

# MR77, MR77SMA, MR77SMAJ

## 2m/70cm Mobile Antenna I Magnet Mount

#### Instruction Sheet

The MR77, MR77SMA, and MR77SMAJ are 2m/70cm Dual-Band mobile antenna and magnet mount combination. 1/4 wavelength on 2m and two phased 1/2 wavelengths on 70cm. This antenna is optimized to operate from 144-148 and 440-450 MHz.

The MR77 comes with 13 feet RG58C/U and PL-259.
The MR77SMA comes with 13 feet RG58CIU and SMA male connector.
The MR77SMAJ comes with 13 feet RG58CIU and SMA female connector.

## **Specifications**

FREQUENCY: 2m: 144-148; 70cm: 440-450 MHz GAIN: 2m: 2.15 dBi; 70cm: 3.4 dBi

POWER: 70 Watts

IMPEDANCE: 50 Ohms (Nominal) VSWR: 1.5:1 (Nominal)

ELEMENT PHASING: 2m 1/4 Wavelength; 70cm 1/2 Wavelength

LENGTH 19.5" (\*0.5m)
WEIGHT: 0.85 lbs. (400 a)

MOUNT: MR77: Magent with 13ft RG58C/U and PL-259

MR77SMA: Magnet with 13ft RG58C/U and SMA Male MR77SMAJ: Magnet with 13ft RG58C/U and SMA Female

LTD WARRANTY: 1 Year against defects in material or workmanship

#### Installation Instructions

- (1) Remove antenna from package and inspect contents to insure it is complete.
- (2) Choose desired mounting location to insure maximum strength of mount, and best performance of antenna.
- (3) Install antenna on vehicle. With quality VSWR meter, check VSWR. The MR77, MR77SMA, and MR77SMAJ are pre-tuned and should require no adjustment.
- (4) Carefully route coax cable to radio. Do not pinch cable in windows or vehicle body panels, this will damage cable. The MR77, MR77SMA, MR77SMAJ will not function properly with damaged cable.



## WARNING! PLEASE READ BEFORE INSTALLATION

Please tighten all set screws before installation.

### **MOBILE ANTENNA**

For ease of installation, DIAMOND ANTENNA MOBILE MOUNTS are strongly recommended. In some cases, mobile mounts of different manufacture may not interface well with DIAMOND Antennas. Most DIAMOND mobile antennas are pretuned to give best possible performance on the band(s) for which they are designed. In some installations, minor VSWR adjustment may be made by moving the antenna up/down at the base end. Two set screws at the base allow for adjustment. Do not cut the antenna rod, unless stated in instructions. Use of magnet mounts is not recommended with tall antennas, (i.e. NR7900A, NR22L, SG7900NMO, SG7900A). Excessive VSWR may occur with the following antennas if used on a magnet mount: CR320A, CR320BNMO, CR627B, CR627BNMO, CR8900A, HV7A, SG7000, NR72BNMO, AZ504FXH and AZ504SP.

#### LARGE GVW TRUCK AND OFF ROAD VEHICLES:

Due to the excessive vehicle vibration, antennas exceeding 45" are not recommended. In any event, antennas damaged by excessive vibration are not covered by warranty. Any tampering, cutting, or attempted adjustment of this antenna beyond our recommendations may void all warranty.

If you have any questions, please call Diamond Customer Service Dept. at (770) 614-7443.

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