The most thorough technical description analysis of the J-pole antenna is the one given by C. Bronson H. Crothers, AA1ZB, & Aug 9,2015

Link reference http://aalzb.net/Antennas/J-Poles/J-PoleSection.html

Important caveats:

Do <u>NOT</u> tie the lower section to Ground. Be sure the antenna is as far from other objects as possible

Utilize a coiled section of the feedline to act as an RF choke as close to feed point as possible. One may also be used near the entry point of the ham equipment, but is NOT necessary

Maximum gain is in line with the resonator portion

Attain a maximum mounting height above the terrain as possible

Whenever not being used, disconnect the antenna from the radio equipment and provide a shorting connection between the antenna & ground. This would also be good practice during thunderstorm activity. Discharge any possible static build-up on the antenna prior to re-connecting it to the equipment