

# DIAMOND ANTENNA

## HF50CX

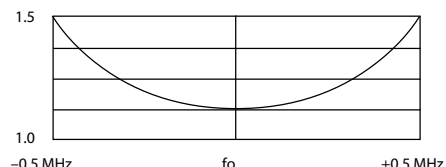
50-54 MHz Mobile Antenna

### Instruction Sheet

The HF50CX is a 6m adjustable mono-band, 3/8 wavelength mobile antenna, optimized for 6m amateur band. Tunable bandwidth 1 MHz from 50-54 MHz.

### Specifications

FREQUENCY:	50-54 MHz
GAIN :	3.5 dBi
POWER:	200 Watts
IMPEDANCE:	50 Ohms
VSWR:	1.5:1 (Nominal)
ELEMENT PHASING:	3/8 Wave
GROUNDING:	Required for optimum performance
LENGTH:	71" (fully extended)
WEIGHT:	0.95 lbs. (440 g)
MOUNT:	UHF MALE (PL259)
WARRANTY:	1 Year against defects in material or workmanship.
RECOMMENDED MOUNTS:	K400C or K600M Trunk Mounts.



### Installation Instructions

NOTE: THIS ANTENNA REQUIRES TUNING TO DESIRED OPERATING FREQUENCY. USE QUALITY VSWR METER TO INSURE PROPER ADJUSTMENT. THE HF50CX REQUIRES PROPER VEHICLE GROUND. MOUNTING LOCATION WILL AFFECT VSWR. NOT RECOMMENDED FOR MAGNET MOUNTS.

- (1) Remove antenna from package and inspect contents to insure it is complete. Attach whip element assembly #001701 to center loading coil assembly #001702. (Illustration 1 & 1A)
- (2) Choose desired mounting location to insure maximum strength of mount, and proper vehicle ground to yield best performance of antenna.
- (3) Install antenna on vehicle. With quality VSWR meter, check VSWR for proper antenna tuning. Tuning adjustments may be required to reach optimum VSWR.

#### Tuning of Antenna

Loosen element lock nut and slide antenna whip up or down. Tune until lowest VSWR is obtained at desired center frequency. Tighten adjustment lock nut. Recommend using removable Loctite Threadlocker #242 or similar product to insure proper fastening of setscrews and element assembly. (Illustration 2 & 3)

(Note: Mounting location and mounting structures will effect RF grounding and resonant frequency. If adjustment of whip is necessary, adjust in 1/8-inch increments until desired resonant frequency is obtained.)

- (4) The HF50CX has a fold-over hinge for situations where the antenna height is a problem (see illustration 4). Simply unscrew the fold-over lock, lift up, and tilt over 90°. Care should be taken when folding over, not to damage vehicle or whip/loading coil assembly. Do not drive with antenna in folded position.

