



SE HF-360 XP 160m to 6m Top Band High Power 1kW Vertical Antenna Instruction manual

Thank you for purchasing the SE HF-360 XP VERTICAL, this instruction sheet should help you get the best from your new antenna. The SE HF-360 consists of 3 Fibreglass vertical radiating sections and one stainless steel top whip and an UNUN transformer used to lower the high impedances found at the feed point of the vertical to the 50 Ohms that is required by your transceiver.

Specifications:

- Type End fed vertical antenna
- Frequency TX/ 1.8 –52 MHz (with ATU)
- RX/ 1.8 – 55 MHz (with ATU)
- Max power 1000 Watts (1kW)**
- Impedance 50 Ohms
- Connector SO-239
- Height 5.5 metres

Assembly and Mounting:

Before you install your antenna, select the most available open site away from power lines and telephone lines. The antenna can be mounted at ground level or at height so giving you many options on installation, **please ensure to use a metal mounting pole.**

Assemble the fibreglass elements ensuring that the lock washers are used and that the steel whip is inserted into the top section fully and that the two grub screws are securely fastened, Mount the antenna using the U-bolts.

At the top of the base cradle place the three nuts and bolts into the black moulding and secure.

Attach the PL-259 plug on the 50 Ohm feeder coax to SO-239 socket on the transformer at the base of the antenna.

We recommend that you should always earth at the tuner point rather than at the transformer for best performance and safety.

Pack contents:

2x Fibreglass poles. 1x Fibreglass pole with base cradle + transformer attached. 1x 1.35 metre steel whip, 2x Lock washers, 3x Top moulding nuts and bolts + washers, 2x U-Clamps + washers and nuts, 1x Allen key for top whip.

Please note:

This antenna is for amateur radio and broadband receiving use. Do not use other than for the purpose of antenna. Please use the antenna within the standard specifications described in this manual. Failure to do this may cause heat and break down of the transformer unit.

***Under test conditions it was found that the antenna performs best when near ground mounted (up to 3m agl).**

***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.

**Warning: High RF currents are present on the antenna when transmitting.
DO NOT TOUCH.**

DATA SHEET

SE HF-360 XP 160m to 6m Top Band High Power 1kW Vertical Antenna

The Sigma Euro-Comm Ltd HF360 is an end fed vertical antenna, capable of allowing the user to work **160 meters through to 10 meters using an ATU found in most modern radios & 6 meter with the use of an external ATU.** The antenna can be pole mounted at ground level or elevated depending on the user's personal requirements. The antenna is rated at 1KW* pep. The antenna comes with fixings and installation guide.

How it works: The antenna is fed using 50 Ohm coax via a SO-239 socket at the base of the unit a 4:1 UNUN transformer is located in an IP65 weather sealed box at the bottom of the bracket section of the fibre glass elements. The antenna comes in four parts, three fibreglass poles and one stainless steel tapered whip. The transformer reduces the impedance at the feed point to a more acceptable level making the antenna much more efficient and allowing proper and easy tuning via an external ATU and automatic ATU's found in most modern radios. The antenna can be grounded if the user experiences excessive local static noise, but as the UNUN is DC grounded: grounding will not affect the tuning ratios.

BAND	With ATU	Specifications
1.8 MHz 160m	1.3	
3.5 MHz 80m	1.0	Type End fed vertical
7 MHz 40m	1.1	Frequency TX / 1.8 - 52 MHz
10 MHz 30 m	1.2	RX / 1.8 - 55 MHz
14 MHz 20 m	1.0	Power handling 1 kW PEP or CW
18 MHz 17m	1.0	& 200 watts max for data modes
21 MHz 15 m	1.0	Impedance 50 Ohms
24 MHz 12m	1.0	Connector SO-239
28 MHz 10 m	1.0	Length 5.5 meters 18 feet
29 MHz 10m FM	1.0	
50 MHz 6m	1.3 (External ATU)	

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.**