



AA Integrated Base Sounder

Product Overview:

The **Integrated Base Sounder BSO-DD-N34** integrates a sounder and a detector base into one device.

The sounder offers a choice of 32 tone sets, and three volume settings, selectable by DIL switch. It communicates with a control panel using the System Sensor Analogue Addressable protocol.

Each tone set has two tones ("stage 1", and "stage 2"). The control panel is able to activate either the stage 1, or stage 2, tone, via the analogue addressable loop.

Product performance has been optimised utilising the latest developments in piezoelectric transducer technology to minimise current consumption and enable a large number of devices to be installed on a loop, without compromising sound output levels.

The **Integrated Base Sounder** is installed simply by a twist fit onto the **B501AP** base, significantly reducing the total cost of installation. A short-circuit Isolator is available as an option (**BSO-DD-I34**).



BSO-DD-N34 AA Integrated Base Sounder



B501AP-IV Low Profile Base

Features:

- » Fully loop powered
- » 32 two-stage tone sets including ISO8201 (T3) & AS2220, selectable with DIL switch
- » Three volume settings – High, Medium and Low
- » Reduces the total cost of installation
- » Sounder uses a separate Module address
- » Common installation base with other Sounders/Strobes in the range
- » Single point of installation for Detector and Sounder
- » Available with short-circuit Isolator (BSO-DD-I34) or without Isolation (BSO-DD-N34)
- » Simple commissioning procedure
- » Optimised performance increases number of devices on an intelligent loop
- » Fault finding simplified
- » Shorting spring in base for continuity testing
- » Anti-tamper feature in mounting base

Sounder Output and Current Ratings*:

Tone Number	Pattern	Nominal Frequency	Cycle	Current (mA) @ 24V			Current (mA) @ 15V			Output (dBA) @ 1m ± 3dB			Stage 2
				High	Med	Low	High	Med	Low	High	Med	Low	Tone
1	Alternating	525 / 440	2 Hz (100 ms / 400 ms)	4.19	1.58	0.89	6.81	2.34	1.16	95.2	90.5	46.565	7
2	Alternating	800 / 922	1 Hz	5.56	1.58	1.18	5.6	2.31	1.63	94.1	90.15	87.8	8
3	Alternating	800 / 922	2 Hz	3.27	1.58	1.15	5.15	2.2	1.63	94	90	87.6	8
4	Alternating	2400 / 2900	3 Hz	5.8	3.67	1.72	9.61	5.76	2.6	95.15	90.8	83.35	10
5	Alternating	2500 / 3100	2 Hz	6.01	3.7	1.72	9.91	6.22	2.56	98.6	91.55	83	10
6	Alternating	988 / 645	2 Hz	3.08	1.49	1.12	5.59	2.31	1.68	93.5	88.2	85.45	8
7	Continuous	630		4.30	1.48	1.02	5.77	2.2	1.4	95.05	89.7	85.65	1
8	Continuous	922		4.21	1.39	1.12	4.05	2.02	1.58	94	90.15	87.8	2
9	Continuous	1200		4.08	1.71	1.27	6.59	2.55	1.78	96.6	92.15	88.95	2
10	Continuous	2810		4.9	3.29	1.56	8.61	5.14	2.3	93.5	91.8	85.7	4
11	Sweep	150 - 1000	150 Hz to 1 KHz in 10 s, then 40 s at 1 KHz, then 1 KHz to 150 Hz in 10 s, then 20 s at 150 Hz, then repeat. Total cycle 80 s.	3.74	1.71	1.36	6.18	2.54	1.93	93.15	87.9	85.95	22
12	Intermittent	420	AS 2220 alert signal: 0.625 s on, 0.625 s off. Volume increases in 10 dB steps from -50 dB on first cycle to full volume on cycle 6, then full volume for every subsequent cycle.	4.59	1.69	0.84	7.77	2.56	1.1	95.6	91.1	84	13
13	Sweep	500 - 1200	AS 2220 evacuate signal: 0.25 sec off, 3.75 sec on	4.46	2.22	1.48	7.36	3.7	2.05	96.35	91.15	87.5	12
14	Intermittent	630	3.33 Hz 150 ms on, 150 ms off	3.31	1.38	0.98	5.39	2.08	1.31	93.9	88.3	84.5	7
15	Intermittent	922	0.8 Hz 0.25 s on, 1 s off	2.53	1.38	1.12	4.1	1.97	1.55	93.45	89.45	87.15	8
16	Intermittent	922	0.5 Hz 1 s on, 1 s off	2.57	1.39	1.13	4.05	2.35	1.57	94.05	89.25	87.8	8
17	Intermittent	2810	1 Hz	5.4	2.4	1.59	8.44	5.16	2.3	94.95	91.65	85.5	10
18	Intermittent	922	1 Hz 500 ms on, 500 ms off	2.61	1.4	1.11	4.16	3.78	1.56	94	90	87.5	8

Tone Number	Pattern	Nominal Frequency	Cycle	Current (mA) @ 24V			Current (mA) @ 15V			Output (dBA) @ 1m ± 3dB			Stage 2
				High	Med	Low	High	Med	Low	High	Med	Low	Tone
19	Intermittent	950	ISO8201 T3 (4.0 second temporal pattern): (0.5 s on, 0.5 s off) x 3, 1.0 s off, then repeat	3.03	1.51	1.21	4.93	2.23	1.69	94.75	90.25	87.8	12
20	Continuous	800		3.29	1.56	1.17	5.43	3.38	1.63	92.9	87.25	84.1	22
21	Sweep	400 - 1200	ISO8201 T3 (4.0 second temporal pattern): (0.5 s on, 0.5 s off) x 3, 1.0 s off, then repeat	3.85	1.66	1.15	6.36	2.59	1.57	94.9	90	85.65	12
22	Sweep	1200 - 500	0.99 Hz 1 s on, 0.01 s off	4.07	2.96	1.4	6.91	2.59	1.66	95.3	90.55	86.65	20
23	Sweep	2400 - 2850	7 Hz	4.99	3.08	1.72	8.46	4.92	2.53	93	89.15	83	10
24	Sweep	500 - 1200	(0.5 s off, 3.5 s on)	4.36	2.04	1.5	7.36	3.61	2.16	96.35	91.3	87.85	8
25	Sweep	800 - 970	50 Hz	3.06	1.54	1.19	4.94	2.26	1.63	93.8	89.05	86.1	8
26	Sweep	800 - 970	7 Hz	2.77	1.59	1.21	4.45	2.33	1.67	93.1	89.55	86.55	8
27	Sweep	800 - 970	1 Hz	2.97	1.67	1.25	5.59	2.48	1.7	93.6	90.55	87.8	8
28	Sweep	2400 - 2850	50 Hz	4.93	3.07	1.76	8.37	4.9	2.58	91.8	87.45	81.2	10
29	Sweep	500 - 1000	7 Hz	2.96	1.45	1.08	8.28	4.85	2.58	94	89.05	85.65	8
30	Sweep	500 - 1200 - 500	0.166 Hz rise 1 s, stable 4 s, fall 1 s	4.01	1.7	1.29	6.7	3.24	2.09	96.45	92.3	89	8
31	Sweep	800 - 1000	2 Hz	2.49	1.6	1.24	6.25	2.4	1.69	94.15	89.9	87.35	8
32	Sweep	2400 - 2850	1 Hz	5.79	3.26	1.74	9.57	5.29	2.69	94.5	91.05	84.9	10

Isolator versions draw an additional 0.19 mA (Shown in the above two tables).

The values above include only the sounder current consumption. Detector current is excluded.

All values shown are (maximum current, average sound) at 25 °C.

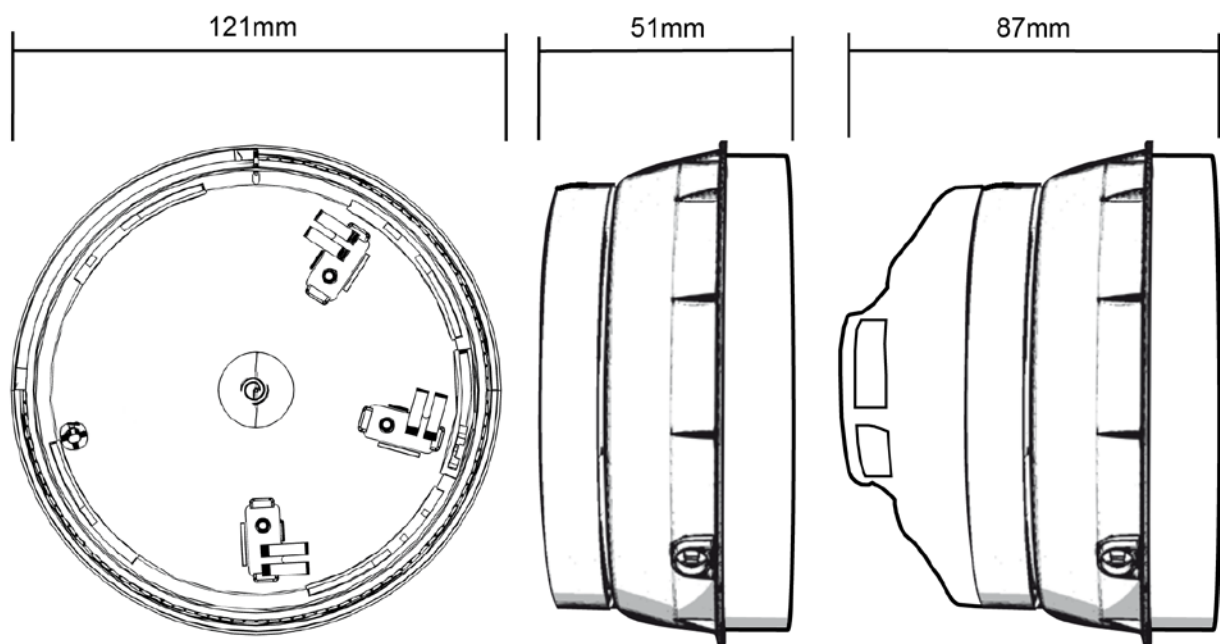
Note that the sounder contains a fixed output switching supply. The sound level and sounder power consumption are independent of the supply voltage. The sounder draws extra current at lower supply voltages to maintain constant sound level.

* This information is for guidance only.

Specifications:

» Operating Voltage	15 to 32 Vdc (Non-Isolation) 15 to 28 Vdc (Isolation)
» Standby Current	120 μ A (Non-Isolation) 225 μ A (Isolation)
» Maximum current Consumption Sounder	< 10.5 mA (High Volume Tone 21 @ 24 Vdc)
» Maximum Sound Output	95 dB(A) \pm 3 dB @ 1 m (High Volume, Tone 8 @ 24 Vdc) [Tone Dependant – Figure stated is based on high volume 970 Hz Continuous @ 24 Vdc]
» Operating Temperature	-25 $^{\circ}$ C to 70 $^{\circ}$ C
» Humidity	0 to 95% RH, non-condensing
» Ingress Protection	IP24 (with low profile base)
» Colour	Pure White or Detector White (Ivory)
» Weight	202 g
» Terminal Size	1.5 - 2.5 mm ²
» Number of Tones	32
» Volume Setting	High, Medium, and Low

Dimensions (excluding B501AP base):



Ordering Information:

Product Code	Description
BSO-DD-N34	Addressable Detector Base Sounder, White, Non Isolation (Requires B501AP-IV Base)
BSO-DD-I34	Addressable Detector Base Sounder, detector White with Isolation
B501AP-IV	Addressable Detector Base – Ivory (for use with Addressable Sounder)
B501AP-BK	Addressable Detector Base – Black (for use with Addressable Sounder)
WPW	Unbranded Deep Waterproof Base, Pure White (Includes LPBW)