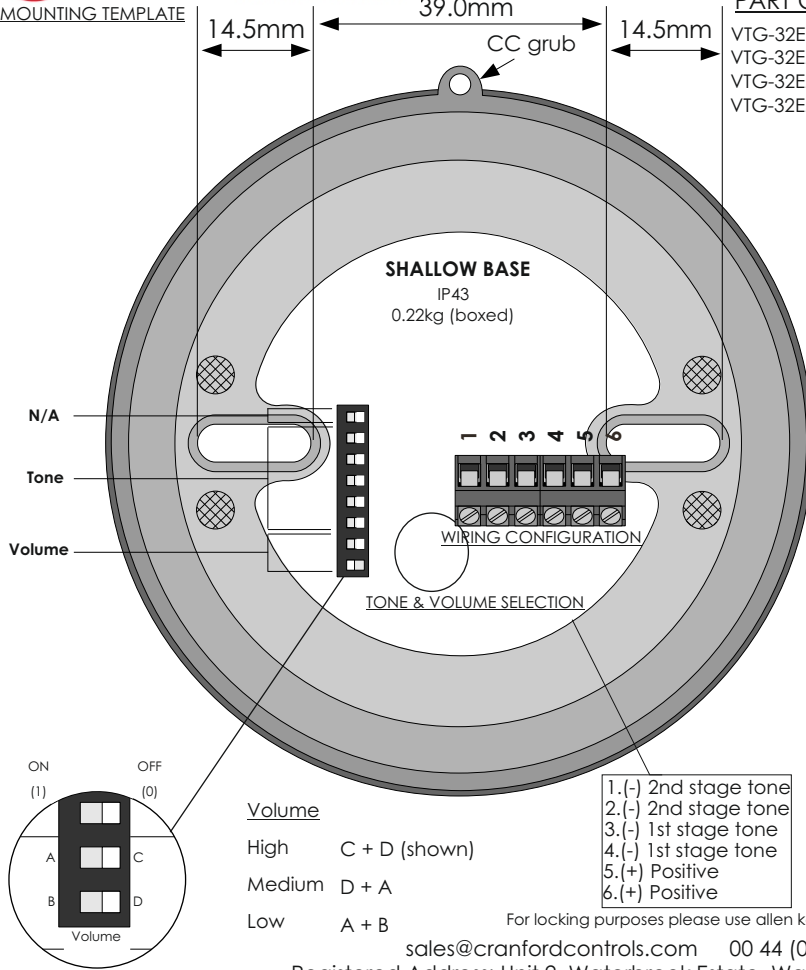
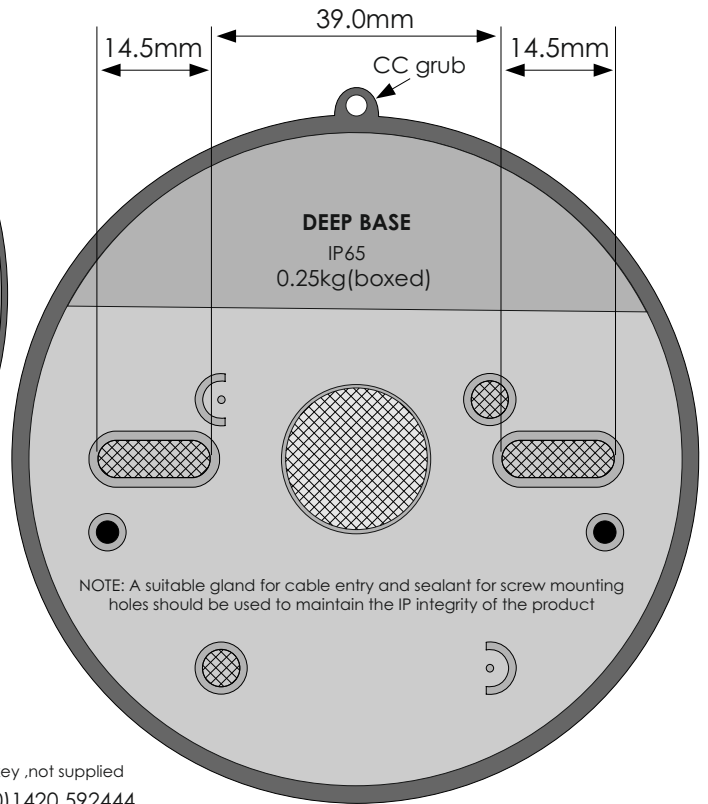


MOUNTING TEMPLATE



PART Code Description

- VTG-32EM-SB-R Marine Approved Spatial Sounder Type A - Shallow Base - Red
- VTG-32EM-DB-R Marine Approved Spatial Sounder Type B - Deep Base - Red
- VTG-32EM-SB-W Marine Approved Spatial Sounder Type A - Shallow Base - White
- VTG-32EM-DB-W Marine Approved Spatial Sounder Type B - Deep Base - White



Registered Address: Unit 2, Waterbrook Estate, Waterbrook Road, Alton, GU34 2UD

STONE LIST - PERFORMANCE

No.	Name	1st stage tone (2nd stage tone is 800Hz continuous as standard)	Switch (23456)	Typical Current (mA)			Typical Sound Output (dBA)		
				Low	Medium	High	Low	Medium	High
* 1	LF Sweep (Cranford sweep)	800-1000Hz swept every 500ms (2Hz)	11111	7.3	12.4	17.3	80.1	95.6	99.9
2	Alternative warble BS	800Hz for 250ms, then 960Hz for 250ms	11110	7.2	12.7	17.2	80.4	95.7	100.0
3	Warble Tone BS	800Hz for 500ms, then 1000Hz for 500ms	11101	7.2	12.3	17.2	79.7	94.7	98.5
4	Alternative warble BS	500Hz for 250ms, then 600Hz for 250ms	11100	6.3	10.2	12.9	80.0	95.8	99.1
5	HF Back up Interrupted	2800Hz for 1000ms, then off for 1000ms	11011	8.7	17.1	27.5	79.2	93.7	101.0
6	LF Back up Alarm	800Hz for 150ms, then off for 150ms	11010	6.3	11.6	15.9	78.6	93.6	97.2
7	HF Back up Interrupted (fast)	2800Hz for 150ms, then off for 150ms	11001	6.4	17.0	27.3	78.3	92.9	99.9
* 8	LF Continuous tone BS5839	800Hz continuous	11000	8.6	11.5	15.8	79.8	94.7	98.4
9	Sweep - 1Hz	800-900Hz swept every 1000ms (1Hz)	10111	6.8	11.9	16.7	80.2	95.6	99.8
10	Australian slow whoop	970Hz for 625ms, then off for 150ms	10110	7.2	13.1	17.5	80.2	95.5	99.9
* 11	Dutch sweep	970Hz continuous	10101	7.0	13.1	17.8	80.2	95.5	100.1
12	Analogue sweep	500-600Hz swept every 500ms (2Hz)	10100	7.3	10.1	12.6	80.2	94.8	97.8
13	Sweep - 3Hz	800-970Hz swept every 333ms (3Hz)	10011	6.3	12.2	17.2	80.2	95.7	100.0
14	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	7.2	16.3	30.8	83.7	95.7	104.6
15	Fast HF sweep	2400-2800Hz swept every 143ms (7Hz)	10001	8.5	15.9	29.9	82.6	97.1	104.2
16	US Temporal Pattern LF	950Hz for 500ms on, 500ms off (x3), then 1500ms off	10000	8.5	12.0	17.2	80.6	96.0	100.5
17	Interrupted BS	800Hz for 500ms, then off for 500ms	01111	6.2	11.6	16.1	79.6	94.5	98.3
18	ISO 8201 LF BS5839 Pt 1	970Hz for 500ms, then off for 500ms	01110	6.4	13.0	17.7	80.1	95.4	99.9
19	Interrupted medium	1000Hz for 250ms, then off for 250ms	01101	6.4	12.6	17.9	78.5	93.8	98.0
20	ISO8201 HF	2850Hz for 500ms, then off for 500ms	01100	6.2	18.0	27.0	79.4	93.4	100.7
21	Continuous	1000Hz continuous	01011	8.5	12.7	18.0	78.9	94.2	98.7
22	LF Buzz	800-950Hz swept every 9ms (110Hz)	01010	7.4	12.0	16.8	79.9	95.3	99.5
23	HF Continuous	2800Hz continuous	01001	7.1	17.1	27.5	79.3	93.8	101.1
24	Sweep	800-970Hz swept every 111ms (9Hz)	01000	8.5	12.0	16.7	80.1	95.5	99.7
* 25	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	7.0	13.7	19.3	79.5	95.0	99.0
26	Swedish Fire signal	660Hz for 150ms, then off for 150ms	00110	6.2	10.5	14.2	76.0	91.9	95.6
* 27	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	6.2	9.3	11.6	76.9	93.1	95.9
28	Swedish all clear signal	660Hz continuous	00100	6.4	10.4	14.0	77.1	93.1	96.8
* 29	General Alarm / Continuous	1s off, 7x (1311Hz, 1s on, 1s off) 7s on / IMO Code 2, Cont 1311Hz	00011	7.0	12.8	21.7	76.2	89.8	95.5
30	US Temporal HF (ISO 8201)	3X (2900Hz, 0.5s on, 0.5s off) 1s off	00010	6.8	11.2	19.0	79.2	94.6	98.7
31	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001	7.1	12.6	16.8	80.2	95.5	100.0
32	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	7.2	12.7	18.1	81.0	95.9	100.2

Measurements are recorded in an anechoic chamber

* Approved tones

Full datasheet available at www.cranfordcontrols.com - D S142

TECHNICAL INFORMATION

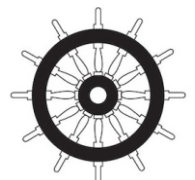
- Voltage range (Vdc): 21.6 - 28
- Operating frequency (Hz): 440 - 2900
- Temperature range (°C): -20 to +70
- Monitoring: Reverse Polarity
- Base diameter (mm): Ø93.0

APPROVALS INFORMATION

- Marine tones located at switch position 29
- General alarm on 1st stage tone
- IMO Code 2 on 2nd stage tone



16



2843 24

Made in UK

Doc Ref:125-128 Issue:011

tone List - PERFORMANCE

No.	Name	1st stage tone (2nd stage tone is 800Hz continuous as standard)	Switch (23456)	Typical Current (mA)			Typical Sound Output (dBA)		
				Low	Medium	High	Low	Medium	High
* 1	LF Sweep (Cranford sweep)	800-1000Hz swept every 500ms (2Hz)	11111	7.3	12.4	17.3	80.1	95.6	99.9
2	Alternative warble BS	800Hz for 250ms, then 960Hz for 250ms	11110	7.2	12.7	17.2	80.4	95.7	100.0
3	Warble Tone BS	800Hz for 500ms, then 1000Hz for 500ms	11101	7.2	12.3	17.2	79.7	94.7	98.5
4	Alternative warble BS	500Hz for 250ms, then 600Hz for 250ms	11100	6.3	10.2	12.9	80.0	95.8	99.1
5	HF Back up Interrupted	2800Hz for 1000ms, then off for 1000ms	11011	8.7	17.1	27.5	79.2	93.7	101.0
6	LF Back up Alarm	800Hz for 150ms, then off for 150ms	11010	6.3	11.6	15.9	78.6	93.6	97.2
7	HF Back up Interrupted (fast)	2800Hz for 150ms, then off for 150ms	11001	6.4	17.0	27.3	78.3	92.9	99.9
* 8	LF Continuous tone BS5839	800Hz continuous	11000	8.6	11.5	15.8	79.8	94.7	98.4
9	Sweep - 1Hz	800-900Hz swept every 1000ms (1Hz)	10111	6.8	11.9	16.7	80.2	95.6	99.8
10	Australian slow whoop	970Hz for 625ms, then off for 150ms	10110	7.2	13.1	17.5	80.2	95.5	99.9
* 11	Dutch sweep	970Hz continuous	10101	7.0	13.1	17.8	80.2	95.5	100.1
12	Analogue sweep	500-600Hz swept every 500ms (2Hz)	10100	7.3	10.1	12.6	80.2	94.8	97.8
13	Sweep - 3Hz	800-970Hz swept every 333ms (3Hz)	10011	6.3	12.2	17.2	80.2	95.7	100.0
14	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	7.2	16.3	30.8	83.7	95.7	104.6
15	Fast HF sweep	2400-2800Hz swept every 143ms (7Hz)	10001	8.5	15.9	29.9	82.6	97.1	104.2
16	US Temporal Pattern LF	950Hz for 500ms on, 500ms off (x3), then 1500ms off	10000	8.5	12.0	17.2	80.6	96.0	100.5
17	Interrupted BS	800Hz for 500ms, then off for 500ms	01111	6.2	11.6	16.1	79.6	94.5	98.3
18	ISO 8201 LF BS5839 Pt 1	970Hz for 500ms, then off for 500ms	01110	6.4	13.0	17.7	80.1	95.4	99.9
19	Interrupted medium	1000Hz for 250ms, then off for 250ms	01101	6.4	12.6	17.9	78.5	93.8	98.0
20	ISO8201 HF	2850Hz for 500ms, then off for 500ms	01100	6.2	18.0	27.0	79.4	93.4	100.7
21	Continuous	1000Hz continuous	01011	8.5	12.7	18.0	78.9	94.2	98.7
22	LF Buzz	800-950Hz swept every 9ms (110Hz)	01010	7.4	12.0	16.8	79.9	95.3	99.5
23	HF Continuous	2800Hz continuous	01001	7.1	17.1	27.5	79.3	93.8	101.1
24	Sweep	800-970Hz swept every 111ms (9Hz)	01000	8.5	12.0	16.7	80.1	95.5	99.7
* 25	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	7.0	13.7	19.3	79.5	95.0	99.0
26	Swedish Fire signal	660Hz for 150ms, then off for 150ms	00110	6.2	10.5	14.2	76.0	91.9	95.6
* 27	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	6.2	9.3	11.6	76.9	93.1	95.9
28	Swedish all clear signal	660Hz continuous	00100	6.4	10.4	14.0	77.1	93.1	96.8
* 29	1st Stage tone General Alarm / Continuous	1s off, 7x (1311Hz, 1s on, 1s off) 7s on / IMO Code 2, Conf 1311Hz	00011	7.0	12.8	21.7	76.2	89.8	95.5
30	US Temporal HF (ISO 8201)	3X (2900Hz, 0.5s on, 0.5s off) 1s off	00010	6.8	11.2	19.0	79.2	94.6	98.7
31	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001	7.1	12.6	16.8	80.2	95.5	100.0
32	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	7.2	12.7	18.1	81.0	95.9	100.2

Measurements are recorded in an anechoic chamber

* Approved tones

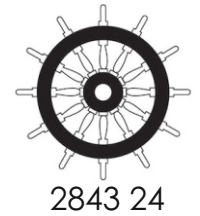
Full datasheet available at www.cranfordcontrols.com - D S142

TECHNICAL INFORMATION

Voltage range (Vdc): 21.6 - 28
 Operating frequency (Hz): 440 - 2900
 Temperature range (°C): -20 to +70
 Monitoring: Reverse Polarity
 Base diameter (mm): Ø93.0

APPROVALS INFORMATION

Marine tones located at switch position 29
 General alarm on 1st stage tone
 IMO Code 2 on 2nd stage tone

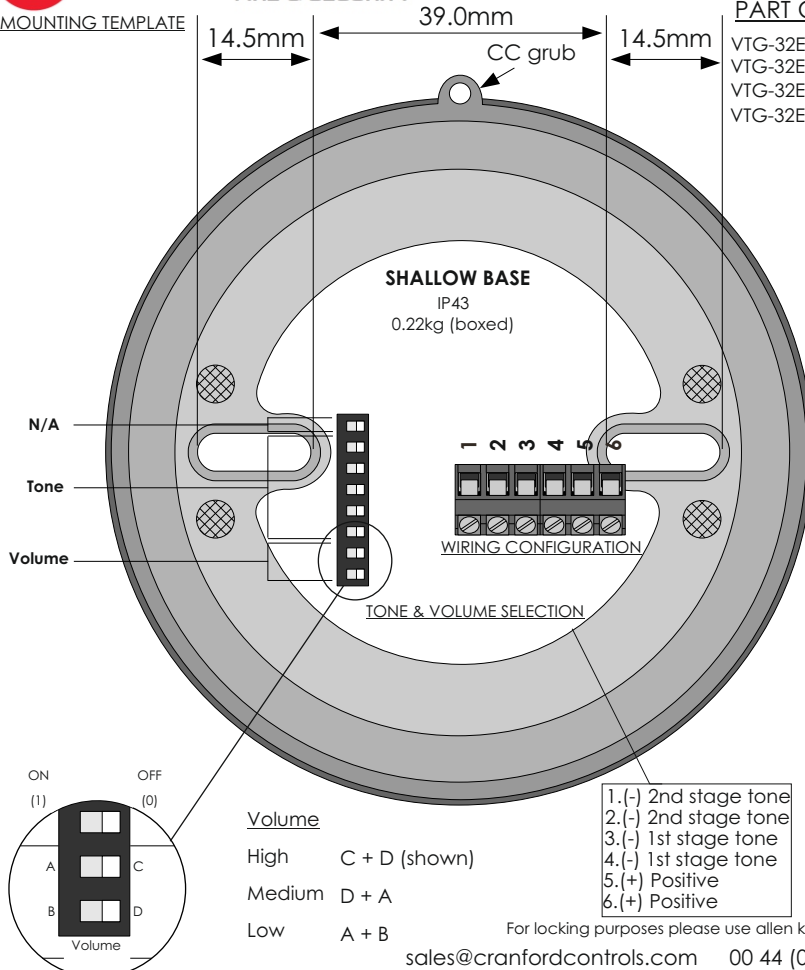


Made in UK

Doc Ref:125-128 Issue:011



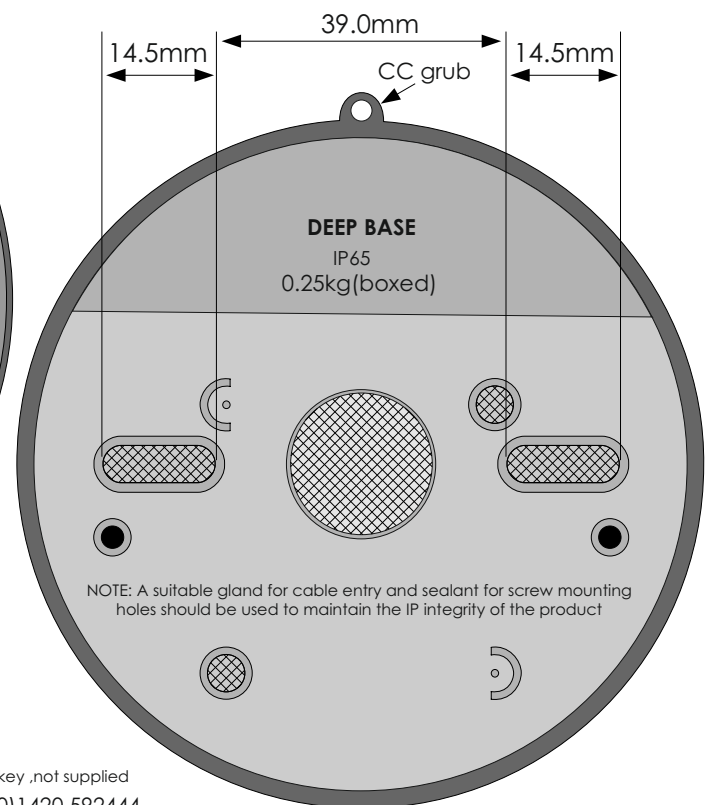
MOUNTING TEMPLATE



Instruction Insert
 VTG-32EM Marine Approved Spatial Sounder 24Vdc

PART Code Description

- VTG-32EM-SB-R Marine Approved Spatial Sounder Type A - Shallow Base - Red
- VTG-32EM-DB-R Marine Approved Spatial Sounder Type B - Deep Base - Red
- VTG-32EM-SB-W Marine Approved Spatial Sounder Type A - Shallow Base - White
- VTG-32EM-DB-W Marine Approved Spatial Sounder Type B - Deep Base - White



sales@cranfordcontrols.com 00 44 (0)1420 592444

Registered Address: Unit 2, Waterbrook Estate, Waterbrook Road, Alton, GU34 2UD