

Installation Instructions

WMM[X]9G Range SW3-338 - v2

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1. Introduction

This document is a guideline for installation of WMM[X]9G range of directional MiMo antennas onto a mast or rail. This document should be utilised as advice in the context of a well-planned installation. The WMM[X]9G comes in a variety of configurations and consists of both horizontally and vertically polarised elements. Note that the polarisation of these elements is referced to a standard pole mounting configuration and will change if the antenna is mounted in an alternate mounting configuration. The label on the rear of the antennas denotes the elements by position as A, B,C and D. In a standard orientation where element A is topmost then elements A and C are horizontally polarised and elements B and D are vertically polarised. The antenna has a nominal E and H-Plane beamwidth of 60 degrees. The antenna is supplied with a clamp bracket cable of adjustment and suitable for fitment to a pole or rail between 25-50mm (1 - 2") diameter.

2. Mounting Requirements and Selecting Location

Select a suitable mounting location for the antenna ensuring that it can be safely accessed with the equipment available. The antenna must not be installed near to powerlines. If mounted externally in a very elevated location or above the roofline it may be prudent to consider fitting surge protectors to the coaxial cables ensuring that they are properly earthed in accordance with the manufacturers instructions.

When selecting a mounting location care should be taken to ensure that at least 0.3m (1') of separation is maintained between the antenna and nearby metal objects and surfaces. Ensure that the selected location will enable the coaxial cable to be easily routed to the equipment while respecting the bend radius of any coaxial cable used.

The antenna should be mounted to a suitable pole or rail (25-50mm (1 - $2^{"}$) diameter) positioned to allow the antenna to cover the desired area. The antenna bracket allows approx 30 degrees of adjustment from the centre line in either the horizontal or vertical axis depending on how it is mounted.

3. Antenna Mounting

Check that you have the required mounting hardware and equipment available. The antenna bracket can be mounted to the antenna and the antenna mounted to the mounting rail / pole in a number of orientations. Select the correct orientation for the installation and fit the angle bracket to the antenna using the supplied M6x1 screws and washers. The U-bolt mounting assembly can then be fitted to the angle bracket and tightened onto the mounting pole / rail. Once almost tight the antenna can be orientated to face in the desired direction and the u-bolt assembly fully tightened. Do not overtighten the assembly.

4. Routing and terminating coaxial cable(s)

Fit the extension cable to the antenna. Route the coaxial cables to the radio equipment, taking care to observe applicable bend radii and avoiding running them adjacent to any existing wiring or fouling any moving components. If exposed it is good practice to waterproof the RF connector joint with a weatherproof electrical tape (self amalgamating type is recommended) allowing a significant overlap of each turn and ensuring that the overlap is in the opposite direction to predicted water fall. If required the coaxial cables should be fitted with properly earthed in line surge arrestors before connecting the antenna to the radio equipment.

5. Pole Mounting using the Adjustable Bracket

Check the comms cables:

• Carry out VSWR check, the VSWR should measure <2.5:1 in transmit bands.

6. Notices



DO NOT

- operate the transmitter when someone is within 1m (3'3") 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.
- · install the antenna near power lines.
- chew parts or put them in mouth, keep away from unsupervised children.
- install the antenna in such a way that it may fall and cause injury.



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.

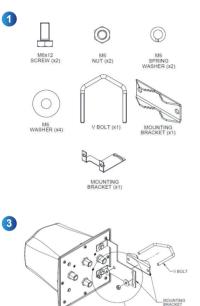
CE

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.

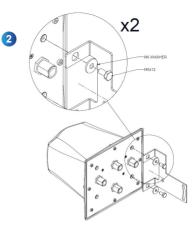
REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals, EC 1907/2006) This product contains Lead (CAS No. 7439-92-1) which is classified as an SVHC (Substance of Very High Concern) as being toxic to reproduction under Article 57c. of REACH. Do not chew parts or put them in mouth, keep away from unsupervisedchildren. Dispose of parts as WEEE waste do not send to landfill.

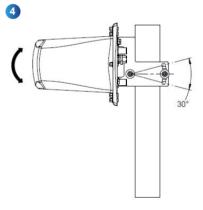
7. Visual Instructions



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-M6 WASHER (x2)





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