PANORAMA ANTENNAS

Installation Instructions

MiMo Ceiling Anetnna

CMM-6-60

SW3-824 - v2

1. Introduction

The CMM-6-60 is a 2x2 MiMo 3G/4G/5G low profile ceiling mount antenna designed to have low visibility. The antenna can be mounted to conductive or non-conductive panels using the supplied nut and/or mounting screws. The antenna has low PIM properties and is supplied with low PIM cable available with N type or 4.3-10 type connectors, so please ensure you have the correct version.

2. Mounting requirements and selecting location

The antenna should normally be placed in a flat, horizontal orientation with the cable exit at the top. When ceiling mounted the antenna should be mounted centrally within the desired coverage area.

The antenna should be spaced as far away from any nearby metal structures as possible. Ensure that there is adequate above panel clearance and that the coaxial cable can be routed to the equipment.

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

3. Antenna Mounting

Where the antenna will be fitted on a lift out ceiling panel, it may be preferable to remove the panel and mount the antenna on the panel whilst working at ground level.

Mark the position for the centre fixing and make a clearance hole for the relevant connector - for N female connector 18mm (3/4") and for 4.3-10 female connector 24mm (1"). Use a correct size hole cutter or drill a pilot hole first and then increase to the required size. If using the optional additional screw fixings mark the position of the mounting holes (the antenna can be used as a template) & drill. Screws should be M4 or No.8 pan head screws of an appropriate length for the installation. Note. Using metal screws may negatively impact low PIM performance - plastic mounting bolts are preferable if available. Clear up all dust and swarf carefully especially if mounting to a conductive panel as this may also negatively affect PIM performance.

Remove the supplied nut and mount the antenna being careful not to kink or damage the cable. Re fix the nut and tighten. Tighten (but do not overtighten) any screw fixings; over-tightening may damage the antenna cover.

3. Routing and terminating coaxial cables(s)

Route the coaxial cable to the mating connector, 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 32mm (1.25") 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.

Important Note: To maintain low PIM performance, Connectors should be cleaned with air or a soft brush and then tightened to the correct torque which is 1Nm for an N type or a maximum of 5Nm for 4.3-10 type connector.

4. 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
- Check the system PIM level if necessary

5. 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.**

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