ZCG SCALAR

CB RADIO ANTENNAS

Model

MA477

Ground Independent Antenna with Folding Base, 90 cm

477 MHz UHF CB Radio

2.1 dBi Gain

Recommended for mounting on a BOAT, CARAVAN, TRAILER, to the facia board of a BUILDING or any þat surface at any angle using using 4 screws or bolts.

4.5 metres of RG58 low loss stranded cable.

UHF male solder connector supplied, not ýtted.

50 watts maximum input power.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

The MA477 ground independent UHF CB radio antenna features a versatile folding swivel base ideal for mounting to a caravan, motor home, boat or outside on the facia board of a building. The antenna can be folded down þat when not in use.

Suitable for all Uniden, GME, Icom and Vertex 477 MHz UHF CB radios, the high quality components and construction ensures a long service life in the harsh Australian environment.

The antenna stands 90 cm tall and delivers 2.1 dBi gain.

4.5 metres of RG58 low loss stranded cable side exits from the mount ferrule.

A UHF male solder connector is supplied.

A detailed speciýcation sheet is available to download from **www.zcg.com.au**

TUNING

The antenna has been tuned in the factory for 477 MHz UHF CB Radio. VSWR has been optimised to less than 1.5:1. This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

No metal ground plane is necessary for the antenna to operate effectively. To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

1. ***Mount the antenna in as high a place as possible.***
2. ***Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360^{o} omnidirectional pattern. At least 350 mm side clearance is desirable, preferably more.***
3. ***For optimum performance the antenna must be in a vertical position, not at an angle.***

FOLDING DECK MOUNT SWIVEL BASE

The MM1 folding deck mount base supplied folds down in two directions and also swivels in the opposite plane by loosening the stainless steel pivot bolt. This versatility allows the antenna to be mounted in a variety of positions on any þat surface and at any angle using four screws or bolts.

Use the base as a template to mark the position of the 4 holes required to secure the deck mount base.

If mounting to a solid wooden surface, you will require 4 stainless steel 6 mm countersunk heavy guage wood screws which are at least 40 mm long. Use a good sealant, such as silicon, to reduce the likelyhood of rot or osmosis setting in.

Otherwise use 4 stainless steel 6 mm bolts with stainless steel spring washers and nuts, or þat washers if using nyloc nuts.

The antenna can be folded down þat when not required.

ROUTING THE CABLE

IMPORTANT : <u>Leave some slack</u> in the cable at the point where the cable exits the chromed brass ferrule. This will allow the antenna to be folded down þat without placing tension on the cable.

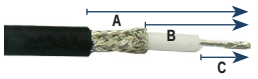
Route the RG58 low loss stranded cable carefully to your radio. Ensure that the cable is not stretched excessively and there are no sharp kinks.

If using cable ties in the harsh marine environment, then we highly recommend the stainless steel type.

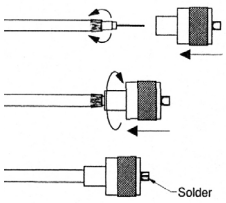
Do not pull the cable ties so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

FITTING THE CONNECTOR

We recommend that you cut the cable to the shortest length necessary, prior to ýtting the UHF male connector provided. Carefully strip the end of the coaxial cable as shown in the diagram.



A = 20.0 mm
B = 15.0 mm
C = 13.0 mm



1. Fold back the uncovered braid over the outer jacket.
2. Screw the UHF male connector over the braid until tight. Trim any exposed braid.
3. Solder the centre core of the cable to the connector pin. Remove any excess solder.

SEALING CONNECTIONS

For the marine environment, it is vital that all connections be well sealed with at least two layers of self-amalgamating tape to prevent ingress of moisture. PVC or electrical tape will not be adequate.

Attach the connector to your radio. The maximum input power rating is 50 watts.

Installation is now complete.

MAINTENANCE

This antenna has been designed for high reliability and low maintenance.

We recommend that you conduct a routine annual mechanical inspection of the antenna, feeder cable and connections.

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