



Model

CT800

Low Profile, Ground
Dependent Mobile Phone
Antenna

Lower 4G/3G
825 □ 890 MHz
2.1 dBi Gain

- Mounts to any flat metal surface at least 1 metre square, such as the roof of a vehicle.
- N-type Female connector

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

The low profile, rugged and covert CT800 mobile phone antenna is an ideal choice in situations where a traditional whip would be vulnerable to damage or vandalism.

Constructed from aluminium, delrin and a tri-metal plated N-type female connector, the antenna measures just 150mm long, 32mm wide and 32mm high.

Typical applications suited for this low profile antenna include :

- | | |
|----------------------------|-----------------------------|
| ✓ Trains | ✓ Police |
| ✓ Buses | ✓ Ambulance |
| ✓ Forklifts | ✓ Fire Brigade |
| ✓ Tractors | ✓ Emergency Services |
| ✓ Forestry Vehicles | ✓ Security Services |
| ✓ Logging Trucks | ✓ Mining |

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

TUNING

The CT800 has been factory tuned to cover the Telstra 3G (NextG □) mobile phone network operating across the frequency range 825-890MHz:

The frequency range appears on the antenna label.

VSWR has been optimised to better than 1.6:1 across the full band.

This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

The typical mounting position for the antenna is to the flat metal roof of a vehicle.

The metal surface must be **at least 1 metre square** and acts as a ground plane. The antenna will then produce a near omnidirectional radiation pattern with 2.1 dBi gain, the same as a 1/4 wave whip.

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 near omnidirectional pattern. At least 350 mm side clearance is desirable, preferably more.**

INSTALLATION GUIDE

Drill 2 x 6.5mm holes and 1 x 17mm in the metal ground plane surface; 2 holes for bolts and the larger hole for the N-type female connector.

Apply a silicone bead around base of connector and edge of CT800 low profile antenna to reduce water ingress.

2 x M6 stainless steel bolts, nuts and washers are recommended to secure the antenna firmly.

The N-type Female connector protrudes through the metal ground plane surface to allow your feeder cable connected from underneath to be concealed and protected from damage.

RU400 low loss or **RG58 low loss** are recommended for use as a feeder cable. To reduce signal loss, the cable should be kept to the shortest length necessary.

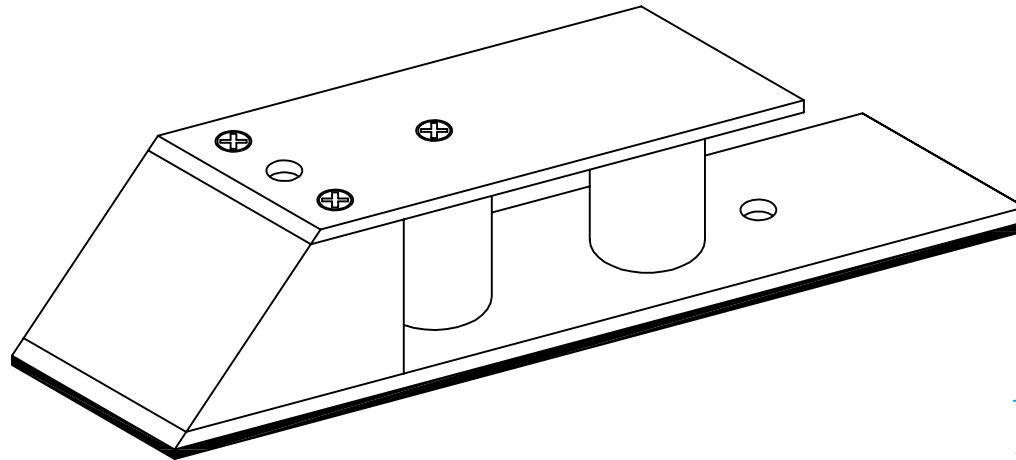
Use proper tools to fit appropriate connectors each end.

Route the cable carefully to your mobile phone. If using cable ties, do not pull them so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

Connect the feeder cable to your mobile phone.

Installation is now complete.

FREQUENCY: 825 - 890 MHz



CT800
Low Profile Antenna

MOUNTING:

Mounting Holes:
Ø6.2 holes x 2
Spacing: 89.3 mm

Neoprene Rubber
Gasket (supplied)

DIMENSIONS:

CT800
Length: 150 mm
Width: 32 mm
Height: 31 mm

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