

# JPC-7 Mini Portable Antenna



## Antenna Description:

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

The new version antenna optimizes the induction coil again in October 2020, re-open the mold to make contact shrapnel, grooves are added in the contact position, so that the contact can be accurately stuck 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 in the 20-meter and 40-meter bands, making it easier and faster to set up, even without an antenna analyzer, you can effortlessly set up and adjust the antenna

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 the 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.

2. 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, not round into a circle. 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, **when there is an antenna analyzer**, first to find the lowest point of the standing wave to see the resonant frequency is high or low. If the resonant frequency is high, it means the antenna is too short, then to lengthen the rod antenna or increase the number of induction coin loops. If the resonant frequency is low, then to shorten the rod antenna or reduce the number of 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, reduce the transmit power to about 10 watts, press the transmit button, adjust the radio frequency knob, and search for each frequency band the minimum point of standing wave, look at the level of resonance frequency, and then use the above method to adjust

## 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)



《Note: the rod antenna on one side is shortened, and the other side does not need to be adjusted》

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- 1 connection base (material: nylon)
- 2- 2 multi-band coils (material: nylon)
- 3- 4 alumina tubes (black), specifications 19×320mm
- 4- 2 top 2.5m stainless steel rod antennas (customized and thickened)
- 5- 2 plastic head screws
- 6- 2 copper connectors for V-shaped set-up
- 7- 1 special black handbag, size 37\*23cm
- 8- 1 special aluminum connector for tripod connection
- 9- 1 piece of Velcro for fixing the Baron





## Antenna Performance Parameters:

1. Frequency: Can work in 40.30.20.17.15.12.10.6 meters 8 bands (7Mhz-50Mhz)
2. Impedance:  $50 \Omega$
3. Load power: SSB-100W
4. Standing Wave(SWR):  $<1.3$
5. Weight: 1.8kg

Graph: JPC-7 is the erection method of JPC-12. The two lines of Barron are respectively inserted into the corresponding jack of vibrator and ground anchor (**ground anchor and ground mesh need to be purchased separately, available in our store**).

