



# Model GRN495

Highly Flexible "Quick Fit"  
Ground Independent Mobile Antenna Kit  
Black Cap, 32 cm

## 490 – 500 MHz 4 dBi Gain

- Highly flexible PVC top, virtually unbreakable and perfect for rugged off-road driving, forklifts and tractors.
- "Quick Fit" to the UHF female mounting base included with 4.7 metre RG58 low loss stranded cable.
- Mounts into any bracket with min 17 mm diameter hole.
- UHF male solder connector supplied, not fitted.

## INSTALLATION GUIDE

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

### ANTENNA DESCRIPTION

Just 32cm tall, the GRN495 half wave UHF whip antenna features a highly flexible PVC top which is virtually unbreakable. Perfect for rugged off-road driving, forklifts and tractors, this ground independent mobile antenna can be mounted in various positions and offers effective performance with 4 dBi gain.

The copper, brass, delrin and PVC construction is purpose built to survive harsh Australian conditions long term.

The GRN495 antenna kit consisting of :

1. The detachable GRN495 "Quick Fit" antenna top, and
2. RA4.7 right-angle UHF female base fitted with 4.7 metres of RG58 low loss stranded cable and UHF male solder connector supplied.

The right-angle UHF female mounting base fits into any bracket with 17 mm minimum diameter hole making this UHF CB antenna kit perfect for mounting in various positions on a vehicle or to a truck mirror.

This unique design makes installation so simple with the additional benefit of being able to easily remove the antenna when not required, or in a situation where you are concerned about damage, vandalism or theft.

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 to cover the full UHF frequency range 490 to 500 MHz. VSWR has been optimised to less than 1.5:1 across the full band.

This tuning cannot be altered.

### SELECTING THE MOUNTING POSITION

The GRN antenna top and RA4.7 base can be mounted on a vehicle or in a fixed location using any bracket with minimum 16 mm diameter hole.

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

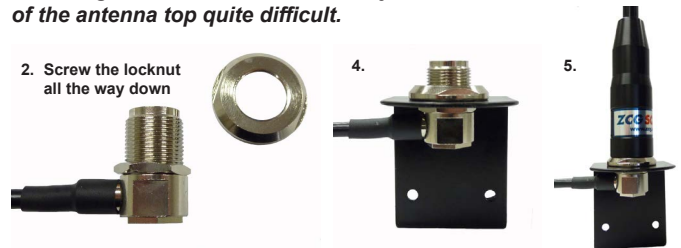
To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

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

### INSTALLATION GUIDE

1. Remove the ring from the UHF female mounting base.
2. Screw the locknut all the way down the thread until it turns freely at the very bottom of the base.
3. Insert the UHF female connector through the hole of your mounting bracket.
4. Replace the ring onto the UHF female mounting base and screw it down tight to secure the base firmly on the bracket.
5. Screw the GRN "Quick Fit" antenna top onto the UHF female base.

**IMPORTANT : Do not over-tighten the antenna top on the mounting base. This is not necessary and will make removal of the antenna top quite difficult.**

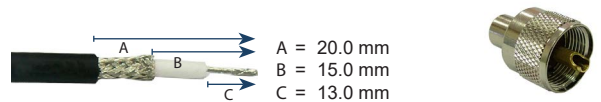


**IMPORTANT : Leave some slack in the cable at the point where the cable exits the mounting base so as not to place unnecessary tension on the cable.**

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 rating is 50 watts.

**Installation is now complete.**