



**Clifford & Snell**

**INSTALLATION & TECHNICAL INFORMATION**

PLEASE READ PRIOR TO INSTALLATION



**Y08 Yodalarm & Yodalight Series**  
**(Incorporating YA80 and YL80)**

AUDIBLE AND/OR VISUAL SIGNALLING DEVICES  
S00625 Issue 4

APPROVALS AND CONFORMITIES



KM 713890



2797-CPR-713892



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RoHS



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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 alarm to be installed.
- Ensure that the power supply is disconnected prior to installation or maintenance to avoid electrical shock.
- The unit should be mounted to a wall or bulkhead formed of suitable material using the two mounting lugs projecting from the side of the enclosure.
- The lugs have an 10mm diameter mounting hole & sit on 250mm centres. The minimum recommended length of fixing screw is 30mm (not supplied).
- Avoid mounting the alarm where it could be subjected to excessive vibration levels.
- All YA80 units require 2 additional ferrite beads (included in box) to be fitted on all input wires, 1 wire per hole. Failure to correctly install the ferrite beads will result in the unit not complying with the EN54-3 approval. (YL80 Ferrite Beads are factory installed).

## **Ingress Protection**

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

- An IP66 cable gland is supplied with the product. This gland (or other suitably rated) must be used.
- When replacing the front cover, each of the four retaining screws **must** be torqued to 0.6Nm  $\pm$ 0.1Nm

## **Sound selection**

- Ensure the supply is **OFF** before proceeding.
- All DC and AC units have 2 selectable alarm stages (see table on back of installation sheet for details) and are set via switches SW1 & SW2.
- Figure 1 (DC) & Figure 3 (AC) show wiring to activate alarm stages 1 & 2.
- Figure 2 shows a second option for DC wiring. This allows for activating a stage 1 or a stage 2 alarm tone depending on the polarity of the connection.
- All stage 1 alarm tones have a predetermined stage 2 alarm (see back of installation sheet), this will only sound if SW1 & SW2 are configured to the same tone.

## **Line integrity for DC systems only**

- For 3 wire 2 stage alarm system, monitor via reverse polarity across TB1 & TB2.
- For 2 wire 2 stage alarm system, 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 0.5watts, wire-wound or metal film type.

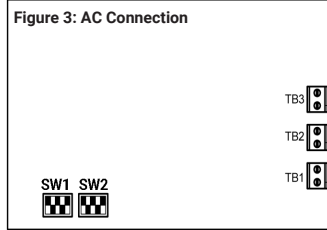
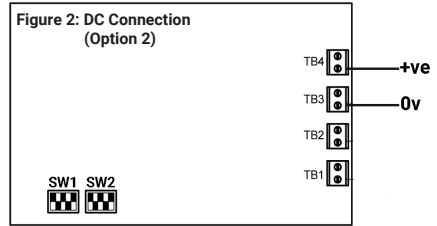
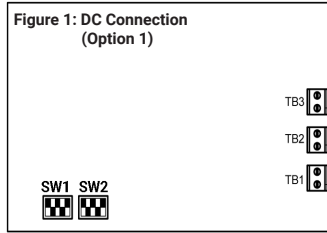
## **AC Systems**

- A second stage alarm tone can be activated by applying an additional "L" connection to the TB3 terminal on the PCB, as shown in Figure 3.

## **Additional Voltage Options**

- The Clifford and Snell YO8 series is also available in a 48vDC (F) option.
- The wiring for this voltage is the same as the 24vDC units as shown in Figure 1.
- Always confirm correct voltage is applied to relevant terminals.

## YA80 Wiring options



**Figure 2 functionality**

Polarity dependent for stage output. See table for connections

TB3	TB4	Output
0v	+v	Stage 1
+v	0v	Stage 2

**Figure 1 & 3 functionality**

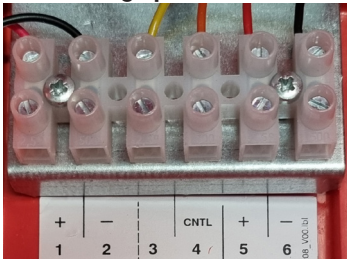
Close SW-A to activate stage 1 tone.  
Close SW-A & SW-B to activate stage 2 tone.  
SW-A & SW-B used as an example of customer external switching equipment.

## Y08 Yodalarm/Yodalight Series

Consists of either the YA80 (Audible Unit only) or the YL80 (Combined Audible & Visual unit)

Connections for the YL80 units are made via a 6 way Terminal Block mounted in the base of the unit as shown in Figure 4 diagram below. Using connections shown, it is possible to independently control both Sounder and Beacon sections.

## YL80 Wiring options



**Figure 4:**  
Terminal block for YL unit connections

Terminal	AC Connections		DC Connections (Option 1)		DC Connections (Option 2)	
	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2
6	N	N	0v	0v		
5	L	L	+ve	+ve		
4		L		+ve	+ve	0v
3					0v	+ve

Beacon Connections		
Terminal	AC	DC
1	L	+ve
2	N	0v

## Features Include:

- Termination: Up to 2.5mm<sup>2</sup> cable
- Operating Temperature: Standard Variants -25°C to +70°C  
EN54-3 Approved -25°C to +55°C
- Enclosure Material: Fire Resistant & UV Stable UL94-5VB rated ABS
- Lens Material: Fire Resistant & UV Stable Polycarbonate
- Ingress Protection: Weatherproof to IP66
- Sound Pressure Level: 117dB(A) Max.
- Volume Control Adjustment: -18dB
- AC Supply: 50/60 Hz

# Tone Table

Tone	Description	Frequency	Rept.	Second Stage	Switches					Special Application	dB(A) @ 1m (± 3dB)
		(Hz)	rate		1	2	3	4	5		
1*	Alternating	800-1000	0.5	3	I	I	I	I	I	Fire Alarms	116
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	117
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		107
7	Alternating (v.fast)	800-1000	0.13	12	I	O	O	I	I		116
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	110
10	Continuous note	700	-	1	O	I	I	O	I	All-clear, Sweden	110
11*	Continuous note	1000	-	31	I	O	I	O	I		116
12	Continuous note	1000	-	7	O	O	I	O	I		116
13	Continuous note	2300	-	2	I	I	O	O	I		113
14	Continuous note	440	-	9	O	I	O	O	I		105
15*	Interrupted tone	1000	2	31	I	O	O	O	I		115
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		115
18	Interrupted tone	2500	0.25	4	O	I	I	I	O		111
19	Interrupted tone	2500	0.5	2	I	O	I	I	O		111
20	Interrupted tone	700	6/12	10	O	O	I	I	O	Pre-vital mess, Sweden	111
21	Interrupted tone	1000	1	32	I	I	O	I	O		116
22	Interrupted tone	700	4	10	O	I	O	I	O	Air-raid, Sweden	110
23	Interrupted tone	700	0.25	10	I	O	O	I	O	Local warning, Sweden	110
24	Interrupted tone	720	0.7/0.3	10	O	O	O	I	O	Industrial alarm, Germany	110
25	Int,fast,rising volume	1400	0.25	26	I	I	I	O	O		112
26	Fast siren	250-1200	0.085	11	O	I	I	O	O		113
27	Rising constant, fall	1000	10/40/10	17	I	O	I	O	O	Industrial alarm, Germany	117
28*	ISO 8201 Evacuation	800-1000	as std	11	O	O	I	O	O	Int'l evacuation alarm	116
29	Fast whoop	500-1000	0.15	32	I	I	O	O	O		113
30*	Slow whoop	500-1200	4.5	12	O	I	O	O	O	Evacuation, The Netherlands	116
31*	Reverse sweep	1200-500	1	11	I	O	O	O	O	Evacuation, Germany	115
32	Siren	500-1200	3	26	O	O	O	O	O		116

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.