
Subject: Re: cone breakup cures

Posted by [GM](#) on Mon, 16 May 2005 14:14:00 GMT

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Greetings! Apparently you can tune a straight wire antenna by adding resistance. Playing around one day I found that terminating a piece of coax I'm using as a TV antenna with a 75 ohm load and then adding R to suit helped quite a bit. I'm sure there's formulas to calc the required resistance for each frequency or BW, but I don't know them. FWIW, 5m ohms works for most of my local TV stations, though I have to fine tune it by moving the coax around since horizontal/vertical orientation affects it. With the other stations, just attaching the 75 ohm termination to a good ground is sufficient. Attaching the shield at the open end to a good ground helps too, or at least it does with my TV. I couldn't tell any difference when I had it attached at the TV's input, but haven't delved into why it would make any difference since the antenna is only ~6.6ft long. Mine is a huge old metal drafting table/desk 'L' unit, but you can just run a 10 ga solid copper wire from an outdoor grounding rod or in-door cold water pipe. After seeing how superior an OTA HD TV broadcast is compared to what the local satellite or cable service offers, I think it's time I learned about antenna design..... HTH, GM
