



Model

SG477-BLKR

All-black ground Independent
vehicle mount antenna
900mm

477 MHz

UHF CB Radio

2.1 dBi Gain

Recommended for medium to heavy-
duty applications

- Mounts into any bracket with minimum 12.7 mm (1/2") diameter hole.
- 5 metres of RG58 low loss stranded cable.
- UHF male solder connector supplied, not fitted.
- 20 watts maximum input power.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

Factory tuned for 477MHz UHF CB radio, the SG477-BLKR vehicle mount antenna is designed to mount to a vehicle bull bar. Standing 900mm tall with 2.1 dBi gain, this ground independent model will deliver reliable performance.

Suitable for all UHF CB radios on the market, this antenna is manufactured from the finest quality components. The robust all-black design is purpose built to survive harsh Australian conditions long term.

5 metres of RG58 low loss stranded cable side exits from a black aluminium ferrule and is not terminated to allow easy installation through vehicle firewalls and dashboards. A UHF male solder connector is supplied, not fitted.

The high quality black stainless steel beehive spring dampens vibrations while travelling and maintains the antenna in a vertical position for the optimum receive and transmit performance at any speed.

A detailed specification 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, CBRS 476.425-477.4125MHz. 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.

The typical mounting position for this antenna is to your vehicle bull bar. However, the guard or boot are other potential mounting points using the appropriate bracket with minimum 12.7 mm (1/2") 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 TOOLS REQUIRED

- 16mm drill bit for mounting hole of spring base (if required)
- 19mm spanner for base securing
- Cable ties for securing coaxial cable route
- Small cutters for cable tie excess removal
- Amalgamation tape and PVC tape for connector sealing

INSTALLATION GUIDE

Remove the bolt and washer from the beehive spring. From underneath, insert the bolt and washer through the hole of your bracket. Screw the bolt into the thread of the beehive spring. Tighten the bolt to firmly secure the antenna to the bracket.

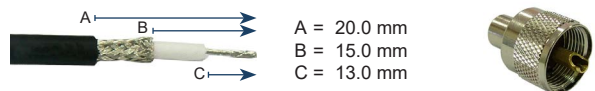
IMPORTANT : *Leave some slack in the cable at the point where the cable exits the mount ferrule. This will allow the antenna to flex in the usual manner during travel.*



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 **20 watts**.

Installation is now complete.