

ANTENNA DESCRIPTION

For a light to medium-duty 4G/3G parallel spring base antenna specifically intended for mounting to the vehicle guard, vehicle boot or truck mirror, look no further than this **SGLDB-W** model.

With 6.2dBi gain, this is an ideal light weight multiband antenna solution to cover all available carriers **upper and lower 4G & 3G** mobile phone networks combined.

The high quality stainless steel spring dampens vibrations while travelling and ensures the antenna stays in the optimal vertical polarisation.

5 metres of MIL-SPEC RG58A/U stranded cable bottom exits through the spring and 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 all available carriers dualband 4G/3G mobile phone networks combined. Telstra, Optus and Vodafone within Australia.

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

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 a vehicle guard, the boot of a sedan or truck mirror using the appropriate bracket with minimum 16 mm diameter hole.

This model can also be mounted to a vehicle bull bar.

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.
- 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 desireable, preferably more.
- 3. Mount the antenna properly vertical, not at an angle.

INSTALLATION TOOLS REQUIRED

- 16mm drill bit for mounting hole of spring base (if required)
- 22mm 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 nut and washer from the threaded base and slip them off over the cable. Pass the cable through the hole of your mounting bracket. Next thread the washer and then the nut back up the cable and onto the threaded base. From underneath, tighten the nut to secure the antenna firmly to the bracket.

IMPORTANT : <u>Leave some slack</u> in the cable at the point where the cable exits through the spring 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.

Insert the FME female connector into your mobile phone. The maximum input power is ${\bf 30}\ watts.$

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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