



Clifford & Snell

INSTALLATION & TECHNICAL INFORMATION

PLEASE READ PRIOR TO INSTALLATION



Y05 Yodalarm & Yodalight Series
(Incorporating YA50 and YL50)

AUDIBLE AND/OR VISUAL SIGNALLING DEVICES

S00624 Issue 4

APPROVALS AND CONFORMITIES



KM 713890



2797-CPR-713892



0086-CPR-774029



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 8mm diameter mounting hole & sit on 153mm centres. The minimum recommended length of fixing screw is 25mm (not supplied).
- Avoid mounting the alarm where it could be subjected to excessive vibration levels.
- All YA50 units require 3 additional ferrite beads (included in box) to be fitted on all input wires. These ferrites must be double looped as shown in figure 6 below. Failure to correctly install the ferrite beads will result in the unit not complying with the EN54-3 approval. (YL50 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 selectable alarm sounds (see table on back of installation sheet for details) and are selectable via switch SW1.
- 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), it is possible to manually select the 2nd stage tone by setting SW2, however this option is only supplied upon request, and is not generally supplied as standard.

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 YO5 series is available in a wide variety of voltage ranges, these include 24vAC (I), 24/50vDC (BT), 48vDC (F), 110vDC (H).
- Wiring example is shown in Figure 4. The units are designed for loop-in, loop-out connectivity allowing 2 terminals per connection.
- Always confirm correct voltage is applied to relevant terminals.

Figure 1: DC Sounder Connection (Option 1)

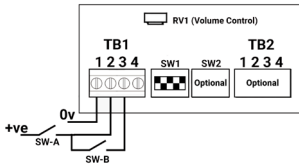


Figure 2: DC Sounder Connection (Option 2)

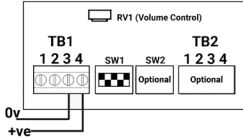
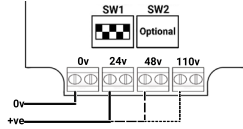


Figure 4: Additional Voltage Options



Y05 Yodalarm/Yodalight Series

Consists of either the YA50 (Audible Unit only) or the YL50 (Combined Audible & Visual unit)

Connections for the YL50 units are made via a 6 way Terminal Block mounted in the base of the unit as shown in the Figure 5 below. Using connections shown, it is possible to independently control both Sounder and Beacon sections.

YL50 Wiring options

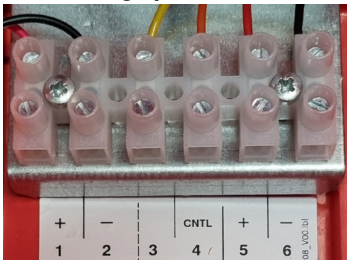


Figure 5: Terminal block for YL unit connections

Features Include:

- Termination:
- Operating Temperature :
- Enclosure Material:
- Lens Material:
- Ingress Protection:
- Sound Pressure Level:
- Volume Control Adjustment:
- AC Supply:

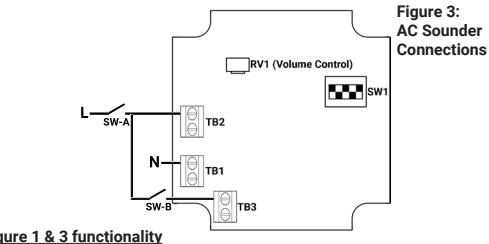


Figure 1 & 3 functionality

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.

Figure 2 functionality

Polarity dependant for stage output.
See table for connections above

TB1/3	TB1/4	Output
0v	+v	Stage 1
+v	0v	Stage 2

Figure 4 functionality

Wiring for the additional voltages, only 1 +ve connection is to be connected per unit, see below:

- Solid line 24vDC
- Dashed line 48vDC
- Dotted line 110vDC

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

- Up to 2.5mm² cable
- Standard Variants -25°C to +70°C
- EN54-3 Approved -25°C to +55°C
- Fire Resistant & UV Stable UL94-5VB rated ABS
- Fire Resistant & UV Stable Polycarbonate
- Weatherproof to IP66
- 112dB(A) Max.
- 18dB
- 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	107
2	Alternating	2500-3100	0.5	4	O	I	I	I	I	Security Alarms	110
3	Alternating (fast)	800-1000	0.25	7	I	O	I	I	I	Increased urgency	107
4	Alternating (fast)	2500-3100	0.25	8	O	O	I	I	I	Security deterrent	110
5*	Alternating	440-554	0.4/0.1	14	I	I	O	I	I	AFNOR, France (NFS 32001)	103
6	Alternating	430-470	1	14	O	I	O	I	I		103
7	Alternating (v.fast)	800-1000	0.13	12	I	O	O	I	I		107
8	Alternating (v.fast)	2500-3200	0.07	13	O	O	O	I	I		110
9	Alternating	440-554	2	10	I	I	I	O	I	Turn-out, Sweden	103
10	Continuous note	700	-	1	O	I	I	O	I	All-clear, Sweden	106
11*	Continuous note	1000	-	31	I	O	I	O	I		107
12	Continuous note	1000	-	7	O	O	I	O	I		106
13	Continuous note	2300	-	2	I	I	O	O	I		112
14	Continuous note	440	-	9	O	I	O	O	I		103
15*	Interrupted tone	1000	2	31	I	O	O	O	I		107
16*	Interrupted tone	420	1.25	30	O	O	O	O	I	AS2220, Australia	103
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		110
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	105
21	Interrupted tone	1000	1	32	I	I	O	I	O		107
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	103
25	Inf,fast,rising volume	1400	0.25	26	I	I	I	O	O		105
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	106
28*	ISO 8201 Evacuation	800-1000	as std	11	O	O	I	O	O	Int'l evacuation alarm	105
29	Fast whoop	500-1000	0.15	32	I	I	O	O	O		105
30*	Slow whoop	500-1200	4.5	12	O	I	O	O	O	Evacuation, The Netherlands	106
31*	Reverse sweep	1200-500	1	11	I	O	O	O	O	Evacuation, Germany	105
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 website.