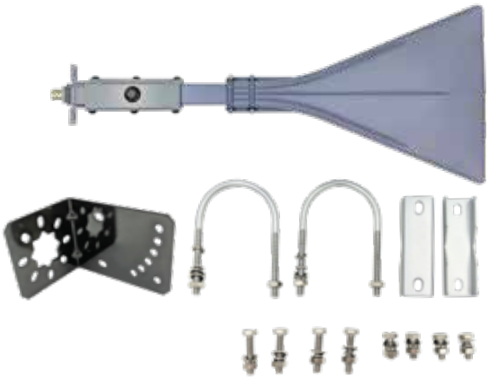
BOLTON TECHNICAL

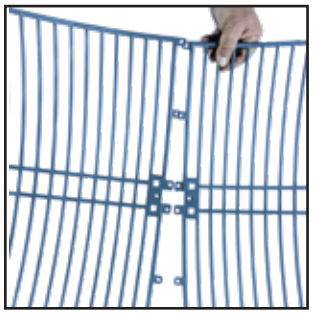
IN THE BOX

2 - Grid Reflectors
1 - Feedhorn
1 - Reinforced L-Bracket 2 - U-Bolts
2 - Toothed Saddles
4 - Short Bolts & Washers 4 - Long Bolts & Washers

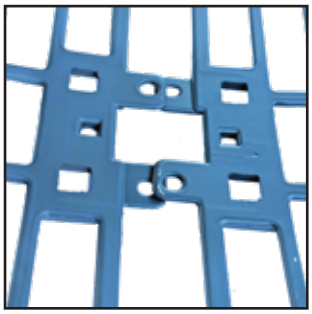


Tools Required

BEST: 2 x 10mm Wrench, Socket or Nutdriver.
ALTERNATE: Adjustable Wrench and/or Pliers



1) Bring two halves together with the tabs overlapping. Alternate the tabs over/under.



2) Carefully check the tab arrangement. Excess pressure indicates incorrect alignment.

3) With holes aligned, secure the two halves with the short bolts to the four outer positions.

4) All four outer bolts should be secured with the head of the bolt facing inward.

5) With the feedhorn vertical, use one hand to hold 2 long bolts in place on the left & right arm brackets.

6) Position feedhorn so bolts & connector pass through reflector. Place L-Bracket over bolts and connectors as shown.

7) Secure the left & right bolts in place to hold bracket. Then proceed with remaining bolts for top & bottom of feedhorn.

8) Depending on your mount location. You can slide assembled antenna over mast or secure U-bolts around mast on this step.

9) U-Bolts & toothed saddle should be positioned as shown for the best grab on the mast.

10) Once on mast, secure nuts on U-bolt. L-bracket allows for vertical alignment in combination with holes & the U-bolts.

11) Use the included right-angle adapter for a safe cable connection.

12) Completed Antenna
NOTE: The antenna has a very narrow radiation beam. Antenna will only work within the narrow signal cone.

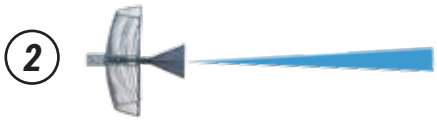
AIMING THE ANTENNA

NOTE: This antenna has a well defined signal area. It will only work when aimed correctly at the intended target. Do not use this antenna in good signal areas, this is a rural location use antenna. Professional installation is recommended.

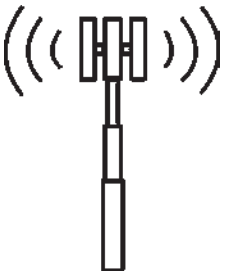
1) **ASSEMBLE:** Be sure to assemble the antenna per the assembly sheet inlcuded.
2) **LOCATE:** Aim the antenna at the intended target. In most cases it will be a cellular tower which hosts your desired carrier's antennas. Keep in mind that a tower nearby that you know the location of, may not be the broadcast tower for your desired frequency range and carrier. If you are unsure which tower to use, a number of tower location apps by carrier & frequency are avialable.

Finding the tower: The best way to see improvements in signal is with a spectrum analyzer. If one is not available you will use a "rough indicator" like the bars on your phone or speed tests on your devices. As you aim better or worse, you will see the difference in your device. NOTE: It may take up to 1 minute for your phone to update the signal strength reading with the bars. For real time readings on your phone, manually change to show signal in dBm.

If possible, use a lower gain antenna with a larger spread to locate the general direction of the tower. If not available scan with the grid 2°-4° at a time to find the tower.

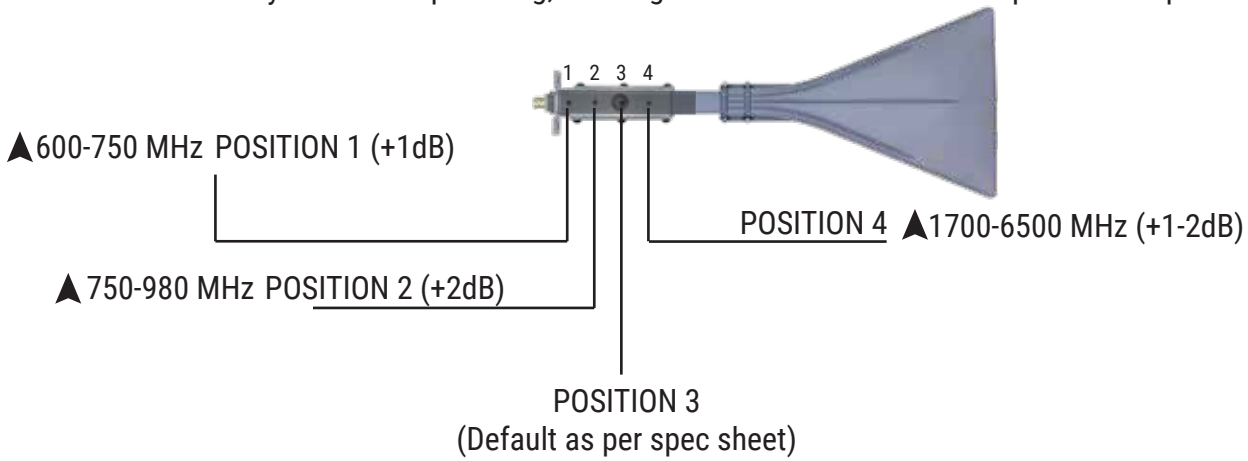


When aiming grid, be aware of the narrow signal beam. The grid can only "see" within the signal pattern for a given frequency. Once the best position is found, secure the grid firmly to ensure performance.



SIGNAL PATTERN VARIES DEPENDING ON YOUR FREQUENCY SELECTION 6° - 20°
TOWER MUST BE WITHIN SIGNAL PATTERN TO FUNCTION CORRECTLY

3) **OPTIMIZE:** The grid's adjustable feature allows for increased gain in a desired frequency range. By positioning the feedhorn in or out along the predefined slots, you will incease gain by 2dB on either the low or high band. Note that the inverse will occur for the band you are not optimizing; 1-2 dB gain will be lost on the other part of the sprectrum.



PRO TIPS

- USE MINIMUM CABLE LENGTH
- MAXIMIZE ANTENNA HIEGHT
- GET CLEAR LINE OF SIGHT
- USE 2 GRIDS FOR MIMO
- DO NOT BEND AT CONNECTORS

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