

## SIGMA LW-40 HF QRO 1Kw Extra High Power Top Band 160-6m Wire Antenna

At the heart of the Sigma LW range of antennas is the 9:1 UNUN. This provides a feed point for the long wire radiating element and converts the impedance from 450 Ohms (+/-) to something nearer to the 50 Ohms expected by your transceiver. There are three connections on the UNUN, a SO-239 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 for any possible lightening 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 feed point up as high as possible – 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 restriction, do not despair. The wire may be dog legged, sloped or fixed in any number of ways to enable it to fit in a space available.

The LW-40 will operate on all HF bands from 160m 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.

PTO

Please use a good quality 50 Ohm coax, RG-213 or Mini 8 are probably the best choice.

\*1kW power rating is for intermittent amateur radio use (CW or PEP) for data modes (FT-*x*, RTTY, etc) or constant carrier data modes a lower maximum of 200 Watts is recommended.

\*If you are using a high-power amplifier it is essential that an external ATU is used between the antenna and the amplifier, otherwise damage may occur.