### Installation

## CD63-71-50 Series UHF Citizens Band Antenna Kit

475-478MHz

Congratulations! You have purchased a CD63-71-50 series Mopole  $^{\text{TM}}$  antenna from RF Industries. The CD63 series antennas have true ground independence and allows mounting in a vairety of positons including vehicle mirror, gutter or roof bar mounts.

- Excellent performance Exhibits 6.0dB gain over a 1/4 wave whip mounted in the centre of a metal roof
- Flexible The whip section is made with the strongest, most resilient form of stainless steel and returns to its original state after bending or deformity
- Rugged The base coil is housed in a high impact thermoplastic moulding and is practically indestructible
- Versatile Ground plane independent design allows installation in almost any location
- Stylish Attractive black finish, complements vehicle styling
- Unique Australian Patent # 596830

# Suggested Mounting **GM7 Plastic** MM2 GM<sub>2</sub> Gutter Mount Mirror Mount Metal Guttermount

#### **SPECIFICATIONS**

CD63-71-50 CD63 assembly with MBC base, no cableCD63-71-53 CD63 assembly with MBC base, 5 m RG58 cable

**Frequency** 475-478MHz UHF Citizens Band Radio Service **Gain** 6.0 dB (over a 1.4 wave whip mounted in the

centre of metal roof)

VSWR Less than 1.5:1 over specified band

Length 780mm (whip and coil only)
Tuning The antenna is supplied pre-tuned
Mounting Base mounts in 16mm or 8.5mm hole

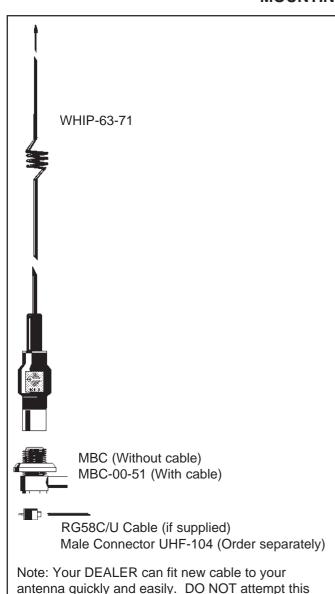
#### WARRANTY

Every unit sold by RF Industries Pty Ltd (the Seller) is warranted to be free from defects in materials and workmanship under normal use and service for a period of twelve months from the date of sale. This warranty covers defective parts and workmanship provided that the defective parts shall be shipped pre-paid to any office of the Seller within twelve months of purchase of goods. The warranty is limited to the repair or replacement (at the Seller's option) of parts and shipping prepaid to the original despatch destination. We regret that no liability can be accepted for consequential or special damages of any kind howsoever arising in connection with products supplied by the Seller. This warranty is in lieu of all other warranties expressed or implied. No representation is authorised to assume for the Sellers any other liability in connection with the Seller's products.



Aust. Patent No.596830

#### MOUNTING INSTRUCTIONS



#### Choosing a mounting position

When choosing a mounting location try to ensure that the whole antenna, in particular the whip section is as high and as far away as possible from metallic obstructions (e.g. roof racks, or vehicle pillars). When mounted in a vertical position well removed from such obstructions the antenna will provide optimum performance.

#### **Installation Procedure**

- 1. Fit the MBC base and cable assembly to the mounting bracket to be used.
- **2.** Fit the hex locknut on the upper surface of the mounting bracket and tighten the assemply into place.
- 3. Screw the circular dress nut down to cover the hex locknut.
- **4.** Fit the mounting bracket to the vehicle. The preferred position for gutter mounts is near the centre door pillar on the drivers side.
- 5. Route the coaxial cable into the vehicle and to the transceiver via the best and most direct path.

  NOTE: Where the cable enters the vehicle try to avoid positions which will result in excessive wear or compression. It is a good idea when using gutter mounts to use the rear door rather than the front door for example.
- **6.** Fit the coil and whip section to the MBC base.
- **7.** Fit the connector to the coaxial cable and connect to the transceiver.
- **8.** Test the VSWR using an in-line RF power meter.
- 9. Do not tune the antenna. This antenna is pre-tuned and should not require adjustment. If the VSWR is in excess of 1.5:1, test the coaxial connectors and cables. NOTE: Due to the design of the high impedance matching circuit, a DC short will exist between the braid of the coaxial cable and the radiating element of the antenna. There should not, however be a short between the outer and centre conductors of the coxial cable. If there is a short across the coaxial cable, this would indicate incorrect coaxial connector fitting. Please seek your dealer's advice.

#### **Installing The Coaxial Connector Model UHF-104**

- 1. Cut end of cable squarely.
- 2. Remove 35mm of the vinyl jacket and slide the coupling ring onto the cable.
- 3. Remove 25mm of the braid and fan back as shown (Fig.2).

yourself as SPECIFIC instructions are required.

- Remove 25mm of the dielectric from the centre conductor taking care not to damage the inner conductors (Fig.2).
- Thread centre conductor of the cable through the connector from the back (Fig.3). When you are sure that all of the strands of the centre conductor are protruding from the pin, screw the connector clockwise onto the braid.
- Continue to screw the body onto the cable until it becomes fairly tight (Fig.4).
   DO NOT OVERTIGHTEN OR SHORTING OF THE CONNECTOR MAY RESULT.
- 7. Trim any excess conductor from the pin. The centre conductor shouldpreferably be soldered, though the UHF-104 can be terminated by gently crimping the pin.
- 8. For final assembly screw the coupling ring onto the connector body (Fig.5).

