Clifford & Snell

INSTALLATION & TECHNICAL INFORMATION

PLEASE READ PRIOR TO INSTALLATION

For Translations and Documentation scan above

YO3 Yodalarm Series

(Incorporating the YA30 Range)

AUDIBLE SIGNALLING DEVICE

S00622 Issue 5

APPROVALS AND CONFORMITIES

KM 713890

BSI/MED/3.53/756095

BSI/UK/3.53/738807

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 6mm diameter mounting hole & sit on 102mm 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 YA30 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.

Figure 6: Ferrite double loop.

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 ±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)

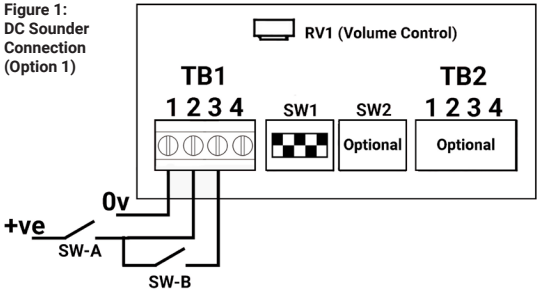

Figure 2:
DC Sounder
Connection
(Option 2)

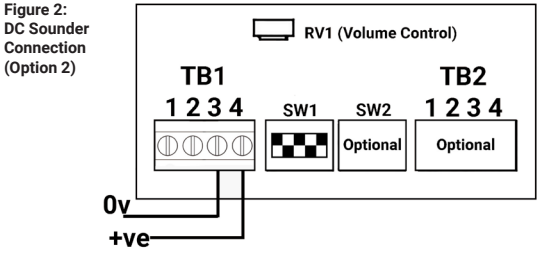

Figure 3:
AC Sounder
Connections

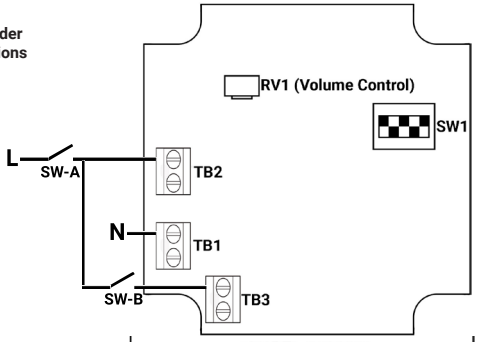

Figure 4:
Additional Voltage
Options

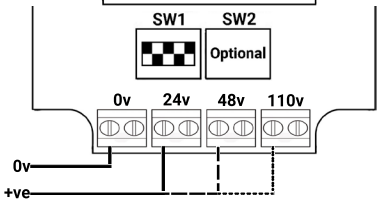

Figure 1 & 3 functionality

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 below table for connections.

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

Features Include:

- Termination: Up to 2.5mm^2 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
- Ingress Protection: Weatherproof to IP66
- Sound Pressure Level: 105dB(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	105
2	Alternating	2500-3100	0.5	4	O	I	I	I	I	Security Alarms	105
3	Alternating (fast)	800-1000	0.25	7	I	O	I	I	I	Increased urgency	104
4	Alternating (fast)	2500-3100	0.25	8	O	O	I	I	I	Security deterrent	105
5*	Alternating	440-554	0.4/0.1	14	I	I	O	I	I	AFNOR, France (NFS 32001)	102
6	Alternating	430-470	1	14	O	I	O	I	I		102
7	Alternating (v.fast)	800-1000	0.13	12	I	O	O	I	I		105
8	Alternating (v.fast)	2500-3200	0.07	13	O	O	O	I	I		105
9	Alternating	440-554	2	10	I	I	I	O	I	Turn-out, Sweden	102
10	Continuous note	700	-	1	O	I	I	O	I	All-clear, Sweden	104
11*	Continuous note	1000	-	31	I	O	I	O	I		102
12	Continuous note	1000	-	7	O	O	I	O	I		102
13	Continuous note	2300	-	2	I	I	O	O	I		105
14	Continuous note	440	-	9	O	I	O	O	I		102
15*	Interrupted tone	1000	2	31	I	O	O	O	I		100
16*	Interrupted tone	420	1.25	30	O	O	O	O	I	AS2220, Australia	101
17	Interrupted tone	1000	0.5	1	I	I	I	I	O		101
18	Interrupted tone	2500	0.25	4	O	I	I	I	O		105
19	Interrupted tone	2500	0.5	2	I	O	I	I	O		105
20	Interrupted tone	700	6/12	10	O	O	I	I	O	Pre-vital mess, Sweden	103
21	Interrupted tone	1000	1	32	I	I	O	I	O		101
22	Interrupted tone	700	4	10	O	I	O	I	O	Air-raid, Sweden	103
23	Interrupted tone	700	0.25	10	I	O	O	I	O	Local warning, Sweden	101
24	Interrupted tone	720	0.7/0.3	10	O	O	O	I	O	Industrial alarm, Germany	103
25	Int,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		103
27	Rising constant, fall	1000	10/40/10	17	I	O	I	O	O	Industrial alarm, Germany	104
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		103
30*	Slow whoop	500-1200	4.5	12	O	I	O	O	O	Evacuation, The Netherlands	105
31*	Reverse sweep	1200-500	1	11	I	O	O	O	O	Evacuation, Germany	103
32	Siren	500-1200	3	26	O	O	O	O	O		103

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.