

## BANDSPRINGER MIDI 10m-60m

A multi-band long-wire antenna from SOTABEAMS

### General information

The current generation of HF portable radios offer great performance on the HF bands—but to get the best out of them, an efficient antenna is required. The Bandspringer is a multi-band long-wire antenna. The length has been chosen to ensure that it will work with the internal antenna tuners in portable radios such as the K1\*, KX1, K2 and KX3. It will also work well with the Elecraft T1 auto-tuner and the MFJ portable tuner.



***\*Note that the Bandspringer must be used with an antenna tuner—it is not suitable for connection directly to an FT817 or similar radio without a tuner.***

Suitable tuners will usually be advertised as being able to tune a random wire / long wire antenna. Some tuners state in the small print that additional equipment is required for this, please check your tuner manual for details. For example, it might say "Optional external Balun allows tuning of random length, long wire or ladder line fed antennas", indicating that the tuner is likely to need a 4:1 balun connected between it and the Bandspringer.

The exact range of bands may vary depending on your tuner. The Bandspringer Midi should work on 40m, 30m and 20m with any tuner capable of tuning a random wire / long wire antenna. It will work effectively on all bands from 60-10m with most such tuners, but not necessarily all.

***\*NOTE: The internal tuner on the K1 has a limited matching range on 80m and coverage of this band may not be possible without using an external tuner.***



## What do you get?

The Bandspringer consists of two wire elements, both are made of high quality tinned copper wire, insulated with a yellow PVC coating. This wire type has proved a good compromise between flexibility and performance. The yellow insulating jacket makes it easy to spot on most surfaces which makes handling much easier. The elements are 42ft each. The wire elements are supplied wound on a Wire Winder to make deployment and recovery in the field as easy as possible.

Each element is terminated in a good quality “Banana” plug. The radiating element has a braided nylon cord extension to make it easy to use. The extension is firmly attached to the wire at one end and has a pegging loop at the other end.

An adapter is provided with a BNC plug and banana sockets to allow the antenna to be connected to your radio or tuner. We stock a BNC socket to UHF plug adapter which can be purchased separately if your equipment has an SO239/UHF socket.

The Bandspringer is supplied with two high-quality aluminium alloy pegs, two insulators for pegging, and a third insulator at the apex.

The total weight is approximately 327gm (11.5 oz.).

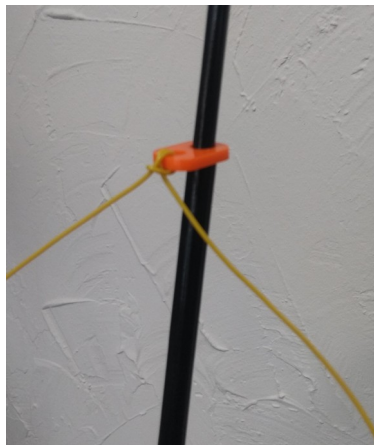
## INSTRUCTIONS

**NOTE:- the antenna must always be connected directly to your tuner - not via a coaxial cable.**

The Bandspringer consists of two wire elements. The wires are identical in length but the radiating element has a red banana plug and a nylon cord extension. The elements are supplied on a Wire Winder. Before undoing the wires, take a moment to note how the toggle is fastened and how the wires have been wound on the Wire Winder (note the “figure-of-eight” method). We strongly recommend this method as the wire can be pulled off the Wire Winders very quickly and without snagging.

Unwinding the radiating element (the one with the cord attached) is best done by starting roughly where you want the far end of the antenna to be and walking back to the operating position, paying out the wire as you go.

Next you need to get your aerial in the air. The attachment point is the orange insulator about 7 metres (23ft) from the banana plug end of the wire.

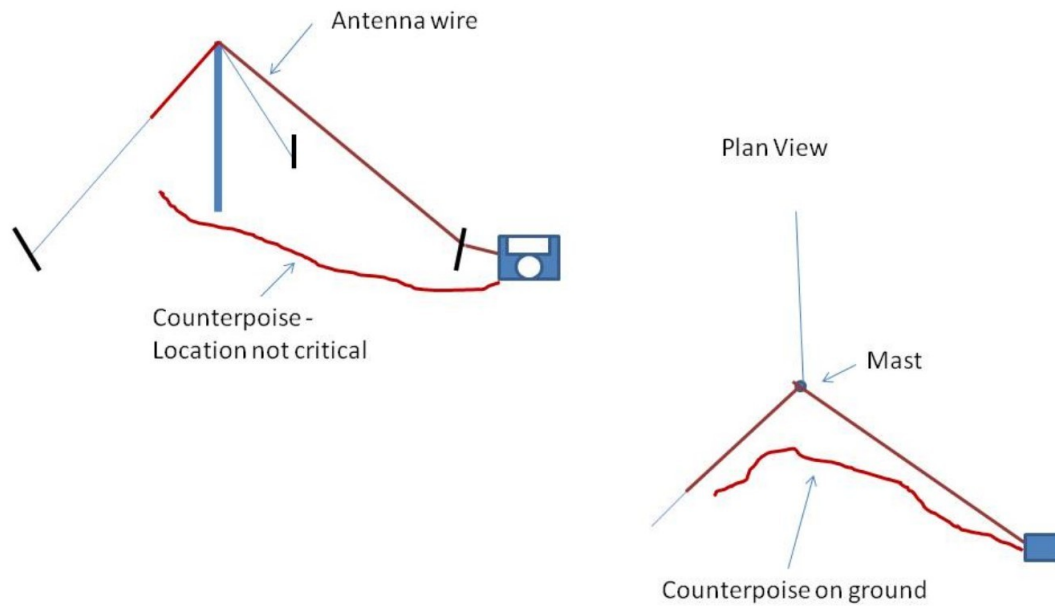


This gives you a firm attachment point which will slide onto a telescopic pole or that you can tie a cord to. Alternatively you could use a handy tree-branch to support this part of the aerial. Aim to get the attachment point of the aerial at least 4 metres (13 ft) up in the air.

If using a telescopic pole, you might need to use an additional guy line (not supplied) to keep the pole upright – please see diagrams on the next page.

The corded end of the aerial can either slope down to the ground, in which case it should be anchored using a peg through the pegging loop at the end, or you can attach the far end to another elevated support - we supply a spare cable tie for this.

The other wire is a radial. This can simply be laid on the ground. Ideally one would lay it under the radiating element but in reality it makes little difference where it is laid. Do use it however, as the system will not work as well without it.



Peg the orange and black insulators (positioned near to the banana plugs).



Plug the black banana plug on the end of the radial into the black socket on the adapter. Plug the red banana plug into the red socket on the adapter. Connect the adapter to your radio.

Before using the antenna, adjust your antenna tuner to give a low VSWR and enjoy!

**Safety:** Never pass your antenna wires over or under overhead electrical cables. Never use an antenna in thundery conditions. Do not erect your antenna where it could trip or otherwise injure others (or yourself).



## Videos

[Band Springer Midi](#) - information about the Bandspringer

[End Fed Antenna Tips](#) - includes a demonstration of putting up a Bandspringer

**SOTABEAMS**  
Unit 1, The Green  
Fountain Street  
Macclesfield, SK10 1JN  
United Kingdom  
+441625 501643

[www.sotabeams.co.uk](http://www.sotabeams.co.uk)