

PRO.SIS.TEL.

Produzione Sistemi Telecomunicazioni

Multi-band V solid 20-15-10m (6m) dipole – V1.0 eng

PST-152TV

Assembly instructions:

The antenna can be assembled in different ways:

Assemble it on two sawhorses and then carry it on the mast or pre-assemble the elements and then complete the assembly on the mast.

In both cases it is preferable to prepare before the elements and then the main plate assembly.

Extracting elements from the carton box, you will find the element tubes as pre-assembled elements, in a telescopic set. Tilt the tube set, make sure that all heads of each diameter escape from the main pipe.

Do not forget to lubricate the thread of steel bolts, if dry may stiff them.

Place the element on a plan, and begin to assembly the smaller diameter,

Align the hole of the inner tube with hole of the outer tube. The fastening of the elements takes place by inserting the bolt from the larger hole so that the cylindrical bolt head pass thoroughly and rests on the inner tube fig.2.

Some sections are multi-perforated to facilitate the adjustment, always start from the center hole, and then shorten or lengthen it if antenna is too long or too short.

Using the same technique, extract and splicing all sections and traps.

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



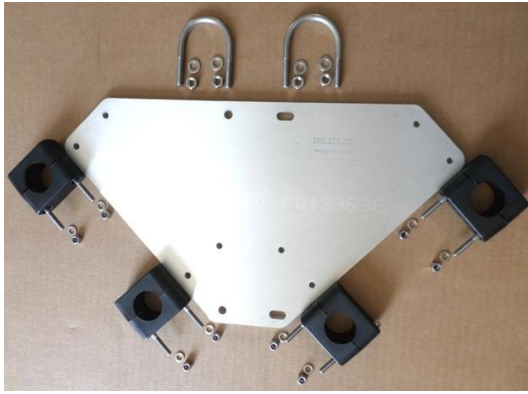
Insert the set of traps (10m on the inner side, 15m in the middle and finally 20m end. Even if traps set is already pre-assembled, the joints inside them have multi drilling, if necessary remove the joint and move to the hole that appears to be most suited to the best resonance.



Longer antenna lower the resonance, shorter antenna increase the resonance. In both cases will have effect on the others lower bands. Start the eventual calibration always starting from the highest frequency (10m - 15m - 20m).

Any drainage holes present on the traps, at the end of assembly should be down side.

Do not seal traps or tube joints. Antenna must breath to prevent damages due condensation.



When both half-elements are ready, prepare the center plate and assemble all the parts as in the photo. The two half-dipoles lower ends must protrude from the insulator of 2.5 cm (1inch). Connect a 1:1 balun to the dipole center (recommended) with two wire jumpers no longer than 8-10 cm (the length affects the resonance of all bands), if you decide not to use the balun, connect terminals of the coaxial opening it as a V directly to the two bolts. Even in this case to make sure that the two terminals of the coax does not exceed 10cm. If too long, the antenna will resonate slightly lower. Seal the coax with good quality sealing glues. The balun, improves antenna operation, preventing RF currents on the shield of the coaxial cable that could cause TVI phenomena or other RF interference.

When assembled the antenna must have a 'look like the one pictured.



After completing the tune-up, check the tightness of all nuts.
If the V dipole is installed above a HF yagi, it is preferable that it is installed parallel to the yagi boom and at a vertical distance of at least 1,5-2m.
If installed alone it is preferable that at least 5m from the ground / roof / floor.

In particular/special conditions, the antenna can also be installed as in the photo below.



Specifications:

Bands: 20 - 15 - 10m

Gain: 0dBd

Max power: 2Kw pep SSB, 1Kw RTTY-CW or in accordance with balun max power.

Half dipole length = about 4m (depend from the tuning set)

Rotating radius = about 3m

Wind area = about 0.2m²

Mast diameter = 40-50mm

Weight = about 7kg

Max wind = 130Km

Material = Alluminum 6060-T6, SS hardware.

Performance:

The antenna has eno bandwidth to cover the whole segment assigned to each single band with maximum SWR of 2:1 to extremes, the mean SWR in band center less than 1: 5.

Performance may vary depending on the environmental conditions in which the antenna is installed. If you can, do not install it at a height of less than 5m from the roof or ground.

Kit 6m (optional)

The 6m kit must be installed as in the photo below.



For improvements and technical - production, specifications and design are subject to change, without affecting the final purpose of the product.



WARNING!!!

Do not install this antenna near electric power lines or other sources of energy, even in the event of accidental contact, could kill or seriously hurt you.



Dear buyer,

thank you for purchasing a Pro.Sis.Tel antenna ..

Making it we have used the best materials available on the market, worked and finished with the best care possible allowed by the state of art.

Use it within the rating for which it was built and will serve you faithfully for many years.

In case of doubts or concerns, our technical department is always ready to provide all the necessary help.

If you are satisfied tell the others, otherwise tell to us.

Your opinion and your suggestions will help us to improve even more our products.

Best regards

Annamaria Fiume IK7MWR

Made in Italy

WARNING! Defend the environment

Disposing components and materials

The antenna consists mainly of aluminum, in the event of disposal, conferred the scrap to a specialized disposal center, in compliance with the requirements of local law.

