



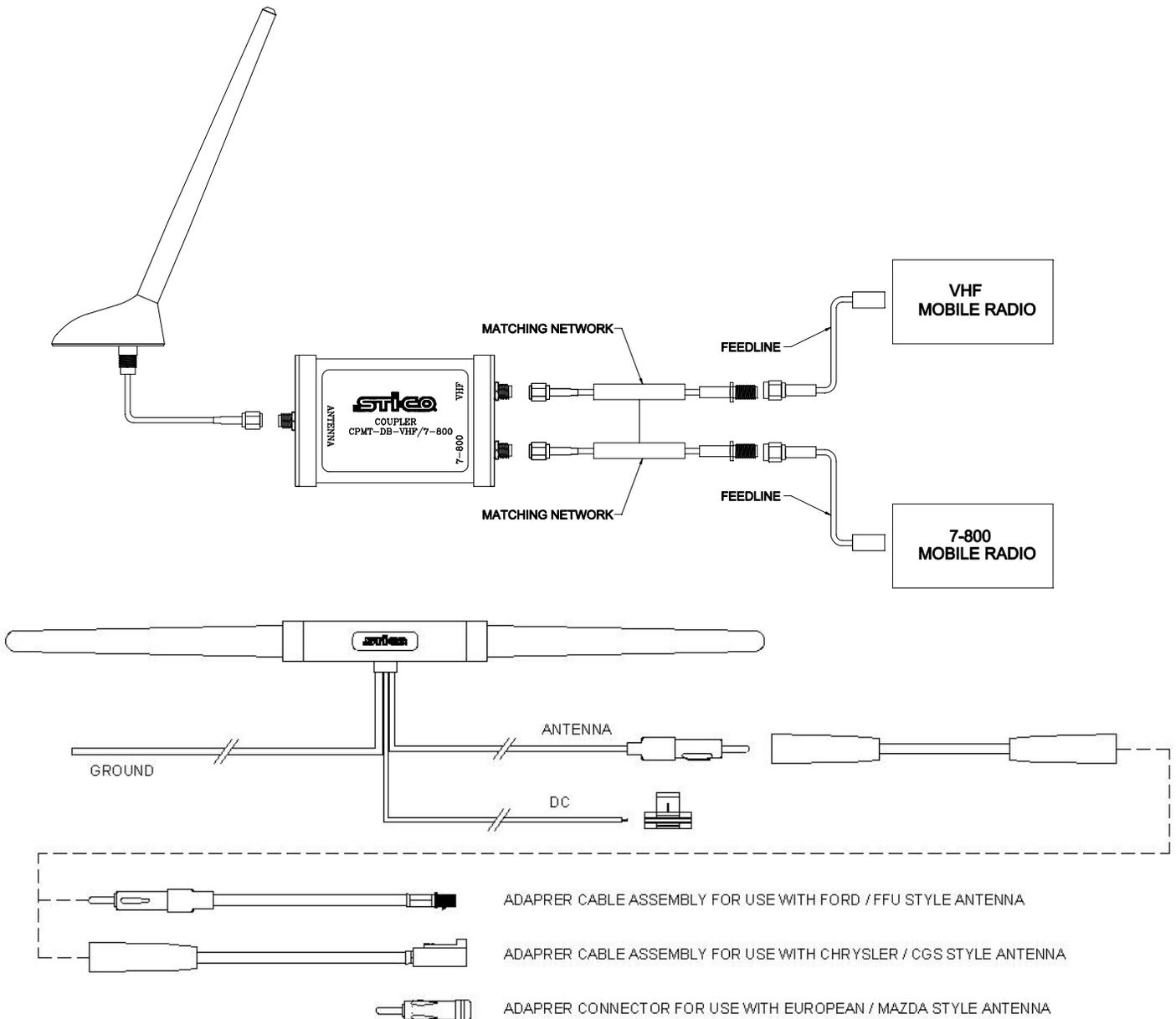
# OEM Roof Mounted Installation Instructions

## Dualband VHF (150-174 MHz) and 7-800 (760-870 MHz) Antenna

MODEL: CPMT-DB-VHF/7-800

### VERIFY:

- A. **System Parts:** The package includes an antenna that is attached to cable and connector for your two way-radio. Use only the components supplied with the antenna.





- B. Bandwidth:** This is a dual band (VHF/7-800) antenna. It was designed to operate between 150 and 174 MHz and 760-870 MHz only. Using this antenna at other frequencies could result in damage to the radio system.

## INSTALLATION:

### A. Antenna Mounting Location

This antenna may be mounted anywhere on the metal roof or metal trunk of the vehicle. Do NOT mount this antenna on a fiberglass or composite surface.

**WARNING! If the antenna is not mounted as described, it will likely not function as designed. The operator will see a sharp increase in SWR if not mounted properly.**

### B. Antenna Mounting Procedure

1. Remove "one way clips" on the inside roof panel near the window and set aside.
2. Remove OEM antenna connection for the AM/FM radio. **Note: Some applications do not have existing OEM antennas. In that case a 3/4" hole is required.**
3. Using an adjustable wrench, remove the OEM antenna.
4. Position the disguised antenna mount into the mounting hole from the top of the vehicle. Note: This step may require an assistant to hold and align the new antenna. A washer is provided to use if needed with larger size mounting holes.
5. Connect the coupler to the antenna's cable (pigtail). Connect the shrink tubed VHF matching network to the VHF port on the coupler. Connect the shrink tubed 7-800 matching network to the 7-800 port on the coupler. Connect the 17 foot cable extensions to the other ends of the matching networks. Trim any excess cable from both cable extensions, attach connectors and then attach to corresponding VHF and 7-800 two-way radios. **Note: Do NOT overtighten the SMA connectors.**
6. Install the GLMT-AMFM antenna in the center of the rear window near the top. This will allow access to the +12VDC power feed in the vehicle roof and attachment of the AM-FM antenna lead to the vehicle harness AM/FM feed to the car radio.
7. Attach the +12vdc power lead from the GLMT-AMFM antenna to the +12vdc power lead, disconnected or unplugged, from the vehicle wiring harness, at the beginning of the installation, with the electrical splice connector supplied with the unit.
8. Attach the ground lead from the AM/FM antenna to any appropriate grounding location.
9. Choose the appropriate Glass mount AMFM antenna lead adapter cable assembly for the vehicle harness and connect it to the AM/FM antenna connection removed from the OEM antenna at the beginning of the installation.
10. Attach the Glass mount AMFM antenna lead to the vehicle harness AM/FM antenna connection removed from the OEM antenna at the beginning of the installation.
11. Conceal excess cabling under the headliner.
12. Test antenna before re-installing the vehicle's trim. (See below)

**Note:** Take care not to tear the sheath of the 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.



## 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.

- A. 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 the grounding.
- B. SWR:** A measurement of SWR (standing wave ratio) will yield better than 2:1. If greater than 2:1, recheck the grounding.

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