

Installation Instruction – SW3-773

BAT Series

SW3-773 - Document Version 1.1

A Introduction

The BAT series is a line of internal mount MiMo LTE/Cellular, optional dual band WIFI and optional GPS/GNSS Antennas. The standard GPS/GNSS LNA gain, where present, is 26dB.



Electrical Safety Note

This product contains an active GPS/GNSS antenna (part number SR8-HG26). Rated voltage: 3-5VDC Rated current: 20mA maximum

The supply to this device must be provided with overcurrent protection of 1A maximum.

B. Mounting requirements and selecting location

The BAT antenna is designed to be fitted on or under a vehicle dashboard, located as far forward as possible to optimise view to the sky. When fitting under the panel, a position should be selected to ensure there is no metal close to the antenna inside the panel.

The optimum orientation for the antenna is to be fitted flat and the UP side must be facing towards the sky. It can also be fitted on or under any other non-metallic panel in a position that allows an adequate view of the sky. Ensure that the antenna is mounted a minimum 10cm (4") away from any metal structure. The antenna must not be fitted adjacent to or in near proximity of one of the vehicle electronic control units (ECU).

C. Mounting the antenna

Note: It is recommended that the installation is not carried out if the temperature is less than 50°F (10°C) as the ideal temperature for the pad bonding is 70°F (21°C) to 100°F (37°C).

Before fitting, ensure that both the antenna face and mounting surface are clean and free of grease – use the supplied alcohol swab and allow the cleaned surfaces to dry before proceeding to fit the adhesive pad.

Select the appropriate pad for your installation - the complete pad can be used for bonding the bottom (flat) face to the mounting panel. The smaller insert pad can be used to mount the antenna under a panel using the top face (marked 'UP') Remove the protective backing from the adhesive pad, place on correct face of the antenna, to enable the UP side to face the sky and apply adequate even pressure to adhere.

Remove the protective backing from the antenna pad, position the antenna and apply adequate pressure to ensure that it has adhered correctly.

D. Routing and terminating coaxial cable(s)

Route the coaxial cables away from the antenna, taking care that the cables do not apply stress to the antenna mounting. It is advisable to observe a minimum bend radius of 25mm (1") when installing the Cell/LTE and WIFI cables. The cables should be routed so that they do not obstruct a moving vehicle component.

The cables must not be routed in front of any airbag devices – note that these may be located behind the windscreen pillar trim and the side of the roof head lining, depending on vehicle specification.

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E. Commission and test

Check LTE/Cellular and WiFi cable(s):

- Carry out VSWR check both feeds should measure <2.5:1.

Check GPS/GNSS cable:

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

F. Notices



DO NOT

- install on conductive surfaces the antenna is not suitable for mounting on metal surfaces. Please note for vehicle installations that metalized glass may also cause significant de-tuning.
- operate the transmitter when someone is within 20cm (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.



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.

Directive 2014/53/EU Radio Equipment Directive (RED)

EN 301 489-1 (V2.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements". Referencing EN 61000-4-2:2009 – Electrostatic Discharge Immunity and EN 61000-4-3:2006 +A1:2008 +A2:2010 – Radiated RF Immunity

EN 300 440-1 V1.6.1 (2010-08) – Electromagnetic compatibility and radio spectrum matters (ERM); short range devices; radio equipment to be used in the 1GHz to 40GHz frequency range; Part 1: Technical characteristics and Test methods in accordance with EN 300 440-2 V1.4.1 (2010-8) - Electromagnetic compatibility and radio spectrum matters (ERM); short range devices; radio equipment to be used in the 1GHz to 40GHz frequency range

Low Voltage Directive: Directive 2006/95/EC (Electrical Equipment designed for use within certain voltage limits) of August 2007. Compliance is declared according to:

EN62368-1: 2014 Audio/video, information and communication technology equipment. Safety requirements.