



## Installation Instructions

**B4BE[E]-6-60 Bracket Mount Antenna /  
LPB-6-60 Panel Mount Antenna**  
SW3-205 - v2

### 1. Introduction

The B4BE-6-60 / LPB-6-60 antennas cover 2G/3G/4G and 5G frequencies (617-960/1710-6000MHz). The LPB-6-60 type is intended for mounting on a metal panel; the B4BE[E] type is supplied with a wall / mast mount bracket, but can also be mounted on a metal panel without the bracket if required, in which case, install as per LPB type.

The B4BE-6-60 / LPB-6-60 antennas are supplied with an integral CS29 low loss cable and the B4BEE-6-60 is supplied fitted with RG174 coaxial cable. All three products are available with a variety of cable lengths and co-axial connectors.

### 2. Mounting requirements and selecting location

**Bracket Mounting for B4BE[E]-6-60:** Select a suitable mounting location for the antenna. The orientation of the antenna should be vertical with the cable exiting downwards. When selecting a mounting location care should be taken to ensure that at least 300mm (12") of separation is maintained between the antenna and nearby metal objects and surfaces. When mounting the antenna to a metal housing, device enclosure or mast, care should be taken to ensure that the antenna housing is elevated above the metal surface to which it is mounted. Ensure that the selected location will enable the coaxial cable to be easily routed to the equipment. When mounting the bracket using screws, it is important to check for any wiring or components behind the panel.

**NOTE:** The supplied bracket provides a tuned counterpoise for the antenna - use of a different bracket may adversely affect performance.

**Panel Mounting for LPB-6-60:** The antenna must be fitted to a conductive ground plane of adequate size. It will fit panels of between 1-12mm thick (0.04-0.47"). The recommended minimum diameter of the surface is 200mm (8"). Select a mounting location taking care to ensure that there is at least 300mm (12") of clearance from proximate metal objects. Ensure that there is adequate clearance under the mounting panel and measure to check for central positioning if necessary.

### 3. Antenna Mounting

**Bracket Mounting for B4BE[E]-6-60:** Check that you have the required mounting hardware and equipment available. The antenna can be bracket mounted via the supplied fixing holes (suitable for machine screws or self-tapping screws) or mast mounted using a suitable jubilee or worm drive hose clip. If drilling holes to mount the antenna the bracket can be used as a drilling template. For a more permanent fitment to the bracket, the adhesive pad can be used - ensure that the bracket surface is clean and dry, remove the protective paper and stick the antenna to the bracket. Secure the antenna to the bracket using the supplied nut and washer and tighten to 4Nm

**Panel Mounting for LPB-6-60:** Mask the panel area around the hole position to protect the surface / paintwork. Drill a pilot hole, then increase the hole size to 12mm (1/2"), ensuring that the drill / cutter bit does not hit any objects under the panel. Clean the area around the hole carefully removing all burrs and swarf. Remove any paint and primer from underneath the panel surface to ensure low resistance electrical contact using washer and nut.

Remove the nut and washer, then the protective paper from the adhesive pad on the underside of the antenna and feed the coaxial cable through the panel. Position the antenna over the mounting hole and stick it to the panel applying firm pressure. Assemble the nut and washer from under the panel and tighten to 4Nm.

### 4. Routing and Terminating Coaxial Cable(s)

Route the coaxial cables to the radio equipment, taking care to avoid running them adjacent to any existing wiring or fouling any moving components. Be careful to observe the cable bend radius of 25mm (1") for the B4BE/LPB and 12mm (1/2") for the B4BEE.

## 5. Commission and test

### Check the comms cables

- Carry out VSWR check, the VSWR should measure as specified in the product data sheet
- Connect the cable to the wireless device

## 6. 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.
- install the antenna in such a way that it may fall and cause injury.
- install the antenna near overhead power lines
- 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.



### 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.**

**Waiver:** This document represents information compiled to the best of our present knowledge. It is not intended to as a representation or warranty of fitness of the products described for any particular purpose. This document details guidelines for general information purposes only. Always seek specialist advice when planning installations and ensure that antennas are always installed by a properly qualified installer in compliance with local laws and regulations.