

PRO.SIS.TEL.

Produzione Sistemi Telecomunicazioni

Multi-band PST-RD1524T rotating solid dipole.

Antenna assembling instructions:

Take antenna parts out the box and find the semi-dipole main alluminum tubes. They have pre-assembled inside the other tubes in a telescopic sequence. Tilt down the main tube end and shake it to have each one inner tubes heads out for about 15 cm or 6 inch. Make sure to have enough free space to extend the entire semi-dipole. Pull out the smaller tube, find the passtroight hole on the inner end, make it coincident whith the passtroight hole present on the next diameter tube which has two different diameter holes, from the larger hole side insert and push down the hallen screw passing trough the inner tube hole, put washer and selflock nut and screw down.

Make sure to have the bolt head as in the picture below. Do not forget to lubricate the stainless steel bolts or nuts before to install them. Any kind of oil or grease is ok.

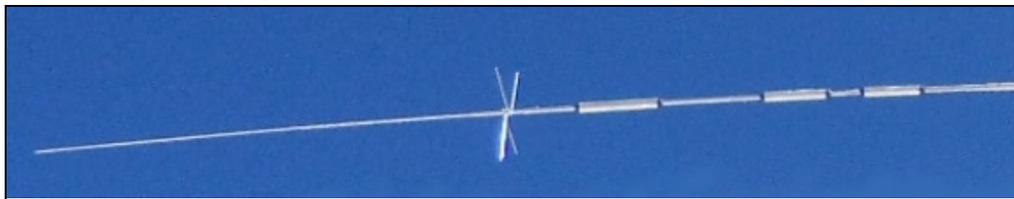
Do the same way for the other tubes joints. Some inner ends have more holes, they will help you in tuning antenna on your preferite band section, use the one in the middle for now.



Make sure to have heach one tubes connection having bolts head on the same side.

When completed, insert on the semi-dipole end the trap set (following the sequence 10m, 15m and 20m, Install the 40m end with his capacitive load. Bolt down each one tube joint following the same way used before. Traps sets are pre-assembled already but joints in between traps, have multi holes on the inner tubes, improving antenna tuning steps if necessary. Longer antenna lower frequency, shorter antenna higher frequency. Any new tuning step on the higher frequency will have effect on the other lower bands.

Make sure to have traps drainage holes on the lower side. Semi dipole will looks like the one in the picture below.



When both semi-dipoles are ready, assembly the antenna center main frame as in the picture below. Make sure to have about 10-12mm or half inch of clearance in between the two ends, with connection bolts aligned on the front side.

On the antenna center main frame rear side, take place a round or a square plate used as antenna-mast interface. Install it, using the same bolts of the central blu insulators.



Connect a 1:1 balun (suggested) using two short wires, not longer than 8-10 cm or 3-4 inches (connections wires will influence the antenna tuning making it longer), if you don't use a balun, than use a coax cable choke, open the coax ends to have two short leads like a V no longer than 3-4 cm or 1-2 inches, soldering on them two eyelet ends. Don't forget to insulate and seal coax end from moisture. (If you don't have any sealing liquid, use nails painting and when dry, cover with good rubber tape)

(Balun and eyelet ends are optionals not included in the antenna parts)



Balun or coax choke do not improve antenna performance, but reduce the RF presence on the coax shield reducing the risk of TVI or other RF noise on electronic devices.

When assembled antenna will look like the one in the picture below.



Install antenna on your mast, make sure to have almost 5-6meters or 15-20 ft over the roof or ground and if installed over an HF yagi antenna, make sure to have dipole in line with yagi's boom spacing them almost 2m or 8 ft. Antenna will have the best performance if installed almost a $\frac{1}{4}$ wave of the lower frequency band, over the ground.

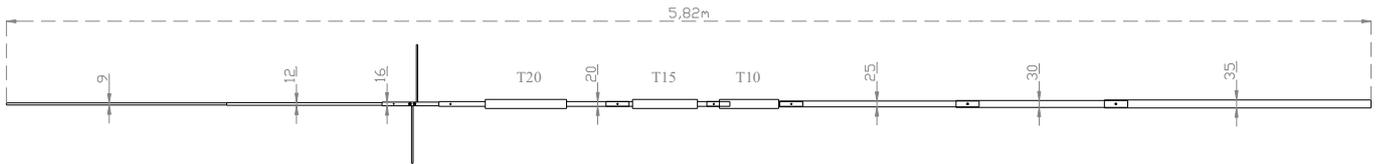
Using an antenna analyzer or a SWR meter, check the antenna tuning on each band.

Antenna tuning frequency could be influenced from the environmental conditions for which could became necessary retuning it. If necessary begin from the higher band, unbolt the multi holes dipole joints and move to next hole, don't forget, longer element lower frequency, shorter element higher frequency. When the tuning operations are completed, check all bolts, make sure that they are well screwed down.

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Semi - dipole dimentions.



Bands: 40 - 20 - 15 - 10m

Gain: 0dBd

Maximum power: 2Kw pep SSB, 1Kw pep RTTY-CW

Rotating dipole turning radius = about 5,85m (19,5 ft)

Wind area = about 0.3m square (3 square feet)

Weight = about 8kg (17 lbs)

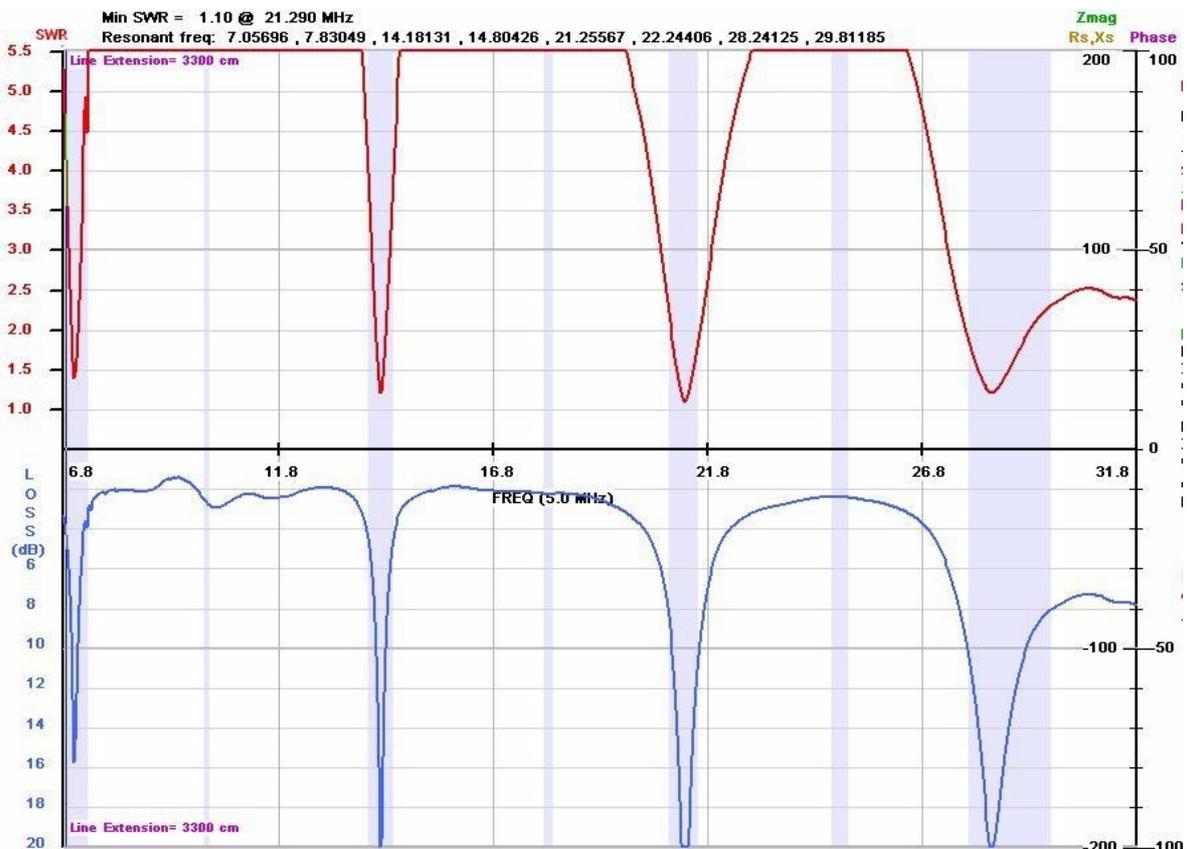
Material = Alluminum 6060-T6 - SS hardware

Antenna performance.

Antenna has enought band to cover each one assigned frequencies slot having an average SWR of 1:5 or better in the middle of each one band.

On 40m will perform for about 120-150Kc.

Performance may change due possible local environmental influence.



The manufacturer reserves the right to make changes without further notice to any

Dear buyer,

Thank you for purchasing an antenna **Pro.Sis.Tel.**

In the construction we used the best materials available on the market, processed and finished with the best care possible allowed by state of the art.

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

In case of doubt or perplexity, our technical department is always available to provide you with all the necessary support.

If you are satisfied tell others, otherwise tell us.

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

Best regards

Annamaria Fiume IK7MWR

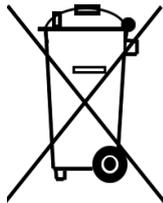
MADE IN ITALY

CAUTION

Defend the environment

Disposal components and materials

The antenna consists mainly of aluminum, in the case of disposal, conferred the scrap to a recycling center that specializes in compliance with the requirements of the law.



Version 1.1 eng