



Technical Manual for the Horn – DB1P UL DB1HP UL

Please note that every care has been taken to ensure the accuracy of our technical manual. We do not, however, accept responsibility for damage, loss or expense resulting from any error or omission. We reserve the right to make alterations in line with technical advances and industry standards.

1. INTRODUCTION

These horn units have been designed for use in harsh environmental conditions.

2. INSTALLATION

General

When installing and operating explosion-protected electrical equipment, requirements for selection, installation and operation should be referred to eg. IEC 60079-14 worldwide and the 'National Electrical Code' in North America. Additional national and/or local requirements may apply.

Ensure that all nuts, bolts and fixings are secure.

Ensure that only the correct UL listed stopping plugs are used to blank off unused gland entry points and that the NEMA/IP rating of the unit is maintained.

The unit is mounted via 2 x Ø 0.31" (8 mm) fixing holes in the base. The fixing holes have been designed to accept an M6 screw or bolt. MEDC recommend the use of stainless steel screws.

Cable Termination

CAUTION: Before removing the cover assembly, ensure that the power to the unit is isolated.

Unscrew and remove the 4 off screws holding the cover assembly to the base. Keep in a safe, accessible location.

Twist the cover gently clockwise and anti-clockwise, whilst pulling it away from the unit. Remove to gain access to the interior of the base.

Cable termination should be in accordance with specifications applying to the application. MEDC recommend that all cables and cores should be fully identified.

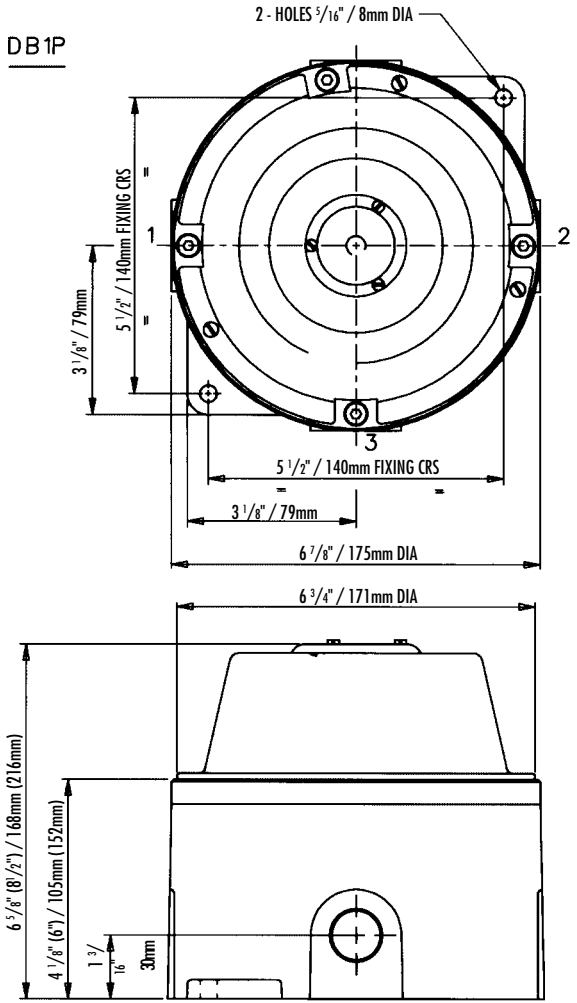
Ensure that only correct UL Listed cable glands are used and that the assembly is shrouded and correctly earthed.

All cable glands should be of an equivalent NEMA/IP rating to that of the unit and integrated with the unit such that this rating is maintained.

The internal earth terminal (where fitted), must be used for the equipment grounding connection and the external terminal is for a supplementary bonding connection where local codes or authorities permit or require such a connection.

Once termination is complete, carefully push the cover back onto the unit, avoiding damage to the mating surfaces. Replace & tighten the 4 off cover screws evenly, to ensure maintenance of the required gap between the cover and enclosure.

GENERAL ARRANGEMENT



NOTE :- DB1HP DIMENSIONS IN BRACKETS

ALL DIMENSIONS IN INCHES AND MILLIMETERS

	TONE FREQ/DESCRIPTION	SWITCH SETTING 12345	TONE DESCRIPTION	Nom O/P (dB(A) @1M)
1	Alt Tones 800/970 Hz at 1/4 sec	11111		114
2	Sweeping 800/970 Hz at 7Hz	11110	Fast Sweep(LF)	114
3	Sweeping 800/970 Hz at 1 Hz	11101	Med Sweep(LF)	114
4	Continuous at 2850 Hz	11100		109
5	Sweeping 2400-2850 Hz at 7 Hz	11011	Fast Sweep	114
6	Sweeping 2400-2850 Hz at 1 Hz	11010		114
7	Slow Whoop	11001	Slow Whoop	115
8	Sweep 1200-500 Hz at 1 Hz	11000	Din Tone	115
9	Alt Tones 2400/2850 Hz at 2 Hz	10111		111
10	Int Tone of 970 Hz at 1 Hz	10110	Back-Up Alarm(LF)	114
11	Alt Tones 800/970 Hz at 7/8 Hz	10101		114
12	Int Tone at 2850 Hz at 1Hz	10100	Back Up Alarm(HF)	109
13	970Hz at 1/4 sec on 1 sec off	10011		114
14	Continuous at 970 Hz	10010		114
15	554Hz for 100mS / 440 Hz for 400mS	10001	French Fire Sound	101
16	Int 660 Hz 150 mS on 150 mS off	10000	Swedish Fire Alarm	106
17	Int 660 Hz 1.8 sec on 1.8 sec off	01111	Swedish Fire Alarm	106
18	Int 660 Hz 6.5 sec on 13 sec off	01110	Swedish Fire Alarm	104
19	Continuous 660 Hz	01101	Swedish Fire Alarm	106
20	Alt 554/440 Hz at 1 Hz	01100	Swedish Fire Alarm	100
21	Int 660 Hz at 7/8 Hz	01011	Swedish Fire Alarm	106
22	Int 2850 Hz 150 mS on 100 mS off	01010	Pelican Crossing	109
23	Sweep 800-970 Hz at 50 Hz	01001	Low Freq Buzz	113
24	Sweep 2400-2850 Hz at 50 Hz	01000	High Freq Buzz	112
25	3 970Hz pulses 0.5on/0.5off, 1.5 off	00111		113
26	3 2850Hz pulses 0.5on/0.5off, 1.5 off	00110		109
27	Int 3100 Hz 0.32s on / 0.68s off	00101		110
28	Spare/Custom Tone	00100		
29	Spare/Custom Tone	00011		
30	Spare/Custom Tone	00010		
31	Spare/Custom Tone	00001		
32	Spare/Custom Tone	00000		

3. OPERATION

3.1 The unit is initiated directly from the power source.

The DB1P & DB1HP units include two 5-way DIL switches to select any two tones from the list. Use SW2 to select tone 1 & SW1 to select tone 2.

3.2 Single Stage Alarm (d.c. version only)

To operate as a single stage alarm, set the appropriate tone using SW1 and connect input wires to TB1 (+ve) (red) and TB5 (-ve) (blue). Loop in and loop out is then TB2 and TB6.

To operate in supervisory mode, reverse the voltage between TB1 and TB5 (such that TB1 is -ve and TB5 +ve).

Note that there is a diode mounted on the PCB which will inhibit the operation of the sounder in the supervisory (reverse voltage) mode.

3.3 Two Stage alarm (d.c. version only)

To operate as a two stage alarm, set the required tones using SW2 for tone 1 and SW1 for tone 2.

3.3.1 Reverse Polarity Set Up

Connect input wires to TB1 (+ve) (red) and TB3 (-ve) (black), tone 1 will sound. Reverse the voltage so that TB3 is +ve and TB1 is -ve, tone 2 will sound.

3.3.2 Common +ve Set Up

Connect input wires to TB1 (+ve) and separate -ve's to TB3 and TB5. When TB3 is -ve tone 1 will sound, when TB5 is -ve tone 2 will sound.

3.4 Single Stage Alarm (a.c. version)

When the unit is powered with a.c. only a single stage alarm is available. Tones should be selected using SW1. Connect input wires between TB1 and TB3.

Note: In all set ups, loop in and loop out is facilitated by TB2, TB4 and TB6 as appropriate.

4. MAINTENANCE

During the working life of the unit, little or no maintenance is required. However, if abnormal or unusual environmental conditions occur due to plant damage or accident etc., then visual inspection is recommended.

If a fault should occur, it is recommended that the unit be returned to MEDC for repair. All parts are replaceable.

If you have acquired a significant quantity of units, it is recommended that spares are also made available. Please discuss your requirements with the Technical Sales Engineers at MEDC.

5. CERTIFICATION/APPROVALS

Please refer to marking on the unit for specific approval details.

- UL listed for use in Class 1, Division 1, Groups C & D
USA (USL) Class 1, Zone 1, Groups IIA & IIB.
- UL Standards UL1203 & UL464.
- Suitable for hazardous location fire-alarm applications.

6. CERTIFIED TEMPERATURE

-25°C to +55°C

-13°F to +131°F

MEDC Ltd, Colliery Road, Pinxton, Nottingham NG16 6JF, UK.
Tel: +44 (0)1773 864100 Fax: +44 (0)1773 582800
Sales Enq. Fax: +44 (0)1773 582830 Sales Orders Fax: +44 (0)1773 582832
E-mail: sales@medc.com Web: www.medc.com

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