

# SIGNALLING DEVICES

Easy Selection Guide

SIGNALLING DEVICES



## Beacons – Selection

The environment in which the beacon is to be installed will determine the product type and light intensity required.

### Environmental factors determining selection

- Safe atmosphere or potentially explosive atmosphere (contact NHP for HAE product selection)
- The light output required for the beacon and distance the signal is required to travel
- The duration (duty cycle) the beacon has to operate, i.e. 4, 12, 24 hours / day
- The ambient level of existing light
- The IP rating of the beacon
- The electrical supply available

## STEP 1: Select Beacon Type

Select one of four different types of visual warning beacons.

### XENON Beacons

- Xenon beacons, or otherwise known as ‘strobes,’ operate by a discharge capacitor igniting xenon gas inside a tube creating a brilliant flash of light.
- The tube life of a Xenon beacon is approximately 5 million flashes, so if the application calls for a 24 hour duty cycle the beacon will only last approximately 2-3 months.
- The xenon beacon is the brightest and most effective visual signal.
- This type is best suited to critical safety applications that require the brightest flash available.

### LED Beacons

- LED (light emitting diode) beacons are ideally suited for long life applications typically achieving up to 100,000 hours of service, or up to 10 years.
- LEDs have a low power requirement.
- Light intensity of the LED beacon is not reduced by a coloured lens.
- Recommended for long term applications in remote or inaccessible areas.

### ROTATING Beacons

- Rotating beacons are driven by an electric motor. Much like a light house, this beacon uses a parabolic reflector revolving around a continuously illuminated lamp on the vertical axis.
- Rotating beacons should always be mounted in a vertical position.
- Rotating beacons have a relatively high current draw so they are not recommended for applications which involve continuous operation for long periods of time.
- Ideal for warehouse and factories as the light beams bounce off structures.
- Shorter life compared to LED technology.

### FILAMENT Beacons

- Filament beacons are a simple and well-proven technology.
- They generally give a much lower light output than Xenons as it takes longer for the lamps to fully illuminate.
- Ideal for low cost solutions in areas which are not affected by vibration.
- Suitable for applications involving prolonged continuous operation.

step 1

step 2

**STEP 2: Select Lens Colour**

Different lens colours are used to convey different messages to the observer.

- RED (R)      Serious danger!
- AMBER (A)    Warning, proceed with care.
- GREEN (G)    OK, proceed as normal.
- BLUE (B)      Specific process notice, such as toxic gas alarms.
- CLEAR (C)     No specific meaning – Ideal for night time use over long distance for maximum light output, or application specific.

The intensity of the light can be greatly reduced as it passes through the dome of the beacon. The extent of this reduction is dependent on the type of lamp used and the colour of the lens. The table below gives an indication of the percentage of light that will pass through the lens for different light sources and lens colours.

Colour	Filament	Halogen	Xenon
Clear	100%	100%	100%
Amber	70%	70%	70%
Red	30%	27%	23%
Green	12%	15%	25%
Blue	8%	10%	13%

**Level of brightness**

In general, if the viewing distance is doubled the light intensity observed is reduced to a quarter.

step 3

**STEP 3: Select Voltage**

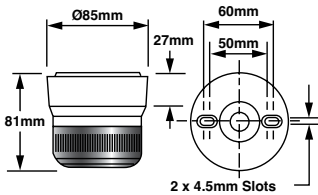
Beacons are available in all common voltages for Australian and New Zealand supply voltages, such as 12 or 24 V DC, 110/230 V AC and 20-72 V AC.

### Different Types of Beacons



#### XENON BEACON KL 306

Features	Lens colour	Voltage	Cat. no.
<ul style="list-style-type: none"> <li>IP 65</li> <li>60 flashes per minute</li> <li>Vandal resistant locking</li> <li>Polycarbonate housing</li> <li>1.4 joule light output</li> </ul>	amber	12/24 V DC	KL3061A
	blue	12/24 V DC	KL3061B
	green	12/24 V DC	KL3061G
	red	12/24 V DC	KL3061R
	amber	110 V AC	KL3063A
	red	110 V AC	KL3063R
	amber	230 V AC	KL3066A
	red	230 V AC	KL3066R
	green	230 V AC	KL3066G

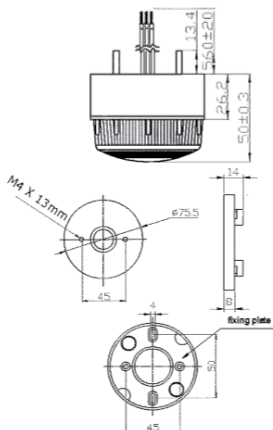


Note: Clear lens – available on indent.



#### XENON BEACON MOX 80

Features	Lens colour	Voltage	Cat. no.
<ul style="list-style-type: none"> <li>IP 67</li> <li>Low current draw</li> <li>Wide voltage range (50 Hz)</li> <li>500 mm flying leads</li> <li>Two point or surface mount fixing</li> <li>Best suited viewing distance up to 20 metres, subject to ambient light</li> <li>Two Joule output @ 60 f.p.m</li> <li>Strobe output only</li> </ul>	amber	10-100 V DC/ 20-72 V AC	MOX80-02A
	green	10-100 V DC/ 20-72 V AC	MOX80-02G
	red	10-100 V DC/ 20-72 V AC	MOX80-02R
	amber	115-230 V AC	MOX80-04A
	green	115-230 V AC	MOX80-04G
	red	115-230 V AC	MOX80-04R

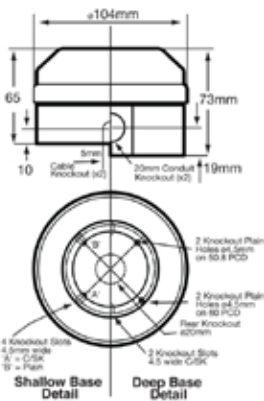


Note: Clear lens – available on indent.



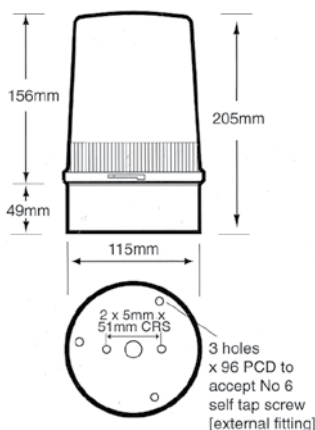
**XENON BEACON  
MOX 195**

Features	Lens colour	Voltage	Cat. no.
<ul style="list-style-type: none"> <li>• IP 65</li> <li>• 60 flashes per minute</li> <li>• Wide voltage range (50Hz)</li> <li>• Optically enhanced flash</li> <li>• 5 joule light output</li> </ul>	amber	15-28 V AC/DC	MOX195-02WHA
	red	15-28 V AC/DC	MOX195-02WHR
	amber	180-265 V AC	MOX195-05WHA
	red	180-265 V AC	MOX195-05WHR



**XENON BEACON  
MOX 200/201**

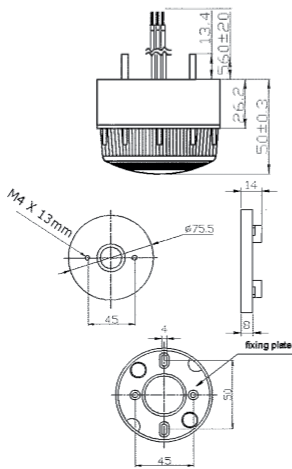
Features	Lens colour	Voltage	Cat. no.
<ul style="list-style-type: none"> <li>• IP 65</li> <li>• 50/60 Hz supply</li> <li>• Strobe output only</li> <li>• 10 joule output @ 60 f.p.m</li> <li>• 7.5 joule output 'double flash' @ 90 f.p.m</li> <li>• Best suited viewing distance up to 100 metres, subject to light conditions</li> </ul>	amber	12/ 24 V DC	MOX201-18A
	blue	12/ 24 V DC	MOX201-18B
	green	12/ 24 V DC	MOX201-18G
	red	12/ 24 V DC	MOX201-18R
	amber	230 V AC	MOX200-22A
	blue	230 V AC	MOX200-22B
	green	230 V AC	MOX200-22G
	red	230 V AC	MOX200-22R



Accessories	Cat. no.
Wall mount bracket – right angle	MO50001
Steel guard – plastic coated	MO50010

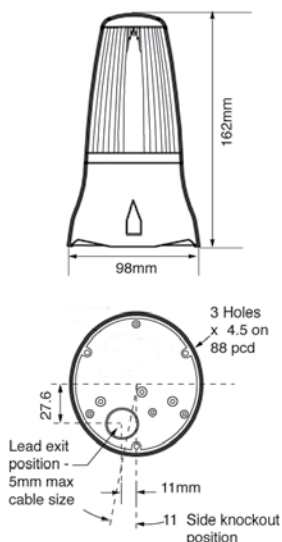
**Note:** 115 V AC available in MOX200-21\_. Refer NHP Pricelist – Part B.

## Different Types of Beacons



### LED BEACONS MOLED 80

Features	Light colour	Voltage	Cat. no.
• IP 67	amber	10-100 V DC	MOLED80-02A
• Low current draw	blue	10-100 V DC	MOLED80-02B
• Wide voltage range (50 Hz)	green	10-100 V DC	MOLED80-02G
• 500 mm flying leads	red	10-100 V DC	MOLED80-02R
• Two point or surface mount fixing	amber	85-265 V AC	MOLED80-04A
• Clear colour lens to give maximum light output	blue	85-265 V AC	MOLED80-04B
	green	85-265 V AC	MOLED80-04G
• Best suited viewing distance up to 20 metres, subject to light conditions	red	85-265 V AC	MOLED80-04R
• Dual operation – static or flash @ 60 f.p.m			



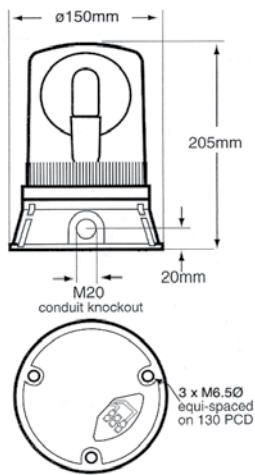
### LED BEACONS MOLED 125

Features	Lens colour	Voltage	Cat. no.
• IP 65	amber	24 V DC	MOLED125-02A
• 50/60 Hz supply	red	24 V DC	MOLED125-02R
• Low current draw	green	24 V DC	MOLED125-02G
• 48 LEDs	amber	115 V AC	MOLED125-03A
• Three modes of operation: static, flashing at 60 f.p.m. and flashing at 120 f.p.m	red	115 V AC	MOLED125-03R
	green	115 V AC	MOLED125-03G
• One metre flying lead (AC only)	amber	230 V AC	MOLED125-04A
• Best suited viewing distance up to 50 metres, subject to light conditions	red	230 V AC	MOLED125-04R
	green	230 V AC	MOLED125-04G

#### Accessories

	Cat. no.
Wall mount bracket – right angle	MO50007
Steel guard – plastic coated	MO50010

Notes: Blue LED option available on indent.

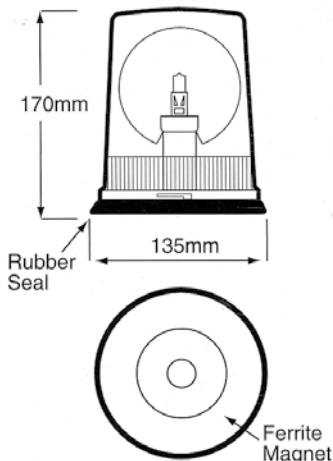


**ROTATING BEACONS  
MOR 400/401**

Features	Lens colour	Voltage	Cat. no.
• IP 65	amber	24 V DC	MOR401-14A
• Wide base for surface mounting	blue	24 V DC	MOR401-14B
• Beam rotation is 120 rpm	green	24 V DC	MOR401-14G
• 50 Hz supply	red	24 V DC	MOR401-14R
• Best suited viewing distance up to 100 metres, subject to light conditions	amber	230 V AC	MOR400-05A
	blue	230 V AC	MOR400-05B
	green	230 V AC	MOR400-05G
	red	230 V AC	MOR400-05R

Accessories	Cat. no.
Wall mount bracket – right angle	M050004
Steel guard – plastic coated	M050010

**Note: 12 V DC, 115 V AC available. Refer NHP Pricelist – Part B.**



**ROTATING BEACONS  
MOR 88**

Features	Lens colour	Voltage	Cat. no.
• IP 65	amber	12 V DC	MOR88-34A
• Rotation is 160 rpm	blue	12 V DC	MOR88-34B
• 50 Hz supply	green	12 V DC	MOR88-34G
• One metre flexible cord	red	12 V DC	MOR88-34R

- Magnetic base
- Car lighter attachment
- Best suited viewing distance up to 100 metres, subject to light conditions

Accessories	Cat. no.
Wall mount bracket – right angle	M050001
Steel guard – plastic coated	M050010

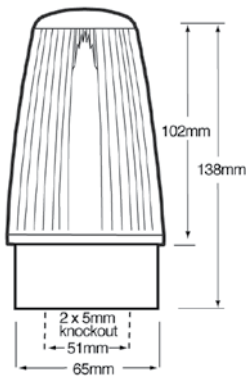
**Note: 24 V DC available. Refer NHP Pricelist – Part B.**



### STATIC FILAMENT BEACON MOSF 125

Features	Lens colour	Voltage	Cat. no.
• IP 65	amber	230 V AC	MOSF125-83A
• 50/60 Hz supply	blue	230 V AC	MOSF125-83B
• 65 mm diameter base	green	230 V AC	MOSF125-83G
• Continuous illuminated beacon	red	230 V AC	MOSF125-83R

- Best suited viewing distance up to 20 metres, subject to light conditions
- Static output only



Accessories	Cat. no.
Wall mount bracket – right angle	M050007
Steel guard – plastic coated	M050003

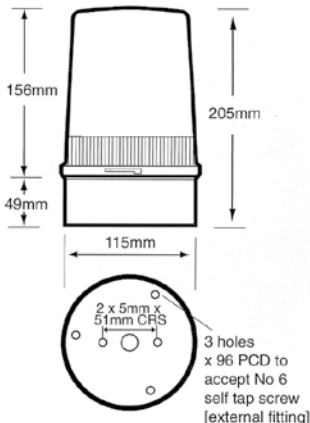
**Note:** 12 V AC/ DC, 24 V AC/ DC, 115 V AC available. Refer NHP Pricelist – Part B.



### FLASHING FILAMENT BEACONS MOFF 200/201

Features	Lens colour	Voltage	Cat. no.
• IP 65	amber	230 V AC	MOFF200-87A
• 50/60 Hz supply	blue	230 V AC	MOFF200-87B
• Flashing output at 60 f.p.m.	green	230 V AC	MOFF200-87G
• 115 mm diameter base	red	230 V AC	MOFF200-87R

- Best suited viewing distance up to 100 metres, subject to light conditions.



Accessories	Cat. no.
Wall mount bracket – right angle	M050001
Steel guard – plastic coated	M050010

**Note:** 12 V DC and 115 V AC available on indent. 24 V DC available. Refer NHP Pricelist – Part B.



### 70mm Control Tower™ Stack Light Modules

Designed for multi-status signal applications. Control tower lights can be assembled from components giving the user full flexibility of design.



(Indicative control tower) including three lights and one piezo buzzer module.

#### 1. Select tower modules (max. five modules)

- IP 65
- Polycarbonate body
- Flash rate 120 f.p.m

Descriptions	Lens colour	Voltage	Cat. no.
continuous, incandescent	green	24 V AC/DC	855TB24DN3
continuous, incandescent	red	24 V AC/DC	855TB24DN4
continuous, incandescent	amber	24 V AC/DC	855TB24DN5
continuous, incandescent	blue	24 V AC/DC	855TB24DN6
continuous, incandescent	clear	24 V AC/DC	855TB24DN7
continuous, incandescent	yellow	24 V AC/DC	855TB24DN8
flashing *, incandescent	green	24 V AC/DC	855TB24FN3
flashing *, incandescent	red	24 V AC/DC	855TB24FN4
flashing *, incandescent	amber	24 V AC/DC	855TB24FN5
flashing *, incandescent	blue	24 V AC/DC	855TB24FN6
flashing *, incandescent	clear	24 V AC/DC	855TB24FN7
flashing *, incandescent	yellow	24 V AC/DC	855TB24FN8
92.107 dual tone piezo style sounder	N/A	24 V AC/DC	855TB24TA3
80-103db 15 tone transducer style sounder	N/A	24 V AC/DC	855TB24TA1

Note: Light or piezo buzzer are classed as one module.

**240 V AC and LED modules also available on request, refer NHP Pricelist – Part R.**

#### 2. Select base for your light module/s

Descriptions	Cat. no.
Black base with cap 10 cm aluminium pole	855TBPM10C
or	
Surface mount (no pole) ½ npt thread	855TBCBC

\* Other options available, refer NHP Pricelist – Part R.

## Sounder – Selection

### Factors determining sounder selection

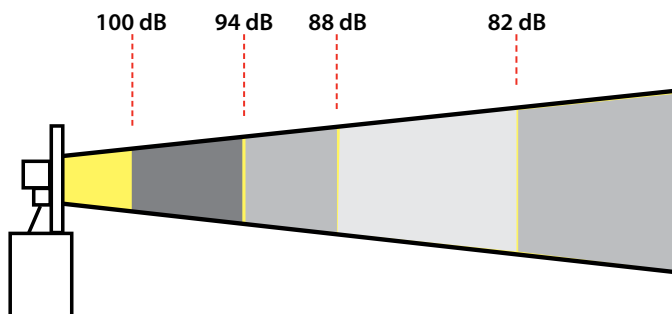
- Ambient noise in the environment
- The duration of signal required
- The noise level required and distance of signal travel
- Supply voltage
- Location - indoors or outdoors; nature of terrain
- Is visual indication also required?

### What happens to sound over distance?

In selecting a sounder for a particular application, the table below can be used as a guide as to the sound level expected at a certain distance away. Local conditions such as wind speed and direction or objects masking the sound path will change the end result. In difficult conditions, the distances a sound can be heard may be significantly less.

## Decibel Level at Distance from Source

		Decibel level (dB) at source																											
		1	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	
Distance from source (m)	1	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140		
	2	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134		
	3	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130		
	5	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126		
	10	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120		
	20	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114		
	30	50	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110		
	50	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106		
	100	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100		
	200	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94		
	400	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90		
	500	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86		
	1000	=	=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80			
	2000				=	=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74			
	3000							=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70			
5000									=	=	38	40	42	44	46	48	50	52	54	56	58	60	62	64	68				



(Double the distance, subtract six dB)

# step 1

## STEP 1: Select Sounder Type

There are four different types of audible signals available.

### ELECTRONIC SOUNDERS

- Most versatile device available.
- Low current consumption and relatively high output.
- Single or multi-tone acoustic sounds. Fast and slow warble, fast and slow pip and continuous note are available. Pre-recorded messages are also a possibility with the Nexus Voice.
- Volume control available.
- Visual and audible signals can be incorporated in one device.
- Designed for easy installation.

### MOTOR DRIVEN SIRENS

- High frequency device.
- Suitable for disaster warnings.

### BELLS

- Cost effective traditional signalling device.
- Medium dB output, delivering a clear loud ring .

### BUZZERS

- Robust construction.
- Low cost.

# step 2

## STEP 2: Select Voltage

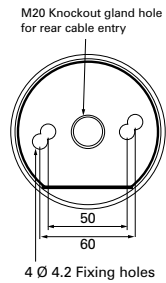
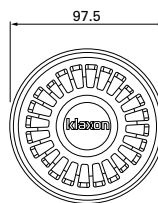
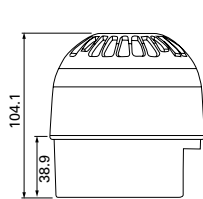
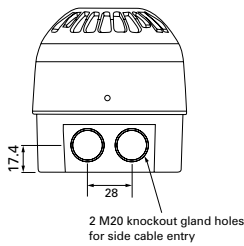
Electronic sounders are available in all common voltages for Australian and New Zealand supply voltages, such as 24 V DC and 110/230 V AC. In addition the NEXUS range has a wide voltage band of 9-60 V DC and is also available in low voltage 24-48 V AC for crane applications.

## Electronic Sounders



### SONOS

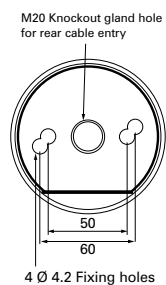
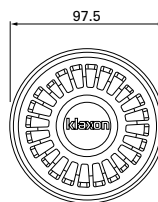
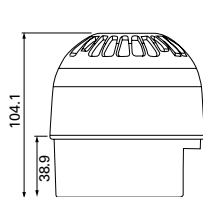
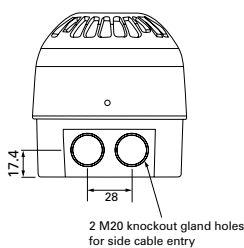
Features	dB@ 1m	Voltage	Cat. no.
• IP 65	93-106	9-60 V DC	KL2494
• M20 cable knock-outs in base	93-106	110/ 230 V AC	KL2492
• 32 tones to choose from (including Australian alert and evacuation tones)			
• Volume adjustment (20 dB turn down)			
• Frequency range 400-2580 Hz			
• KL2494 has provision for 2nd stage alarm that can be controlled separately.			



### SONOS WITH LED BEACON



Features	Lens colour	dB@ 1m	Voltage	Cat. no.
• IP 65	amber	93-106	17-60 V DC	KL2496A
• M20 cable knock-outs in base	red	93-106	17-60 V DC	KL2496R
• 32 tones to choose from (including Australian alert and evacuation tones)				
• Current draw and dB output are tone dependent				
• Volume adjustment (20 dB turn down)				
• Frequency range 400-2580 Hz				
• Sounder and beacon can be controlled separately.				

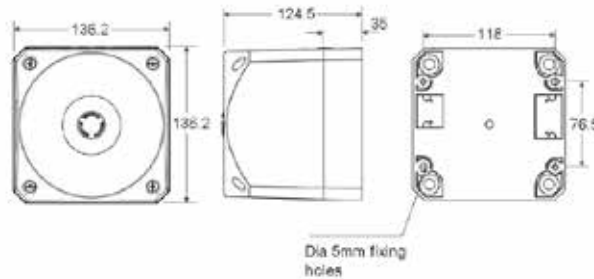


**Electronic Sounders**



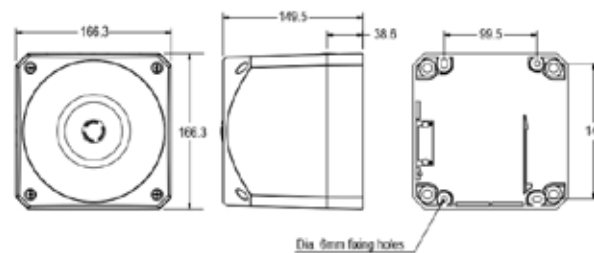
**NEXUS SOUNDER**

Features	dB@ 1m	Voltage	Cat. no.
• IP 66 rated	105	10-60V DC	KL980542
• Volume adjustment (20dB turn down)	105	110-230 V AC	KL980548
• 64 tones to choose from (including Australian alert and evacuation tones) – see page 18	110	10-60V DC	KL980554
• Three stage alarms (DC only) can be controlled separately	110	24-48V AC	KL980605
• Provision for five cable entries	110	110-230 V AC	KL980557
	120	10-60V DC	KL980545
	120	110-230 V AC	KL980551



**NEXUS VOICE SOUNDER**

Features	dB@ 1m	Voltage	Cat. no.
• Nexus Voice – download your own message from a PC using a USB cable (installation CD and guide comes with sander)	110	24V DC	KL980726
• Space for seven messages available in DC model, four available in AC	110	110-230 V AC	KL980784



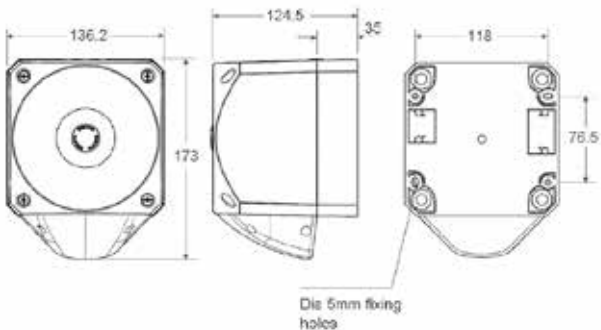
**Note:** Refer to page 18 for list of available nexus tones.

## Electronic Sounders

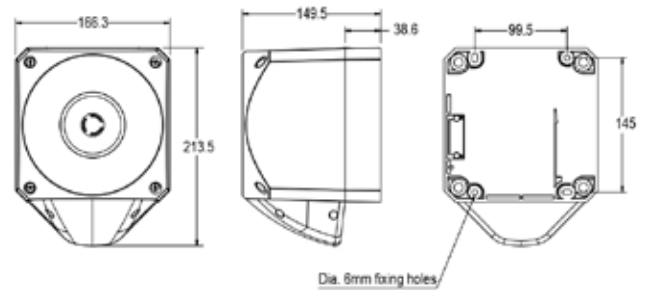


### NEXUS SOUNDER WITH XENON BEACON

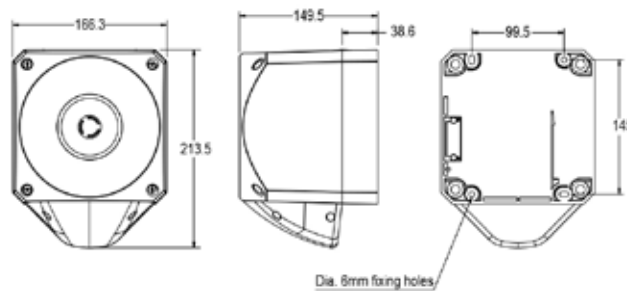
Features	Lens colour	dB@ 1m	Voltage	Cat. no.
• IP 66 rated	red	105	10-60V DC	KL980543
• Volume adjustment (20dB turn down)	amber	105	10-60V DC	KL980544
• Strobe can be controlled separately	red	105	110/230V AC	KL980549
• 64 tones to choose from (including Australian alert and evacuation tones) – see page 18	amber	105	110/230V AC	KL980550
• Three stage alarms (DC only) can be controlled separately	red	110	10-60V DC	KL980555
• Provision for five cable entries	amber	110	10-60V DC	KL980556
• 5 joule xenon strobe	red	110	110/230V AC	KL980558
	amber	110	110/230V AC	KL980559
	red	120	10-60V DC	KL980546
	amber	120	10-60V DC	KL980547
	red	120	110/230V AC	KL980552
	amber	120	110/230V AC	KL980553



Nexus 105 dB Sounder Beacon Dimensions



Nexus 110 dB Sounder Beacon Dimensions



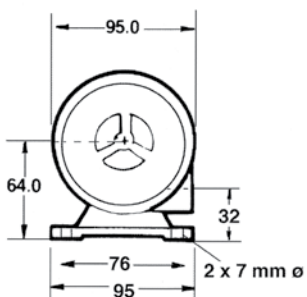
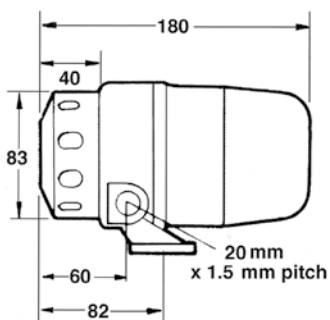
Nexus 120 dB Sounder Beacon Dimensions

**Motor Driven Sirens**



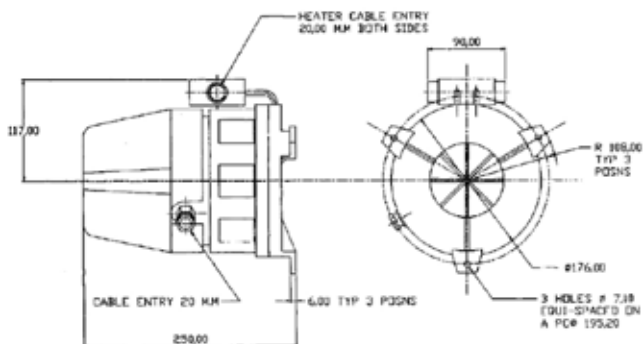
**MONO 72**

Features	dB@ 1m	Voltage	Cat. no.
• IP 65	120	110 V AC/ DC	KL2105
• Clear sound output	120	230 V AC/ DC	KL2108
• 1800 Hz frequency			
• Continuous sound rating			
• Suits mining and quarry applications			



**SO4**

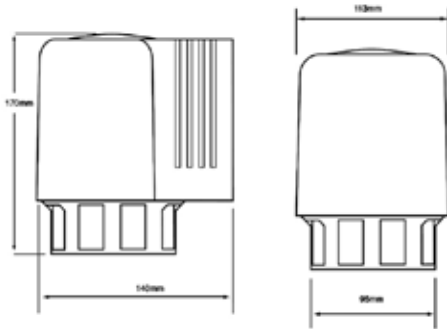
Features	dB@ 1m	Voltage	Cat. no.
• IP 55	125	230V AC/DC	KL504240
• Outdoor warning over small to medium areas			
• Vertical cast aluminium mounting			
• Continuous sound rating			
• 900 Hz frequency			





### SUPER M

Features	dB@ 1m	Voltage	Cat. no.
• Vertical mounting	127	110V AC/DC	KLXSM110
• Continuous sound rating	127	230 V AC/DC	KLXSM240
• 1600 Hz frequency			
• 1 metre pre-wired cable			
• Suitable for areas with high background noise			



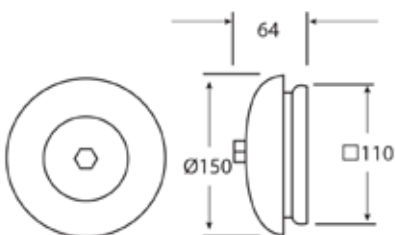
### Mechanical Bell

#### SOLENOID SERIES

- IP 44 construction with steel gong and powder coated aluminium body
- High quality solenoid driven striker producing loud and clear ring
- Four point fixing on flat surfaces, supplied with gasket and 150 mm fly leads
- Suitable for use in education, commercial and transport applications



Description	Colour	dB@ 1m	Voltage	Cat. no.
Mechanical bell 6" (150 mm) - 100dB IP 44 24 V DC supply	grey	100	24 V DC	W6-024VDC
Mechanical bell 6" (150 mm) - 100dB IP 44 115 V AC supply	grey	100	115 V AC	W6-115VAC
Mechanical bell 6" (150 mm) - 100dB IP 44 230 V AC supply	grey	100	230 V AC	W6-230VAC





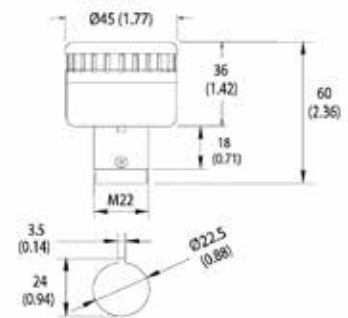
**Buzzers**



**BULLETIN 855P**

Features	dB @ 1m	Voltage	Cat. no.
• IP 65	100	12-24 V AC/ DC	855PB30ME22
• For close proximity warning (3300 Hz)	100	240 V AC	855PB20ME22

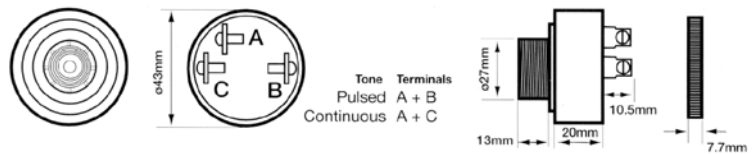
- -25° to +60 operational temperature
- 45 mm diameter
- 22.5 mm diameter panel mount



**AE20M**

Features	dB @ 1m	Voltage	Cat. no.
• IP 55	90	12 V DC	AE20M-12
• Continuous or pulsed tone (2900 Hz)	90	24V DC	AE20M-24
• AE20M-12 (pulsed tone only)	90	110 V AC	AE20M-115
• 50/60 Hz	90	240 V AC	AE20M-230

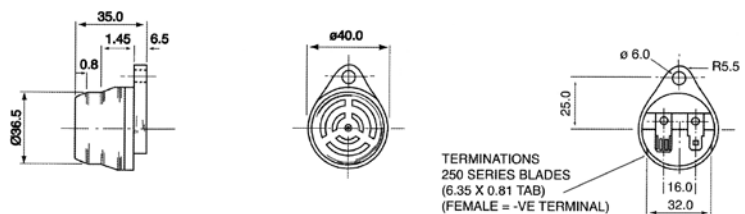
- 43 mm diameter
- 27 mm diameter panel mount



**KKTB**

Features	dB @ 1m	Voltage	Cat. no.
• IP 34	80	6-14 V DC	KL1049646
• Base mount (Single Point Fixing)	80	10-28 V DC	KL1049650

- Low frequency 450 Hz sound rating
- Continuous sound rating
- 40 mm diameter



## Wide Area Sirens

NHP have the complete product and service combination available for your wide area siren requirements.

We are able to tailor a solution to your needs with pre-project evaluation and ongoing support to achieve individual requirements.

The ES range of sirens, from respected warning systems supplier Klaxon is able to address mass alert signalling for all environments




### Main Features

- Audibility range between 106dB @ 30m for the smallest unit to 127dB @ 30m for the largest unit.
- 16 user selectable and configurable emergency signals.
- Storage for up to and selectable 400 pre-recorded voice messages.
- Battery operated from an integral battery pack to overcome AC power failure.
- User definable schedules for time/date signalling.
- Silent test facility to minimise nuisance signalling to test the siren.
- Full control and fault diagnosis of a single or multiple units via an RS485 interface of up to 1.5km distance from the siren.
- Supports a radio and modem for remote operation via bi-directional integrated RS232 interface.
- Supports a GPS clock for accurate time synchronisation for schedules via an integrated RS232 interface.
- Class D 375W amplifier used in the output with self healing short circuit, thermal and over current protection.
- Active alarm signal or PA output via a set of N/O and N/C relay contacts for control of and supplementary devices. (i.e. Strobe beacon).
- Four configurable relays with changeover contacts used to monitor the activities of the unit.
- Siren activity and fault report log.
- Minimum alarm signal operating time of at least 6 minutes after a 7 day AC power loss.
- Control cabinet constructed from coated steel as standard or stainless steel on request, (800 x 600 x 250mm), which provides an environmental rating of IP65 and the siren horns are manufactured of cast aluminium.
- Power supplied by an integral 48 V DC battery pack and an 88-132/176-264 V AC @ 47-63Hz power source.
- Operating temperature range of -20 to +60°C.

**Please contact NHP if you are interested in a wide area siren solution.**

## NEXUS TONE DESCRIPTIONS AND FREQUENCIES

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

All tones can be heard online at:  
[www.nhp.com.au/products/products-and-services/signalling-devices/sound-files](http://www.nhp.com.au/products/products-and-services/signalling-devices/sound-files)





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