



Installation Instructions EN

L[X]A[X]MM4[X]-7-42
SW3-1177 - v1

1. Introduction

The L[X]A[X]MM4[X]-7-42[-X] MiMo antenna is designed to be a one size fits all solution for IOT applications requiring no-drill installation. The robust low profile housing contains 4x 4G LTE / 5G NR elements covering 698-960/1427-4200MHz. Versions of the product are available with up to 4x WiFi elements supporting WiFi 6e 2.4/5.150-7.125GHz and optional L1 only or L1/L5 GPS/GNSS. The antenna is suitable for fitment to ferrous metal panels using magnetic fixing and any smooth even surface using the supplied acrylic adhesive pad.



Electrical Safety Note

LGA[X]MM4[X]-7-42 contains an active L1 Band GPS/GNSS antenna. Rated voltage: 3-5VDC Rated current: 17mA maximum.
LG5A[X]MM4[X]-7-42 contains an active L1/L5 Band GPS/GNSS antenna. Rated voltage: 3-5VDC Rated current: 37mA maximum.

The supply to these devices must be provided with over current protection of 1A maximum.

2. Mounting requirements and selecting location

The L[X]A[X]MM4[X]-7-42 range can be mounted on a conductive or non-conductive panels but if the antenna is mounted to a non-ferrous panel there will be no magnetic retention. Select a mounting location, checking for panel curvature to ensure that the antenna base will have a flat mounting surface if possible. The mounting surface should be clean and dry for maximum magnetic or adhesive retention.

Measure to check for central position if applicable. For optimal performance the antenna should, if possible, be mounted at least 300mm (1ft) away from other conductive objects on the mounting panel.



Important Note Regarding Vehicle Mounting

The product is not primarily intended for vehicle mounting but can be mounted on vehicles where a risk assessment by a competent professional indicates that the magnetic retention is suitable for the application. In any case users should not exceed 80Mph/130Kmph when the antenna is installed externally on a vehicle.

3. Magnetic mounting

Clean and dry the desired mounting location. Make sure that there is no swarf or debris stuck to the bottom of the antenna as this may affect adhesion and damage the panel. The magnetic base has a scratch resistant pad which is suitable for direct contact with most panels. No other material should be placed under the mount as this will affect the magnetic adhesion.

Hold the mount above selected location and lower gently on to panel, ensuring effective adhesion.

If the antenna needs to be moved or re-located, use the body of the antenna - Do not hold, carry or remove the antenna by using the coaxial cable.

4. Adhesive mounting

It is recommended that installation using adhesive pad fixing is only carried out in temperatures above 50°F (10°C). The ideal temperature for the pad bonding is in the range of 70°F (21°C) to 100°F (37°C).

Remove the existing non-slip boot from the base and ensure the underside is clean.

Remove the backing paper from one side of the adhesive pad, align to the base and fit, applying firm, even pressure to ensure effective adhesion

Remove the backing paper from the remaining side of the adhesive pad, hold the mount above the selected location and fit, applying firm, even pressure to ensure effective adhesion.

If fitted to a vehicle using adhesive pad method, then some time should be allowed for the pad to cure before the vehicle is driven.

5. Routing and terminating coaxial cable(s)

Route the coaxial cables to the equipment, taking care to avoid fouling any moving component. If installed on a vehicle, the cables must not be routed in front of any airbag device. Respect a minimum bend radius of 12mm (1/2") if possible.



When routing the cables take care to avoid running them adjacent to any existing wiring or obstructing any moving components. If installed on a vehicle the cables must not be routed in front of any airbag device.

6. Commission and test

Check GPS/GNSS cable (where applicable):

- Check the GPS/GNSS cable(s) with DC to measure high resistance.
- Connect the GPS / GNSS cable(s) to the GPS/ GNSS receiver(s) and check for satellite acquisition.

Check comms cable(s):

- Carry out VSWR check, should measure in line with datasheet specifications.
- Connect comms cables to equipment.

7. Notices



CAUTION

Consider relevant RF exposure rules. Ensure that the antenna is installed to provide a minimum separation distance of at least 20 cm (8") from all persons during use..



DO NOT

- exceed 80Mph/130Kmph when the antenna is installed externally on a vehicle
- operate the transmitter when someone is within 20 cm (8") of the antenna.
- operate the equipment in an explosive atmosphere.
- chew parts or put them in mouth, keep away from unsupervised children.



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.