

Help with the TEV-1.

First thing to remember is the TEV-1 is just an 8.5m aluminium radiator, so you have to find some way of tuning it up to the required frequencies. Of course, the simplest way is an Autotuner like the SGC237 or SGC230 or an Icom AH-4 or similar mounted at the feed point. The other way is using a manual or automatic tuner at the radio end. The first suggestion you would never need a balun, the second may tune up easier with a 4:1 balun at the feedpoint.

Because the impedances range so much on the different bands, it is generally thought that a 4:1 balun at the feed point will make the transformation of whatever the antenna impedance is at the required frequency closer to the coax impedance and therefore more efficient. We have found this system works best making a manual tuner easier to tune. Also, some people with inbuilt tuners in the radio have found they have not needed an external tuner.

Another thing that is found is that the more earth/ground/radials the better. There can never be too much. Tin roofs, gutters, tin sheds fences water pipes, extra multi-length radials and anything that could act as a ground plane will help the TEV-1 tune and perform better.

Another suggestion is to feed the TEV1 from a distance in an 'L' shape. This will make the TEV-1 like a long wire, but puts the end higher than you could normally put it, and fits it in a shorter space. This method is shown in the drawing below. Using this method, make sure there is plenty of earth on the other side of the balun.

