

## **Exterior Antenna for 6200 Series Beacons**

The EA62 exterior antenna provides several features that distinguish it from the standard antennas designed for in-vehicle installations:

- Unobstructed signal path
- Weatherproof construction
- · Solid mechanical mounting
- · Sealed cable entry point
- · Concealed and protected cable entry point

To obtain the maximum benefits of these features it is critical that the antenna be installed correctly.

## **Tools & Accessories Required:**

- Power drill
- Drill bits up to 5/8" or 5/8" hole-saw (suitable for metal drilling)
- 3/16" dia. round (rat tail) file
- 1 1/8" open-end wrench or adjustable wrench
- Masking tape
- Silicone sealant
- Thread locking sealer

## Installation steps:

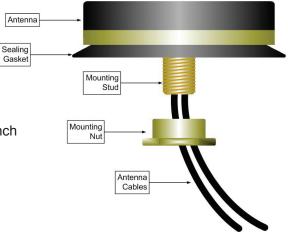
1. Select the best mounting location for the antenna. It must be a location where the antenna cables will reach to where the beacon is mounted, with a path to route the cables in a way that will protect them.

The antenna mounting panel should have the following characteristics:

- · Free of signal obstructions
- Horizontal
- Smooth
- Flat
- Rigid
- No more than 1⁄4 inch thick

The roof of a vehicle is usually perfect.







- 2. Use masking tape to cover an area larger than the antenna at the selected mounting position. This will help prevent paint scratches during the installation process.
- 3. Drill a 5/8 inch hole through the selected mounting panel at the desired location. Be sure you are using drills that are designed for the material you are drilling through. Drilling a small pilot hole is usually the best way to get started. Using a hole-saw rather than drill bits may be a good alternative.

Ensure that no burs or rough spots remain after drilling/hole-sawing. This may require light filing with a round file. Be careful not to scratch paint around the hole.

- 4. Feed the two antenna connectors, one at a time, down through the hole from the outside. Do not fasten the antenna in place yet.
- 5. Remove the masking tape and thoroughly clean the top surface where the antenna's sealing gasket will sit.
- 6. If the area where the gasket will sit is not perfectly smooth and flat, apply silicone sealant to the bottom surface of the gasket to ensure a waterproof seal.
- 7. Set the antenna in place with the mounting stud penetrating the mounting hole.
- 8. Orient the mounting nut such that the widest part is down (away from the mounting panel). This will allow the wrench to fit more easily around the nut for tightening. Slide the antenna cables through the slot in the mounting nut. Tighten the mounting nut up against the base of the mounting panel.

Do not over tighten the mounting nut. Use thread locking sealer on the threads of the nut to prevent it from vibrating loose.

- 9. Route the antenna cables from the antenna to the beacon. Be sure they do not kink and are protected from crushing, cuts, abrasion, heat, and accidental snagging or tearing. Wrapping the cables in several layers of electrical tape may be necessary at critical points along the route.
- 10. Connect the antenna cables to the beacon by following the instructions supplied with the beacon. Coil and secure any extra lengths of cable to ensure it won't kink.