



Installation Instructions

B4BSC-6-60-[X]SPIP and LPBSC-6-60-[X]SPIP

SW3 - 1174 - v3

1. Introduction

This antenna range covers 2G/3G/4G and 5G frequencies (617-960/1427-6000MHz) and is designed for mounting in hostile environments including those subject to temporary submersion. The B4BSC-6-60 antennas are supplied with a wall / mast mount bracket as standard but can also be mounted on metal panels or enclosures of sufficient size. The LPBSC-6-60 antennas are designed for panel or enclosure mounting.

The antenna is supplied with integrated FR CS29 low loss cable with a variety of cable lengths and fitted with an IP rated SMA Plug (m) connector.

2. Mounting requirements and selecting location

Bracket Mounting: Select a suitable mounting location for the antenna on the desired surface. 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 if possible. 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. If mounting the antenna using screws it is important to check for adequate under panel clearance. It is important for RF performance that the antenna is only bracket mounted using the supplied bracket. Mounting the antenna utilising a different bracket may adversely affect performance.

Panel Mounting: The antenna should be fitted to a conductive ground plane of adequate size. It will fit panels of between 1-6mm thick (0.04-0.23") 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: Check that you have the required mounting hardware and equipment available. The antenna can be bracket mounted via the supplied fixing holes (suitable for suitable machine screws or self-tapping screws) or pole mounted using a suitable jubilee or worm drive hose clip or cable ties if appropriate. If drilling holes to mount the antenna the bracket can be used as a drilling template. When ready unscrew the sealing nut at the base of the antenna mounting bush and leave the nut and o-ring washers loose on the cable. Repeat this process for the slotted nut and washers. Pass the coaxial cable through the slot on the antenna bracket. It is not necessary to remove the backing from the supplied adhesive pad but the pad can be utilised if a more secure fitment to the bracket is desired. If utilising the adhesive pad, ensure that the top surface of the bracket is clean and dry, remove the backing from the adhesive pad and stick the antenna to the bracket applying firm pressure. Tighten the antenna securely to the bracket using the nut and washers. Pass the o-rings back up the cable and locate them at the base of the antenna mounting bush. Turn the sealing nut onto the threaded mounting bush and tighten to 3Nm (2.2 ft/lbs)

Panel Mounting: Mask the panel area around the hole position to protect the surface / paintwork. Drill a pilot hole, then increase the hole size to 19mm (3/4"), ensuring that the drill / cutter bit does not hit any objects under the panel. Clean the area around the hole carefully removing all swarf. Remove the nut and washers and set aside and then remove the adhesive pad backing from the underside of the antenna and feed the coaxial cable through the panel. Position the antenna centrally over the mounting hole and stick it to the panel applying firm pressure. Apply a bead of appropriate neutral cure silicone sealant around the entire periphery of the antenna housing and allow to cure before proceeding.

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"). Connect the SMA plug to the connector on the device and tighten to 1Nm (0.73 ft/lbs)

5. Commission and test

Check the comms cables:

- Carry out VSWR check, the VSWR should measure as stated in the datasheet
- Connect the Cellular/LTE cable.

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.



Please Recycle

Printed versions of these instructions can be recycled. When you have finished with these instructions please recycle them.

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.