

**SM-1**  
**Swivel Mount**



### Description

The Swivel Mount is used for securing a Detector to a flat surface. The mounting angle can be adjusted by simply loosening the clamp assembly tension screw. Each mount is rated for up to 10 pounds (4.5Kg), and should be used only on a flat, secure and stable surface

There are three basic components to the Swivel Mount:

The clamp assembly – this consists of the clamp plate with 2 mounting holes, a jaw, and a tension screw.

The ball shaft – this consists of a ball with an integral threaded shaft and a jam nut.

The mounting plate – this is a triangular shaped aluminum plate with three mounting holes - one threaded and two unthreaded.

### Precautions – Read this carefully

Whenever an object is affixed to a wall or ceiling, you must take special care to mount it securely to prevent it from falling and causing damage or injury.

For a safe and secure installation, use good judgment and common sense throughout all phases of the installation.

### Mounting Surfaces

Carefully evaluate the composition, construction and strength of the mounting surface.

Be sure to provide adequate reinforcement should you determine that it is necessary.

You must also consider what type of hardware and what types of mounting techniques are appropriate for each mounting surface.

### Fasteners

Attaching the clamp assembly requires fasteners appropriately selected for the strength and composition of the mounting surfaces involved. Use 1/4-20 x 1" or similar bolts and locking nuts to attach the mounting plate to the detector.

Always use fasteners in all mounting holes and don't over-tighten them. Over-tightening can weaken the mounting surface, damage the fasteners, and make the attachment less secure.

## Installation

### Attach the ball shaft to the mounting plate

Use a 7/16 (11 mm) inch Allen hex wrench, to loosen the tension screw in the clamp assembly until the jaw opens – ONLY enough so you can release the ball. DO NOT unscrew the tension screw completely!

If attached, remove the mounting plate from the ball shaft. Thread the jam nut onto the ball shaft so at least ¼ inch of shaft extends beyond the jam nut. Thread the ball shaft into the mounting plate until the threaded shaft is even with, but does not protrude through, the mounting plate. Tighten the jam nut against the mounting plate, then verify that the ball shaft is even with and does not extend beyond the other side of the mounting plate.

### Attach the mounting plate

Attach the mounting plate to the back of the detector using two ¼ -20 screws and nuts through the unthreaded holes on the detector and mounting plate so the threaded hole with the ball shaft is centered in the back of the detector.

### Attach the mounting clamp assembly

Position the clamp assembly onto the location you have selected with the tension screw facing down. Insure that you will have access to tighten the tension screw with the wrench after the installation is complete.

Use the clamp assembly as a template and mark the hole locations on your mounting surface. Prepare the surface and all holes for fasteners. Secure the clamp assembly to your selected mounting surface using all four mounting holes.

### Final assembly

Check again that the clamp assembly is open enough to clear the ball. While holding the detector and ball assembly in line with the clamp assembly, “pop” the ball into the clamp assembly. Continue supporting the detector and use the tension screw with a 7/16 inch Allen hex wrench to remove any slack from the clamp, ball, and jaw, but do not tighten yet. (The ball should be properly seated, and the detector should still move easily.)

Adjust the orientation of the detector until it is in its final position and continue to support the detector while you tighten the tension screw enough to prevent the detector from moving.

In order to hold the detector in position and prevent any slippage, the clamp assembly

must get a good ‘bite’ into the ball and form a solid joint. Tighten the clamp only enough to lock and hold the detector firmly at the chosen angle of adjustment. When that point is reached, no further tightening is necessary.

If the detector loses its position – first loosen the tension screw then re-orient the detector and tighten the tension screw.

**IMPORTANT** - Since the ball will slowly compress under pressure, you should check the clamp assembly after 15 minutes and tighten again if necessary. Then check once more in approximately one hour. Always support the weight of the detector while positioning it and tightening the clamp.

