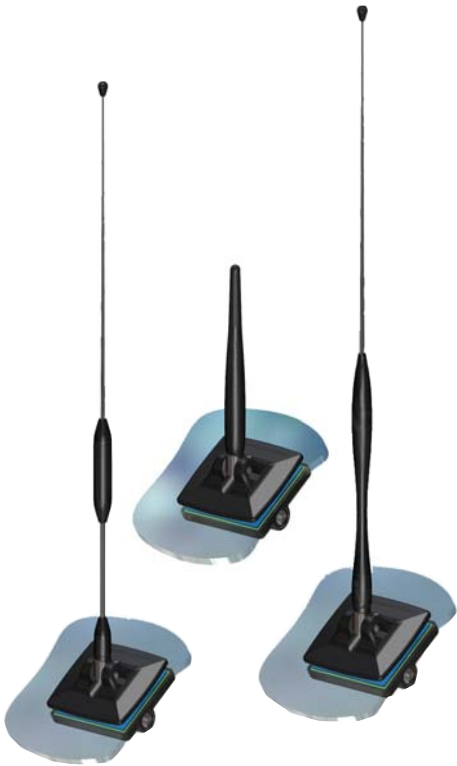


Installation Instructions for Glassmount Antennas



INSTALLATION INSTRUCTIONS INTRODUCTION

This is a general installation instruction and should be used in conjunction with the vehicle manufacturer's guidelines for antenna installation, where applicable.

1 PREPARATION - MOUNTING POSITION

i The optimum mounting position is as near to the top of the glass as possible on the front or rear window; an alternative mounting position is a non-opening side window.

ii Care should be taken to ensure that the mounting foot is not centred directly over any demisting or car radio antenna wire embedded in the windscreen glass or directly over any very fine wire heated elements (typically used in heated front windscreens). In most cases the elements will not cover the entire screen area and selecting a suitable position will usually pose no problem. This type of antenna is not suitable for mounting on double glazed screens or reflective glass which contains metal or metal oxides (often distinguished by a transparent blue/purple/gold hue across the entire screen). If an alternative window cannot be found, then a hole-mount antenna should be installed.

iii Select a position that allows both internal and external components the maximum glass contact area – avoid locations with excessive glass curvature.

iv Mounting must be clear of the path of any wiper blades by at least 6mm; the driver's vision must not be obscured; and the operation of the vehicle must not be impeded in any way.

v Where possible, the whip should be at least 300mm from any other external antenna and the edges of the antenna mounting foot must be at least 6mm from the top or side of the window.

vi The coupling box must be positioned with the cable exiting to the side. (A)

vii When installed, the whip must be in a vertical position, to protrude as much above the roof line as possible.

The adhesive pads cannot be removed and re-used once they have been stuck to the glass. It is therefore very important to determine the correct position for the antenna before installing it.

2 PREPARATION - GLASS SURFACE

The surface of the glass must be thoroughly degreased by cleaning it with the alcohol swab provided. Do not touch or contaminate the surface after it has been cleaned.

3 PREPARATION - TEMPERATURE

The bonding time of the adhesive pad is related to its temperature. The strongest bond in the shortest time will be achieved if all the surfaces to be joined are between 20°C and 30°C. If conditions below 16°C cannot be avoided, both the glass and the antenna components (coupling box and foot) should be warmed before installation.

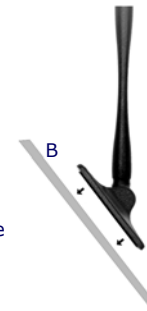
4 MOUNTING THE ANTENNA FOOT

i Using the Alcohol Swab, thoroughly clean the glass and wipe it dry using a clean dry cloth. (Keep the swab for step 6.)

ii Remove the protective paper.

iii Hold the assembly just clear of the glass in the chosen position and check that this is correct before firmly pressing the pad to the glass. The pad will stick immediately on contact and cannot be repositioned; even pressure should be applied to ensure that all the adhesive pad area makes contact with the glass and that any air bubbles are expelled.

iv Hold the foot assembly firmly and, with the whip in a vertical position tighten the hinge screw. (B)



5 APPLYING THE SILICONE SEALANT (where supplied)

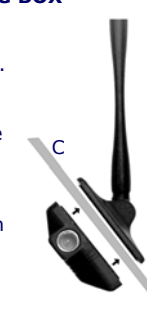
A thin bead of silicone should be applied into the gap around the edge of the antenna foot - this provides a seal and also makes up for any glass curvature at the foot edge.

6 MOUNTING THE COUPLING BOX

i Using the Alcohol Swab, thoroughly clean the glass and wipe it dry with a clean dry cloth.

ii Remove the protective paper.

iii Hold the box just clear of the glass in the chosen position and check that this is correct before pressing it firmly onto the glass. The pad will stick immediately on contact and cannot be repositioned. (C)



7 TEST & COMMISSION

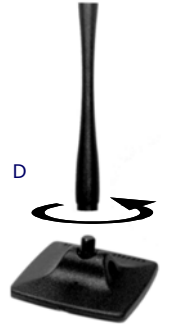
This product has been factory tuned and tested to ensure it conforms to specification - no on-site tuning is provided or required. However, the completed antenna installation should be tested using a suitable VSWR meter to check the integrity of installed coaxial cabling and connectors.

8 CARE AND MAINTENANCE

i The whip must be unscrewed when using a car wash or when entering areas with low headroom clearance.

(D)

ii This antenna is manufactured to very high standards. Apart from keeping it clean, no maintenance is required under normal operating conditions.



REMOVAL AND REINSTALLATION

This is easily achieved with a re-installation kit which contains all the necessary parts. The foot cover comes ready assembled with an extra adhesive pad for the coupling box.

i Care and time should be taken when removing the foot and coupling box assembly, to avoid damage to both the vehicle and antenna parts. Removal is best achieved by gentle and gradual prising of the foot and box assemblies away from the glass with a wide, flexible bladed tool such as a wall/ paint scraper or putty knife.

ii To install the new foot cover simply follow step 4 above.

iii To re-install the coupling box remove all trace of the existing adhesive pad and wipe the box clean. Fit the new adhesive pad to the coupling box and then follow step 5 above.

iv The completed antenna installation must be tested as per step 7 above.

Panorama Antennas Ltd

Frogmore • London • SW18 1HF

Tel: +44 (0)20 8877 4444

Fax: +44 (0)20 8877 4477

Sales@panorama.co.uk • www.panorama.co.uk