JPC-7 Mini Portable Antenna



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Antenna Description:

JPC-7 is a Mini portable antenna designed for field communications, simple and quick to set up, one person can be completed in 5 minutes.

The new version antenna optimizes the induction coil upgraded contact shrapnel, added grooves on contact position, so that the contact can be accurately snap on the coil. The use of manganese steel material increases the strength of the shrapnel, making the contact with the coil more reliable.

The new version coil has marked the number of turns at 20-meter and 40-meter bands, making it easier and faster to set up, even without an antenna analyzer, you can set up and adjust the antenna easily.

To use the 20m waveband, just move the slider contact to the red coil marked with gold, then shorten the one-side pull rod antenna by about 10cm (do not adjust the other side), and then slightly adjust the pull rod antenna according to your frequency level.

To use the 40m waveband, move the slider contact to the position of the silver marked red line. And the pull rod antennas can be raised for use after they are all pulled out



Below is a picture of JPC-7 installed on Tangula Mountain in 2013

Attention Notes when using the antenna:

1. The assembly sequence of each antenna vibrator is: connecting seat - positive V copper piece - two aluminum tubes - inducting coil - pull rod antenna.

 By using with low transmission power antenna analyzer, in order not affect the adjustment of the standing wave, the feeder line should be all opened, do not circle it.
It will have no this kind problem by using higher transmission power antenna analyzer.

3. The side near the pull rod antenna is the first circle. Count from the side with the fixed coil screw. The half circle with the screw is not counted

4. Adjusting the standing wave, Adjusting the SWR, when there is an antenna analyzer, check the lowest point of the standing wave first. If the resonant frequency is over high, it means the antenna is too short, need to pull the rod antenna higher or increase the induction coil loops. If the resonant frequency is over low, then to pull the rod antenna shorter or reduce the induction coin loops

If there is **no antenna analyzer**, use the standing wave meter of the radio station, set it in FM, AM or RTTY mode, adjusted the transmit power to about 10 watts, press the transmit button, adjust the radio frequency knob, and search for the minimum point of standing wave on each frequency band, look at the level of resonance frequency, and adjust accordingly.

Antenna Set-up Mode:

V-shaped Set-up



Slope Set-up



90° right-angle Set-up



Horizontal Set-up



Display of Antenna Assembly



Display of Copper Parts Assembly:



Display of Velcro fixed Barron:





Barron connection method:

Plug into the screw hole of the vibrator (The plug does not distinguish between left and right)



Reference Data:

40m wave band: 7.050 MHz is the 5th and 4th turn counting from the side of the aluminum tube (on the red line marked with silver), both sides of the rod antenna all pull out 7.050 standing wave 1.2-1.5

20m wave band: 14.270MHz is 7 and 9 turns counting from one side of the rod antenna (on the red line marked with gold), after pulling out all 10 sections of the rod antenna, shorten one of the side of the rod by about 10cm, VSW 1.0-1.2.

$\langle\!\!\!\! \ \rangle$ Note: the rod antenna on one side is shortened, and the other side does not need to be adjusted $\rangle\!\!\!\!\rangle$

15m wave band: 21Mhz are two circles on each side close to the rod antenna, and all the rods are pulled out

10m wave band: Pull out all 10 sections of the rod antenna, and then retract one of the rod antennas to about 7cm, 29.600Mhz standing wave 1.2. Note: No need add induction coil.

Note: the above data is based on the antenna V-shaped set-up, and the data will be different when the antenna set-up mode and angle changed. The shrapnel contacts only contact the marked coil, do not contact the adjacent coil.

Accessories Packing List:

- 1. 1x connection base (material: nylon)
- 2. 2x multi-band coils (material: nylon)
- 3. 4x alumina tubes (black), specifications 19×320mm
- 4. 2x top 2.5m stainless steel rod antennas (customized and thickened)
- 5. 2x plastic head screws
- 6. 2x copper connectors for V-shaped set-up
- 7. 1x special black handbag, size 37*23cm
- 8. 1x special aluminum connector for tripod connection

9. 1x piece of Velcro for fixing the Baron

