



Model

# ZN1-77-02

Highly Flexible Ground Independent

Mobile Antenna, 40 cm

## 477 MHz UHF CB Radio

### 2.1 dBi Gain

Virtually indestructible and ideal for 4WD, vehicle bull bar or guard, the boot of a sedan, a truck mirror, forklift or tractor

- Suits hilly terrain or CBD locations
- Mounts into any bracket with minimum 10 mm diameter hole.
- 4.5 metres of RG58 low loss stranded cable.
- UHF male solder connector supplied, not fitted.
- 100 watts maximum input power.

## INSTALLATION GUIDE

[www.zcg.com.au](http://www.zcg.com.au)

### ANTENNA DESCRIPTION

**ZN1-77-02** is a highly flexible low profile half wave UHF CB antenna ideally suited to mounting on the vehicle guard, the boot of a sedan, a truck mirror, forklift or tractor. Virtually unbreakable and factory tuned for 477 MHz with 2.1 dBi gain, this model is truly ground independent offering numerous mounting locations.

Standing 40 cm tall and suitable for all Uniden, GME, Icom and Vertex UHF CB radios, the ZN1-77-02 antenna is designed to be both lightweight and durable with a long service life.

The antenna mounts simply into any bracket with a minimum 10 mm diameter hole using the nut and washer on the threaded base.

4.5 metres of RG58 low loss stranded cable bottom exits through the mounting base. The cable is not terminated to allow easy installation through vehicle firewalls and dashboards. It is recommended that the cable be cut to the shortest length necessary prior to fitting the UHF male solder connector supplied.

A detailed specification sheet is available to download from [www.zcg.com.au](http://www.zcg.com.au)

### TUNING

The antenna has been tuned in the factory for 477 MHz UHF CB Radio, 476.4125 - 477.4125MHz all 40/80 channels.

VSWR has been optimised to better 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.

Typical mounting positions for this antenna are to a vehicle bull bar or guard, the boot of a sedan or truck mirror using the appropriate bracket with minimum 10 mm diameter hole.

The antenna can also be mounted in locations other than on a vehicle.

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° omnidirectional pattern. At least 350 mm side clearance is desirable, preferably more.**
3. **Mount the antenna vertical, not at an angle.**

### INSTALLATION GUIDE

Remove the nut and washer from the threaded base and slip them off over the cable. Pass the cable through the hole of your mounting bracket. Thread the washer and nut back up the cable and onto the threaded base.

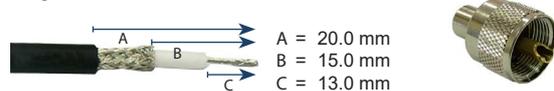
From underneath, tighten the nut to secure the antenna firmly to the bracket.

**IMPORTANT :** Leave some slack in the cable at the point where the cable bottom exits through the threaded base. This will allow the antenna to flex in the usual manner during travel.

Route the RG58 low loss stranded cable carefully. Avoid high heat areas in the engine bay. Ensure that the cable is not stretched excessively and there are no sharp kinks. Use cable ties, but do not pull so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

We recommend that you cut the cable to the shortest length necessary, prior to fitting the UHF male connector provided.

Carefully strip the end of the coaxial cable as shown in the diagram.



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.

Attach the connector to your radio. The maximum input power is 100 Watts.

**Installation is now complete.**