



# Roof Mount Installation Considerations

## Roof Mount Dual Band VHF/700/800 Antenna

### RFMT-DB-VHF/7-800

#### VERIFY:

1. **Part List:** The package includes antenna, coupler, and hardware (See drawing). Use only the components supplied with the antenna. I.e. mast and coupler.
2. **Bandwidth:** The VHF/7-800 broadband antenna is 24 MHz wide, within the range of 150-174 MHz and 106 MHz wide within the range of 760-870 MHz.

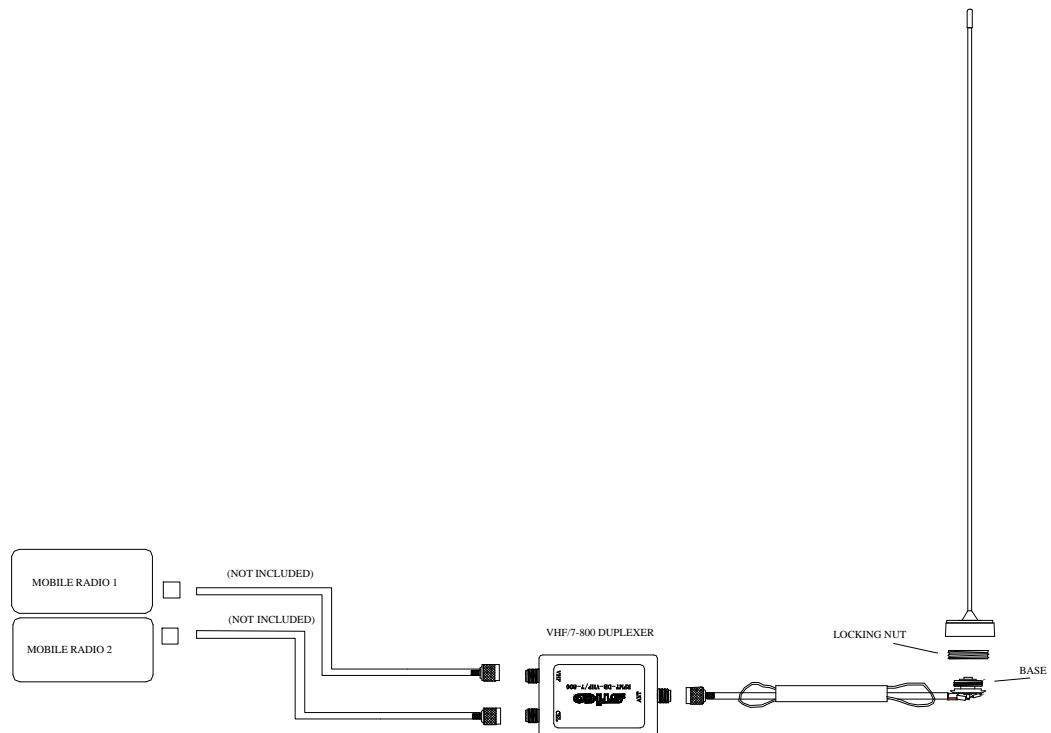
#### INSTALLATION:

1. **Placement:** Select a desired location for the antenna; it may be mounted on roof or trunk lid. When mounting antenna on the roof, remember to allow room for duplexer unit and feedlines.

**Note:** Keep in mind that some vehicles will have composite trunk lids.

Drill 3/4" hole. Remove any burrs above and below the hole.

**Note:** Be careful not to tear the sheath of cable when pulling through sharp body panels. If a hole appears in the cable's sheath, cover with several layers of a high quality electrical tape.





2. **How to attach:** Pass the NMO base cable assembly through hole from outside vehicle. Thread the locking nut, with "O" ring seated in groove, onto base and tighten. Make sure mounting base is centered and shoulder is seated properly. Locking nut must compress "O" ring and contact with vehicle.
3. **Assemble:** Attach the duplexer, residing in the headliner, to the NMO base cable assembly. Connect the remainder of the antenna as shown.
4. **Interconnect:** Refer to the installation diagram on the previous page. Do not tape or secure any feedlines to data or vehicle cables during installation. Connect the radios to the proper ports.

## +TESTING:

**Installation testing, if required, must take place at the transmitter side of the feedline. This will ensure that the cable connectors and cables have the proper continuity. Make sure all doors, hood, and trunk are closed. The coupler can is part of the tuning network and needs to be in line for proper test results.**

***Note:** Some vehicles are sensitive to VHF frequencies. STI-CO suggests that you isolate feedlines and check for unwanted interference with the ignition switch on.*

5. **Reflective Power** - A measurement of reflective power using a wattmeter, you can expect up to 11% reflected power. When results are greater than 11%, recheck grounding.
6. **SWR** - A measurement of SWR (standing wave ratio) will yield better than 2:1. If greater than 2:1, recheck grounding.