



***End Fed Half Wave Antenna
Coupler***

John MOUKD has a very informative
web page
<https://m0ukd.com>

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Why I choose this design

- After several grey nomad trips away in the caravan I wanted an antenna I could put up in caravan parks where it is mostly not possible to use inverted V's, dipoles or large radial systems.
- I was inspired by Andy VK5LA with his use of a vertical with his ground mat system.
- A half wave came to mind as I have built and used a half wave inverted L antenna on 160m with a lot of success. Searching the net resulted in the MOUKD design.

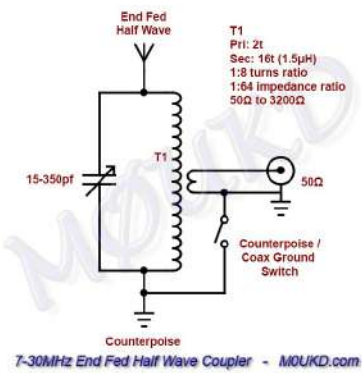
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M0UKD finished coupler



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The circuit



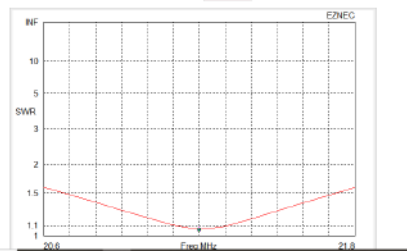
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Multi band 40m – 10m

- I decided I wanted to be able to operate on all bands from 40m to 10m so the idea of a linked half wave radiating element was born.
- The next slide shows the on line calculator from MOUKD's web page. That gives you the radiating length and the counterpoise length.

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Calculator

Enter the frequency: MHzHalf Wave antenna is: MetresMinimum counterpoise: Metres

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Tuning chart derived from calculator

Freq	Vertical	C/pole	Capacitor
7.144	19.74m	1.974m	8.9
10.125	11.93m	1.193m	6.1
14.21	9.80m	.980m	4
18.13	7.27m	.727m	3.0
21.25	6.64m	.664m	1.9
24.95	5.65m	0.565m	1.2
28.45	4.96m	0.496m	0.8

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Counterpoise

Steve Yates AA5TB article on The End Fed Half Wave Antenna and Counterpoise can be found at, www.aa5tb.com

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How I make my Links using irrigation tubing.



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Proto build with 3.2K test resistor



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Testing upper tuning value 30MHz



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Testing lower tuning value 6.5MHz



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Reduction drive is essential for tuning



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My finished coupling unit



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Coupling connections



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Coupler Internal's



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Reduction drive and shaft coupler



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My portable station



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Linked radiating element



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Where to next

- My next project is to wind a variable inductor to use with my coupler unit and a 5.5m telescopic whip so I am able to have a small foot print in areas of restricted space and still enjoy our great hobby of amateur radio.

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*Thank you for your time and enjoy the
great outdoors*



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