

VISUAL								SOUNDER & COMBINATION								
Series																
Light source	12 LEDs Static Flashing (60FPM) 120° Light axis	36 LEDs Static Flashing (60/120FPM) 120° Light axis	8 LEDs Static Flashing (160FPM) 360° Light axis	48 LEDs Static Flashing (60/120FPM) 360° Light axis	144 LEDs Static Flashing (60FPM) Rotating (140RPM) 360° Light axis	36 LEDs Static 120° Light axis	-	Xenon Flashing (60FPM)	-	Xenon Flashing (60FPM)	-	Xenon Flashing (60FPM)	-	Xenon Flashing (60FPM)	-	Xenon Flashing (60FPM)
Sound @1m	-	-	-	80dB Piezo buzzer	-	90dB Piezo buzzer	-	-	108dB (32 tones)	112dB (32 tones)	116dB (32 tones)	120dB (32 tones)	-	-	-	-
Voltage	10-100 VDC (02) 115-230 VAC (04)	8-20 VAC/DC (01) 20-30 VAC/DC (02) 30-85 VAC/DC (03) 85-280VAC & (05) 85-380VDC	10-17 VAC/DC (01) 20-30 VAC/DC (02) 35-85 VAC/DC (03) 85-280 VAC & (05) 85-380 VDC	24VDC RAG LED-Tricolor (01) 24 VDC (02) 115 VAC (03) 230 VAC (04)	24 VDC (401) 90-370 VDC (400) 70-265 VAC (400)	8-20 VAC/DC (01) 20-30 VAC/DC (02) 35-85 VAC/DC (03) 85-280 VAC & (05) 85-380VDC	24 VDC (D) 48 VDC (F) 24 VAC (I) 115 VAC (L) 230 VAC (N)	24 VDC (D50) 48 VDC (F50) 115 VAC (L50) 230 VAC (N50)	24 VDC (D) 48 VDC (F) 24 VAC (I) 115 VAC (L) 230 VAC (N)	24 VDC (D50) 48 VDC (F50) 115 VAC (L50) 230 VAC (N50)	24 VDC (D) 48 VDC (F) 115 VAC (L) 230 VAC (N)	24 VDC (D50) 48 VDC (F50) 115 VAC (L50) 230 VAC (N50)	24 VDC (D) 48 VDC (F) 115 VAC (L) 230 VAC (N)	24 VDC (D50) 48 VDC (F50) 115 VAC (L50) 230 VAC (N50)	24 VDC (D) 48 VDC (F) 115 VAC (L) 230 VAC (N)	24 VDC (D50) 48 VDC (F50) 115 VAC (L50) 230 VAC (N50)
Colour	01 02 03 04	01 02 03 04 05	01 02 04	01 02 03 04 05	01 02 03 04 05	01 02 04	-	ARBGC0	-	ARBGC0	-	ARBGC0	-	ARBGC0	-	ARBGC0
IP rating	IP67 Air-tight Submersion in water	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP65 Air-tight Rain/spray/splash	IP66 Air-tight Powerful rain/spray/splash/sea conditions
Temp (°C)	-20 to +55	-25 to +55	-25 to +55	-20 to +45	-25 to +55	-25 to +55	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70	-35 to +70
HxW	50mm x 76mm	73mm x 104mm	107mm x 72mm	119mm x 90mm	162mm x 98mm	205mm x 150mm	104mm x 108mm	91.5mm x 91.5mm	183mm x 91.5mm	136mm x 136mm	194mm x 136mm	219mm x 219mm	276mm x 219mm	219mm x 219mm	276mm x 219mm	276mm x 219mm
Catalogue Order Number	LED80-02-01	LED195-02-02	LED100-02-03	LEDA100-02-04	LEDD125-02-05	LEDA125-02-02	LED401-02-01	LED-TL-02-02	YA40/D/RN/WR	YL40/F50/A/RN/WR	YA50/I/RF/WR	YL50/N50/G/RF/WR	YA80/L/RF/WR	YL80/N50/C/RF/WR	YA80/D/RF/SU/WR	YL80/N50/R/RF/SU/WR
Guide Example	Step1 Step2 (10-100VDC) Step3 (Amber)	Step1 Step2 (20-30 VAC/DC) Step3 (Red)	Step1 Step2 (20-30 VAC/DC) Step3 (Blue)	Step1 Step2 (20-30 VAC/DC) Step3 (Green)	Step1 Step2 (24 VDC) Step3 (Clear)	Step1 Step2 (24 VDC) Step3 (Red)	Step1 Step2 (24 VDC) Step3 (Amber)	Step1 Step2 (20-30 VAC/DC) Step3 (Red)	Step1 Step2 (24 VDC) Step3 (Amber Xenon)	Step1 Step2 (48 VDC) Step3 (Green Xenon)	Step1 Step2 (24 VAC) Step3 (Green Xenon)	Step1 Step2 (230 VAC) Step3 (Clear Xenon)	Step1 Step2 (115 VAC) Step3 (Clear Xenon)	Step1 Step2 (10-60 VDC) Step3 (Clear Xenon)	Step1 Step2 (24 VDC) Step3 (Red Xenon)	Step1 Step2 (10-60 VDC) Step3 (Red Xenon)

Beacon - selection

- Environmental factors determining selection**
- The light output required for the beacon and distance the signal is required to travel
 - The ambient level of existing light
 - The IP rating of the beacon
 - Safe atmosphere or potentially explosive atmosphere

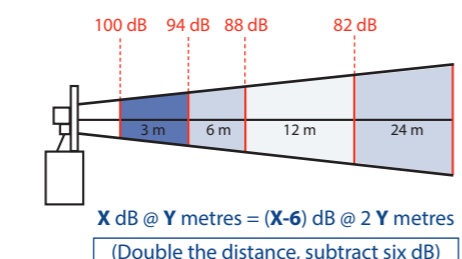
The intensity of the light can be reduced as it passes through the dome of the beacon. The extent of this reduction is dependent on the type of lamp used and the colour of the lens. The table below gives an indication of the percentage of light that will pass through the lens for different light sources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

Colour	Filament	Halogen	Xenon	LED
Clear (05)	100%	100%	100%	100%
Amber (01)	70%	70%	70%	100%
Red (02)	30%	27%	23%	100%
Green (04)	12%	15%	25%	100%
Blue (03)	8%	10%	13%	100%

Sounder - selection

- Factors determining sounder selection**
- Ambient noise in the environment
 - The duration of signal required
 - The noise level required and distance of signal

What happens to sound over distance?
In selecting a sounder for a particular application, the table to the right 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

Distance from source (m)	Decibel level (dB) at source								
	80	85	90	95	100	105	110	115	120
1m	80	85	90	95	100	105	110	115	120
2m	74	79	84	89	94	99	104	109	114
3m	70	75	80	85	90	95	100	105	110
5m	66	71	76	81	86	91	96	101	106
10m	60	65	70	75	80	85	92	95	100
20m	54	59	64	69	74	79	86	89	94
30m	50	55	60	65	70	75	80	85	90
50m	46	51	56	61	66	71	76	81	86
100m	40	45	50	55	60	65	72	75	80
200m	-	39	44	49	54	59	66	69	74
400m	-	-	40	43	50	53	60	63	70
500m	-	-	-	41	46	51	56	61	66
1000m	-	-	-	-	40	45	50	55	60
2000m	-	-	-	-	39	44	49	54	59
3000m	-	-	-	-	-	40	45	50	55
5000m	-	-	-	-	-	-	41	46	51

Decibel values at a distance of 1 meter from source

180	Loudest possible
170	Rocket launch
160	Ear drum bursts
150	Threshold of pain
140	Rock concert
130	Air raid siren
120	Jack hammer
110	Riveting machine
100	Chain saw
90	Welder
80	Vaccum cleaner
70	Noisy restaurant
60	Normal conversation
50	Quiet office
40	Library
30	Whisper
20	Leaves rustling
10	Breathing

IP rating guide

Note* IP67 products are not automatically rated at IP65/6 unless stated

IP	1st digit	2nd digit	Protection
IP 6	5		Protection from water jets (6mm nozzle)
IP 6	6		Protection from powerful water jets (12mm nozzle)
IP 6	7		Protection from immersion in water (1m for 30mins)

2nd digit refers to protection from liquids

