European manufacturer

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# BS-531/1 SOUNDER WITH BEACON FOR FIRE DETECTION PANEL

CE

| TECHNICAL CHARACTERISTICS | |
|---|---|
| OPERATION VOLTAGE | 21-28V DC |
| MAXIMUM CONSUMPTION | 1.2W |
| MAXIMUM SOUND OUTPUT in1m | 94dB (sound effect 1) |
| BEACON | 1 Power LED |
| TYPE OF APPLICATION ENVIRONMENT | Type A |
| MOUNTING | Wall |
| COVERAGE (y) | 6 m around the siren at an angle of 180° |
| MOUNTING HEIGHT (x) | 2.4m max |
| COVERAGE VOLUME CODE | W-2.4-6 |
| COVERAGE VOLUME | 86.4m³ (max) |
| FLASH RATE | 1 Hz (Switchable to 0.5 Hz) |
| FLASH COLOUR | Red |
| DEGREES OF COVER PROTECTION | IP42C |
| PRODUCED IN ACCORDANCE WITH | EN 54-3: 2001 +A1:2002 +A2:2006, EN 54-23: 2010 |
| OPERATION TEMPERATURE RANGE | 0 to 60 °C |
| RELATIVE HUMIDITY | Up to 95% |
| CONSTRUCTION MATERIAL | ABS/PC, PC |
| EXTERNAL DIMENSIONS | 141 x 141 x 100 mm |
| TYPICAL WEIGHT | 230gr. |
| GUARANTEE | 2 years |

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## GENERAL

This device is Visual Alarm Devices (VAD) for fire detection panels that offer a strong sound output and an optical warning with a beacon. The strong sound and the optical warning beacon cover many square metres. It features two inputs (N1, N2) for the production of two different sounds. This device can co-operate with any fire detection panel (BSR-2104, BSR-2114, BS-1632, BS-1634, BS-1636, BS-636).

### Installation and Connection

**1.** First, remove the retaining screw, place a flat blade screwdriver in the holes of the plastic hooks and remove the plastic cover (Image 1 on page 2).

**2.** Remove carefully the beacon connector (Image 2 on page 2).

**3.** Use the supplied mounting parts to install the siren's base at a height of 2.4 metres from the floor (figure 1 on page 2). Place the plastic plugs and fasten the screws to the mounting holes. Attention!! Make sure that the siren's base is installed upwards as shown in figure on page 4.

**4.** Place the caps and make a hole in the center using a small screwdriver. Pass through the caps the cables to connect the device.

**5.** The (**+N1** or the **+N2**) terminal block is connected to the (**+**) output of **Alarm-1** or **Alarm-2** of the panel and the (**-**) of the terminal block is connected to the (**-**) output of **Alarm-1** or **Alarm-2** of the panel. Accordingly connect in parallel all the sirens. (The maximum number of sirens depends on the type of the panel).

**6.** To select various **sound effects** use the dipswitch 1, 2 and 3 and choose the diserable sound effect, according to tables 2 and 3 on page 3.

**7.** For **LED effect** variation use the dipswitch 4 (Table 1) on page 2. On the last siren of the line, we must connect in parallel with its power cables, the terminal resistor that was removed from the alarm contacts of the panel.

**8. Reinstall the beacon connector (step 2).** Refit the plastic cover until the plastic hooks are securely attached (step 1) and fasten the retaining screw (torque 0.6Nm). Attention!! Make sure that the siren's cover is installed in the correct orientation.

**9.** Test the device after installation.


Image 1

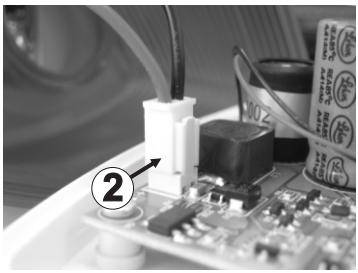
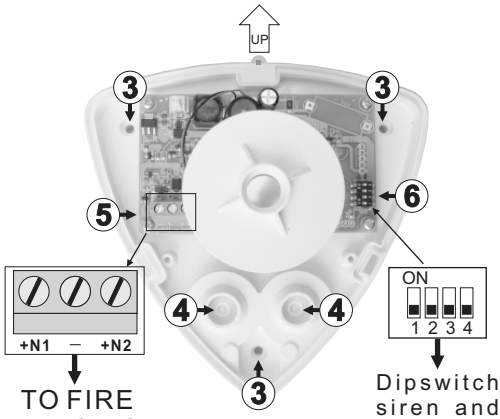



Image 2




TO FIRE DETECTION PANEL

Image 3

Dipswitch siren and beacon selections

**W-x-y**

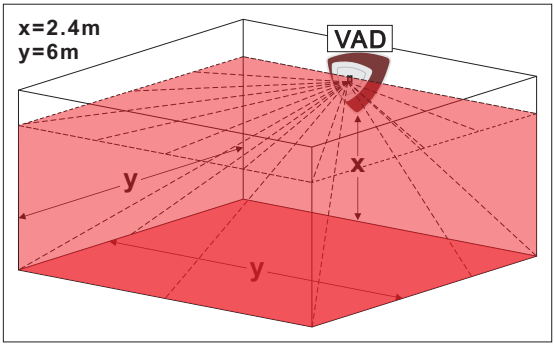



**Figure 1 W -Wall Mounted Device**

| TABLE 1 | |
|---|---|
| DSW | LED effect |
| ON 4 | 0.1 sec **ON** 1.9 sec **OFF** (0.5 Hz) |
| ON 4 | 0.1 sec **ON** 0.9 sec **OFF** (1 Hz) |


**NOTE!!! After finishing the installation, place the SEAL sticker as shown in the picture.**

## TABLE 2

### Fire Detection Panel connection to +N1

| DSW | Nr | Sound effect | Tone in accordance to: | dB | mA |
|---|---|---|---|---|---|
|  | 0 | 970Hz continuous | BS5839-1:2002 - ''evacuate'' BS5839 Part 1 1988 | 91 | 21 |
|  | 1 | 970Hz (1sec **ON** - 1 sec **OFF**) | BS5839-1:2002 - ''alert'' BS5839 Part 1 1988 | 94 | 22 |
|  | 2 | From 1200Hz to 500Hz in 1 sec | BS5839-1:2002 - DIN -Tone DIN33404 Part 3 | 90 | 22 |
|  | 3 | From 500Hz to 1200Hz in 3.5 sec - 0.5 sec **OFF** | NEN2575 (Netherlands) | 87 | 31 |
|  | 4 | 800Hz - 970Hz alternate at 1Hz | BS5839-1:2002 | 91 | 29 |
|  | 5 | Intermittent 2850Hz (0.5 sec **ON** - 0.5 sec **OFF**) | ISO8201 High Frequency | 82 | 27 |
|  | 6 | 970Hz (0.5 sec **ON** 970 Hz **OFF** x3 times +1.5 sec **OFF**) | ISO8201 Low tone - US Temporal Tone LF | 92 | 24 |
|  | 7 | 2850Hz (0.5 sec **ON** 2850 Hz **OFF** x3 times +1.5 sec **OFF**) | ISO8201 High tone - US Temporal Tone HF | 83 | 27 |

## TABLE 3

### Fire Detection Panel connection to +N2

| DSW | Nr | Sound effect | Tone in accordance to: | dB | mA |
|---|---|---|---|---|---|
|  | 0 | 970Hz (1 sec **ON** - 1 sec **OFF**) | BS5839-1:2002 - ''alert'' BS5839 Part 1 1988 | 94 | 22 |
|  | 1 | 970Hz continuous | BS5839-1:2002 - ''evacuate'' BS5839 Part 1 1988 | 91 | 21 |
|  | 2 | From 500Hz to 1200Hz in 3.5 sec - 0.5 sec **OFF** | NEN2575 (Netherlands) | 87 | 31 |
|  | 3 | From 1200Hz to 500Hz in 1 sec | BS5839-1:2002 - DIN -Tone DIN33404 Part 3 | 90 | 22 |
|  | 4 | Intermittent 2850Hz (0.5 sec **ON** - 0.5 sec **OFF**) | ISO8201 High Frequency | 82 | 27 |
|  | 5 | 800Hz - 970Hz alternate at 1Hz | BS5839-1:2002 | 91 | 29 |
|  | 6 | 2850Hz (0.5 sec **ON** 2850 Hz **OFF** x3 times +1.5 sec **OFF**) | ISO8201 High tone - US Temporal Tone HF | 83 | 27 |
|  | 7 | 970Hz (0.5 sec **ON** 970 Hz **OFF** x3 times +1.5 sec **OFF**) | ISO8201 Low tone - US Temporal Tone LF | 92 | 24 |

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**Certification**

The sounder with beacon BS-531/1 is certified from DEDAL.
Also DEDAL controls the production under CPR number:

| | |
|---|---|
| **BS-531/1**<br>**SOUNDER WITH BEACON** | CE 1922 |
| **1922 - CPR - 1785**<br>**EN-54-3: 2001 +A1:2002 +A2:2006**<br>**EN-54-23: 2010** | **22** |
| **KOLINDROS PIERIAS**<br>**60061 GREECE** | olympia electronics SAFETY & SECURITY SYSTEMS |

# Figure which shows the correct positioning of the base