



Model

ZM21-AM/FM

Marine AM/FM Antenna

2.1 metres tall

AM/FM Radio
Receive

530 KHZ to 108 MHZ

- ↳ Mounts to MM1 or MM2 using 1"-14 UNS thread
- ↳ 4.5 metres of RG58 low loss stranded cable.
- ↳ Solderless "easy fit" car radio connector supplied

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

Tuned to receive AM and FM radio broadcasts while at sea, this marine AM/FM antenna is a single piece construction and will match the height and appearance of ZM21 models in the ZCG marine range.

All components used are of the highest quality to ensure long term survival in the harsh marine environment. The antenna will deliver reliable performance for many years.

4.5 metres of RG58 cable side exits from the chromed brass ferrule. Cut the cable to the shortest length necessary prior to fitting the solderless car radio connector supplied.

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 AM Radio Band 530 to 1600 KHz and the FM Radio Band 88 to 108 MHz. This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

No metal ground plane is necessary for the antenna to operate effectively. 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.**

FOLD DOWN SWIVEL BASE (not included)

You can choose between the MM1 plastic fold down mount or MM2 316 grade stainless steel fold down base. Both of these bases include a 1"-14 UNS thread on the top which mates with the thread in the chrome mount ferrule of your antenna.

Alternatively black versions of both the MM1 and MM2 are available.

Both of these fold down mounts are adjustable in two directions and also swivels in the opposite plane by loosening the stainless steel pivot bolt. This versatility allows the antenna to be mounted in a variety of positions on any flat surface and at any angle using four screws or bolts.

Use the base as a template to mark the position of the 4 holes required to secure the deck mount base.

ZCG recommend using high quality stainless steel fastening screws or bolts, depending on your mounting surface.

ROUTING THE CABLE

IMPORTANT : *Leave some slack in the cable at the point where the cable exits the chromed brass ferrule. This will allow the antenna to be folded down flat without placing tension on the cable.*

Route the RG58 low loss stranded cable carefully to your radio. Ensure that the cable is not stretched excessively and there are no sharp kinks.

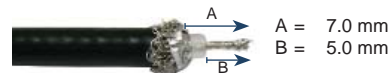
If using cable ties, then we highly recommend the stainless steel type for the harsh marine environment.

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.

FITTING THE CONNECTOR

We recommend that you cut the cable to the shortest length necessary, prior to fitting the solderless car radio connector supplied.

1. Unscrew the black cap and disassemble all connector components.
2. Thread the black cap onto the coaxial cable.
3. Carefully strip the end of the coaxial cable as shown in the diagram and fold the braid back over the jacket.



4. Place the retention clip over the end of the cable and exposed braid, then squeeze the fingers into the cable jacket to hold the clip secure.
5. Loosen the screw in the white centre pin piece, insert the centre conductor wire into the pin and tighten the screw.
6. Move the black cap up the cable and over the retention clip.
7. Thread the metal outer body piece over the inner white centre piece.
8. Screw the black cap and connector outer body together finger tight.

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 AM/FM radio.

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.