

PAC-12 Portable Antenna (High-end Version)



Antenna Description:

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

Antenna Characteristics:

- 1- Light weight, small size, easy to carry
- 2- Easily work in multiple bands
- 3- Convenient and fast erection, one person can complete the erection in 3 minutes
- 4- It is very suitable for outdoor platform, business trip or balcony erection
- 5- The aluminum tube base is sandblasted and oxidized to black, which is very beautiful and high-grade



Antenna Performance Parameters

1. Portable weight about 1.4Kg
2. Retracted Length about 34.5cm, Erection Length about 410cm
3. Frequency: Can work in 40.30.20.17.15.12.10.6 meters 8 bands (7Mhz-50Mhz)

4. Impedance: $50\ \Omega$
5. Maximum power: SSB-100W
6. SWR: 40m band SWR<1.3, other bands can be adjusted to 1.1

Note: Add another coil without sliding regulator (can be customized). If the two coils are superimposed together and added with a 20-meter ground mesh, it can work in the 80-meter band.

Packing List:

1. 1 Aluminum Alloy base
2. 1 Multi-band inductive coil (material: nylon, note: the inductive coil is made by mold processing not made by hand)
3. 1 Ground anchor, size $10 \times 240\text{mm}$ (no electroplating treatment to maintain good grounding)
4. 4 Alumina tubes (black), size $19 \times 320\text{mm}$
5. 1 Top 2.5m stainless steel rod antenna (customized and thickened)
6. 1 Ground mesh 10 strands (tear off as needed during use, usually 3 strands are enough)
7. 1 Special cloth wrapper

Installation and Setting:

1. Put the connecting ring of the ground mesh directly on the screw of the ground anchor and screw it to the base, and then comes the connecting seat—four-aluminum tube—the induction coil—the rod antenna
2. Adjusting the SWR, **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

3. Tearing off 3-4 roots of ground mesh to be used. Adjusting the angle of the ground mesh can change the impedance of the antenna.

The reference data of Sliding regulator:

7 Mhz in 4 circles near the side of the aluminum tube, the pull rod retracts about 10cm, SWR 1.1-1.3 (on the red line marked with silver)

14Mhz in 6 circles on the side close to the rod antenna, the pull rod retracts about 20cm, (on the red line marked with gold) SWR 1.1-1.3

21.4Mhz with 4 sections of aluminum tube plus rod antenna 7 sections +10cm, SWR 1.1-1.3

29.6Mb with rod antenna only, pull out all and retract about half section, SWR 1.2

Note: Shrapnel contacts only contact the marked coil, do not contact the adjacent coil

The above parameters may vary slightly depending on the environment, and can be fine-tuned according to your actual situation



Note: pac-12 antenna can also be set up on the balcony, as long as you find a way to fix the base part, the ground mesh can be laid on the balcony or hang down, the vibrator can be used horizontally out of the balcony for better effect (be sure to pay attention Safety, take protective measures, the user shall be responsible for the personal injury or financial loss caused by the fall, and the seller shall not bear any responsibility)