

[Social Media](#)

[August Special Offers](#)

[Information & Advice Starts Here](#)

[Price Promise](#)

[SWR Meters & Readings Explained](#)

[Photos Wanted - £25 Discount Voucher Prize Every Month!](#)

[Beginners Start Here](#)

[Advice Pages](#)

[How To Order](#)

[Customer Testimonials](#)

[EBAY CB Advice](#)

[Package Deals & Starter Packs](#)

[Best Sellers & Favourite Items](#)

[Multi-Standard CB's](#)

[Installing CB Into 4x4's](#)

[Terms & Conditions](#)

[Postage & Packaging](#)

[Alternative Aerials In Our Packages](#)

[4x4 Links Page](#)

[4x4CB's BLOG !](#)

[About Us](#)

[Farm CB Radio](#)

[CB Radio For Mini's](#)

[Motorhome CB Radio](#)

[PMR446 Walkie-Talkies](#)

[CB For Motorbikes](#)

[Marine CB](#)

Installing CB Into 4x4's Fitting the Aerial & Mount / Fitting a 2-Bolt Rack/Bar Mount

[Fitting a Bullbar / Roll Cage Mount](#) | [Fitting a Dome Mount](#) | [Fitting a Gutter Mount](#) | [Fitting a Magnetic Mount](#) | [Fitting a PSM-1 Mount](#) | [Fitting a Roofrack / Roofbar Mount](#) | [Fitting a Widget Mount](#) |

You are here : [Installing CB Into 4x4's](#) / [Fitting the Aerial & Mount](#) / [Fitting a Flat Bar Mount](#)

Installing one of our Two-Bolt bar mounts is very easy...

What you need to do to install a Two-Bolt bar mount :
Bolt it onto whatever bar or section you want to fit it to - making sure at least one part of the mount has a metal-to-metal connection with what it's bolted to.

(There is a way of getting an earth connection without making metal-to-metal connection at the mount - see the "Installing without metal-to-metal connection" section below)

You will need an SWR meter (a basic and easy to use test meter) to make sure you have a good earth between the mount itself and whatever you have fitted it to. If you don't have a good earth, you will have a very high SWR, and this can damage the CB, so to be sure you should check it with an SWR meter.

Most of our aerials (Springers etc) are about the right length to give a good SWR reading if all other factors are ok (some suppliers call this "Pre-SWR'd" which is rather misleading as a good SWR depends on a number of factors, not just the aerials length), but using the meter to check, and fine tune (usually by adjusting the aerials length) if necessary, as well as check that you have a good earth/ground plane, is essential.

Read our [SWR meter guide](#).

2-Bolt Rack/Bar Mount Physical Specs :

- Size : 25mm Wide x 93mm Long
- Maximum diameter it can be bolted onto : 31mm
- Minimum diameter it can be bolted onto : 14mm
- Standoff from centre of fixing "groove" to outer edge of mount : 67mm
- Standoff from centre of fixing "groove" to centre of aerial mounting hole : 53mm

The bolts supplied with this mount are 36mm long - you can increase the size of bar that this mount can be bolted to by using longer bolts...we sell [60mm bolts](#) and [80mm bolts](#) for this purpose, although they are primarily for the 4-bolt type bar mounts so are in packs of 4.

We also sell an optional [Weather protector for this mount](#) which quite a useful item to have.

Metal-to-metal earth :

You don't have to go mad with an angle grinder or file, but you will need to get a clean metal-to-metal connection between some part of the mount (usually the serrated edge inside the "clamp-on" bit) and your roofrack or whatever.

This metal to metal contact point only needs to be a few square millimeters, but if it is this small, make sure the the mount is not going to move over time, so it no longer touches metal.

Generally speaking, the larger the groundplane is, the better the aerials performance will be - this is because the angle of radiation is lower (i.e. being transmitted along the surface, rather than straight up in the air) with a larger ground or earth.



A Two-Bolt mount shown here with a 5m lead

4X4CB.COM

[Home](#)

[CB Radio Licence Abolished!](#)

[Package mounts info](#)

[Aerials](#)

[Tutorials and "How To's"](#)

[WebRings](#)

[CB Radio Sets](#)

[V Dub CB Radio](#)

[Contact Us](#)



A close-up of a 2-Bolt bar mount on a roofrack - you can just make out where the galvanised layer has been scraped off to get an earth connection



The same roofrack mounting from further away - notice it's fixed to the top bar of the rack, getting the aerial away from any metal around it

Installing without metal-to-metal connection :

If you cannot make a metal-to-metal connection at the mount, there are two ways you can still get this mount to work correctly for you :

- You can run an earth wire from to a convenient earthing point
- You can use one of our [Artificial Ground Planes](#)

If you choose to use an earth wire or earth strap to make the ground contact then the wire should be as short and thick as possible to get the best connection, and should be attached to the mount (not the aerial) - a ring terminal on one of the two fixing bolts is ideal for this.

This method of obtaining an earth connection will work ok, but you will get slightly less range than if you had made the earth connection at the actual mount because the further the aerial is away from it's earth, the higher the angle of radiation will be - so you'll be sending signal up at something like 45 degrees, instead of a much lower angle, along the ground.

Using one of these methods is ideal if you have a nice new powder coated rack and don't want to scrape the paint away, or have a heavily chromed or zinc plated bar that again you don't want to scrape, or the surface of what you want to mount to is plastic coated.



2-Bolt mount fitted with an [Artificial Ground Plane](#) fixed to a powder coated roofrack that the customer didn't want to scrape in order to get an earth connection



Another 2-Bolt mount fitted with artificial ground, on the mirror arm of a tractor which does not have a continuous metal-to-metal contact with the rest of the cab

Roofrack mounting

The 2-Bolt mount is ideal for small diameter roofrack bars (upto 31mm max). If you are using this mount to fix to a roofrack, then you will probably find that the rack itself is a large enough piece of metal to act as a groundplane for the aerial so you won't have to worry about making a connection between the rack and the body or the battery.

If you're using it to fix to a single roof bar, you may need to use one the solutions shown above, even if the roof bar is metal because it might not be large enough on it's own to act as a ground and it may be isolated from the rest of the vehicle (this is done by manufacturers in some circumstances to reduce vibration and wind noise).

One of the factors that contribute to getting a good SWR is that the aerial shouldn't have too much metal close to it, so it's no good putting this mount on the bottom bar of a roofrack on whatever, and having the aerial right next to the top bar etc, as this won't work so well - best to put it on the top bar to start with.



A two bolt bar mount mounted on the roofbars of an estate car



A two-bolt mount fitted to a galvanised roofrack on a Land Rover

Other places you can use this mount

Because this mount can be used on any small diameter bar, it can be used to mount an aerial in a whole load of different places...

For example :

- On a lamp guard on a bullbar
- On a rear ladder
- On any round or square bar between 14mm and 31mm in diameter



Here the customer discarded one part of the mount and just bolted the rest to the vehicle using the bolt that holds the roof bars on



A 2-Bolt bar mount fitted to an awning tie on a VW Camper

General points to remember wherever you use the flat bar mount :

Using this mount means you have the cable on the outside of the vehicle - it's important to secure the cable (with tiewraps) so it's not going to get tugged on by stray branches etc. Also, where there often ends up a "loop" under the mount where the plug connects - make sure you keep this as small as possible, maybe close the loop with some gaffa tape or similar, so branches etc can't snag the cable or connector.

The stud (the bit where the aerial screws in the top, and the plug goes in the bottom) has an insulator fitted which insulates the main bolt from touching the bar as it passes through it.

This nylon insulator has a lip to it, which is designed to sit in the hole in the bar, so that the bolt that passes through it doesn't touch the bar at all - this is important so if you take the stud apart for any reason, make sure it goes back with the lip seated properly in the hole.

Product links:

[2-Bolt mount with 5m cable](#)

[2-Bolt mount without cable](#)

[4x4 CB Radio Package Deals](#) (all of which have the option of choosing this mount)

[More photos of the 2-Bolt Rack/Bar mount](#)

You are here : [Installing CB into 4x4's](#) / [Fitting the Aerial & Mount](#) / [Fitting a Flat Bar Mount](#)

Search for

in

Products



Search

[Advanced Search](#)



[CB Radio Products](#) | [Search](#) | [Information](#) | [My Basket](#) | [Checkout](#)

[Terms & Conditions](#) | [My Account](#) | [Login](#) | [Contact Us](#) | [Sitemap](#) | [Home](#)



© Copyright 2013, Communication Eleven