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Produzione Sistemi Telecomunicazioni

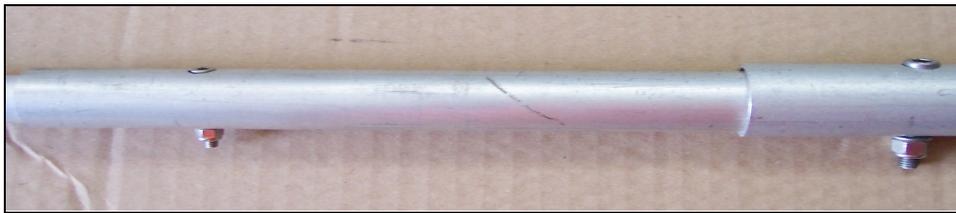
## PST-RD40SC

### Assembly instructions:

Extracting the two half dipoles from the package, you will find the tubes pre-assembled already, in a telescopic sequence. Tilting the package, make sure that all the heads of each one diameter protrude from the main tube. Since the nuts and bolts are stainless steel, tightening the nuts may lock and therefore always lightly lubricate the thread.

Place the semi-dipole on a plane, and start to pull out the smaller diameter,

Match the hole in the inner tube with that of the outer tube. The elements are fastened by inserting the bolt from the side of the larger hole so that the cylindrical bolt head is well embedded and rests on the inner tube, see fig.2.



Tighten the nut firmly. Make sure that all the bolts' heads are on the same side. With the same technique, extract and join all the sections.

When the two semi-elements are ready, if not already pre-assembled, prepare the central plate and assemble all the parts as shown in the photo.



If you purchased the balun (1:1) version, install the balun directly on the dipole bolts, making sure to fasten the coax so that the weight does not weigh on the balun itself.

In the version without balun, connect the coaxial, after having opened it as a V, directly on the two input bolts. Any tuning corrections are possible by slightly and symmetrically moving the two clamps on the coils. In the picture an example of a possible final appearance.

Completed the assembly of the semi-elements, proceed to the assembly of the two capacitive hats, they consist of 4 parts each one + bolts.

Insert the 12mm tube into the head of the tube holder and make the central hole coincide with that of the tube holder and lock it firmly with the 4MA bolts.

Insert the 9mm tubes into the two 12mm terminals, match the holes and lock them with the 3MA screws. Assembly details are visible in the photos. Subsequently, the two caps will be mounted on the terminals of the half-dipole, the multi-hole allows to vary the center of resonance of the antenna. Making it longer will move down resonance, shortening it will raise the resonance. In the initial assembly it is advisable to use the second or third hole, each hole corresponds to a variation between 50 and 70Kc, depending on the influence of the environment in which it is installed.

Make sure that all the bolts and screws have the nut that looks down (in case of accidental unscrewing, the pin remains in place, preventing the exit of the element.) On non-self-locking nuts, it is better to pass a round of tape adhesive for security. Do not tape the junctions of the antenna, it must be able to breathe, otherwise internal corrosion may occur due to the presence of moisture and condensation.



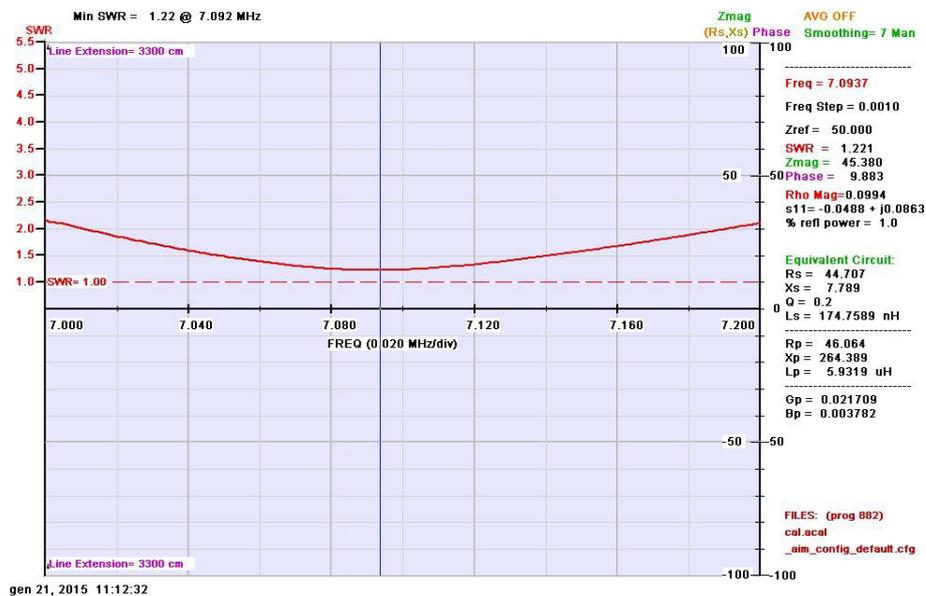
After mounting the antenna on the mast, check the resonance, if the position of the capacitive caps has changed. Although in frequency, the antenna has high ros, loosen the clamps on the input coils and move with very small steps forward or backward along the coil of the coils, in a symmetrical way, until you find the best impedance matching. If well tuned, the antenna should have a swr equal to or very close to 1:1 in the center of the band.

After completing the setup operations, check the tightness of all nuts. If the dipole will be mounted above an HF yagi, it is preferable that it be installed parallel to the yagi boom and at a vertical distance of at least 1.5m.

***Performance may vary according to the environmental conditions in which the antenna is installed.***

## Performance:

The antenna covers about 200Kc/s in the 40 band with a 2:1 swr on the band limits. Performance may vary according to the environmental conditions in which the antenna is installed. However, it is advisable not to install it at a height of less than 5m from the roof-floor. In the graph below the swr curve of the dipole during the test.



## Specifications:

**Gain:** from 0 dBd (installed at 9m from the ground and compared with dipole full inv V)

**Operating bands** 40m

**Front / side ratio:** around 15dB

**Impedance:** 50 ohms (1:1 balun recommended)

**Ros:** within 1:1.5

**Max power** 5KW pep ssb, 1,5Kw cw-rtty (Depends on the balun power limit if installed)

**Dipole length:** about 10m

**Rotation radius:** about 5m

**Mast:** De48-50mm

**Weight:** about 7kg

**Material:** AL6060T6 Stainless steel nuts and bolts



## Safety Notice

**Be responsible for avoiding possible accidents**

**Do not install the antenna near uncovered power lines or other sources of power at risk of electrocution, you may be killed or seriously damaged. Make sure that nobody can come into contact even accidental, with it during use**

**Install the antenna on supports that are adequately sized to support the load even in heavy windy conditions.**

**The fall of all or part of it could affect people and / or things with non-calculable damage.**



**In the case the responsibility is to be charged exclusively to the user.**

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.**

