Recommended

for a vehicle bull

All-black dual gain 'Town & Country spring base collinear 1.2 metres tall

#### ANTENNA DESCRIPTION

O O O O

100 watts maximum input power

connection to your UHF CB radio very simple FME Male to UHF Male adaptor supplied to make 4.5 metres of RG58 low loss stranded cable with Mounts into any bracket with minimum 12.5 mm

FME

Female connector

Designed for dependable performance across both hilly and flat terrain, the ZN3-77-11B-TCP from ZCG Scalar stands either 0.65m or 1.2m tall, depending on gain requirements of either 2.1 or 6.6 dBi. Built for heavy-duty use with the large barrel spring, this antenna is engineered to withstand harsh conditions, making it a reliable choice for demanding mobile UHF CB 477 MHz communication applications.

- The antenna tops can be detached for storage when not required using the Allen hex key and storage bag supplied.
- 2.1 dBi antenna top suits hilly terrain or CBD locations.
- 6.6 dBi antenna top suits regional/rural or semi-flat terrain
- Precision machined marine grade aluminium ferrule with corrosion resistant coating gives the antenna a longer service life.
- Customizable Components: Individual replacement parts and component upgrades are available to order including our 8.1dBi gain model SKU: ZN3-77-12BLKR-TPM

A detailed specification sheet is available to download from our website www.zcg.com.au

### TUNING

The antenna tops have been tuned and optimised in the factory for 477 MHz UHF CB Radio - all 40/80 channels. VSWR has been optimised to less than 1.5:1. This tuning cannot be altered.

# **MOUNTING POSITION**

The recommended mounting position for this antenna is as high on your vehicle as possible. The height and weight of this antenna make mounting to the guard, boot or mirror not practical.

No metal ground plane is necessary for the antenna to operate effectively.

To achieve best performance, mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the 360° omnidirectional pattern.

At least 350 mm side clearance (height of this sheet) is desireable, preferably more to reduce coupling between antennas.

### **INSTALLATION KIT**

The installation kit provided with the antenna includes:

- 1) 2.1dBi antenna & 6.6 dBi antenna top
- Spring base assembly with 4.5 metre cable and FME 1) Female connector fitted.
- 2) FME Male to UHF Male adaptor.
- 3) 3 mm Allen Hex Key to secure and/or remove the antenna top when not required, or when you wish to interchange the top with a different length top (available separately).
- PVC cap to cover the exposed UHF female connector on the spring base whenever the antenna top has been removed
- 5) 6 x 100 mm cable ties, 2 x 200 mm cable ties.

## **INSTALLATION GUIDE**

The stainless steel spring base can be fitted into any bracket with a minimium 12.5 mm diameter hole.

4.5 metres of RG58 low loss stranded cable bottom exits through the spring base. A FME female connector is fitted to the cable and an FME Male to UHF Male adaptor is supplied to make connection to your UHF CB radio very simple.

- 1) Remove the split nut from the barrel spring and from the cable.
- 2) Pass the FME connector and cable through the hole of your bull bar mounting bracket.
- 3) Place the split nut back on the cable. Screw the split nut back on to the spring and tighten from underneath to secure the antenna firmly to the bracket or mount hole.
- 4) IMPORTANT: You must leave some slack in the cable at the point where the cable bottom exits through the spring.

Leaving a stress relief loop in the cable will permit the antenna to flex in the usual manner during travel, without placing unnecessary tension on the cable.



Failure to follow this advice will most likely result in the feeder cable being ripped out of the antenna! The issue is not covered under warranty.

- 5) Route the antenna feeder cable carefully to your CB radio. Avoid high heat areas in the engine bay.
  - Ensure that the cable is not stretched excessively and there are no sharp kinks.
  - 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.
- 6) Neatly coil any excess cable and secure out of sight.
- 7) Screw the FME Female connector fitted to the cable into the FME Male to UHF Male adaptor supplied.
- 8) Connect the adaptor tot he antenna input of your UHF CB
- 9) For requirements for 2.1dBi, remove the 6.6 dBi antenna from the spring base and replace with the 2.1dBi antenna top, ensure retaining grub screw tighten to mitigate movement during transit. Ensure alternate antenna top is placed inside storage bag supplied.

The antenna installation is now complete.