



Model

ZM204-CB

27 MHz CB Radio Base Station

Antenna, 5.1 metres tall

26.68 – 27.98 MHz

Full Band

2.1 dBi

- 5 piece anodised aluminium telescopic tube.
- 2 x U-bolts and saddles supplied for mounting to a round mast up to 50 mm in diameter.
- UHF female connector at base of the mount tube.
- 50 watts maximum input power.

INSTALLATION GUIDE

www.zcgg.com.au

ANTENNA DESCRIPTION

Factory tuned for 27 MHz CB radio, the **ZM204-CB** collinear base station antenna consists of a 5 piece anodised aluminium telescopic tube which stands 5.1 metres tall when fully assembled.

The antenna offers an economical and robust solution for omnidirectional 27 MHz communications and delivers 2.1 dBi gain.

A UHF Female connector rated for up to 50 watts input power is located at the base of the mount tube.

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

TUNING

The antenna has been tuned in the factory to cover the 27 MHz CB Radio band, 26.68 to 27.98 MHz.

VSWR has been optimised to less than 1.5:1.

This tuning cannot be altered.

ANTENNA ASSEMBLY

With the drilled hole at the top, insert each of the 5 aluminium tube sections into each other in the correct order.

Joining screws are provided.

Line up the holes in each section and drive the screws fully home through inner and outer tube sections.

SELECTING THE MOUNTING POSITION

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

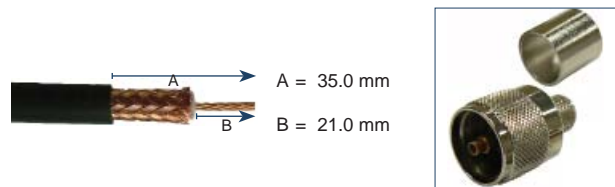
2 x U-bolts and saddles are supplied for mounting the antenna to a round mast up to 50 mm in diameter.

Take care not to over-tighten the clamps beyond reason.

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 "7910" UHF male crimp connector is available to fit RG213 cable. Carefully strip the end of the coaxial cable as shown in the diagram and fit the connector using proper tools.



Attach the N-Male connector to the antenna's UHF Female connector located at the base of the mount tube.

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

IMPORTANT : Secure the cable properly so as it does not flap in the wind and no stress is placed upon any connections.

Use cable ties, but do not pull them so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

Cut the cable to the shortest length necessary, prior to fitting the appropriate connector for your 27 MHz CB 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 prepare the coaxial cable and fit the connector, as before.

SEALING CONNECTIONS

IMPORTANT : 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.

RETURN LOSS TEST

Following installation of the feeder cable, connect an SWR meter between the antenna cable and your 27 MHz CB Radio.

Press and hold the transmit button on the microphone of your radio and check the SWR reading on the meter. The return loss should be better than 1.5:1, as per the factory specification.

Disconnect the SWR meter and attach the feeder cable to your 27 MHz CB 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.