



Model

ZM312V

Marine White Whip and Base

47 cm tall

VHF 156 to 162 MHz

Full Band

2.1 dBi

- Mounts to any flat metallic surface at least 0.5 metres square, such as the deck or cabin of an aluminium or steel boat
- 5 metres of white RG58 low loss stranded cable with FME female connector fitted.
- FME male to UHF male adaptor supplied.
- 25 watts maximum input power.

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

Standing 47 cm tall, ZM312V is a wire wound fibreglass whip with white heatshrink cover and factory tuned for VHF marine communications across the 156 to 162 MHz band.

The whip mounts onto the white OB-3 base supplied which has stainless steel and brass components to ensure long term service in the harsh marine environment.

5 metres of white RG58 low loss stranded cable bottom exits from the OB-3 antenna base. An FME female connector is fitted to the cable for easy installation.

An FME male to UHF male adaptor is also included in the kit to provide another common connector option.

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

TUNING

The white whip has been tuned in the factory to cover the full VHF Marine Band 156 to 162 MHz, including the Marine Emergency Channel operating at 157 MHz.

VSWR has been optimised to better than 1.5:1.

This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

IMPORTANT : The antenna is not ground independent and therefore must be mounted on a metallic surface at least 0.5 metres square for effective performance.

Typical mount positions would be on the deck or cabin of an aluminium or steel boat.

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.**
3. **For optimum performance the antenna must be in a vertical position, not at an angle.**

MOUNTING THE ANTENNA BASE

The white OB-3 antenna base can be mounted through any flat metallic surface up to 5 mm thick. The metal surface must be at least 0.5 metres square and acts as a ground plane for the antenna.

1. Drill a 16 mm diameter hole through the metal surface.
2. Unscrew and remove the nut on top of the white OB-3 base, then disassemble all components as shown in the diagram.
3. From underneath, push the mounting leg through the hole.
4. From above, replace the rubber gasket, base cap, washer and nut in that order.
5. The rubber gasket will provide a waterproof seal. However, for the marine environment we do recommend that you also use a good sealant, such as silicon, to reduce the likelihood of rust or corrosion setting in.
6. Tighten the top nut to firmly secure the base in position.
7. Screw the white whip onto the 5/16"-26 TPI thread on top of the OB-3 mounting base.

ROUTING THE CABLE

IMPORTANT : Leave some slack in the cable at the point where the cable bottom exits from the base. This will ensure that there is no unnecessary tension placed on the cable.

Route the white 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 so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

CONNECT TO YOUR RADIO

An FME female connector has been fitted to the cable for your convenience. The maximum input power rating is 25 watts.

An FME male to UHF male adaptor is also included in the kit to provide another common connector option.

Attach the FME female connector to your radio, or use the adaptor as appropriate.

Installation is now complete.