

## VELOX 41300 and 41301 Series

### Addressable Loop Powered Sounders



#### Technology

The VELOX 4130x Addressable range of Sounder with state of the art microprocessor controlled technology, are fully loop powered from the range of VELOX fire alarm control panels. The new range of devices is fully addressable by VELOX range of control panels, provided with in-built isolators to enhance reliability. The new range of devices approved to EN54-3 and EN54-17.

The new range of sounders are supplied with 32 tones to comply with world-wide of sounder tones requirements, and thanks for the VTC "Variable Time Communication" protocol of VELOX, all the sounders are fully synchronised.

#### 5 Years Warranty

The VELOX clients enjoy five years warranty on all the VELOX devices. An extra added advantages when installing the VELOX range of products.

#### Approvals & Standards

The Velox 41300 and 41301 sounders products comply with the following British and European standards. BS EN 54-3 and EN54-17

#### Features

- Powered by the same fire detection loop
- Automatic or Manual Addressing functions.
- Built-in Short Circuit Isolator and EN54-17 certified.
- EN54-3 approved.
- 32 tones plus a selectable override tone
- Deep-Base IP65
- Features base locking system as standard
- Unique twist and lock bayonet mounting system

#### Cost effective installation is an added benefit

The Loop Powered sounders can be connected and Powered from the VELOX 2Km loop length using 1.5mm<sup>2</sup> cable. All the sounders range of devices are loop powered, which means cost-effective wiring, and easy to install on the same fire detection loop. This exceptional feature shall drop the cost dramatically, especially in an application like hotels and malls were many beacons or sounder-beacons are required to be installed on the same fire alarm loop.

### Commissioning is never easier

VELOX wants to make it easy for the installer, neither dip or rotary switches are required to address the devices, nor barcode scanners or other complicated methods of installation are needed.

Automatic addressing is an added benefit to the many others of VELOX technology, where the fire alarm control panel sequentially addresses each device and makes sure that no duplicate addresses are allowed. Furthermore, when needed to assign an address in a non-sequential fashion, the manual programming via the VELOX detector programming tool is utilised.

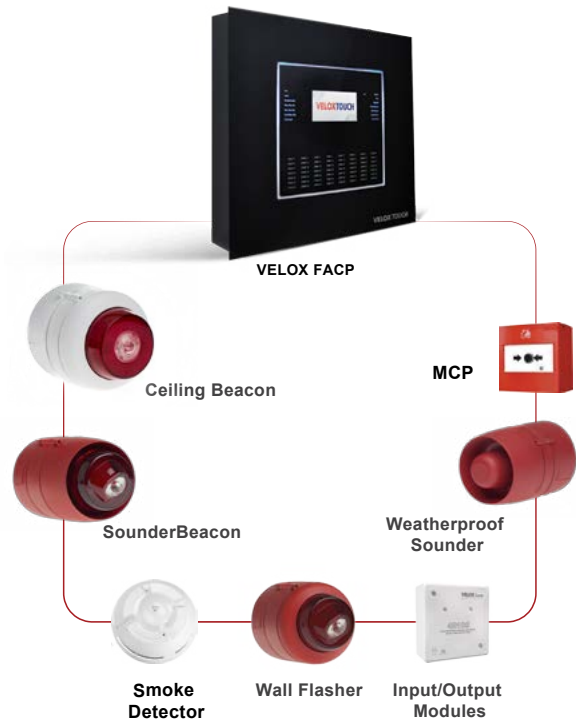
### Applications

The VELOX 41300 and 41301 series of loop powered addressable Sounder are designed to fit broad range applications such as hotel rooms, corridors, malls, car-parks, electrical rooms. The vast variety of 32 tones that complies with worldwide requirements of sound tones makes these devices suitable for use worldwide.

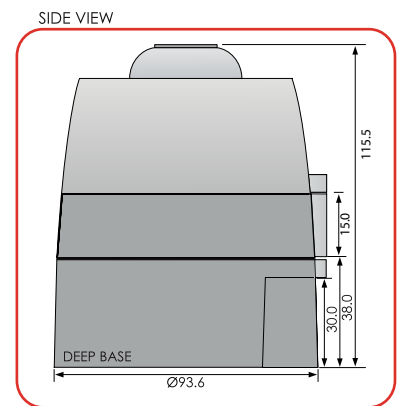
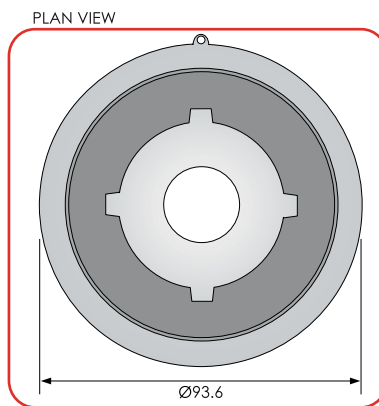
The sounder activated by a specific command sent from the fire alarm control panel. Communication established via the VELOX Variable Time Communication (VTC) protocol. The VTC allows the VELOX devices to communicate in high communication immunity over a long distance of 2km loop length

### Connections

The units can be connected to Velox Fire Alarm Panels as shown in below :



### Product Overview & Dimensions



## Technical Specifications

|                                  |                            |
|----------------------------------|----------------------------|
| Voltage Range (Vdc)              | 21-30, Loop Powered        |
| Number of Tones                  | 32                         |
| Operating frequency (Hz)         | 440-2900                   |
| Temperature range ( C)           | -20 to +70                 |
| Max Current (mA) @ 24VDC         | 8.3 - 30.8                 |
| Fault Protection                 | Inbuilt Isolator           |
| Material                         | ABS fire retardant plastic |
| Protection Rating                | IP65C (DEEP BASE)          |
| Boxed Weight (kg)                | .031kg                     |
| body colours                     | Red for Wall Mounted       |
| Typical Current Consumption (mA) | 6.2 – 17.1                 |
| Addressing                       | Automatic or Manual        |

## Performance

| Volume setting                            | High  | Med   | Low  |
|---|-------|-------|------|
| Sound Output, Typical (dBA)               | 102.3 | 97.6  | 82.1 |
| Sound output, anechoic chamber (dBA)      | 99.9  | 95.6  | 80.1 |
| Sound Output, reverberation chamber (dBA) | 117.7 | 110.7 | 95.3 |

## Order Codes

|       |  |
|-------|--|
| 41300 | Loop Powered Addressable Wall Mounted Sounder              |
| 41301 | Loop Powered Addressable Weatherproof Wall Mounted Sounder |

**Approved Tone List - Graphical**

| no. name                    | 1st stage frequency                   | 1st stage graphical | 2nd stage frequency                       | 2nd stage graphical |
|-----------------------------|---------------------------------------|---------------------|---|---------------------|
| 1 LF Sweep                  | 800-1000Hz swept every 500ms (2Hz)    |                     | 800Hz continuous                          |                     |
| 8 LF Continuous tone BS5839 | 800Hz continuous                      |                     | 800Hz continuous                          |                     |
| 11 Dutch sweep              | 970Hz continuous                      |                     | 500-1200Hz for 3500ms, then off for 500ms |                     |
| 25 German DIN tone          | 1200-500Hz swept every 1000ms (1Hz)   |                     | 800Hz continuous                          |                     |
| 27 French tone AFNOR        | 554Hz for 100ms, then 440Hz for 400ms |                     | 800Hz continuous                          |                     |

**Approved Tone List - Performance**

| no. name                    | 1st stage tone                        | switch (23456) | typical current (mA) |        |      | typical sound output (dBA) |        |       |
|-----------------------------|---------------------------------------|----------------|----------------------|--------|------|----------------------------|--------|-------|
|                             |                                       |                | low                  | medium | high | low                        | medium | high  |
| 1 LF Sweep (Cranford sweep) | 800-1000Hz swept every 500ms (2Hz)    | 11111          | 7.3                  | 12.4   | 17.3 | 80.1                       | 95.6   | 99.9  |
| 8 LF Continuous tone BS5839 | 800Hz continuous                      | 11000          | 8.6                  | 11.5   | 15.8 | 79.8                       | 94.7   | 98.4  |
| 11 Dutch sweep              | 970Hz continuous                      | 10101          | 7.0                  | 13.1   | 17.8 | 80.2                       | 95.5   | 100.1 |
| 25 German DIN tone          | 1200-500Hz swept every 1000ms (1Hz)   | 00111          | 7.0                  | 13.7   | 19.3 | 79.5                       | 95.0   | 99.0  |
| 27 French tone AFNOR        | 554Hz for 100ms, then 440Hz for 400ms | 00101          | 6.2                  | 9.3    | 11.6 | 76.9                       | 93.1   | 95.9  |

**EN54-3 Approved Minimum Sound Output at 1 Meter**

**Tone 1 -**

| Horizontal Plane |       |      | Vertical Plane |       |      |
|------------------|-------|------|----------------|-------|------|
| Angle            | 21.6V | 28V  | Angle          | 21.6V | 28V  |
| 15°              | 92.6  | 94.6 | 15°            | 93.3  | 95.2 |
| 45°              | 95.7  | 97.8 | 45°            | 96.0  | 98.0 |
| 75°              | 97.7  | 99.5 | 75°            | 97.8  | 99.8 |
| 105°             | 97.8  | 99.6 | 105°           | 97.7  | 99.7 |
| 135°             | 96.0  | 98.0 | 135°           | 96.0  | 97.9 |
| 165°             | 91.3  | 93.2 | 165°           | 90.6  | 92.4 |

**Tone 27 - French AFNOR Tone**

| Horizontal Plane |       |      | Vertical Plane |       |      |
|------------------|-------|------|----------------|-------|------|
| Angle            | 21.6V | 28V  | Angle          | 21.6V | 28V  |
| 15°              | 87.8  | 89.7 | 15°            | 88.0  | 89.8 |
| 45°              | 92.2  | 94.1 | 45°            | 92.6  | 94.5 |
| 75°              | 93.7  | 95.7 | 75°            | 94.1  | 96.3 |
| 105°             | 94.0  | 95.7 | 105°           | 93.9  | 95.8 |
| 135°             | 92.5  | 94.4 | 135°           | 92.2  | 94.0 |
| 165°             | 85.6  | 87.5 | 165°           | 86.1  | 88.1 |

**Continuous 800Hz Tone (Over ride Tone)**

| Horizontal Plane |       |      | Vertical Plane |       |      |
|------------------|-------|------|----------------|-------|------|
| Angle            | 21.6V | 28V  | Angle          | 21.6V | 28V  |
| 15°              | 90.3  | 92.3 | 15°            | 90.3  | 92.3 |
| 45°              | 93.5  | 95.4 | 45°            | 93.3  | 95.3 |
| 75°              | 96.1  | 98.0 | 75°            | 95.8  | 97.8 |
| 105°             | 95.9  | 97.9 | 105°           | 95.7  | 97.6 |
| 135°             | 93.9  | 95.8 | 135°           | 93.4  | 95.3 |
| 165°             | 89.6  | 91.5 | 165°           | 87.4  | 89.6 |

**Tone 11 - Dutch Sweep Tone**

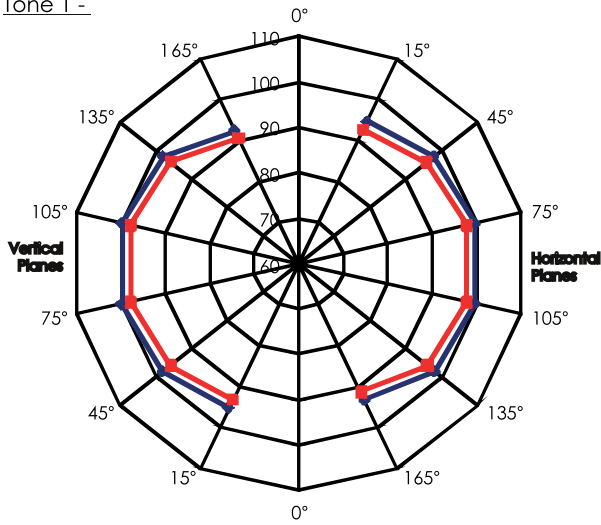
| Horizontal Plane |       |      | Vertical Plane |       |      |
|------------------|-------|------|----------------|-------|------|
| Angle            | 21.6V | 28V  | Angle          | 21.6V | 28V  |
| 15°              | 92.7  | 94.6 | 15°            | 92.2  | 94.1 |
| 45°              | 96.0  | 98.0 | 45°            | 96.4  | 98.4 |
| 75°              | 97.8  | 99.7 | 75°            | 97.8  | 99.8 |
| 105°             | 97.8  | 99.6 | 105°           | 97.5  | 99.5 |
| 135°             | 96.0  | 98.0 | 135°           | 96.3  | 98.1 |
| 165°             | 90.5  | 92.4 | 165°           | 91.3  | 93.2 |

**Tone 25 - German DIN Tone**

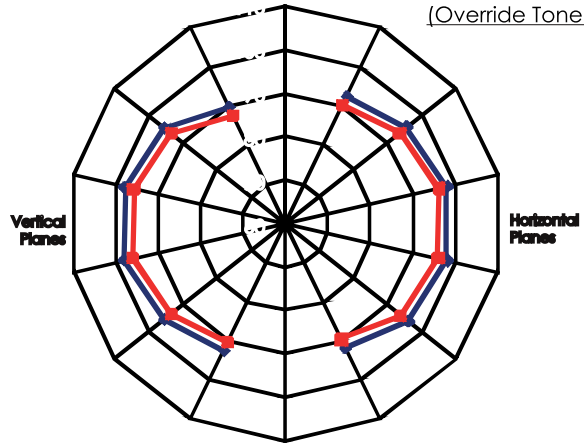
| Horizontal Plane |       |      | Vertical Plane |       |      |
|------------------|-------|------|----------------|-------|------|
| Angle            | 21.6V | 28V  | Angle          | 21.6V | 28V  |
| 15°              | 91.6  | 93.5 | 15°            | 90.8  | 92.8 |
| 45°              | 95.7  | 97.7 | 45°            | 95.2  | 97.0 |
| 75°              | 96.9  | 98.9 | 75°            | 97.1  | 99.1 |
| 105°             | 97.0  | 98.9 | 105°           | 97.0  | 98.9 |
| 135°             | 95.5  | 97.4 | 135°           | 95.0  | 97.0 |
| 165°             | 90.3  | 92.3 | 165°           | 90.0  | 91.9 |

**EN54-3 Approved Polar Diagrams**

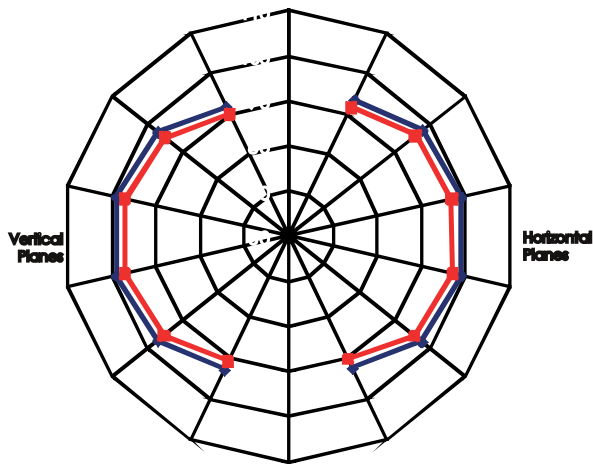
Tone 1 -



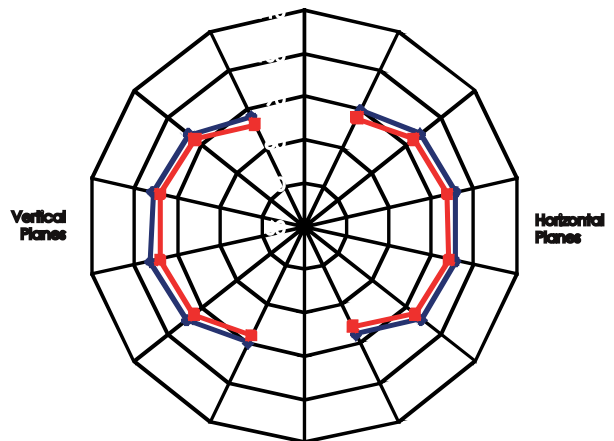
Continuous 800Hz Tone (Override Tone)



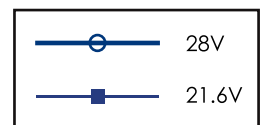
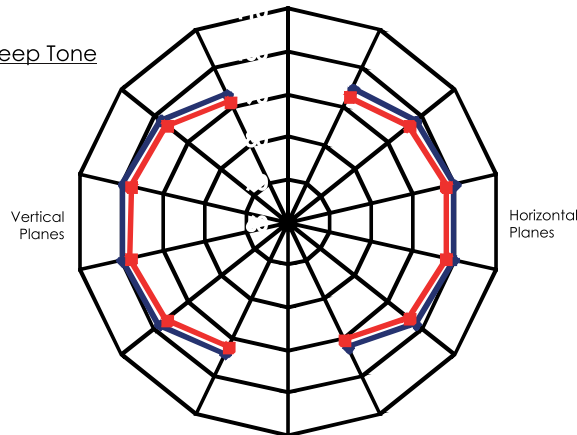
Tone 25 - German DIN Tone



Tone 27 - French AFNOR Tone



Tone 11 - Dutch Sweep Tone



As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice  
 Ref. Velox4130x/S/R1/V1/020719