

Installation Instructions

WMM48G-17-42 - 4x4 MiMo Wall Mount Antenna

SW3-1034- Document Version 1

A Introduction

The WMM48G-17-42 is a 4x4 MiMo 4G/5G wall mount antenna designed to be low profile and un-obtrusive. The antenna can be mounted to conductive or non-conductive panels using the supplied flush wall mount bracket. A multi-tilt mast / wall bracket part no. SAB-186 is available as an optional accessory. The antenna is supplied with integrated low loss flame retardant cable.

B. Mounting requirements and selecting location

The antenna should normally be mounted in a flat, vertical orientation with the cable exit at the bottom. The antenna should be mounted facing the desired coverage area.

The antenna should be spaced as far away from any nearby metal structures as possible. Special care should be taken to ensure that the area directly in front of the antenna is free from metal objects and other obstructions. Ensure that there is adequate clearance and that the coaxial cables can be routed to the equipment.

Ensure that the selected mounting location can safely be accessed using the equipment that is available.

A low profile wall mount bracket is supplied allowing flat fitment to a wall with no adjustment. Alternatively, if the antenna is fitted to a panel with rear access, then it can be secured to the panel using suitable length M6x1 machine screws into the threaded bushes in the antenna back plate. A multi-tilt bracket is available as an optional accessory for mounting to a mast (diameter <60mm [2.36"]) or wall – this allows adjustable vertical and horizontal tilt.

C. Antenna mounting

- The antenna is designed to be mounted by a professional installer. Please seek professional advice from an accredited installer regarding the installation if in any doubt.
- If the antenna will be fitted to an existing mast, please ensure that it will not overload it.
- Ensure that the installation location can be safely accessed with the equipment that you have available.
- If mounting to a wall in a position which is accessible care should be taken to ensure that no one comes within 0.5m (1.5') of the antenna during use.



CAUTION

Parts of the antenna are an electrical conductor. Contact with power lines can result in death, or serious injury. Do not install the antenna where there is any possibility of contact with (or high voltage arc-over from) power cables. The antenna and supporting mast must not be close to any power lines during installation, removal or in the event that part of the system should accidentally fall.



CAUTION

If the antenna is installed above the roof line or in an exposed location, it is advisable to fit lightning surge arrestors in the coaxial cable feed line. Suitable units should be sourced and installed as per the manufacturer instructions. The installer is responsible for determining if this is a requirement for the antenna installation.

D. Mounting Using the Low Profile Wall Bracket

Offer the antenna to the mounting bracket face, fit the supplied bolts with washers and tighten securely. Do not over-tighten as it may warp the back plate.

Ensure there are no obstructions or utilities behind the mounting surface. Use the bracket as a template to mark the mounting hole positions. Select the correct size drill bit to suit the wall plug, drill holes and insert wall plugs. Align the bracket over the prepared holes, insert screws and fully tighten evenly. Drill any hole/s required for cable routing as appropriate.

Safety Check: Ensure that the bracket is securely fixed to wall before fitting the antenna.

Offer the antenna and bracket to the wall mounting tilting the antenna slightly away from the wall and sliding the two flanges on the antenna bracket into the locations on the wall bracket until the antenna locates. Be careful not to trap or damage the cable.

E. Pole Mounting using the optional adjustable bracket

Fit bracket to antenna using supplied screws, washers and nuts. Offer the multi-tilt bracket to mast in selected position and fit V bolts with washer & nuts. Tighten by hand to allow final positioning and alignment of the bracket. Note: minor directional adjustment in both azimuth (horizontal)[+/- 40deg] and elevation (vertical) [+/-20deg] can be made using the tilt/swivel feature. Once correctly aligned, fully tighten the V bolts evenly from each side to secure the bracket.

Caution: Do not overtighten the V bolts as this may damage or distort the mast tube section.

F. Routing and terminating coaxial cable(s)

Route the coaxial cables to the mating connectors, ensuring that the cable is secured and protected from subsequent damage during access. The cable should never be kinked and the minimum bend radius of 25mm (1") must be observed.

If cable ties are used, they should not be overtightened, as this will distort the cable profile and could affect the antenna performance. Any excess cable should be laid "side by side" (not coiled) and can be secured by cable ties or tape.

Connectors should be tightened to the correct torque which is 1Nm for an N type or 0.5Nm for SMA connectors.

G. Commission and test

Check the comms cables:

- Carry out VSWR check, the VSWR should measure <2.5:1 in transmit band.
- Connect the cable to the radio device

H. Notices



DO NOT

- operate the transmitter when someone is within 20cm (8") of the antenna.
- operate the equipment in an explosive atmosphere.
- attempt to install the antennas without the proper safe equipment to access the install location.
- chew parts or put them in mouth, keep away from unsupervised children. Dispose of parts as WEEE waste do not send to landfill.

**European Waste Electronic Equipment Directive 2002/96/EC**

Waste electrical products should not be disposed of with household waste. All electronic products with the WEEE logo must be collected and sent to approved operators for safe disposal or recycling. Please recycle where facilities exist. Many electrical/electronic equipment retailers facilitate "Distributor Take-Back scheme" for household WEEE. Check with your Local Authority or electronic retailers for designated collection facilities where WEEE can be disposed of for free.

**Directive 2011/65/EU (RoHS 2)**

RoHS 2 compliance is declared per Directive 2011/65/EU and its subsequent amendments with exemption 6.c applied.

REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals, EC 1907/2006)

This product contains Lead (CAS No. 7439-92-1) which is classified as an SVHC (Substance of Very High Concern) as being toxic to reproduction under Article 57c. of REACH. Do not chew parts or put them in mouth, keep away from unsupervised children. Dispose of parts as WEEE waste do not send to landfill.