

VI-6737 Digital Sounder Beacon

Installation and Operation Manual V1.05

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VSAIL

Features

- ◇ 16 Tone Available
- ◇ Type A : Indoor use
- ◇ 4 Sounder output Level
- ◇ Addressable Sounder Beacon
- ◇ Sounder/Optical indication Switchable.
- ◇ High-luminance ,low-power LED visual alarm Display
- ◇ Designed to comply with EN54-3



Description

The VI-6737 is an Addressable Sounder Beacon It will make loud alarm sound and optical indication at same time when fire was detected by fire detection and fire alarm system.The Sounder Beacon can be clearly heard and visible observed as a danger signal .With the pleasing appearance,it is also easy to install and maintain.

Technical data

Operating Voltage: :	16-28V(Modulated-pulse)	Standby Current :	< 0.3mA
Alarm Current(AVG) :	< 8 mA	Wiring :	Two-wire (non-polarized)
IP Rating: :	21C	Visual Alarm Indication:	0.2s light on; 0.8s light off
Temperature range :	-10°C ~ 50°C	Humidity :	≤95%RH, (40±2°C) No condensation

Installation

- ◇ **Dimensions: Showing on Fig.1**

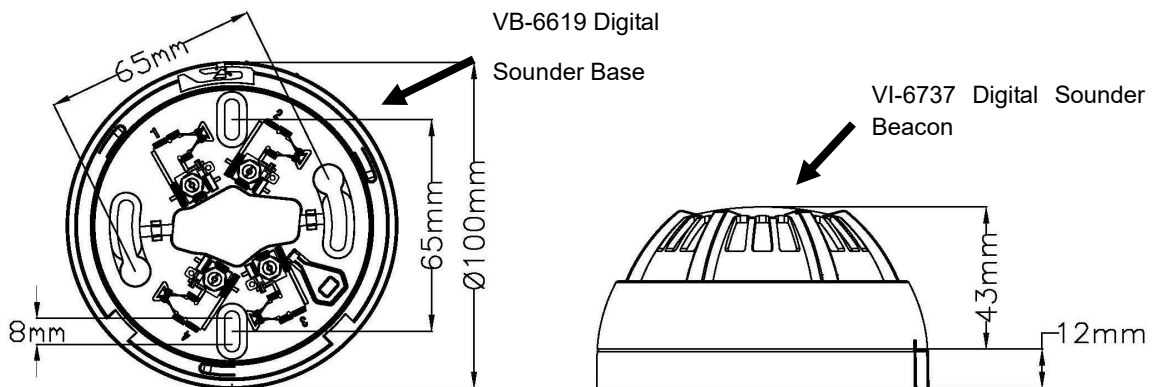


Fig.1 Dimensions

- ◇ **Locking Mechanism**

The VI-6737 can also be locked onto the mounting base by removing the plastic lug on mounting base (see Fig.2) and therefore it will be used as a sounder to comply with EN54-3.

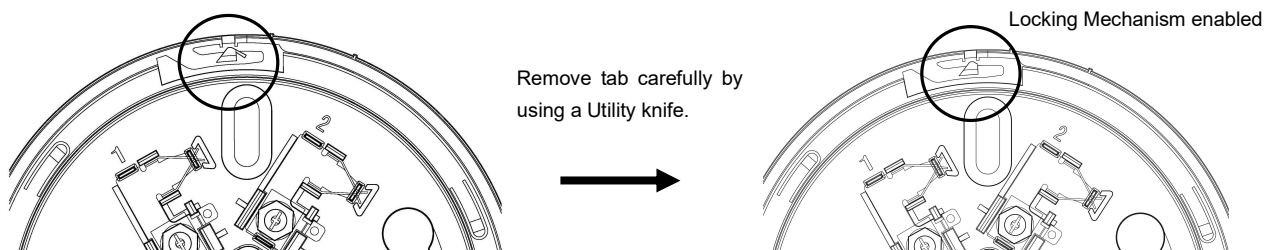


Fig.2 Locking Mechanism

Take down the key which is on VI-6737 mounting Base, Insert the key into the unlock aperture, and rotate key by 90 degrees to remove the VI-6737 from the installation base, Please refer to the Fig.3

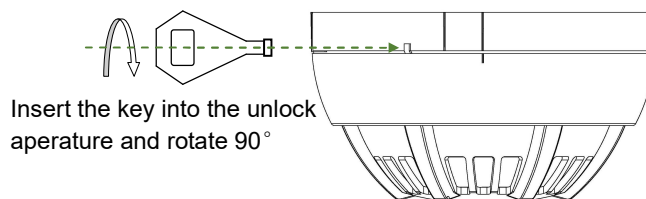


Fig.3 Unlocking

◇ **Mounting:**

Warning: Please disconnect the loop power in order to avoid control panel broken by short circuit when mounting base.

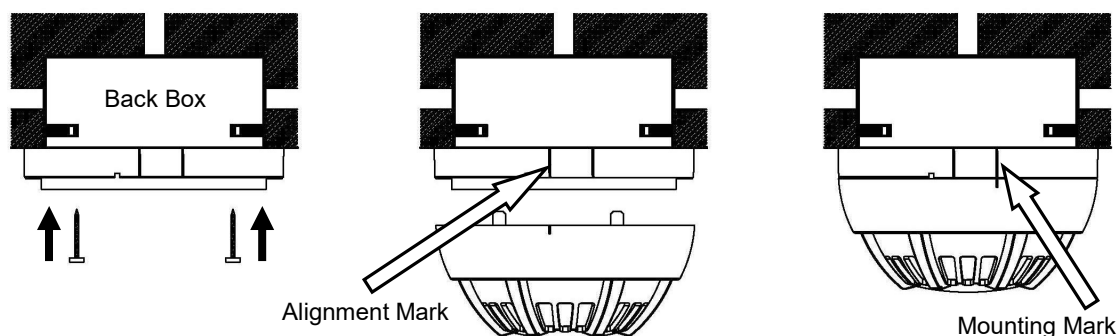


Fig.4 Mounting

◇ **Mounting Step**

1. Install the Mounting Base into Back Box by using screw. (Back box is standard 86H50 box) Make sure the mounting base is installed stable.
2. Connect the terminals on the mounting base, Detail please refer to "Wiring Details".
3. Install the Sounder Beacon body onto mounting base and direct Alignment Mark to Mounting Mark.
4. Turn Alignment Mark aim to Locking Mark to finish the installation.

Wiring

Wiring Requirement: RVS-2*1.0 mm² or 1.5 mm² wire, laid through metal tube (cable sink) or PVC tube.

1,2 Should connecting with fire alarm system detection loop (Non-polarized)

3,4 Should connecting with separate auxiliary power supply (If more than ten Sounder Beacon connecting in one loop)

Loop wiring is shown in Fig.5 and Fig.6

◇ **Loop power supply**

Maximum 10 VI-6737 Sounder Beacon can be connected in one loop.

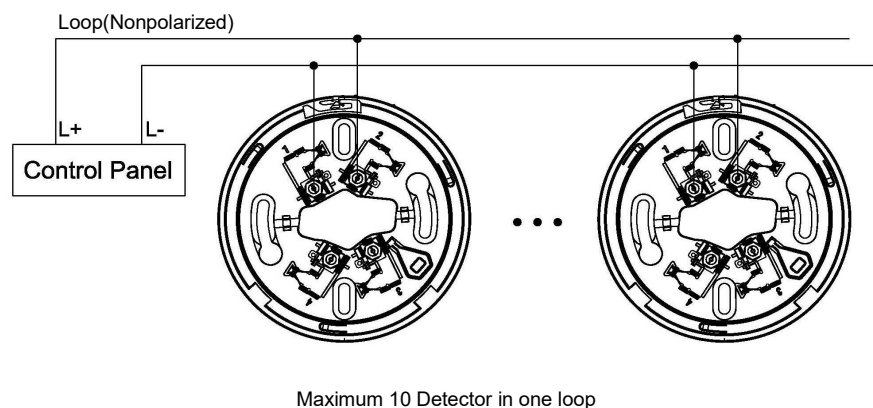


Fig.5 Loop power supply Installation

◇ **Auxiliary power supply**

If more than ten Sounder Beacon connecting in one loop ,the VI-6737 needs to connect with separate auxiliary power supply.The power requirement is 22~28VDC

Warning:The Control panel's power supply equipment can not be used as auxiliary power supply.

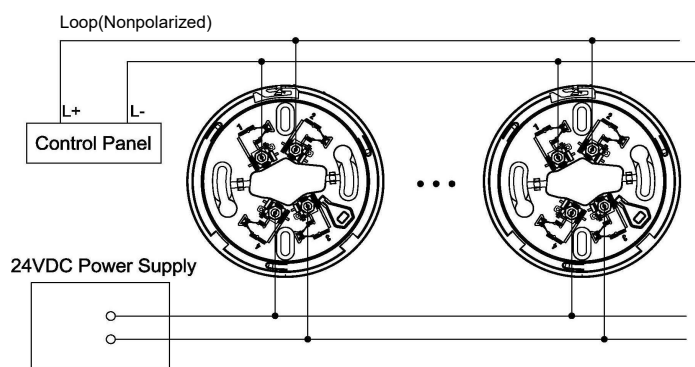


Fig.6. Auxiliary power supply installation

Address setting

VI-6537 Digital Programmer is used to write an address of the Sounder Beacon.

1. Connecting Programmer with loop terminals:1,2 of the Detector before it installation .
- 2.Set address ,Pressing Write key, the address will be shown on the numeric display if successful. It is fail if there is no address. Please refer to VI-6537 Digital Programmer Manual for details.
- 3.Address range should be within 0—255. The address is unique in a loop.

Sounder output level

Class	Current(AVG)	Sound Output Level±3Db
I	2.5mA	76dB
II	2.65mA	80dB
III	2.75mA	86dB
IV	3.125mA	90dB

- ◇ Class IV is Factory Setting
- ◇ The VI-6737 sounder output level can be set or switched off by Control Panel,Please refer to the corresponding manual for details.

Tone setting

- ◇ The tone of VI-6737 sounder can be set by Control Panel.Please refer to the corresponding manual for details.

No.	Tone	Description	No.	Tone	Description
0*	Medium Sweep HF	2400Hz -2900Hz @3Hz	8*	Fast Rise Sweep&Intermittent	(500Hz -1200Hz)× 3, 3.5s on/0.5s off
1*	Fast Sweep HF	2400Hz -2900Hz @9Hz	9	Slow rise &Intermittent	500Hz-1200Hz,3.75s/0.25s off
2	Continuous	2400Hz	10	Temporal HF	2850Hz, 0.5s on/0.5s off×2/1.5s off
3	Medium Sweep	800Hz /970Hz @ 2Hz	11	Temporal HF	2850Hz 0.4s on,0.3s off
4	Continuous	970Hz	12	Slow rise sweep	550Hz,0.7s/1000Hz,0.33s
5	Medium Sweep	800Hz -970Hz @1Hz	13	Slow rise sweep	500Hz -1200Hz @0.33Hz
6	Intermittent	970Hz 1s off/1s on	14*	Medium Sweep	1500Hz -2700Hz @3Hz
7	Evacuation Tone	970Hz, 0.5s/630Hz, 0.5s	15	Medium Sweep	800Hz-970Hz@3Hz

*Tone Approval to En54-3.

Testing

Warning: Switched off the power before all devices are installed completely.

The Sounder Beacon must be tested after installation or regular maintenance.

- ✧ **Registration:** The fire alarm control panel will registers the Sounder Beacon on line to check if the address of the Sounder Beacon mounted is the same address as that registered in the control panel.
- ✧ **Alarm condition:** After registration, Press “EVAC” Button of the Control Panel ,check the Sounder Beacon whether give the Sound and optical indication.
- ✧ **Reset:** After testing, reset the sounder beacon through control panel.

Fault Finding

Sounder Beacon Fault on Control Panel	Check wiring of VB-6619 Digital Sounder Base,Whether there is short-circuit or open circuit. Check the connection between Sounder Beacon and mounting base.
Address Fault	Incorrect address setting. Reset by VI-6537 Digital Programmer.

Limited Warranty

VSAIL warrants that the product will be free of charge for repairing or replacing from defects in design, materials and workmanship during the warranty period. This warranty doesn't cover any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

Appendix 1 LPCB tones of certification work tables

1. Tone 0 – Maximum Volume dB(A) 2400-2900Hz @ 3Hz

Angle	Horizontal Plane		Vertical Plane	
	Max 28V	Min 16V	Max 28V	Min 16V
15°	82.5 dB(A)	82.0 dB(A)	82.7 dB(A)	82.5 dB(A)
45°	82.8 dB(A)	80.1 dB(A)	79.3 dB(A)	79.2 dB(A)
75°	86.3 dB(A)	85.4 dB(A)	86.4 dB(A)	85.9 dB(A)
105°	86.7 dB(A)	85.5 dB(A)	86.2 dB(A)	84.8 dB(A)
135°	81.2 dB(A)	78.8 dB(A)	80.3 dB(A)	80.1 dB(A)
165°	82.3 dB(A)	81.8 dB(A)	81.1 dB(A)	81.1 dB(A)

2. Tone 1 – Maximum Volume dB(A) 2400-2900Hz @ 9Hz

Angle	Horizontal Plane		Vertical Plane	
	Max 28V	Min 16V	Max 28V	Min 16V
15°	78.0 dB(A)	78.0 dB(A)	78.3 dB(A)	77.9 dB(A)
45°	76.6 dB(A)	76.3 dB(A)	77.0 dB(A)	76.2 dB(A)
75°	86.0 dB(A)	85.1 dB(A)	85.9 dB(A)	84.1 dB(A)
105°	84.1 dB(A)	83.6 dB(A)	84.0 dB(A)	84.0 dB(A)
135°	77.4 dB(A)	77.0 dB(A)	77.5 dB(A)	75.0 dB(A)
165°	76.3 dB(A)	76.0 dB(A)	76.5 dB(A)	75.3 dB(A)

3. Tone 8 – Maximum Volume dB(A) (500Hz -1200Hz)×3, 3.5s on/0.5s off

Angle	Horizontal Plane		Vertical Plane	
	Max 28V	Min 16V	Max 28V	Min 16V
15°	68.6 dB(A)	68.1 dB(A)	69.0 dB(A)	68.2 dB(A)
45°	67.9 dB(A)	66.7 dB(A)	67.4 dB(A)	64.2 dB(A)
75°	74.1 dB(A)	73.3 dB(A)	74.0 dB(A)	72.9 dB(A)
105°	74.4 dB(A)	73.3 dB(A)	72.7 dB(A)	72.3 dB(A)
135°	67.0 dB(A)	66.5 dB(A)	67.3 dB(A)	67.0 dB(A)
165°	68.9 dB(A)	68.6 dB(A)	68.4 dB(A)	68.0 dB(A)

4. Tone 14 – Maximum Volume dB(A) 1500Hz -2700Hz @3Hz

Angle	Horizontal Plane		Vertical Plane	
	Max 28V	Min 16V	Max 28V	Min 16V
15°	81.9 dB(A)	81.2 dB(A)	81.9 dB(A)	81.6 dB(A)
45°	77.6 dB(A)	77.3 dB(A)	77.4 dB(A)	71.3 dB(A)
75°	82.9 dB(A)	82.3 dB(A)	83.4 dB(A)	83.0 dB(A)
105°	83.1 dB(A)	82.6 dB(A)	83.6 dB(A)	83.2 dB(A)
135°	76.2 dB(A)	76.1 dB(A)	77.2 dB(A)	76.6 dB(A)
165°	79.8 dB(A)	78.6 dB(A)	80.5 dB(A)	79.9 dB(A)