INSTALLATION & TECHNICAL INFORMATION

PLEASE READ PRIOR TO INSTALLATION

For YL40 Translations and Documentation scan above.

For YA40 Translations and Documentation scan above.

YO4 Yodalarm & Yodalight Series

(Incorporating YA40 and YL40)

AUDIBLE AND/OR VISUAL SIGNALLING DEVICES

S00623 Issue 5

APPROVALS AND CONFORMITIES

KM 713890

BSI/MED/3.53/756093

BSI/UK/3.53/738807

2797-CPR-713892

0086-CPR-774029

RoHS

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 back box should be mounted to a wall, bulkhead or conduit box formed of suitable material using the back box and gasket supplied.
- The back box can be mounted using any of the mounting hole knockouts in the base.
- Avoid mounting the alarm where it could subjected to excessive vibration levels.
- All YO4 units require 3 additional ferrite beads (included in box) to be fitted on all input wires for the sounder PCB. 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.

Figure 6: Ferrite double loop.

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 0.6Nm ±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 YO4 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)

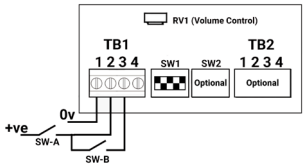

Figure 2: DC Sounder Connection (Option 2)

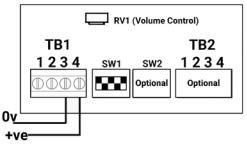

Figure 4: Additional Voltage Options

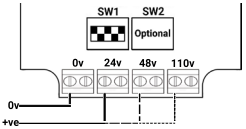

Figure 3: AC Sounder Connections

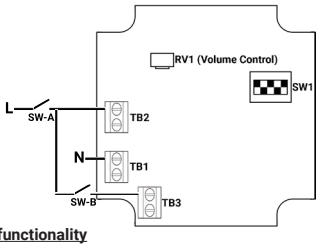

Figure 1 & 3 functionality

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

YO4 Yodalarm/Yodalight Series

Consists of either the YA40 (Audible Unit only) or the YL40 (Combined Audible & Visual unit) note LED version only available in 24vDC.

- Connections for the Beacons are made directly to the on-board Terminal Block
- For DC: Terminal (+) for +ve and Terminal (-) for 0v (Fig. 5 & Fig. 6)
- For AC: Terminal (L) for LIVE and Terminal (N) for NEUTRAL (Fig. 7 & 8)

Figure 5: DC Xenon Beacon

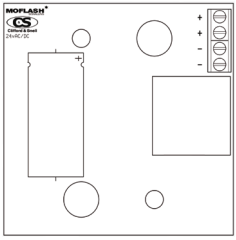

Figure 6: DC LED Beacon

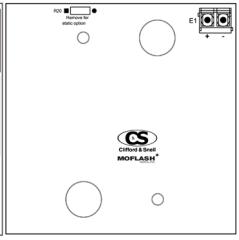

Figure 7: AC Xenon Beacon

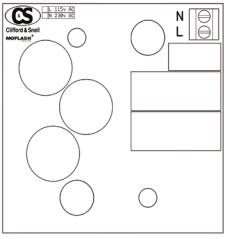

Figure 8: AC LED Beacon

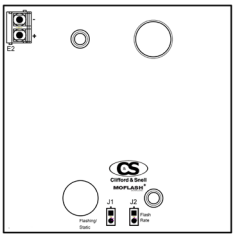

Figure 8 functionality

Options for additional flash rate & static light option, see table for jumper positions. J2 flash rates only apply when J1 is fitted.

AC LED beacon will be factory set to 60 FPM as standard.

Link	Link in	Link out
J1	Flashing mode	Static Mode
J2	120 FPM	60 FPM

Features Include:

- Termination: Up to 2.5mm² cable
- Operating Temperature: Standard Variants -35°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 IP65
- Sound Pressure Level: 108dB(A) Max.
- Volume Control Adjustment: -18dB
- AC Supply: 50/60 Hz

Tone Table

Tone	Description	Frequency (Hz)	Rept. rate	Second Stage	Switches 1	2	3	4	5	Special Application	dB(A) @ 1m (± 3dB)
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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