



**Thank you for purchasing a Micro Z (pronounced “Micro zee”) antenna tuner. The Micro Z has been designed to provide a wide matching range across the 7 to 28MHz frequency range (40m-10m). Like any tuner, the precise range will depend on the antenna that you are tuning.**

**The Micro Z is a modified version of the popular Z match network. It was designed using a network analyser to optimise the matching range. This resulted in the development of a different variant of the Z match. The design has six windings in total. It may (possibly) be a new variant.**

The Micro Z incorporates an match-indicator LED. The brighter it glows the better the match, so tune for maximum brightness. The brightness will vary from band to band and will be less with lower power levels. The match indicator is always in circuit which is useful as you can see if you have a transmitter or antenna problem while using the Micro Z.

Antenna Terminals



### Matching Configurations

Ground or Counterpoise	Antenna	Comment
A	B	The most usual configuration
A	C	Try this if A-B does not work
B	C	Try this if A-B and A-C don't work

*For balanced antennas use A-B or B-C*

There are two tuning controls and three input terminals. Using these options allows a wide range of impedances to be matched. The best way to explore how the tuner works is to use an antenna analyser. The Youkits FG01 is perfect for this job.

To use the tuner, connect your transmitter to the input BNC connector. Connect the antenna to the black and first red terminal. With the transceiver in receive mode, adjust the variable capacitors while listening for an increase in noise or signal strength. This will roughly adjust the tuner.

Set your transceiver to allow a carrier to be sent (FM, AM or CW). Set the power level to between 2 and 5 Watts. Key up the transmitter and adjust the two variable capacitors while watching the LED. If it illuminates, carefully adjust the controls for maximum brightness. The controls will interact so an iterative process is required.

If no match is noted, move the red terminal to the other red socket and repeat the process above. Patience is required!

In cases where no match can be found, extend or shorten your antenna by between 1/8th and 1/4 of a wavelength.

The easiest and quickest way to become familiar with your tuner is to use an antenna analyser for adjustments instead of your transceiver. A graphical analyser such as the YouKits FG01 makes the process very easy.

Once adjusted, the transceiver can be set to up to 10 Watts PEP.

## Questions