



**Clifford & Snell**

**INSTALLATION & TECHNICAL INFORMATION**

PLEASE READ PRIOR TO INSTALLATION



**FD/SD40 Yodac Series**  
**(Flashing or Static LED Indicators)**

VISUAL SIGNALLING DEVICE

S00630 Issue 2

APPROVALS AND CONFORMITIES



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## **Installation**

- Installation must be carried out in accordance with the latest codes of practice by a qualified electrician.
- Check that the power supply is correct for the voltage rating of the Beacon to be installed.
- Ensure that the power supply is disconnected prior to installation or maintenance to avoid electrical shock.
- The back box must be mounted with the two cable entry holes at the top or bottom.
- Cable entries points (M20) are provided on all sides and in the base.
- The back box should be mounted to a wall, bulkhead or conduit box formed of suitable material using the back box and gasket supplied. See Figure 1 for mounting holes.
- Avoid mounting the Beacon where it could be subjected to excessive vibration levels.
- It is not necessary to earth the alarm circuitry, but earth tags should be used if earth continuity of conduit or cable sheathing is to be maintained

## **Ingress Protection**

To maintain the IP rating of the product, the below points must be observed.

- A suitable rated (Minimum IP65) cable gland (not supplied) must be used.
- When replacing the front cover, each of the two retaining screws must be torqued to  $0.6\text{Nm} \pm 0.1\text{Nm}$

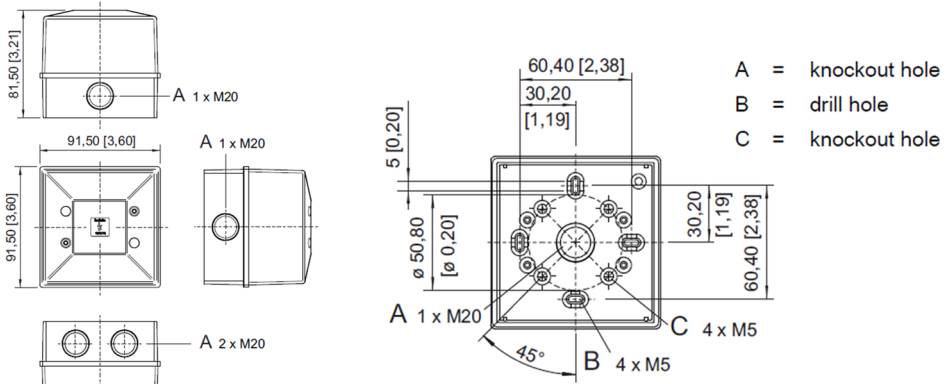
## **Electrical Connections**

- These devices are purchased as modular assembly kits & by combining various coloured Beacon heads, (either Flashing (FD) or Static Type (SD)). They offer great Visual Status flexibility.
- The modular assembly allows for the addition of a YA40 Acoustic Signal if required.
- The SD40 units will require external input signals or PLC control to switch between visual functions (not supplied) from pre-set static mode to flashing or to activate the YA40 audible unit.
- For independent operation each Beacon/Sounder unit will need its own power supply, this can be done with either a common 0v line and separate +24v power lines, or each unit having its own 0v and +24v lines.
- Figure 2 below shows the 4 way terminal block configuration allowing 2x positive input/output terminals and 2x 0v(-) terminals for the beacon.
- Figure 3 below shows the optional sounder PCB with the 0v and +V connections, along with the DIP switch for tone selection. See Tone Table (page 4).

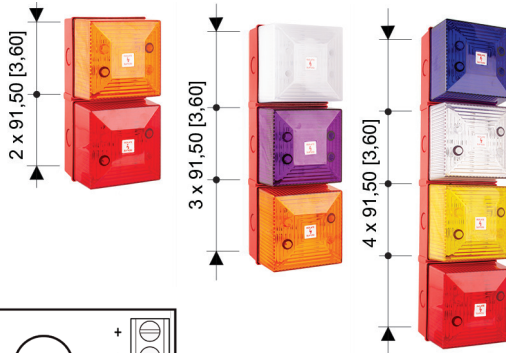
## **Line Integrity on DC Systems**

- Monitor via threshold, (applied voltage < 1v) an end-of-line (E.O.L) resistor is required for line monitoring and should have a minimum resistance of 3k3 Ohms and 0.5 Watts, wire-wound or metal film type.

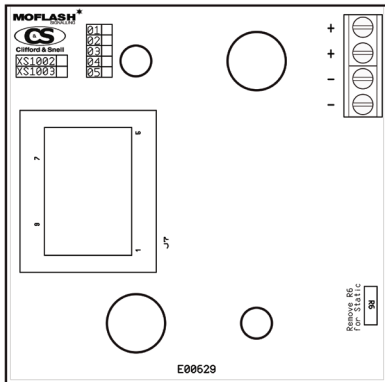
## Dimensional Drawing



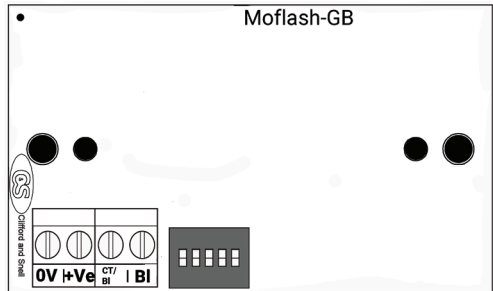
### Figure 1



### Figure 2



### Figure 3



### Features include:

- Termination: Upto 2.5mm<sup>2</sup> cable
- Flash Rate: 60 Flashes Per Minute (1Hz) (FD units only)
- Operating Temperature: -25°C to +70°C
- Enclosure Material: Fire Resistant UL94-5VB rated ABS
- Lens Material: Fire Resistant Polycarbonate
- Ingress Protection: Weatherproof to IP65
- Sound Pressure Level: 108dB(A) Max. (Sunder only)
- Volume Control Adjustment: -18dB (Sunder only)

## Tone Table

Tone	Description	Frequency	Rept. rate	Second Stage	Switches					Special Application	dB(A) @ 1m (± 3dB)
		(Hz)			1	2	3	4	5		
1*	Alternating	800-1000	0.5	3	I	I	I	I	I	Fire Alarms	108
2	Alternating	2500-3100	0.5	4	O	I	I	I	I	Security Alarms	108
3	Alternating (fast)	800-1000	0.25	7	I	O	I	I	I	Increased urgency	108
4	Alternating (fast)	2500-3100	0.25	8	O	O	I	I	I	Security deterrent	108
5*	Alternating	440-554	0.4/0.1	14	I	I	O	I	I	AFNOR, France (NFS 32001)	108
6	Alternating	430-470	1	14	O	I	O	I	I		105
7	Alternating (v.fast)	800-1000	0.13	12	I	O	O	I	I		108
8	Alternating (v.fast)	2500-3200	0.07	13	O	O	O	I	I		107
9	Alternating	440-554	2	10	I	I	I	O	I	Turn-out, Sweden	105
10	Continuous note	700	-	1	O	I	I	O	I	All-clear, Sweden	107
11*	Continuous note	1000	-	31	I	O	I	O	I		108
12	Continuous note	1000	-	7	O	O	I	O	I		108
13	Continuous note	2300	-	2	I	I	O	O	I		108
14	Continuous note	440	-	9	O	I	O	O	I		104
15*	Interrupted tone	1000	2	31	I	O	O	O	I		108
16*	Interrupted tone	420	1.25	30	O	O	O	O	I	AS2220, Australia	105
17	Interrupted tone	1000	0.5	1	I	I	I	I	O		108
18	Interrupted tone	2500	0.25	4	O	I	I	I	O		106
19	Interrupted tone	2500	0.5	2	I	O	I	I	O		106
20	Interrupted tone	700	6/12	10	O	O	I	I	O	Pre-vital mess, Sweden	105
21	Interrupted tone	1000	1	32	I	I	O	I	O		108
22	Interrupted tone	700	4	10	O	I	O	I	O	Air-raid, Sweden	104
23	Interrupted tone	700	0.25	10	I	O	O	I	O	Local warning, Sweden	103
24	Interrupted tone	720	0.7/0.3	10	O	O	O	I	O	Industrial alarm, Germany	104
25	Int,fast,rising volume	1400	0.25	26	I	I	I	O	O		108
26	Fast siren	250-1200	0.085	11	O	I	I	O	O		106
27	Rising constant, fall	1000	10/40/10	17	I	O	I	O	O	Industrial alarm, Germany	108
28*	ISO 8201 Evacuation	800-1000	as std	11	O	O	I	O	O	Int'l evacuation alarm	107
29	Fast whoop	500-1000	0.15	32	I	I	O	O	O		106
30*	Slow whoop	500-1200	4.5	12	O	I	O	O	O	Evacuation, The Netherlands	108
31*	Reverse sweep	1200-500	1	11	I	O	O	O	O	Evacuation, Germany	107
32	Siren	500-1200	3	26	O	O	O	O	O		107

Note: EN54-3 Compatible Tones are marked above with \*.

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Additional resources, including installation sheet translations, certificates and DoCs are available from the [www.moflash.co.uk](http://www.moflash.co.uk) website.