

SharpEye™

40/40 Duct Mount

P/N 777670

Installation Guide



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Warning: This manual should be read carefully by all individuals who have or will have responsibility for using, maintaining or servicing the product.

The detector is not field-repairable due to the meticulous alignment and calibration of the sensors and the respective circuits. Do not attempt to modify or repair the internal circuits or change their settings, as this will impair the system's performance and void the SPECTREX product warranty.

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Release History

Rev	Date	Revision History	Prepared by	Approved by
0	January 2012	First Release	Ian Buchanan	Eric Zinn
1	March 2014	Second Release	Ian Buchanan	Eric Zinn
2	May 2014	Third Release	Ian Buchanan	Eric Zinn
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1 General Description

This document describes the installation instructions for the Duct Mount P/N 777670.

The duct mount is suitable for use with the SharpEye 40/40 Series Optical Flame Detectors (40/40I, 40/40M, 40/40R, 40/40L, 40/40LB, 40/40L4, 40/40L4B, 40/40U, 40/40UB, 40/40UFL, and 40/40UFI), for both the aluminum and St.St. enclosure.

The duct mount allows flame detection in areas where high temperatures exist or in cases where the detector cannot be installed inside the area. It comprises a special duct mount arrangement with specific optical window to allow installation in high temperature duct applications.

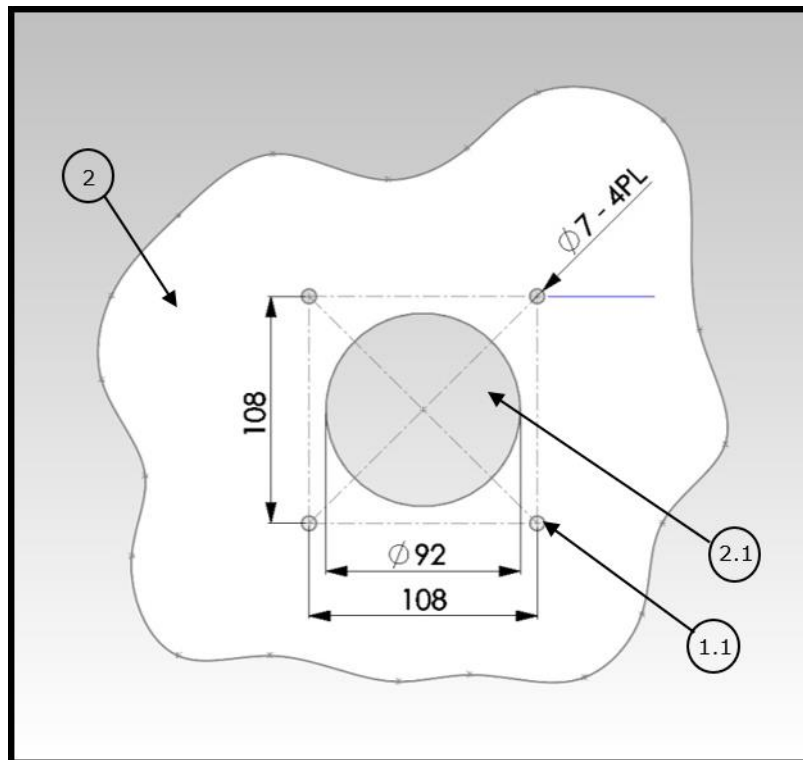
The duct mount will limit the cone of vision of the installed detector to 65 horizontal and 65 vertical.

The temperature allowed for the duct mount to be installed at is: 55°/+200°C / -67°F/+392°F.

2 Duct Mount Installation Instructions

2.1 Surface Preparation

- 1 Check the air duct installation surface (2) stability. It should be as near as possible to a riding girder connection in order to ensure proper support to the mounting and to the unit. Also, the surface must be stable and free of vibrations.
- 2 Locate the best installation surface for the detector, so that the detector will have a full cone of vision to the protected area.
- 3 Drill and cut the duct according to instructions in Figure 1. Drill the duct hole (2.1) and the screw holes (1.1) carefully.



Description	
1.1	Screw holes
2	Duct installation surface
2.1	Duct hole

Figure 1: Drilling Layout Dimensions for Duct Installation

2.2 Duct Mount Disassembly

- 1 Open nuts (5) and (8), and washers (4) and (7).
- 2 Dismount the internal plate (1) and the base plate (3).
(See Figure 2 and Figure 3).

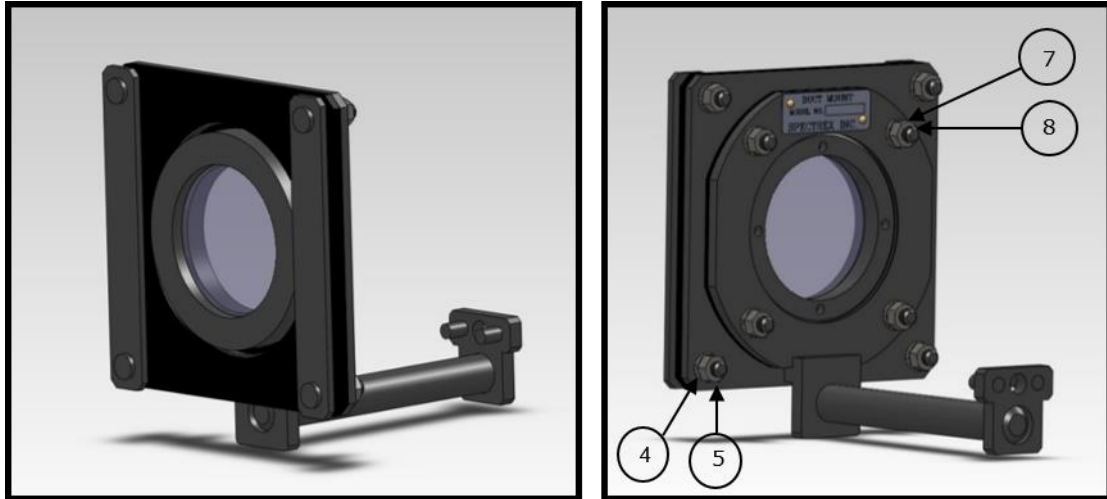
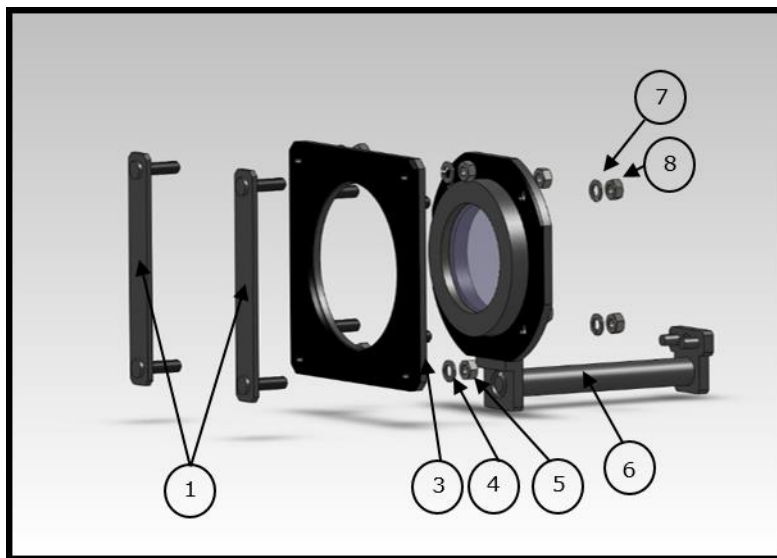


Figure 2: Duct Mount Disassembly



Description			
1	2 internal plates	6	Duct mount base
3	Base plate	7	4 M6 spring washers
4	Duct hole	8	4 M6 base nuts
5	4 M6 plate nuts		

Figure 3: Duct Mount Parts

2.3 Mounting the Duct Mount

- 1 Insert the first internal plate (1) through the air duct (2) hole (2.1).
- 2 Hold it by hand and press the base plate (3) to the installation surface against the internal plate (at base plate (3) there is a gasket that is glued).
- 3 Verify that the internal plate screws are inserted into the gasket holes to prevent it from falling.
- 4 Secure the base plate to the installation surface using 4 nuts (5) and washers (4).
- 5 Remove your hand and repeat the process for the second internal plate.
- 6 Attach the duct mount base (6) to the base plate (3) and secure it with washers (7) and nuts (8).

The base plate (3) and duct mount (6) are now connected (see Figure 5).

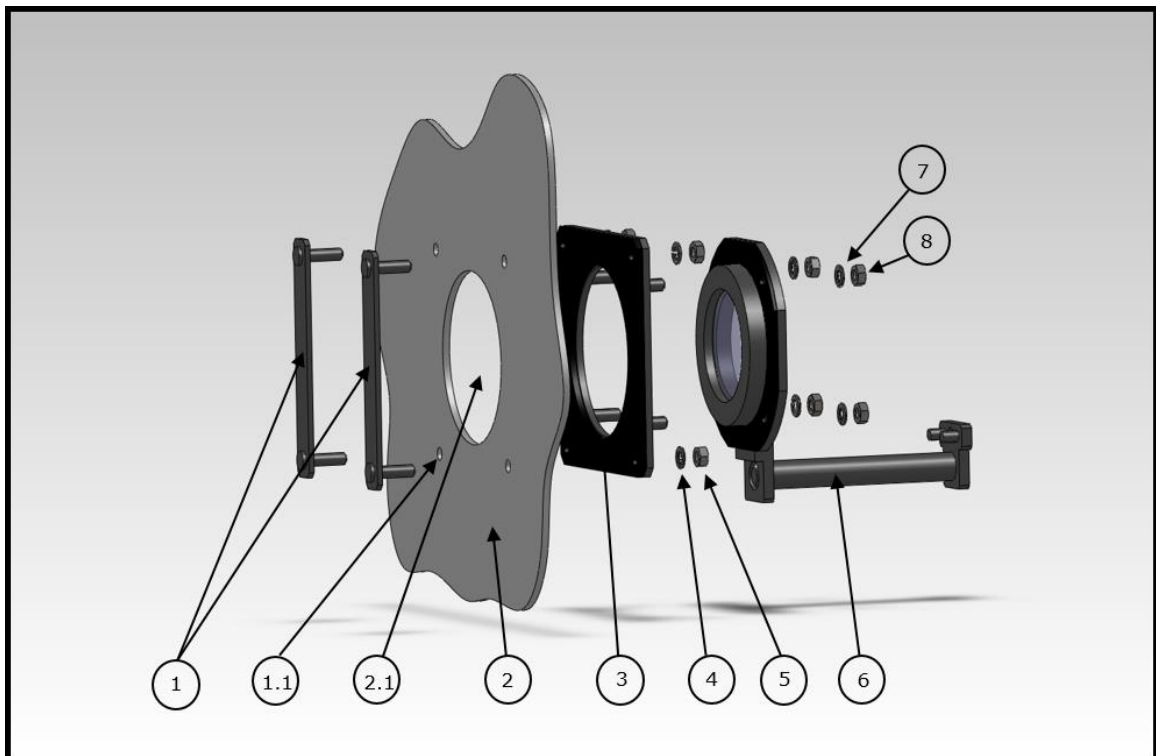


Figure 4: Duct Mount Parts Before Final Assembly

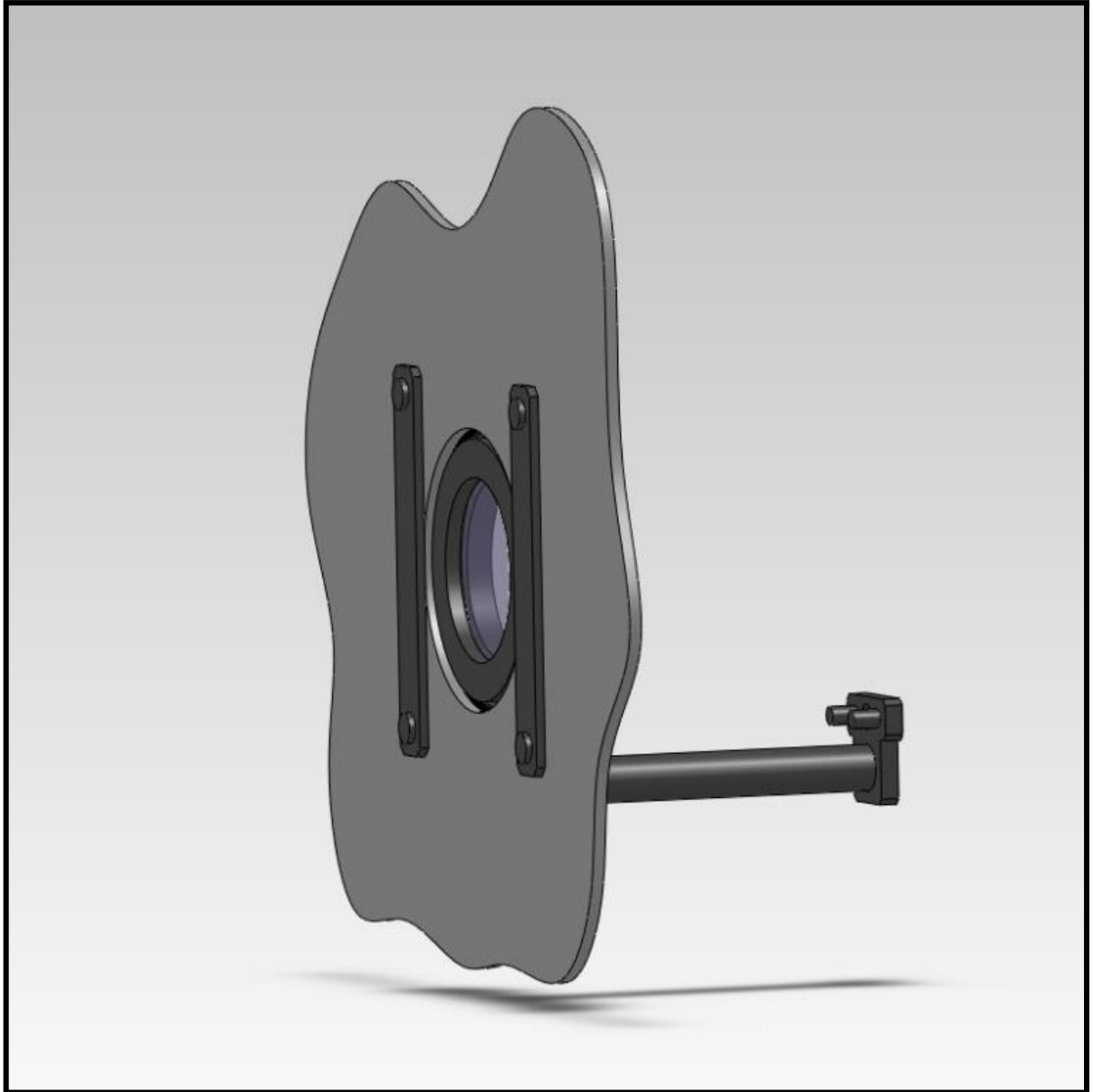


Figure 5: Duct Mount Parts After Assembly

2.4 Mounting the Detector

- 1 Insert the detector (9) at the pin (10).
- 2 Secure the pin using a screw (11).

Note: The screw (11) is already mounted on the detector, and should be removed and reinstalled facing the opposite direction.

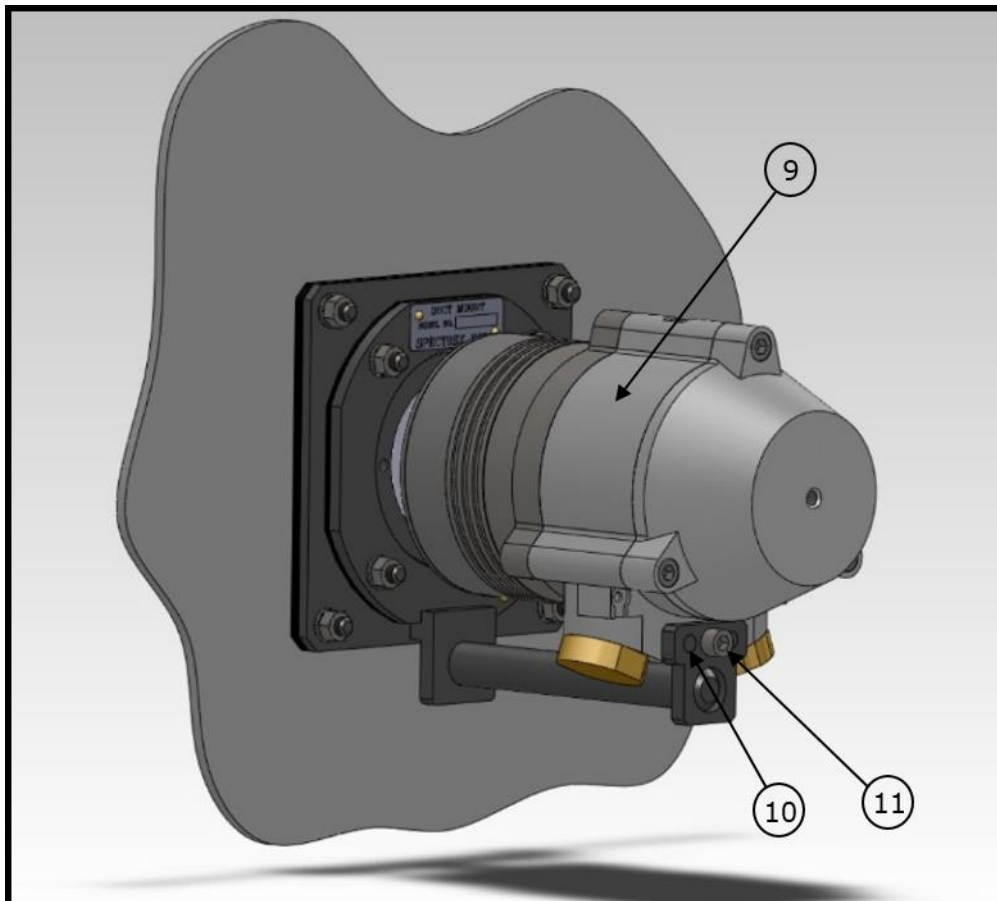


Figure 6: Detector Mounted on a Duct Mount

Technical Support

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