



CB Radio Antenna

User Manual

Version 1.0 July 2021

1 Specifications

Parameter	Value
Frequency	27MHz
Gain	2dbi
Max Power	150W
Length	71cm (28 in)
VSWR	≤1.5
Connector	PL259
Weight	0.290kg (0.64 lb)

2 Compatibility

Compatible with the cb radios that come with a SO239 socket

Radioddity: CB-27

Uniden: PRO505XL, PRO510XL, PRO520XL, BEARCAT 880,
BEARCAT 980SSB, PC88ELITE

Cobra: 29Lx, 29LTD, CBR29LTDCHR, 29NW, HHRT50, 19 DX IV

President Electronics CB Radio

Midland: 5001Z

3 What is in the box?

1 x CB Antenna

1 x Hex Allen key, 2mm

4 Alignment for best performance

Out of the box (without any special alignments) the sweetspot of the antenna is somewhere within the 11m band (e.g. 26.490Mhz) and it has already a acceptable SWR within the 11m band. As you know the SWR is depending on various parameters such as the way the antenna cable is routed or bend, the humidity and a few more environmental aspects and of course the frequency used. So, for 11m HF, even a value of about 3 is not top notch, but acceptable. However, the antenna may be aligned for even better SWR.

In order to align the antenna for best performance you will need either an antenna analyzer or a SWR meter. The measuring device should be capable of measuring SWR within the 11m (27MHz) band.

4.1 Possibility 1 – Use the supplied 2mm Hex Allen key

Together with your antenna you received a small plastic bag (to be found within the antenna sleeve) that does contain a 2mm Hex Allen key.

1. With that Hex Allen key, loosen the grub screw that is located at the top of the large silver coloured spring of the antenna.
- 2.



Hex Allen key inserted into the grub screw

3. Now you are able to move the black-coloured antenna radial in and out of the silver-coloured base part.



Antenna radial fully pulled out (with even the brass visible)

4. Start with the black part all out but the brass part of the radial not being visible.
5. Measure the SWR and write down that SWR value.
6. Now carefully push back the black-coloured radial just a very little bit into the silver-coloured part. Again, measure the SWR. As long as the SWR is getting better, continue by slightly pushing back the black-coloured radial into the silver-coloured base part. By doing so, you will be able to fine tune the antennas SWR.
7. When the SWR is at its lowest value, use the 2mm hex Allen key and fasten the grub screw.

4.2 Possibility 2 - Pull off the rubber cover

Another possibility to shorten/lengthen the antenna is via the screw at its top end.

1. Carefully pull off (do not use any knife or cutter) its top most rubber cover (the black rubber at the top end of the antenna, about 4cm in length, it prevents the inner part of the antenna from any moisture).



2. Underneath that rubber cover you will find a screw, secured against the antenna with a nut. By turning the screw counterclockwise, you can lengthen the antenna for about 15mm. Using a 3mm hex Allen key (not supplied), you can turn the screw.
3. Start with the the nut being as close as possible to the screws head and the screw being all way in to the antenna.
4. Measure the SWR and write down that SWR value.
5. Now carefully turn the screw counterclockwise for a complete turn and measure/write down again. By doing so, you will be able to fine tune the antennas SWR.



As soon as you found the best position for the screw, secure the screw with the nut against the antenna and put back the rubber sleeve.



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