

# PANORAMA ANTENNAS

## Installation Instructions B4BE-7-27

SW3-664 | Version 1 | 20.01.14



### A. Introduction

B4BE-7-27 is a range of antennas covering global 2G/3G and 4G frequencies (698-960/1710-2700MHz). These antennas are supplied with a wall / mast mount bracket as standard but can also be mounted on metal panels or enclosures of sufficient size.

#### B.i. Bracket Mounting - Select A Suitable Location

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. 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.

#### B.ii. Bracket Mounting - Mounting the antenna

Check that you have the required mounting hardware and equipment available. The antenna can be bracket mounted via the four 4.5mm fixing holes (suitable for M4 machine screws or 4mm self-tapping screws) or mast mounted using a jubilee or worm drive hose clip with a maximum width of 14mm (1/2"). If drilling holes to mount the antenna the bracket can be used as a drilling template. When ready mount the antenna securely to the bracket using the supplied nut and washer. It is not necessary to remove the backing from the supplied adhesive pad but the pad can be utilised if a more permanent 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.

#### C.i. Panel Mounting - Select A Suitable Location

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.

#### C.ii. Panel Mounting - Mounting The Antenna

Mask the panel area around the hole position to protect the surface / paintwork. Drill a pilot hole, then increase the hole size to 14mm (0.55"), 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 any paint and primer from underneath the panel surface to ensure adequate electrical contact using washer and nut.

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Remove the nut and washer and then the adhesive pad backing from 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 fully.






#### D. Routing The Coaxial Cable

Route the coaxial cable(s) to the equipment, taking care to avoid running adjacent to existing wiring or fouling any moving controls or components. Fit a connector to the cable if required.

#### E. Test and Commission

It is recommended to carry out a VSWR check on the comms cable, the VSWR should be as specified in the product datasheet.

#### F. Notices

	Electrical Caution – Parts of this antenna are an electrical conductor. Contact with power lines can result in death or serious injury. The antenna and supporting mast must not be close to any power lines during installation, use or removal. If the antenna is elevated and at risk from lightning strike it must be ensured that the antenna is mounted and earthed appropriately by a trained professional in accordance with the relevant standards.
	Important Note: Any mounting location must be safe to access with the equipment that you have available
	RF Safety Note - The antenna should be mounted in such a way that no person is likely to be within a distance of 30cm (12") during use.
	European Waste Electronic Equipment Directive 2002/96/EC - Please ensure that your old Waste Electricals and Electronics are recycled do not throw them away into standard waste.
	Directive 2011/65/EU (RoHS 2) - This product is fully compliant with the RoHS 2 directive

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.

Panorama Antennas Ltd accepts no responsibility for performance issues, durability issues, damage to equipment or any other loss (to the fullest extent permitted by law) if the product is not installed in accordance with these instructions.