5 metres of RG58 low loss stranded cable FME female connector fitted to the cable. INSTALLATION GUIDE

0 0

0

diameter

hole

Mounts into any bracket with minimum 13mm

(1/2")

# Mobile phone vehicle mount antenna Telstra, Optus & Vodafone 4G LTE and 3G 6.2 dBi Gain

# ANTENNA DESCRIPTION

The SG700-4GX mobile phone antenna is the ideal choice for good reason :

- Multiband coverage of the Telstra 4GX and 3G, Optus 4G Plus & Vodafone 4G LTE networks combined.
- Effective performance with 5.1 dBi gain.
- Modest size at 1.1m tall.
- Robust construction ensuring a long service life.

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

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

5 metres of black RG58 low loss stranded cable side exits from the black aluminium 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 Telstra 4GX and 3G, Optus 4G Plus & Vodafone 4G LTE mobile phone networks. No additional tuning is required.

VSWR has been optimised to better than 1.6:1 across the full frequency range 718-788MHz and 820-890MHz.

This tuning cannot be altered.

#### SELECTING THE MOUNTING POSITION

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

The recommended mounting position for this antenna is as high on your vehicle as possible to ensure full omni-directional transmit and recieve. Typical mounting positions are a vehicles bullbar, guard or boot using an appropriate bracket with 13mm ( $\frac{1}{2}$ ) minimum diameter hole.

The antenna can also be mounted in locations other than on a vehicle, such as on a tower, mast or structure.

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 omnidirectional pattern and interference. A minimum of 350mm between any type of antenna is recommended.

3. Mount the antenna vertical, not at an angle.

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## 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**

Mode

Ensure your mounting position is clear from any metallic obstructions or other sources of interference.

Ensure mounting distance is sufficient (min. 350mm) away from other radiating antennas, this will reduce possible interference ensuring your antenna will work to the specified levels.

Ensure mounting bracket or location is secure to reduce possible damage due to movement which may cause possible failure of your installation.

Remove the bolt and spring washer from the beehive spring. From underneath, insert the bolt and spring washer through the hole of your mounting bracket.

Place the antenna onto the mounting position. 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 holder or mobile device. The maximum input power is 30 watts.

#### Installation is now complete.

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