

**J-Pole Antenna  
tuned for 89 Mhz  
in the FM broadcast  
band  
G. Forrest Cook WB0RIO**

Based on the 146 Mhz design  
by Ed Humphries, N5RCK

It is possible to get a 1:1 SWR reading with this antenna. Move the coax clamps up and down in parallel for the minimum swr then trim the length of the long element for resonance. To find the resonance point of the antenna, sweep the FM10a VFO while observing the SWR, it will be minimum at the resonant point. Shortening the antenna will raise the resonant frequency. Use minimal power so as not to interfere with anybody and never exceed the legal ERP limit. All antenna tests should be done in a clear area, preferably where the antenna will permanently reside.

This antenna is made from 1/2" copper tubing and it is soldered together with plumbing Tees, elbows, and nipples.

Start with 108" and trim for 104" minimum SWR.

