# ANTENNA DESCRIPTION

DLD2400 is a stud mount dipole for data link purposes factory tuned to cover the frequency 2.4 - 2.5 GHz with 2.1 dBi gain.

The flexible UV stabilised black PVC radome and delrin ferrule stands just 115mm tall.

600mm of RG316 miniature teflon dielectric coaxial cable bottom exits through the base.

A SMA male connector is fitted to the cable, as standard, unless alternative specified.

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

## TUNING

The antenna has been tuned in the factory for the frequency 2.4 GHz.

VSWR has been optimised to better than 1.5:1.

This tuning cannot be altered.

### SELECTING THE MOUNTING POSITION

The dipole can be mounted into any bracket with a 12.7 mm ( $\frac{1}{2}$ ") minimum diameter hole using the stainless steel nut at the base.

A variety of mounting brackets are available separately.

No metal ground plane is necessary for the antenna to operate effectively. Potential mount positions therefore include vehicles and numerous fixed locations where no metal exists.

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° omnidirectional pattern and interference. At least 350 mm side clearance is desireable, preferably more.
- 3. Mount the antenna vertical, not at an angle.

### INSTALLATION GUIDE

Remove the nut from the threaded base, slip it down the cable and over the connector. Pass the cable through the hole of your mounting bracket.

Thread 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 bottom exits the threaded base so as not to place unnecessary tension on the cable.

Route the 60 cm RG174 cable carefully to your data device. 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 SMA male connector into your data device. The maximum input power rating is 20 watts.

#### Installation is now complete.

### MAINTENANCE

Our DLD2400 is constructed of robust UV rated external materials and high quality internal PCB radiating components to ensure a long, reliable service life, with minimum maintenance.

We recommend a full system visual inspection of your antenna condition, antenna mounting security, coaxial cable route and termination, <u>yearly</u> to ensure your system is performing adequately.

A regular check of your transmission or receive device performance should also be undertaken as per the manufacturers guidance.

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