

PRO.SIS.TEL.

Produzione Sistemi Telecomunicazioni

Vertical HF monoband antenna PST-20VF

Assembling instructions:

After unpacking antenna, you will find the antenna tubes in the main lower tubes Od 30mm pre-assembled already in a telescopic way, following step down diameter.

Tilting it down, do in the way to have all tubes heads coming out from the main tube.

The fastening of the elements takes place by inserting the bolt from the wider hole side so that the bolt cylindrical head passing thoroughly, sit and rests on the inner tube.

Assembly the telescopic tubes joints as in the picture below.



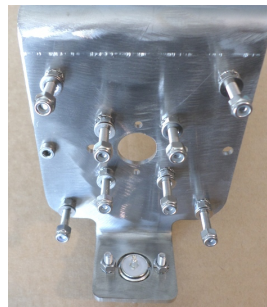
Lightly lubricate the threads of all bolts before installing (the SS tends to be nailed very easily).

Tighten the nut. Make sure that all bolt heads are on the same side.

Using the same way, extract and connect all sections, less than the larger diameter that has to be assembled before on the antenna base and then proceed to final assembly.

Some sections of tubing and the tip, have multiple holes that serve to make a fine tuning. Longer element lower frequency, shortening element increase frequency.

After completing the assembly of the radiator, proceeding to the assembly of the base which presents a whole series of holes, which have to be equipped and prepared following the pictures sequence.



Install the 4 bolts 4x25MA (for wire radials) in the holes in X shape (inner bolts are used only in the solid radials version). On one of those will take place one end of the RF choke eyelet terminal. Correct assembling sequence for all the bolts: bolt, serrated washer, normal nut, two flat washers and self-locking nut.

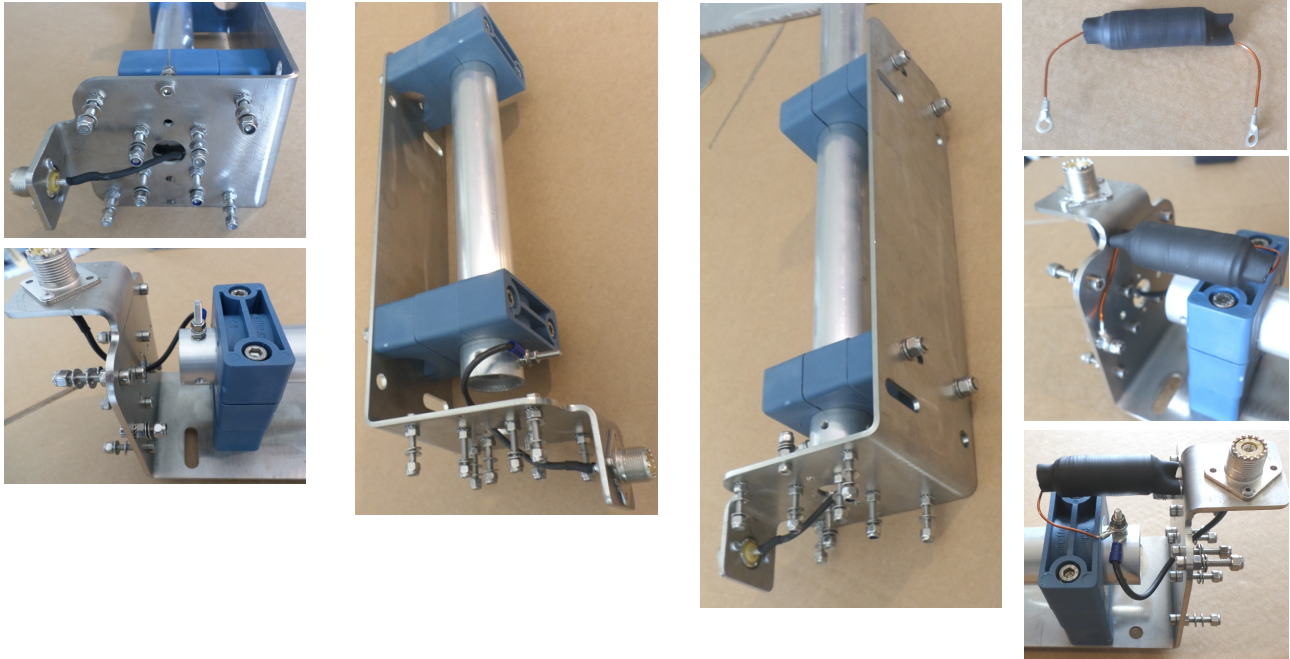
Lock all tightening bolts thoroughly normal nut. On this bolts will take place wire radial ends.

Continue the assembly with the two insulators in which is placed the wider and lower tube section. Leave loose bolts so you can easily move the tube into its final position with the lower side protruding approximately 2cm from the lower insulator. Install on the tube end a 4x15MA bolt and lock it, insert a flat washer, eyelet RF wire eyelet terminal, another flat washer and normal nut.

Lock bolts of isolators and assembling the RF choke coil (choke). Making sure that the coil is vertical for a better rain drainage. The choke will short to ground any electrostatic discharge and will reduce noise.

The care and precision of this assembly will ensure a long life to the antenna.

Check that all bolts have been properly secured and completed the radiator assembly.



With the aid of the U bolts, install the base on the supporting pole and install the wire radials.

The U bolts are 50mm wide, it can get poles or tubes from 40 to 50mm.

As radials being installed, take care doing the work as they can also heavily influence the final tuning. You may have to try to attempt the best point of resonance.

Antenna aluminum main tubes:

1 x 30x1150mm

1 x 25x1150mm

1 x 20x1150mm

1 x 26x1150mm

1 x 12x1150mm (4 holes allow the fine tuning)

2 x 5,25m wire radial (installing more radial will improve antenna performance)

WARNING!!

All images and drawings, in this user manual, are indicative, with the sole purpose of helping the assembly, they may not explain exactly the product, which may be subject to changes without obligation to anyone, without prejudice to the final specifications.

Due wire radials antenna will have greater performance if installed 10-20cm over the ground with radial on the soil or roof. If the space is not enough for a complete wires extension, they can be coiled on the ground around the antenna base in a spiral-shaped design.

Before to rise up antenna in the sky, make sure that all bolts and connections are well tightned.

Do not seal tubes joints. Antenna must breathe.

Technical specifications:

Height: 5.25 m approximately

Weight = 4.5Kg

Wind area = 0.1m²

Max wind = 130 km/h with guy wires

Accept mast 40-50mm (60mm on request)

6060T6 aluminum, stainless steel bracket and bolts.

Note: antenna could be influenced due local environments.

If possible avoid to install it close to metal object parallel to antenna radiator.

The antenna length can change in according with setting and/or possible environmental influences

Average usable bandwidth (if swr = 1:1):

20m = ~ full band with swr <=2:1 on the band limits

Specifications may change without notice.



Warning:

Do not install the antenna near power lines or equipment that could result in electrical contacts. You could be seriously injured or killed.

The antenna must be installed in accordance with local/national rules/laws.

If necessary get a professional installer.

Prosistel can not be sued for damages for non-compliance of equipment safety rules.



Dear customer,

thank you for purchase a **Pro.Sis.Tel.** item, if you are happy with it please talk to everybody, if you are unhappy with it please talk with us.

Your feed back and suggestions, will be very appreciated, to improve our products.

Annamaria Fiume

IK7MWR

MADE IN ITALY

Protect your environment, in case of discontinuing of this unit, consign it to specialized metal waste collector following local/national rules.

