ZCG

Model
SGDB-W

Ground Independent
Multiband Cellular Antenna

All carriers
dualband 4G

6.2 dBi Gain

Recommended for a vehicle bull bar

- Mounts into any bracket with minimum 13mm (½") diameter hole.
- 5 metres of RG58 low loss stranded cable.
- FME female connector fitted to the cable.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

The SGDB-W cellular mobile phone antenna is a popular choice for good reason :

- Dualband coverage of the lower and upper 4G network
- Effective performance with 6.2dBi gain.
- Modest size at 900mm tall.
- Robust construction ensuring a long service life.

The antenna mounts easily into any bracket with minimum 13mm (½") minimum diameter hole and is secured firmly by the bolt and spring washer in the base of the beehive spring.

The high quality electro-polished stainless steel beehive spring dampens vibrations while travelling.

5 metres of RG58 low loss stranded cable side exits from the aluminium mount ferrule. An FME female connector is fitted to the cable for easy installation.

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

TUNING

The antenna has been tuned in the factory to cover the upper and lower 4G mobile phone networks.

VSWR has been optimised to better than 1.6:1 across the full frequency range 825-960 MHz and 1710-2190 MHz.

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, although the guard or boot are other potential mounting points using the appropriate bracket with 13mm (½") minimum 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 distortion of the 360^{o} omnidirectional pattern and interference. At least 350 mm side clearance is desireable, preferably more.***
3. ***Mount the antenna vertical, not at an angle.***

INSTALLATION TOOLS REQUIRED

- 13mm drill bit for mounting hole of spring base (if required)
- 19mm or 3/4" 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 mounting bracket. Screw the bolt into the thread of the beehive spring. Tighten the bolt to firmly secure the antenna to the bracket.

IMPORTANT : <u>Leave some slack</u> 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 without placing unnecessary 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.

Use cable ties, but do not pull them so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

Insert the FME female connector into your mobile phone or mobile device. The maximum input power is 30 watts.

Installation is now complete.

The cable may be cut shorter if desired. However, a new connector will then need to be fitted using proper tools.

If the FME female connector fitted to the cable does not suit your mobile phone, then any other connector which is suitable for RG58 cable can be fitted. Otherwise use a suitable adaptor, or a patch lead.

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