Before Installation

Please read these instructions carefully and keep for future reference.
The information in this document is subject to change without notice. For updates please refer to our website.

⚠ CAUTION

Do not use the products outside the rated power supply voltage range specified in the Specifications. It may cause a fire or damage to equipment.

⚠ CAUTION

Do not disassemble, repair, or modify the products. It may cause a fire or electric shock.

⚠ CAUTION

Make sure to turn the power off before commencing any wiring work. Otherwise it may cause electric shock or damage to equipment.

Note: Follow the requirements for the installation of the products in accordance with the Specifications. Otherwise it may cause malfunction.

Note: Do not install the product in any location where oil, dust, iron powder, chemicals, or hydrogen sulphide may occur or affect the product. It may cause damage to equipment.

Section 1 – INTRODUCTION

VDOT-S6 Base is a detector base with sounder which is individually or collectively controlled by Velocity Control Panel MMP series using addressable system and designed to be used with the model VDOT-PY, VDOT-PYH, VDOT-DPH, and VDOT-H2 detector head.

The detector base has 4 sound patterns which are continuous, march, ANSI 3 temporal and 4 temporal patterns. These patterns which are used in and around buildings can be selected by the control panel. Only ANSI 3 temporal pattern shall be used for UL Listed applications.

The sounder pressure level at 3 m (10 ft.) from the base is over 85 dB.

127 bases can be connected to a loop of the control panel.

The base is designed to be mounted to 3-1/2” octagonal, 4” octagonal or 4” square electrical box.

Section 2 - TERMINALS

VDOT-S6 BASE is supplied with 5 terminals as standard.
The terminals of VDOT-S6 BASE are configured as follows:

Terminal	Description
1	SLC positive
3	Not used
6	SLC negative
I+	Aux. supply positive
I-	Aux. supply negative

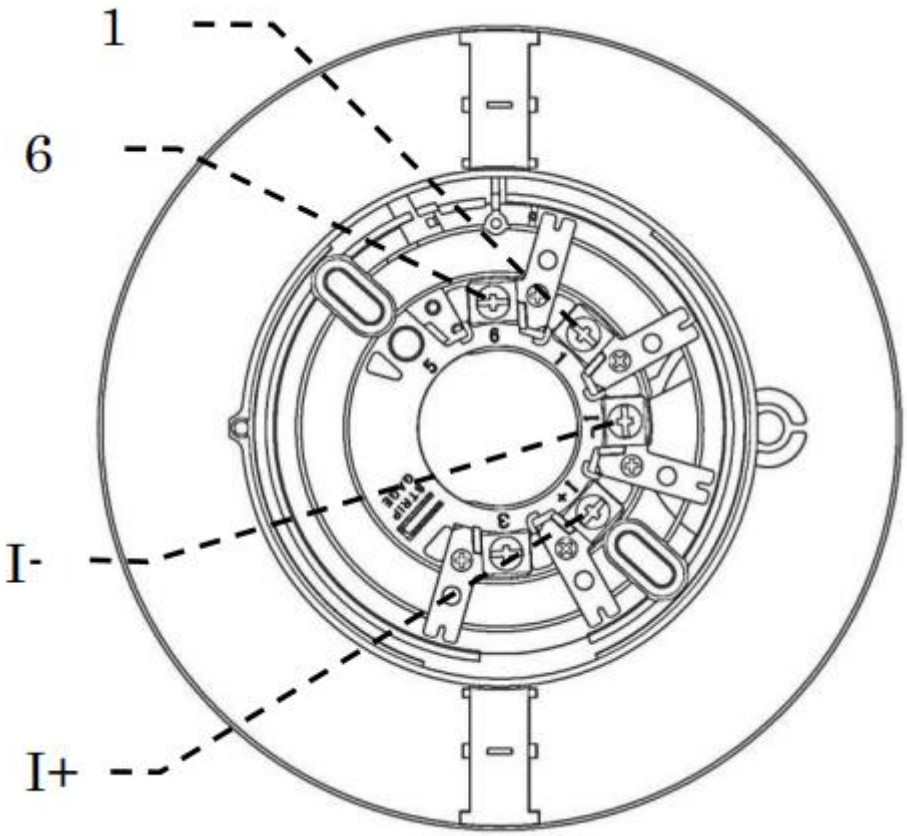

Figure 1: Position of terminals

Section 3 – Dimensions

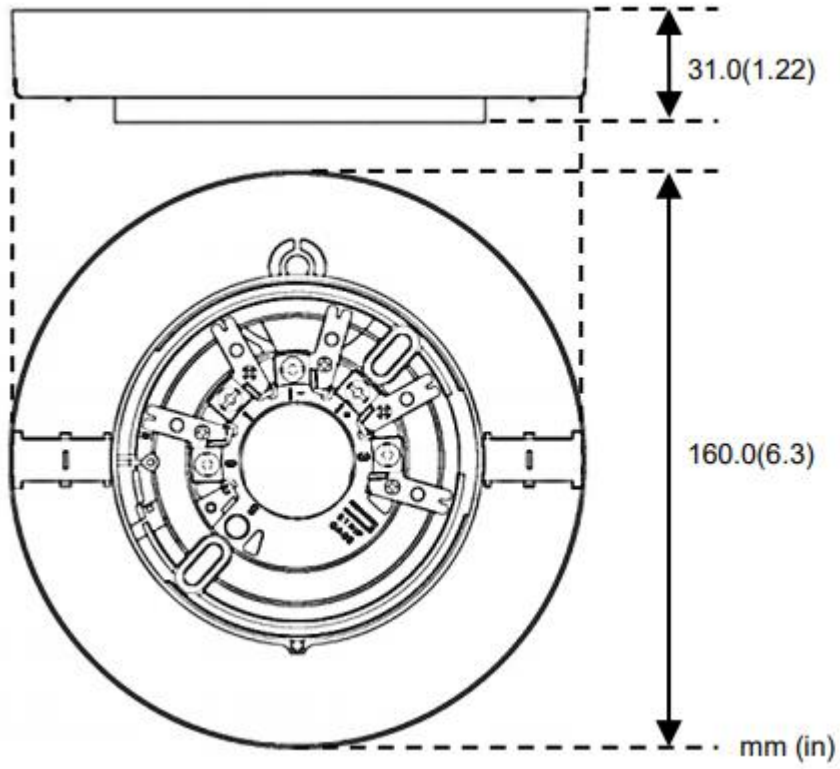

Figure 2: Dimension of VDOT-S6 BASE

Section 4 – DETECTOR MODELS

VDOT-S6 BASE are available for use with the VDOT series detectors.
It is important to use the correct detector for each application.
The standard range of detectors available is as follows:

Model	Description
VDOT-PY	Analog addressable photoelectric smoke detector
VDOT-PYH	Analog addressable combination photoelectric smoke and heat detector 57°C (135°F) with 8.3°C (15°F) rate of rise
VDOT-H2	Analog addressable heat detector 57°C (135°F) with 8.3°C (15°F) rate of rise
VDOT-DPH	H Analog addressable combination photoelectric smoke (dual wave length) and heat detector 57°C (135°F) with 8.3°C (15°F) rate of rise

Section 5 – GENERAL OPERATION

VDOT-S6 BASE is controlled by Fire Alarm Control Velocity Panel MMP series for emitting alarm and selecting sound pattern. The panel initiates the sound of the base individually or collectively and also the panel selects the sound from 4 patterns which are continuous, march, ANSI 3 temporal and 4 temporal according to a “Job data” (site-specific data). Only ANSI 3 temporal pattern shall be used for UL Listed applications. When the base is disconnected from SLC, the control panel indicates fault warning. Meanwhile, if the fault warning caused by open or short circuit

on the AUX. power circuit is required to be indicated on the panel, use PCE and VDOT-MiniIP as described in Section 8.

Section 6 – ADDRESS SETTING

The VDOT-S6 BASE requires compatible addressable communications to the control panel in order to function properly. All sounder bases have random addresses from the factory before installation. The VDOT-AD2 Address Programmer is used for setting the address between 1 and 254 decimal of all devices prior to installation. See Annex A for the handling. Once addressed, connect to Fire Alarm Control Velocity Panel MMP series.

Note: Address setting for VDOT-S6 BASE needs to be executed in the condition of being unwired to SLC.

Section 5 – INSTALLATION

The product must be installed in accordance with the applicable NFPA standards, local codes and jurisdictional authorities. Failure to follow these instructions may result in failure of the detector to report an alarm condition.

Note: ZETA ALARM SYSTEMS is not responsible for the product which is improperly installed, maintained and tested.

The sounder base is designed to be mounted to 3-1/2” octagonal, 4” octagonal or 4” square electrical conduit box. Before installing the product, check the continuity, polarity and insulation resistance of all wiring. Check that siting is in accordance with the site system drawings and conforms to all applicable local codes such as NFPA 72.

In normal use, the VDOT-S6 BASE will be installed at ceiling level or wall position. Please refer to specific detector instruction manual for details. Pass the field wiring through the cable opening in the center and from the rear of the base. Install the base to the electrical box with screws via the base mounting holes. Connect the field wiring to the base terminals, as detailed in Figure 5.

Install the detector head by inserting it into the base and turning clockwise until the notch in the detector rim aligns with base locking screw. To avoid unauthorized removal, turn the locking screw counterclockwise until the screw extends out about 4 mm (3/16”) from the rim of the base (See Figure 4).

Note: If the detector is installed on a high ceiling where a tool (ladder, etc.) is needed, it is not recommended to use the locking screw.

⚠ CAUTION

Smoke and heat detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

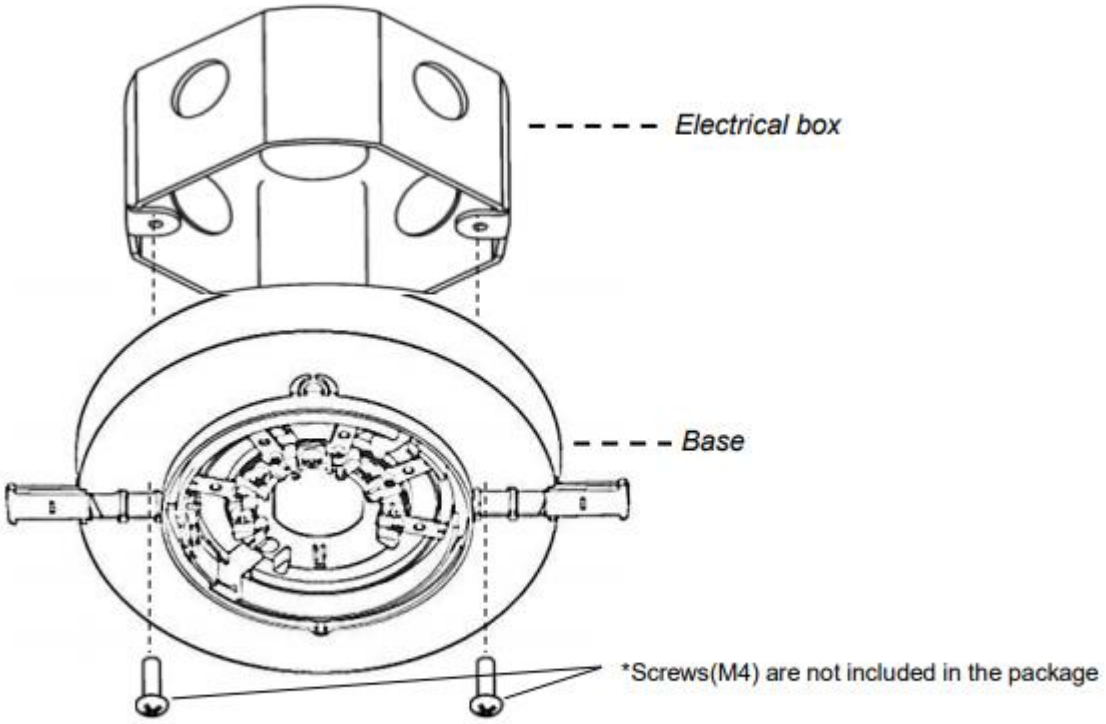

Figure 3: Installation to electrical box

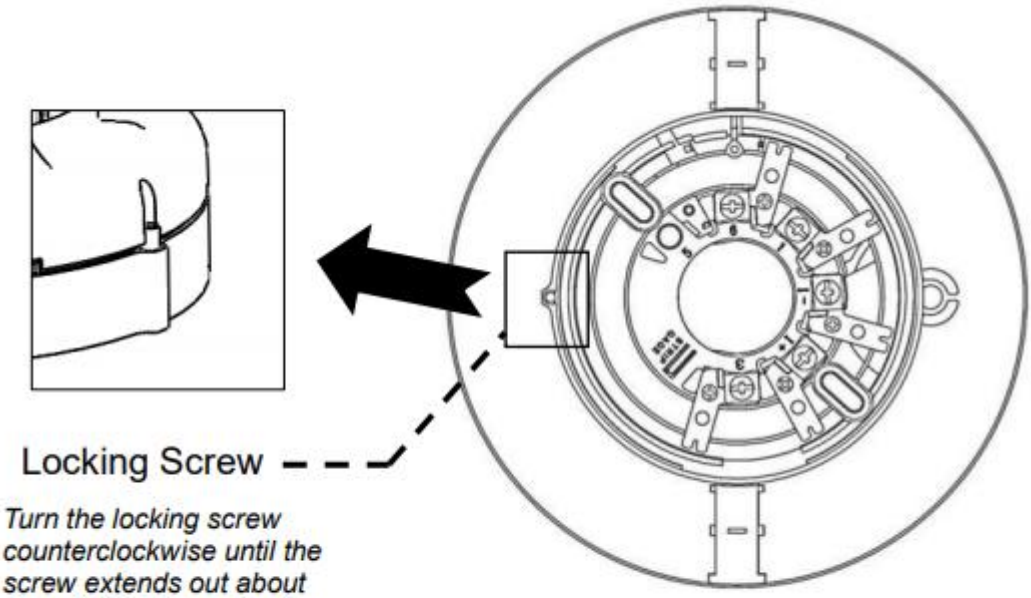

Figure 4: Position of locking screw

Section 8 – CONNECTIONS

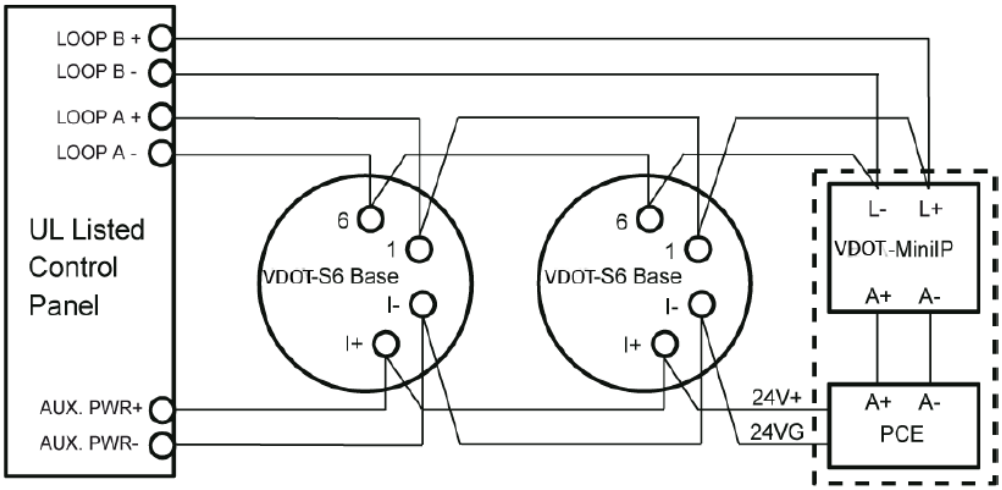

Figure 5: Connection to Velocity control panel MMP series

⚠ CAUTION

Use cable AWG12-20 for wiring. Do not connect different gauge cables at one terminal in order to prevent loosening.

⚠ CAUTION

Do not connect cables in reverse polarity. Failure to connect the polarity correctly could result in damage to other equipment.

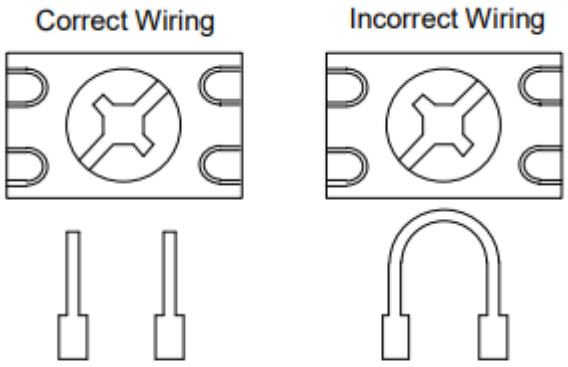

Figure 5: Connection to terminals

⚠ CAUTION

For system monitoring — For terminals 1, 6, I+ and I- do not use looped wire under terminals. Break wire run to provide monitoring of connections.

Section 9 – Maintenance

Maintenance

The VDOT-S6 BASE is a high quality product engineered for reliability. In order to obtain optimum performance, periodic maintenance is required, at least in accordance with NFPA 72 chapter 14 “Inspection, Testing and Maintenance”

Routine Inspection:

Ensure the detector head and the base are secure and undamaged.

Operation Test:

The purpose of the Operational Test is to confirm the product’s correct operation in response to an operation of initiating devices.

Notes:
- Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service.
- Disable the system to prevent unwanted alarms.
- All the EVA-S6 Bases must be tested after installation and periodically thereafter.
- Testing methods must satisfy the Authority Having Jurisdiction (AHJ).
- When carrying out site testing of the product, the control panel must be set to “One Man Walk Test” mode prior to the test.

1) Take any necessary precautions to limit the sounding of the alarm sounders/bells and fire service summoning device.

2) Test the detector in accordance with each detector’s instruction manual as specified in Section 4. Check that the LED indicator on the detector illuminates. When the detector goes into an alarm status, confirm that the base emits the alarm (sound pattern) which is configured in the Job data.

3) After the detector has given the alarm condition, the detector automatically is reset from the control panel. It may be necessary to allow a short time to elapse before resetting the detector. Confirm that the alarm of the base stops sounding.

4) If the base fails these tests it should be returned for repair

Section 8 – SPECIFICATION

SLC Applied Voltage	Rated Range 20VDC to 38VDC
AUX. Supply Voltage	Rated Range 16VDC to 33VDC
SLC Current Consumption	Standby 0.5mA Alarm 1.4mA
AUX. Supply Current Consumption	Standby 0.5mA Alarm 20mA
SLC Line Impedance	Up to 50ohms (See note 1)
AUX. Supply Line Impedance	1.76 ohms@85 bases in alarm
UL Ambient Installation Temperature Range	0℃ (32°F) to 38℃ (100°F)
Operating Temperature Range	-10℃ (14°F) to 55℃ (131°F)
Storage Temperature Range	-20℃ (-4°F) to 60℃ (140°F)
Max Relative Humidity	Up to 95% RH, non-condensing
Environment	Indoor dry use only
Addressing Method	Soft addressing, non-volatile EEPROM
Address	1 – 254 (dec)
Maximum Quantity per Loop	127 units (See Note 1)
Terminal	AWG12 - 20
Dimensions	Φ160.0 mm x 31.0 mm H (Φ6.3" x 1.22" H)
Weight	Approximately 170g (6.0 ounces)
Conformity	UL268 and UL464

* Refer to the Installation and Operation Manual of Control Panel Velocity MMP series to determine correct loop load and maximum loop resistance for devices connected to each loop.