THE M0CVO LW-20 ANTENNA

At the heart of the LW range of antennas (LW-10 and LW-20) is the M0CVO 9:1 UNUN. This provides a feedpoint for the long wire radiating element and converts the impedance from 450Ω (+/-) to something nearer to the 50Ω expected by your transceiver. There are three connections on the UNUN, a SO239 to which you connect the coaxial feed line and two machine screws with butterfly wing nuts. One of these has the wire antenna connected to it and the other is for you to connect a length of wire to earth. This is not strictly a necessary connection but will reduce static pick up and provide a direct to earth pass for any possible lightning strike or build-up of static in the air. The best way to do this is to attach a length of wire to a ground rod and fix it to the UNUN at this terminal. Fix the feedpoint up as high as you possibly can – it may be attached to a pole or to a wall and then attach the other end of the wire to a point as far away as is possible. This is best done if the wire can be kept in a straight line and horizontal but, if this is not possible due to space restrictions, do not despair. The wire may be dog-legged, sloped or fixed in any number of ways to enable it to fit in the space available.

The LW- 20 will operate on all HF bands from 80m upwards with a good ATU.

The other end of your coaxial cable should be attached to your ATU and then from the ATU to your transceiver. Power up, make final adjustments to tune and away you go.

The specified power rating of this antenna (400W) is for intermittent amateur modes such as CW or SSB. Modes employing FSK (100% duty cycle) such as FT8, FT9, JT65, etc claim to multiply the power factor by up to 12 times that of CW or SSB transmissions. In an unmatched antenna the coil in a BALUN/UNUN can show as a resistance so some power is transformed into heat. If you multiply this temperature change by 12 it could lead to damage so power should be kept to <= 30W when using these modes.