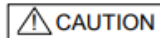


## Before Installation

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.

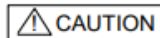
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 CAUTION

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.

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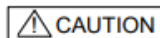
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 CAUTION

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

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 CAUTION

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

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**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-STB-SCI is a detector base with short circuit isolator for use with Velocity MMP Panel series, which does not require an address. The detector base isolates short-circuit to protect detectors from failing. When short-circuit is detected LED indicator illuminates, and short-circuited area is isolated automatically. Upon removal of the short condition, the area is automatically connected to go back to the normal standby status.

## Section 2 - TERMINALS

VDOT-STB-SCI base is supplied with 4 terminals as standard. The terminals of VDOT-STB-SCI base head are configured as follows:

- Terminal 1 = SLC positive
- Terminal 3 = Not used
- Terminal 6 = SLC negative IN
- Terminal 5 = SLC negative OUT

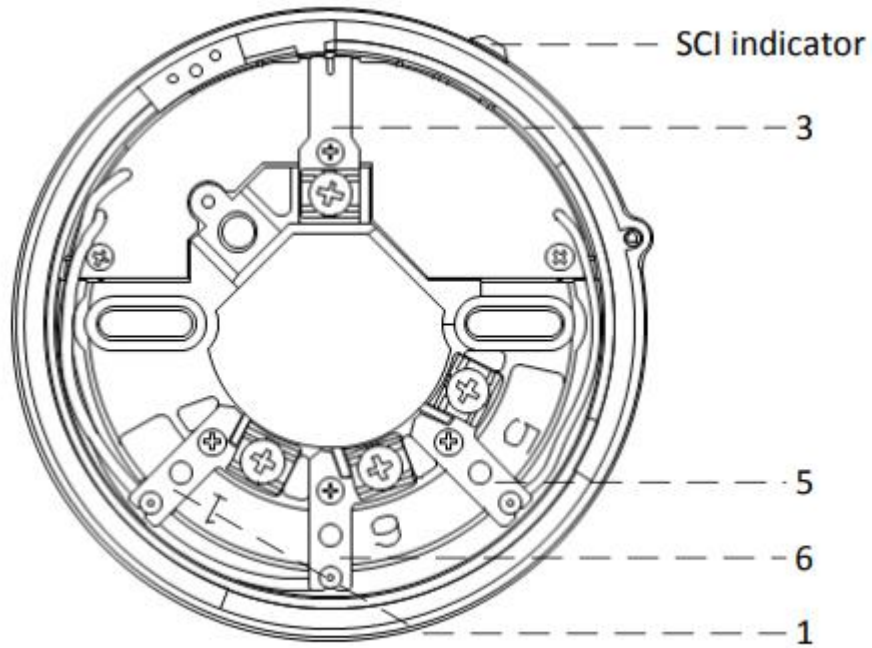


Figure 1: Position of terminals

Section 3 – Dimensions

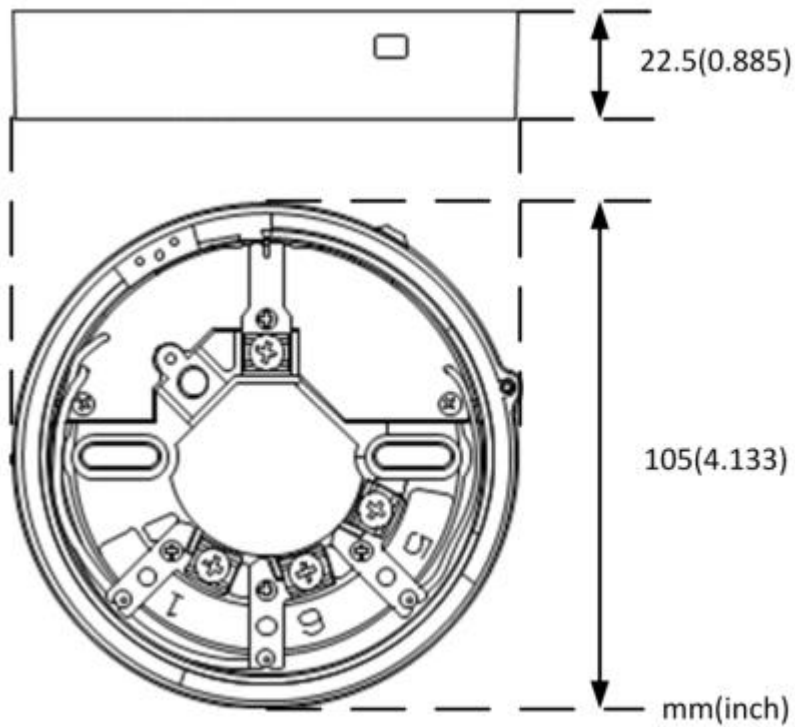


Figure 2: Dimension of VDOT-STB-SCI

**Section 4 – DETECTOR MODELS**

VDOT-STB-SCI 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

Optional accessory

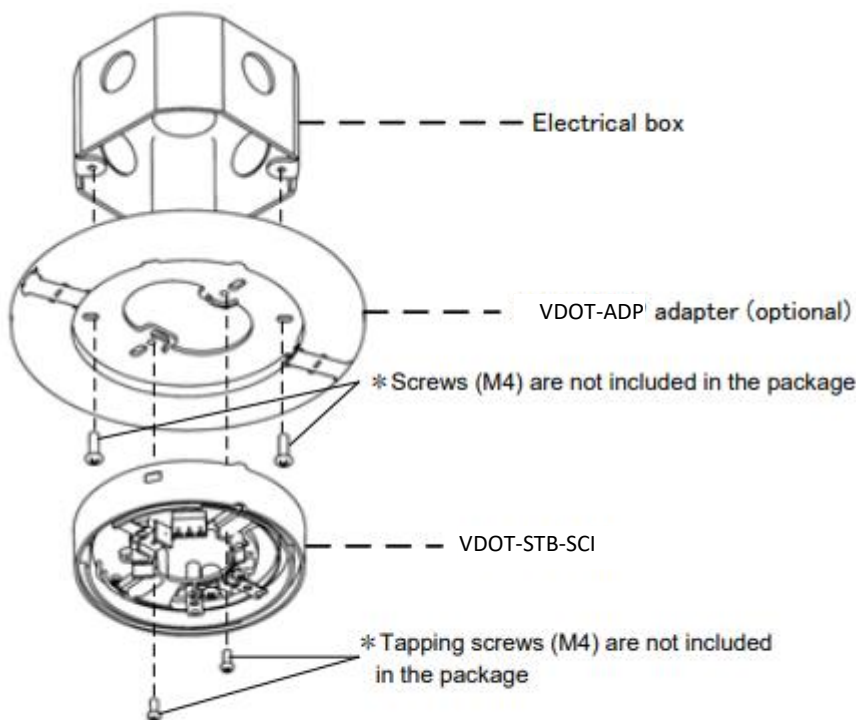
VDOT-ADP adapter: Use this adapter when VDOT-STB-SCI is installed with a 4” square electrical box or 4” octagonal electrical box. (Refer to “VDOT-ADP Instruction Manual” for details.)

**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.

**Note:** Use the VDOT-ADP adapter for a 4” square electrical box or 4” octagonal electrical box. VDOT-ADP adaptor is not used for a 3-1/2” octagonal electrical box

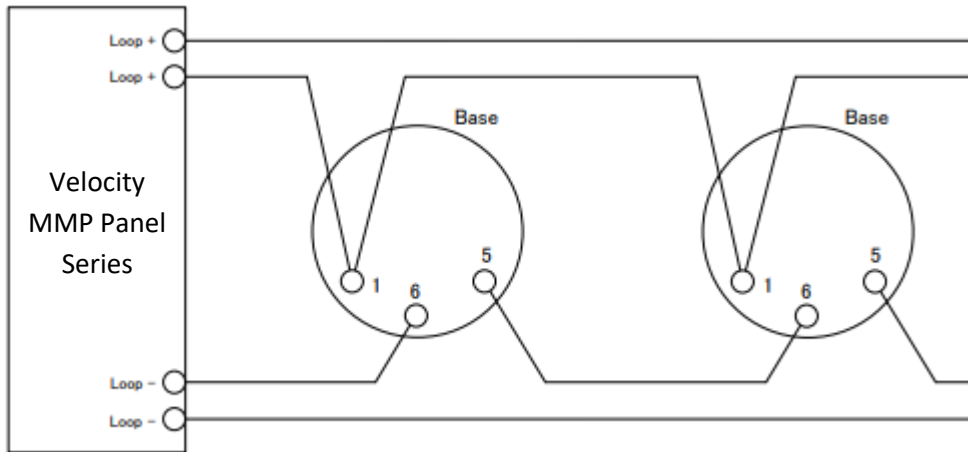


**Figure 3: Installation to an electrical box**

**Section 6 – CONNECTIONS**

Install wiring in accordance with Figure 4 in this document.

All wiring must conform to applicable local codes, ordinances and regulations.



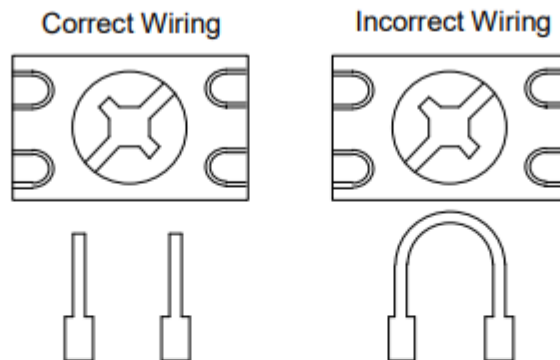
**Figure 4: Connection to a control panel Velocity MMP series**

**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**

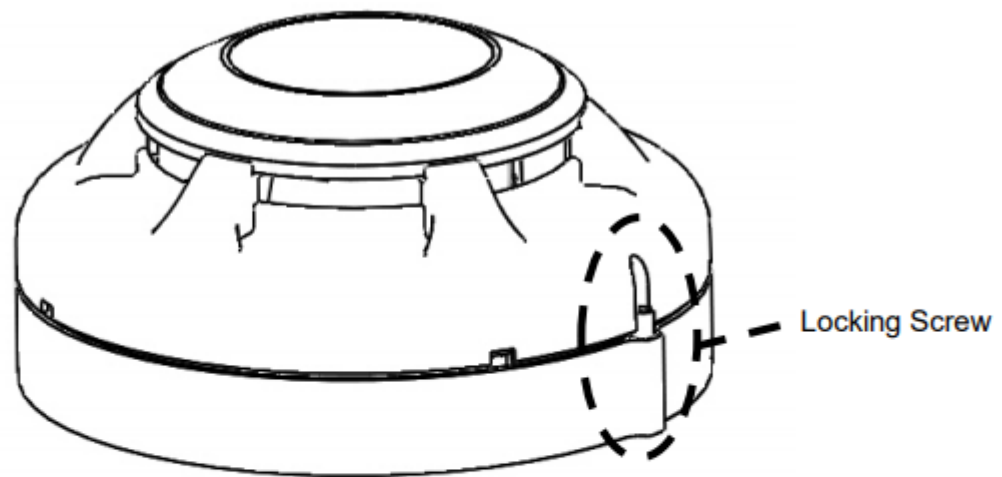
**CAUTION**

For system monitoring - for terminals 1, 5, and 6, do not use looped wire under terminals. Break wire run to provide monitoring of connections.

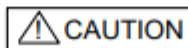
Before installing the product check the continuity, polarity and insulation resistance of all wiring. Check that siting is in accordance with the site system drawings and conforms to all applicable local codes such as NFPA 72.

In normal use, the VDOT-STB-SCI base will be installed at ceiling level. Pass the field wiring through the cable hole in the center and from the rear of the base. Hold and affix the base to the ceiling or electrical box with screws via the base mounting holes. Connect the field wiring to the base terminals, as detailed in Section 5 and 6, making sure the wiring does not obstruct fitting of the detector head.

Fit the detector head by inserting it into the base and turning clockwise until the notch in the detector rim aligns with base locking screws. To avoid unauthorized de-installation, turn the locking screw counterclockwise until the screw comes to about 4mm(3/16") from the rim of the base, as shown in Figure 6. The OMNIVIEW™ 360° indicator permits visibility from any angle.



**Figure 6: Position of locking screw**



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

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## Section 7 – Maintenance

### Maintenance

The VDOT-STB-SCI 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.

- 1) When carrying out site testing of the product, the control panel shall be set to “one-man-walk test mode” prior to the test.
- 2) Take any necessary precautions to limit the sounding of the alarm sounders/bells and any fire service summoning device.

3) Detach the detector connected with the base.

4) Short between terminal 1 and 5, and the yellow SCI indicator is illuminated. The short circuit isolator isolates the devices connected after the short-circuited area, which makes these devices have no response. Upon removal of the short condition, the area is automatically connected to go back to the normal operating status, and the SCI indicator turns off.

**Note:** For detector testing and cleaning information, refer to each detector's instruction manual as specified in Section 4.

**Section 8 – SPECIFICATION**

SLC Applied Voltage	Rated Range 20VDC to 38VDC
SLC Current Consumption	Standby 100µA Activated(SCI Isolation) 22mA
SLC Line impedance	Up to 50ohms (Refer to * below)
SCI On Resistance	0.2ohms (max)
SCI Fault Detection Voltage	10V (min)
Visual Indicator (Status LED)	SCI LED (yellow)
UL Ambient Installation Temperature	0°C(32°F) to 38°C(100°F)
Operating Temperature	-10°C(14°F) to 55°C(131°F)
Storage Temperature	-20°C(-4°F) to 60°C(140°F)
Max Relative Humidity	Up to 95% RH , non-condensing
Environment	Indoor dry use only
Terminal	Terminal for SLC: AWG12 to 20
Dimensions	φ105 mm x 22.5 mm H (φ4.133" x 0.885" H) (Mount to a 3-1/2" octagonal box)
Weight	Approximately 79g (2.8 ounces)
Standard	UL268 and UL521

\* 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.