

Moxon Rectangles



L. B. Cebik, W4RNL (SK)

The Moxon Rectangle is growing in popularity as a compact 2-element array that approaches a full-size 2-element Yagi in gain but with a far superior front-to-back ratio and a direct match for the standard 50-Ohm coaxial cable. The antenna can be built as a wire array--especially for the lower HF regions--or as a rotatable aluminum beam. For convenience, I have pulled together the growing selection of Moxon Rectangle notes into this single subdirectory and organized them in the order of recommended reading.

- **VK2ABQ Squares and Moxon Rectangles**
- **The Moxon Rectangle: A Review**
- **An Aluminum Moxon Rectangle for 10-Meters**
- **Wire Moxon Rectangles for 40-10 Meters**
- **Further Notes on 40-Meter Wire Moxon Rectangles**
- **Notes on the Moxon Rectangle Pattern**
- **The Double-D Antenna**
- **Multi-Banding the Moxon Rectangle**
- **Using Moxon Rectangles for WARC-Band Antennas**
Part 1: Some 17-12 Meter Ideas
Part 2: Some 30-17-12 Meter Ideas
- **Moxon-Modifying the C3-Type Tri-Bander**
- **The Moxon Rectangle on 2 Meters**
- **Building a 2-Meter Moxon**
- **Designing Moxon Rectangles by Equation and by Model**
- **40 + 30 = 50 (Not 70)**
- **A Truly Portable Moxon Rectangle for Nearly No-Tool Field Assembly**
- **Moxon Rectangles for 6 Meters**
- **The Elusive Moxon Nest**
- **Part 1: Vertically Stacking Horizontally Oriented Rectangles**
- **Part 2: Vertically Stacking Vertically Oriented Rectangles**
- **HF Vertically-Oriented Moxon Rectangles: A 40-Meter Example**
- **Stepped-Diameter Moxon Rectangles for 20 through 10 Meters**

Additional information on building wire and tubing versions of Moxon rectangles for a direct 50-Ohm feed is available in **Simple and Fun Antennas for Hams**, ed. Hutchinson and Straw (ARRL, 2002), pp. 12-19 to 12-28. The [KD6WD Moxon Antenna Project](#) at Murray State University is another good source of information on various construction techniques, especially for the operator needing a light-weight or a semi-stealthy antenna.

Below is a version of the Moxon dimension calculator that you may use right on this page, thanks to Joe Faber, KG4UHP, who created the JavaScript and gave me permission to place it here. Remember that the dimensions apply to Moxon rectangles that use the same diameter material throughout. Decide on the design frequency and the diameter of the elements. You may use inches or millimeters for the diameter--or you may select an AWG wire gauge. Be certain to select the unit of measure for the output. Then, click on any of the output boxes if the calculations have not already appeared.

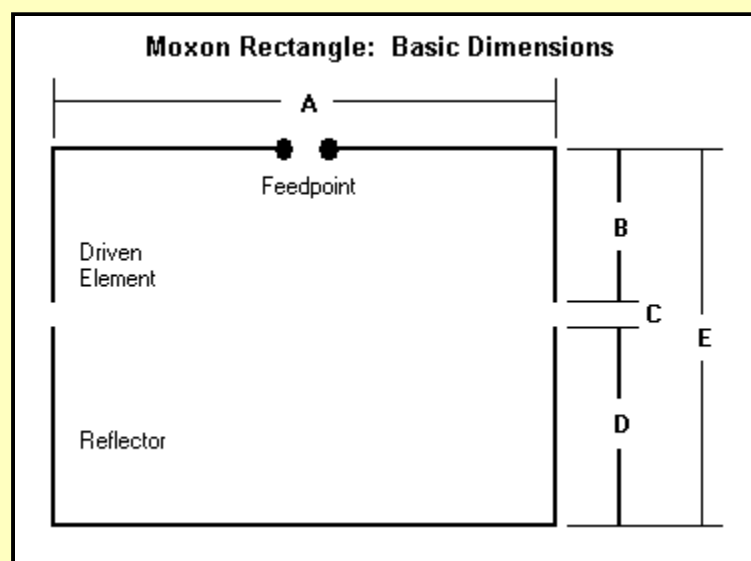
Moxon Rectangle Dimension Calculator

Frequency : MHz

Wire Diam : gauge

Output Units :

A	29.17
B	4.05
C	1.17
D	5.56
E	10.78





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