



Model

CT90

Low Profile, Rugged and
Covert FM Radio Receive
Antenna

87.5-108.5MHZ

- ➔ Mounts to any flat metal surface at least 1.2 metres square.
- ➔ 6 x M6 x 20mm mounting bolts supplied.
- ➔ N-type female connector.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

CT90 is a low profile, rugged and covert antenna, factory tuned to receive FM radio transmissions.

Virtually unbreakable, this model is the ideal choice in situations where a traditional long whip would be vulnerable to damage or vandalism.

Constructed from aluminium, delrin and a tri-metal plated connector, the antenna measures 865mm long, 80mm wide and 100mm 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 Vehicles |

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 FM Radio band 87.5- 108.5MHz.

VSWR has been optimised to less than 1.5:1 at centre of the band and better than 2:1 across the entire 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 1.2 metres square and acts as a ground plane. The antenna will then produce a near omnidirectional radiation pattern, 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 360° omnidirectional pattern. At least 350 mm side clearance is desirable, preferably more.**

INSTALLATION GUIDE

Drill 6 x 6.5mm holes and 1 x 17mm in the metal ground plane surface; 6 holes for bolts and the larger hole for the N-type female connector.

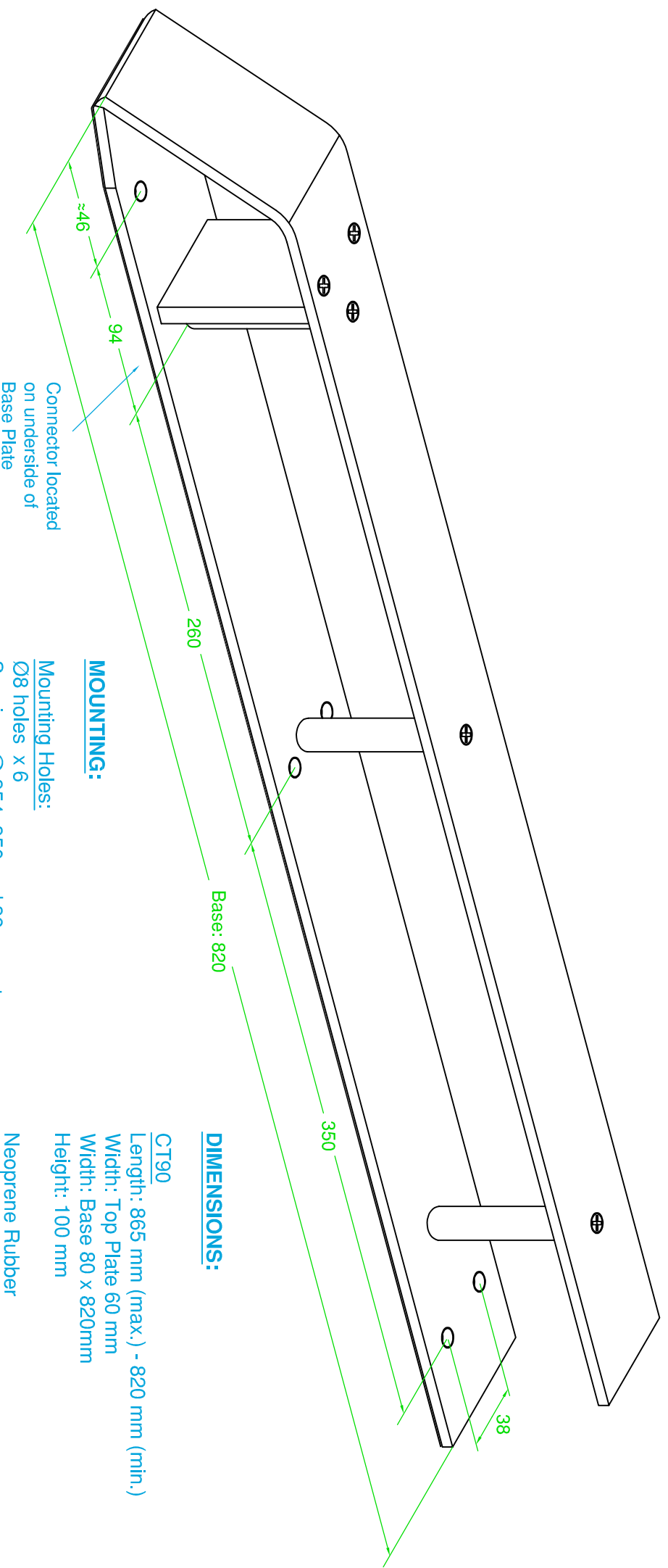
Apply a silicone bead around base of connector and edge of CT90 low profile antenna to reduce water ingress.

6 x M6 x 20mm stainless steel set screws are supplied 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.

Connect the feeder cable to your FM radio to complete the installation.

FREQUENCY: AM/FM



CT90 Low Profile Antenna

MOUNTING:

- Mounting Holes:
 - Ø8 holes x 6
 - Spacings @ 354, 350 and 38 mm ctrs.
- Fasteners (supplied):
 - 6 x Set Screw, Hex Head, S/S, M6 x 20
 - 6 x Nyloc Nuts, S/S, M6

Connector:
N-Type Female

DIMENSIONS:

- CT90
 - Length: 865 mm (max.) - 820 mm (min.)
 - Width: Top Plate 60 mm
 - Width: Base 80 x 820mm
 - Height: 100 mm
- Neoprene Rubber
- Mounting Gasket supplied

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