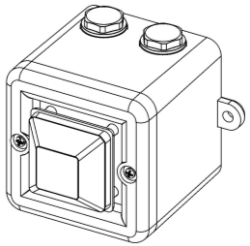
INSTRUCTIONS & SERVICE MANUAL
SON4B – 10 Tone Sounder & Filament Lamp Beacon 'Sonora'

SON4B SOUNDER & FILAMENT LAMP BEACON DESCRIPTIONS

- Automatic synchronisation on multi-sounder system.
- Duplicate cable terminations (in & out for daisy-chain installations).
- Cable entries: 2x M20 entry positions
- Terminals: 0.5-1.5mm² cables.
- Ingress protection: IP66
- Operating temperature: -25°C to +55°C [-13°F to +131°F]
- Approvals: CE, UKCA
  VdS approved: EN54-3 (CPD 89/106/EEC).
  EAC: RU D-GB.GA05.B.12595-20



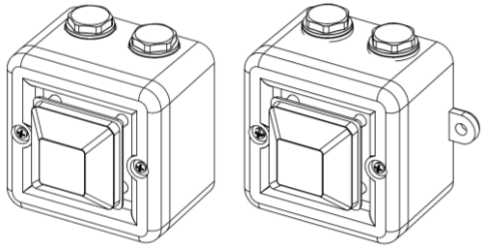
SON4B AC MODEL

Sounder functions:

- Number of tones: 10 (UKOOA / PFEER compliant)
- Number of stages: 3
- Stage switching: Negative

Beacon functions:

- Beacon type: 1.3W Filament bulb/lamp
- Flash rate: 1Hz
- Lens colours: Amber, blue, red



(no mounting lugs) (with mounting lugs)

SON4B DC MODEL

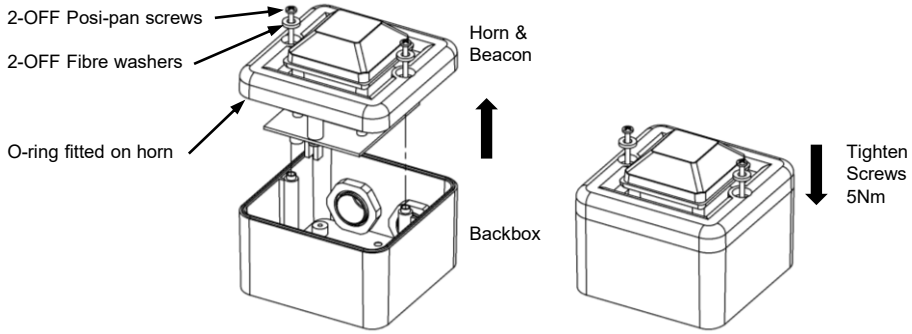
ELECTRICAL RATINGS

Model Number	Nominal Voltage	Voltage Range	Current
SON4BDC24[x]/[y]*	24Vdc	+/-25%	95mA**
SON4BAC24[x]/[y]	24Vac 50/60Hz	+/-10%	180mA
SON4BAC115[x]/[y]	115Vac 50/60Hz	+/-10%	50mA
SON4BAC230[x]/[y]	230Vac 50/60Hz	+/-10%	30mA

[x] = Enclosure colour
[y] = Lens colour
* For DC units, two backbox options are available. Model numbers with code 'M' describe backbox option with mounting lugs, e.g. SON4BDC24M[x]/[y]. Model numbers without code 'M' describe backbox option without mounting lugs, e.g. SON4BDC24[x]/[y].
** Current at nominal voltage on Tone 1.

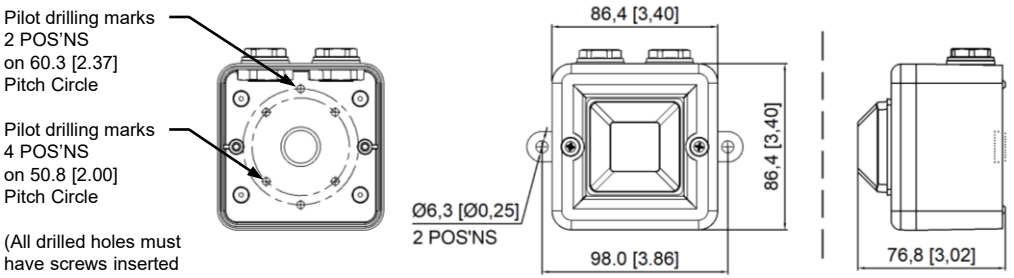
ACCESS TO ENCLOSURE

Loosen pozi-pan screws in two positions to access enclosure.



MOUNTING POSITIONS

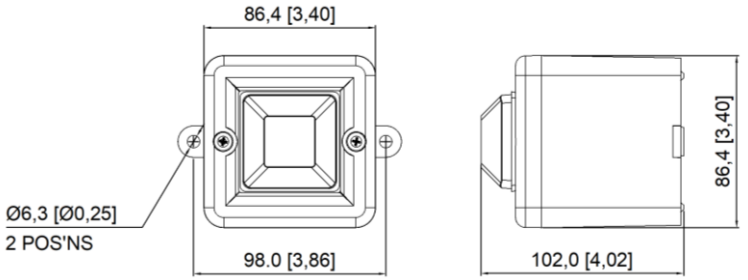
DC Models (Dimensions in mm [in]):



Backbox without mounting lugs e.g. SON4BDC24[x]/[y] (view of backbox internal)

Backbox with mounting lugs e.g. SON4BDC24M[x]/[y]

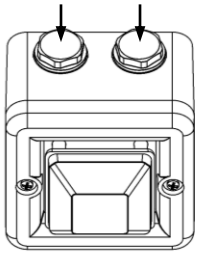
AC Model (Dimensions in mm [in]):



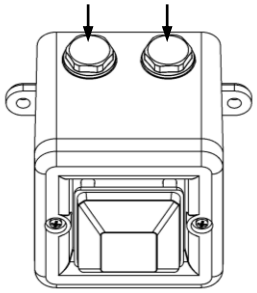
CABLE ENTRIES

The backbox features two cable entries for M20 fittings. All entries are factory fitted with stopping plugs and locking nuts.

Use suitable conduit or cable glands with suitable IP rating.

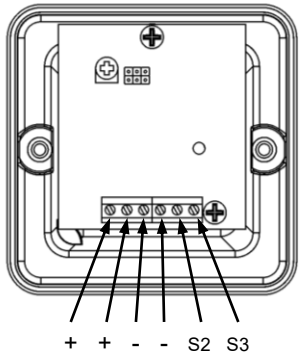


SON4B DC Model
Cable Entries

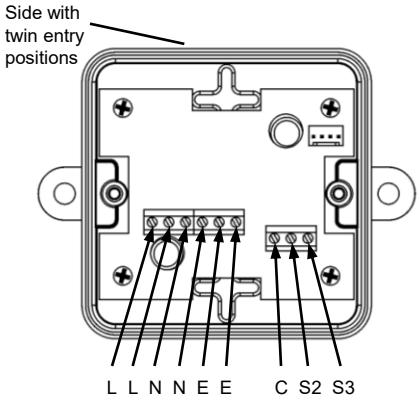


SON4B AC Model
Cable Entries

SON4B TERMINAL CONNECTIONS



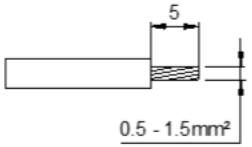
SON4B horn-beacon part
rear view shown with DC terminals



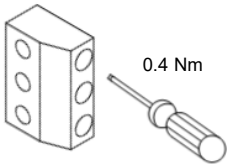
SON4B backbox shown with
AC terminals

See D246-06-101 for schematic diagrams.

Wiring Guidelines:



(Suitable cable size)



(Terminal tightening)

SON4B CPD COMPLIANCE

SON4B 24 Vdc unit is CPD compliant. EN54-3 Type B EN60529: IP66
Beacon is not compliant.

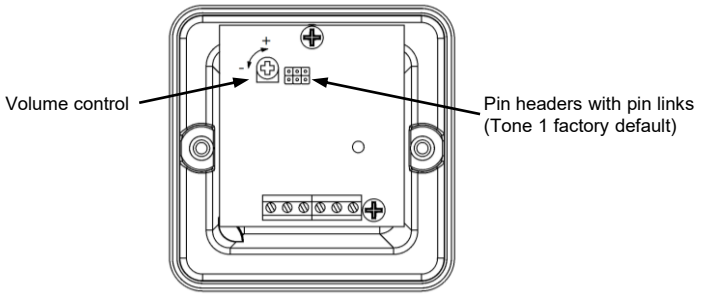
The tones listed have been tested to EN54-3 and are compliant with the Construction Product Directive 89/106/EEC.
EN54-3 test data: document D0665.

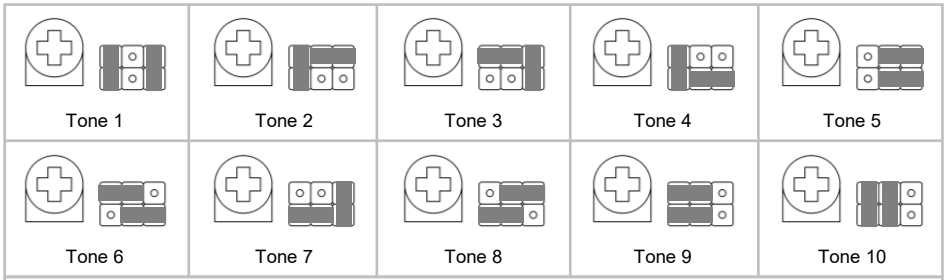
Stage 1 Tone	Frequency Description
Tone 1	800/1000Hz @ 0.25 sec Alternating
Tone 2	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop
Tone 3	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.
Tone 4	544Hz (100mS)/440Hz (400mS) - NF S 32-001
Tone 5	1000Hz Continuous
Tone 8	2400/2900 @ 50Hz sweeping

Please note:
Stages 2 & 3 are not VDS approved.
VDS approved for wall mounting only.

VOLUME CONTROL AND TONE SELECTION

Volume is adjusted with the potentiometer, and tones are selected from the pin headers of the circuit board fitted behind the horn-beacon part.





See Tone Table tone descriptions.

Tone selection. To select a tone place the pin link in the position shown above.

Sélection de la tonalité / réglage des commutateurs. *Pour sélectionner une tonalité, mettre les socles à broches dans les positions illustrées.*

Tonwahl / Einstellung der Schalter. *Zur Wahl eines Tons die Klemmenanschlüsse in die angegebenen Positionen bringen.*

Selezione tono / regolazione commutatore. *Per selezionare un tono, disporre i collegamenti a cavallotto nelle posizioni indicate.*

Seleção de tons / ajuste dos comutadores. *Para seleccionar um tom, coloque as ligações dos pinos na posição mostrada.*

Selección Tono / programación interruptores. *Para seleccionar un tono colocar las conexiones de los puentes en las posiciones mostradas.*

Toonselectie.*Om een toon te selecteren de pinverbinding in de hierboven aangetoonde positive plaatsen.*

Valg af tone. *Valg af en tone sker ved at anbringe stiftforbindelsen i ovenstående position.*

Velge tone. *For å velge en tone må du plassere stiftleddet i posisjonen som vist ovenfor.*

Tonval. *Välj en ton genom att placera stiftanslutningen i läget som visas ovan.*

NOTE: Please check factory settings and ensure the correct alarm tone is selected for your country or application.
Pas op: bij ingebruikstelling dient u zich ervan te overtuigen dat de unit op de juiste toon is ingesteld.

TONE TABLE

Stage 1 Frequency Description	Stage 2 (S2)	Stage 3 (S3)
Tone 1 800/1000Hz @ 0.25 sec Alternating	Tone 8	Tone 5
Tone 2 500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	Tone 1	Tone 8
Tone 3 1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	Tone 1	Tone 8
Tone 4 544Hz (100mS)/440Hz (400mS) - NF S 32-001	554Hz	Tone 2
Tone 5 1000Hz Continuous - PFEER Toxic Gas	Tone 1	Tone 6
Tone 6 Bell	Tone 1	Tone 8
Tone 7 800/1000Hz @ 7Hz Sweeping	Tone 5	Tone 1
Tone 8 2400/2900Hz @ 50Hz Sweeping	Tone 5	Tone 1
Tone 9 420Hz @ 0.625 sec Australian Alert	Tone 10	Tone 5
Tone 10 500-1200Hz 3.75sec /0.25sec. Australian Evac.	Tone 6	Tone 5

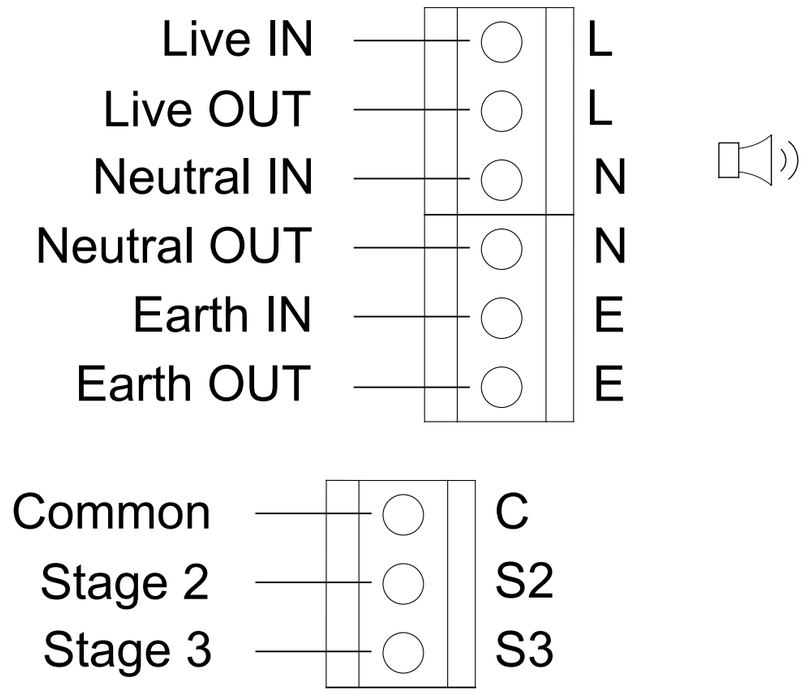
>100dB(A) @ 1m

No liability is accepted for any consequence of the use of this document. The technical specification of this unit is subject to change without notice due to our policy of continual product development. All dimensions are approximate. This unit is sold subject to our standard conditions of sale, a copy of which is available on request.

ISSUE	MOD No.	REASON - INITIAL - DATE
A		INTRODUCTION DH - 05/03/2021

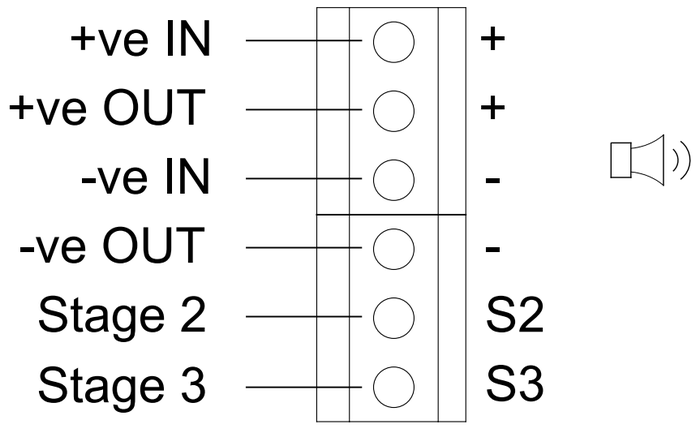
SON4B / SON4L AC Wiring Std. Config.: 1

Power: Live, Neutral, Earth
Stage 1: Apply Power to Live & Neutral
Stage 2: Apply Power to Live & Neutral, connect Stage 2 to Common
Stage 3: Apply Power to Live & Neutral, connect Stage 3 to Common



SON4B / SON4L DC Wiring Std. Config.: 1

Power: +ve & -ve
Stage 1: Apply Power to +ve & -ve
Stage 2: Apply Power to +ve & -ve & connect Stage 2 to -ve
Stage 3: Apply Power to +ve & -ve & connect Stage 3 to -ve



DRAWING TO BS8888:2000
GEOMETRIC TOLERANCES TO ISO1101:1983
LINEAR DIMENSIONAL TOLS
ANGULAR DIMENSIONAL TOLS

STANDARDS
SON4

DRAWN	D.HOWGILL	DATE 05/03/2021
CHECKED	B.ISARD	DATE 05/03/2021
APPROVED	R.N.POTTS	DATE 05/03/2021

SURFACE FINISH | WEIGHT (Kg)
MATERIAL
ALTERNATIVE MATERIAL

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ALL DIMENSIONS IN MM
IF IN DOUBT, ASK - DO NOT SCALE

A3

TITLE SON4B / SON4L (AC/DC) WIRING DIAGRAMS

SCALE	SHEET	DRAWING NUMBER
NTS	1 OF 1	D246-06-101