

## 1. Technical Specification: DC Sounder-Only/DC Sounder with 5J Xenon Beacon

Supply Voltage Range	10-60V DC	
Current – Sounder	8-40mA*	(Typ. 30mA @ 24V, Tone 1)
Current – Beacon (Where fitted)	250mA Average, 700mA Peak*	
Peak Sound Level:	100-113 dBA at 1m*	(Typ. 105dBA @ 24V, Tone 1)
Number of Tones:	64	
Frequency Range	340-2900 Hz*	
Volume Control	20dBA typical	
Remote Tone Switching	Provision for 3 alarm stages (Negative voltage activation)	
Operating Temperature:	- 25°C to +70°C	
Casing:	High Impact Polycarbonate/ABS	
IP Rating:	IP66	
Synchronisation	Automatic with Klaxon Nexus and Sonos Sounders	







\*depends on selected tone and supply voltage

## 2. Installation

- a. The sounder is installed by first mounting the base unit and making the external wiring connections to the base. The head unit then automatically connects when it is attached to the base.
- b. The sounder head is separated from the base by unlocking the four ¼-turn fasteners in the corners of the sounder. (Recommended screwdriver: Philips No. 2, min 100mm long).
- c. Note that the head only fits onto the base one way around. If a beacon is fitted, care should be taken when mounting the base to ensure that the beacon will be positioned in the desired orientation after the sounder is attached.

## 3. Wiring

The sounder and beacon have separate wiring terminals. Each terminal is duplicated to enable simple 'daisy-chain' connection of multiple units.

Line	Terminal Marking
Sounder Positive Supply (10 to 60V DC)	 +
Sounder Negative Supply (0V)	 -
2 <sup>nd</sup> Stage Alarm Control (Connect to 0V to activate)	 S2
3 <sup>rd</sup> Stage Alarm Control (Connect to 0V to activate)	 S3
Beacon Positive Supply (10 to 60V DC)	 +
Beacon Negative Supply (0V)	 -

## 4. Controls

### a. Tone Selection

The first and second stage alarm tones are independently set using 6-way dipswitches S1 and S2 respectively. The required settings are shown in the table overleaf. The third stage alarm tone is pre-set to complement the selected first stage tone as shown in the table.

### b. Volume Control

The sound output of the unit can be reduced by up to 20dBA by adjusting the potentiometer.

### c. Beacon Flash Controls (If fitted)

The flash mode of the beacon can be altered using the 2-way dipswitch marked 

Switch	Off	On
1	Single Flash	Double Flash
2	60 flashes per minute	30 flashes per minute

# Nexus 105 DC

# Tone Table

TONE	TOPE TYPE	TOPE DESCRIPTION/ APPLICATION	DIP SWITCH (S1/S2) 1 2 3 4 5 6	3 <sup>rd</sup> STAGE TONE	PEAK SOUND LEVEL (dBA @ 1m)	SOUNDER CURRENT (mA AVG)
1.	————	970Hz (BS5839-1:2002)	0-0-0-0-0-0	18	105	31
2.	□□□□	800Hz/970Hz @ 2Hz (BS5839-1:2002)	0-0-0-0-0-1	1	105	28
3.	∩∩∩∩	800Hz – 970Hz @ 1Hz (BS5839-1:2002)	0-0-0-0-1-0	1	104	25
4.	- - - -	970Hz 1s OFF/1s ON (Apollo Fire Systems Alert Tone, BS5839-1:2002)	0-0-0-0-1-1	1	105	17
5.	□□□□	970Hz, 0.5s/ 630Hz, 0.5s (Apollo Fire Systems Evacuate Tone, BS5839-1:2002)	0-0-0-1-0-0	1	105	27
6.	□□□□	554Hz, 0.1s/ 440Hz, 0.4s (France – AFNOR NF S 32 001 )	0-0-0-1-0-1	1	103	20
7.	∩∩∩∩	500 – 1200Hz, 3.5s/ 0.5s OFF (Netherlands – NEN 2575:2000)	0-0-0-1-1-0	1	108	19
8.	- - - -	420Hz 0.625s ON/0.625s OFF (Australia AS1670 Alert tone)	0-0-0-1-1-1	1	102	10
9.	∩∩∩∩	500 – 1200Hz, 0.5s/ 0.5s OFF x 3/1.5s OFF (Australia AS1670 Evacuation tone)	0-0-1-0-0-0	1	106	13
10.	□□□□	550Hz/440Hz @ 0.5Hz	0-0-1-0-0-1	19	104	21
11.	- - - -	970Hz, 0.5s ON/0.5s OFF x 3/ 1.5s OFF (ISO 8201 Low tone)	0-0-1-0-1-0	1	105	13
12.	- - - -	2850Hz, 0.5s ON/0.5s OFF x 3/1.5s OFF (ISO 8201 High tone)	0-0-1-0-1-1	1	107	16
13.	∩∩∩∩	1200Hz – 500Hz @ 1Hz (DIN 33 404)	0-0-1-1-0-0	1	109	22
14.	————	400Hz	0-0-1-1-0-1	18	101	16
15.	□□□□	550Hz, 0.7s/1000Hz, 0.33s	0-0-1-1-1-0	1	105	25
16.	∩∩∩∩	1500Hz – 2700Hz @ 3Hz (Vandal Alarm)	0-0-1-1-1-1	1	113	32
17.	🔔	Simulated Bell	0-1-0-0-0-0	1	107	18
18.	————	2400Hz	0-1-0-0-0-1	1	110	26
19.	————	660Hz	0-1-0-0-1-0	10	102	25
20.	- - - -	660Hz 1.8s ON/1.8s OFF	0-1-0-0-1-1	19	102	14
21.	- - - -	660Hz 0.15s ON/0.15s OFF	0-1-0-1-0-0	19	102	14
22.	□□□□	510Hz, 0.25s/ 610Hz, 0.25s	0-1-0-1-0-1	1	103	24
23.	□□□□	800/1000Hz 0.5s each (1Hz)	0-1-0-1-1-0	1	106	25
24.	∩∩∩∩	250Hz – 1200Hz @ 12Hz	0-1-0-1-1-1	1	101	23
25.	∩∩∩∩	500Hz – 1200Hz @ 0.33Hz.	0-1-1-0-0-0	1	108	21
26.	∩∩∩∩	2400Hz – 2900Hz @ 9Hz	0-1-1-0-0-1	1	113	39
27.	∩∩∩∩	2400Hz – 2900Hz @ 3Hz	0-1-1-0-1-0	1	111	39
28.	∩∩∩∩	800Hz – 970Hz @ 100Hz	0-1-1-0-1-1	1	104	23
29.	∩∩∩∩	800Hz – 970Hz @ 9Hz	0-1-1-1-0-0	1	104	27
30.	∩∩∩∩	800Hz – 970Hz @ 3Hz	0-1-1-1-0-1	1	105	28
31.	- - - -	800Hz, 0.25s ON/1s OFF	0-1-1-1-1-0	1	103	8
32.	∩∩∩∩	500Hz – 1200Hz, 3.75s/0.25s OFF (AS2220)	0-1-1-1-1-1	1	108	20
33.	————	340Hz	1-0-0-0-0-0	1	101	17
34.	————	1000Hz	1-0-0-0-0-1	18	106	25
35.	∩∩∩∩	1400Hz – 1600Hz, 1s/1600Hz – 1400Hz, 0.5s (NF 48-265)	1-0-0-0-1-0	1	104	34
36.	- - - -	660Hz 6.5s ON/13s OFF	1-0-0-0-1-1	19	102	9
37.	□□□□	1000Hz/2000Hz, 1s each	1-0-0-1-0-0	1	108	25
38.	- - - -	720Hz, 0.7s ON/0.3s OFF	1-0-0-1-0-1	1	104	16
39.	- - - -	970Hz, 0.25s ON/OFF	1-0-0-1-1-0	1	105	17
40.	- - - -	2800Hz, 1s ON/OFF	1-0-0-1-1-1	1	106	20
41.	- - - -	2800Hz 0.25s ON/OFF	1-0-1-0-0-0	1	106	19
42.	□□□□	2400/2900 @ 2Hz	1-0-1-0-0-1	1	113	38
43.		Chime, 554Hz/440Hz Single shot 'ding dong'	1-0-1-0-1-0	1	100	15
44.		Chime, 554Hz/440Hz Repeating 'ding dong'	1-0-1-0-1-1	1	102	15
45.		Chime, 970Hz/800Hz Single shot 'ding dong'	1-0-1-1-0-0	1	101	36
46.		Chime, 970Hz/800Hz Repeating 'ding dong'	1-0-1-1-0-1	1	100	36
47.		Hooter, Repeating	1-0-1-1-1-0	1	102	13
48.	□□□□	Gentle alarm - Tone 2, rises slowly to full volume over 30s	1-0-1-1-1-1	1	105	28
49.	□□□□	Time-Out Alarm – As Tone 2, cuts off after 10 mins	1-1-0-0-0-0	1	105	28
50.	□□□□	Time-Out Alarm – As Tone 2, cuts off after 2 mins	1-1-0-0-0-1	1	105	28
51.	- - - -	750Hz 0.33s ON/0.51s OFF	1-1-0-0-1-0	1	103	8
52.	- - - -	750Hz 0.51s ON/0.33s OFF	1-1-0-0-1-1	1	103	15
53.	- - - -	550Hz, 0.33s/1000Hz, 0.7s	1-1-0-1-0-0	1	106	25
54.	∩∩∩∩	600Hz – 900Hz/ 0.9s	1-1-0-1-0-1	1	104	31
55.	∩∩∩∩	660Hz – 680Hz/ 0.9s	1-1-0-1-1-0	1	101	28
56.	∩∩∩∩	670Hz – 725Hz/ 0.9s	1-1-0-1-1-1	1	104	25
57.	∩∩∩∩	920Hz – 750Hz/ 0.9s	1-1-1-0-0-0	1	104	30
58.	∩∩∩∩	700Hz - 900Hz, 0.3s/0.6s OFF	1-1-1-0-0-1	1	104	11
59.	∩∩∩∩	900Hz - 760Hz, 0.6s/0.3s OFF	1-1-1-0-1-0	1	105	19
60.	————	750Hz	1-1-1-0-1-1	18	103	22
61.		Power Only – Use with Stage 3 control for manual/intermittent chime triggering	1-1-1-1-0-0	43		
62.		Power Only – Use with Stage 3 control for manual/intermittent chime triggering	1-1-1-1-0-1	43		
63.		Power Only – Use with Stage 3 control for manual/intermittent horn triggering	1-1-1-1-1-0	47		
64.		Reserved for future use	1-1-1-1-1-1			

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