



Model

HM2800

Coastguard

Marine Base Station Mast Mount

Antenna, 6.2 metres tall

27 MHz Marine Band

2.1 dBi Gain

1 metre RG213 cable tail with
N-Female connector fitted

- Mounts to a mast using 2 heavy duty parallel clamps (available separately).
- 50 watts maximum input power.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

Built to full commercial specifications, the **HM2800** "Coastguard" 27 MHz marine base station antenna will survive long term in the most severe weather conditions and hostile environments.

Standing 6.2 metres tall, the brass and cable internals are fully sealed inside a strong white fibreglass radome and stainless steel mount tube.

The antenna delivers a 360° omnidirectional radiation pattern with 2.1 dBi gain.

The 1 metre RG213 cable tail is terminated with an N-Female connector rated for up to 50 watts input power.

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 marine frequency range 27.680 to 27.980 MHz. VSWR has been optimised to better than 1.5:1. This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

For mounting to a mast, **2 x UAM180L** heavy duty galvanised steel parallel clamps are recommended and will suit a round mast between 40 mm and 75 mm in diameter.

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

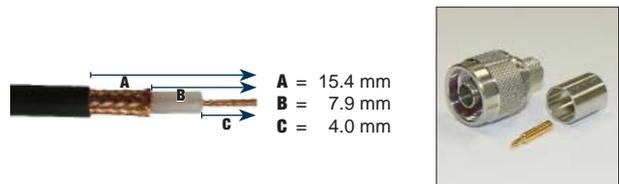
- Mount the antenna in as high a place as possible.**
- Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the radiation pattern. At least 350 mm side clearance is desirable, preferably more.**
- For optimum performance the antenna must be in a vertical position, not at an angle.**



PREPARE THE FEEDER CABLE

RG213 is recommended for use as a feeder cable. To reduce signal loss, the cable should be kept to the shortest length necessary.

The "7937" N-Male crimp connector is available to fit RG213 cable. The proper trim dimensions are :



Attach the N-Male connector to the antenna's cable tail.

Route the feeder cable to your radio. Ensure that the cable is not stretched excessively and there are no sharp kinks.

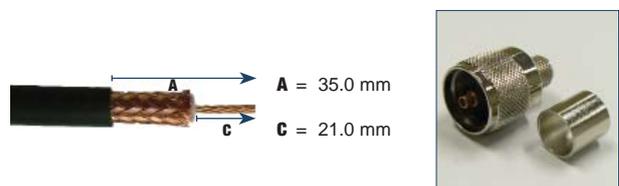
If using cable ties, then we highly recommend the stainless steel type for the harsh marine environment.

Do not pull the cable ties so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

CONNECT YOUR RADIO

Cut the cable to the shortest length necessary, prior to fitting the appropriate connector for your marine 27 MHz radio. Usually this will be a UHF male. There are various UHF male connectors available for RG213 cable.

If using our "7910" UHF male crimp connector for RG213, carefully strip the end of the coaxial cable as shown in the diagram.



SEALING CONNECTIONS

For the marine environment, it is vital that all connections be well sealed with at least two layers of self-amalgamating tape to prevent ingress of moisture. PVC or electrical tape will not be adequate.

Attach the connector to your radio. The maximum input power rating is 50 watts.

Installation is now complete.

MAINTENANCE

This antenna has been designed for high reliability and low maintenance. We recommend that you conduct a routine annual mechanical inspection of the antenna, feeder cable and connections.