard)	switch (23456)	typical current (mA) low	medium	high	typical sound output (dBA) low	medium	high
1	LF Sweep (Cranford sweep)	800-1000Hz swept every 500ms (2Hz)	11111	10.2	14.8	23.0	80.1	95.6	99.9
2	Alternative warble BS	800Hz for 250ms, then 960Hz for 250ms	11110	9.9	14.6	19.2	80.4	95.7	100.0
3	Warble Tone BS	800Hz for 500ms, then 1000Hz for 500ms	11101	9.9	14.7	18.9	79.7	94.7	98.5
4	Alternative warble BS	500Hz for 250ms, then 600Hz for 250ms	11100	9.1	12.7	14.9	80.0	95.8	99.1
5	HF Back up Interrupted	2800Hz for 1000ms, then off for 1000ms	11011	12.4	19.4	28.9	79.2	93.7	101.0
6	LF Back up Alarm	800Hz for 150ms, then off for 150ms	11010	10.7	15.0	18.2	78.6	93.6	97.2
7	HF Back up Interrupted (fast)	2800Hz for 150ms, then off for 150ms	11001	11.8	19.4	28.8	78.3	92.9	99.9
8	LF Continuous tone BS5839	800Hz continuous	11000	9.6	14.0	17.4	79.8	94.7	98.4
9	Sweep - 1Hz	800-900Hz swept every 1000ms (1Hz)	10111	9.9	14.8	19.2	80.2	95.6	99.8
10	Australian slow whoop	970Hz for 625ms, then off for 150m	10110	9.9	15.6	19.5	80.2	95.5	99.9
11	Dutch sweep	970Hz continuous	10101	10.1	15.0	19.6	80.2	95.5	100.1
12	Analogue sweep	500-600Hz swept every 500ms (2Hz)	10100	9.1	12.6	14.7	80.2	94.8	97.8
13	Sweep - 3Hz	800-970Hz swept every 333ms (3Hz)	10011	9.9	15.0	19.0	80.2	95.7	100.0
14	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	11.4	19.3	34.5	83.7	95.7	104.6
15	Fast HF sweep	2400-2800Hz swept every 143ms (7Hz)	10001	11.4	19.6	34.4	82.6	97.1	104.2
16	US Temporal Pattern LF	950Hz for 500ms on, 500ms off (x3), then 1500ms off	10000	10.4	15.1	19.6	80.6	96.0	100.5
17	Interrupted BS	800Hz for 500ms, then off for 500ms	01111	9.2	15.1	18.4	79.6	94.5	98.3
18	ISO 8201 LF BS5839 Pt 1	970Hz for 500ms, then off for 500ms	01110	9.2	14.6	20.5	80.1	95.4	99.9
19	Interrupted medium	1000Hz for 250ms, then off for 250ms	01101	11.0	16.0	20.2	78.5	93.8	98.0
20	ISO8201 HF	2850Hz for 500ms, then off for 500ms	01100	12.1	17.5	28.3	79.4	93.4	100.7
21	Continuous	1000Hz continuous	01011	10.2	15.1	20.1	78.9	94.2	98.7
22	LF Buzz	800-950Hz swept every 9ms (110Hz)	01010	9.8	14.7	18.9	79.9	95.3	99.5
23	HF Continuous	2800Hz continuous	01001	11.3	18.6	29.3	79.3	93.8	101.1
24	Sweep	800-970Hz swept every 111ms (9Hz)	01000	9.7	14.6	18.9	80.1	95.5	99.7
25	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	9.7	13.5	20.9	79.5	95.0	99.0
26	Swedish Fire signal	660Hz for 150ms, then off for 150ms	00110	10.4	14.3	17.0	76.0	91.9	95.6
27	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	9.1	11.9	15.6	76.9	93.1	95.9
28	Swedish all clear signal	660Hz continuous	00100	9.3	13.2	16.2	77.1	93.1	96.8
29	US Temporal Pattern HF	2900Hz for 500ms on, 500ms off (x3), then1500ms off	00011	11.3	18.3	28.9	79.2	93.1	100.4
30	Siren 2 way ramp (short)	500-1200Hz rising for 250ms, then falling for 250ms	00010	9.4	13.6	17.6	79.2	94.6	98.7
31	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001	9.8	15.9	19.6	80.2	95.5	100.0
32	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	9.9	15.0	19.7	81.0	95.9	100.2

measurements are recorded in an anechoic chamber

TECHNICAL INFORMATION

Voltage Range (Vdc): 18 - 35
Number of Tones: 32
Operating Frequency (Hz): 440 - 2900
Temperature Range (°C): -20 to +70
Flash Rate: c.1Hz
Monitoring: Reverse Polarity
Protection Rating: IP65
Boxed Weight (kg): 0.25
Base Diameter (mm): Ø93.0
Material: ABS fire retardant plastic

Made in UK

Doc Ref: 125-025 Issue: 005

TONE LIST - PERFORMANCE

no.	name	1st stage tone (2nd stage tone is continuous as standard)	switch (23456)	typical current (mA) low	medium	high	typical sound output (dBA) low	medium	high
1	LF Sweep (Cranford sweep)	800-1000Hz swept every 500ms (2Hz)	11111	10.2	14.8	23.0	80.1	95.6	99.9
2	Alternative warble BS	800Hz for 250ms, then 960Hz for 250ms	11110	9.9	14.6	19.2	80.4	95.7	100.0
3	Warble Tone BS	800Hz for 500ms, then 1000Hz for 500ms	11101	9.9	14.7	18.9	79.7	94.7	98.5
4	Alternative warble BS	500Hz for 250ms, then 600Hz for 250ms	11100	9.1	12.7	14.9	80.0	95.8	99.1
5	HF Back up Interrupted	2800Hz for 1000ms, then off for 1000ms	11011	12.4	19.4	28.9	79.2	93.7	101.0
6	LF Back up Alarm	800Hz for 150ms, then off for 150ms	11010	10.7	15.0	18.2	78.6	93.6	97.2
7	HF Back up Interrupted (fast)	2800Hz for 150ms, then off for 150ms	11001	11.8	19.4	28.8	78.3	92.9	99.9
8	LF Continuous tone BS5839	800Hz continuous	11000	9.6	14.0	17.4	79.8	94.7	98.4
9	Sweep - 1Hz	800-900Hz swept every 1000ms (1Hz)	10111	9.9	14.8	19.2	80.2	95.6	99.8
10	Australian slow whoop	970Hz for 625ms, then off for 150m	10110	9.9	15.6	19.5	80.2	95.5	99.9
11	Dutch sweep	970Hz continuous	10101	10.1	15.0	19.6	80.2	95.5	100.1
12	Analogue sweep	500-600Hz swept every 500ms (2Hz)	10100	9.1	12.6	14.7	80.2	94.8	97.8
13	Sweep - 3Hz	800-970Hz swept every 333ms (3Hz)	10011	9.9	15.0	19.0	80.2	95.7	100.0
14	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	11.4	19.3	34.5	83.7	95.7	104.6
15	Fast HF sweep	2400-2800Hz swept every 143ms (7Hz)	10001	11.4	19.6	34.4	82.6	97.1	104.2
16	US Temporal Pattern LF	950Hz for 500ms on, 500ms off (x3), then 1500ms off	10000	10.4	15.1	19.6	80.6	96.0	100.5
17	Interrupted BS	800Hz for 500ms, then off for 500ms	01111	9.2	15.1	18.4	79.6	94.5	98.3
18	ISO 8201 LF BS5839 Pt 1	970Hz for 500ms, then off for 500ms	01110	9.2	14.6	20.5	80.1	95.4	99.9
19	Interrupted medium	1000Hz for 250ms, then off for 250ms	01101	11.0	16.0	20.2	78.5	93.8	98.0
20	ISO8201 HF	2850Hz for 500ms, then off for 500ms	01100	12.1	17.5	28.3	79.4	93.4	100.7
21	Continuous	1000Hz continuous	01011	10.2	15.1	20.1	78.9	94.2	98.7
22	LF Buzz	800-950Hz swept every 9ms (110Hz)	01010	9.8	14.7	18.9	79.9	95.3	99.5
23	HF Continuous	2800Hz continuous	01001	11.3	18.6	29.3	79.3	93.8	101.1
24	Sweep	800-970Hz swept every 111ms (9Hz)	01000	9.7	14.6	18.9	80.1	95.5	99.7
25	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	9.7	13.5	20.9	79.5	95.0	99.0
26	Swedish Fire signal	660Hz for 150ms, then off for 150ms	00110	10.4	14.3	17.0	76.0	91.9	95.6
27	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	9.1	11.9	15.6	76.9	93.1	95.9
28	Swedish all clear signal	660Hz continuous	00100	9.3	13.2	16.2	77.1	93.1	96.8
29	US Temporal Pattern HF	2900Hz for 500ms on, 500ms off (x3), then1500ms off	00011	11.3	18.3	28.9	79.2	93.1	100.4
30	Siren 2 way ramp (short)	500-1200Hz rising for 250ms, then falling for 250ms	00010	9.4	13.6	17.6	79.2	94.6	98.7
31	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001	9.8	15.9	19.6	80.2	95.5	100.0
32	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	9.9	15.0	19.7	81.0	95.9	100.2

measurements are recorded in an anechoic chamber

TECHNICAL INFORMATION

Voltage Range (Vdc): 18 - 35
Number of Tones: 32
Operating Frequency (Hz): 440 - 2900
Temperature Range (°C): -20 to +70
Flash Rate: c.1Hz
Monitoring: Reverse Polarity
Protection Rating: IP65
Boxed Weight (kg): 0.25
Base Diameter (mm): Ø93.0
Material: ABS fire retardant plastic

Made in UK

www.acornfiresecurity.com