Technical Specifications & Usage Guide

Frequency Range Extension

This antenna can be applied to VHF and UHF bands.

VHF Matching: Use 10 unextended sections + 26CM.

UHF Matching: Use the 51MHz dimension.

Recommended Power: Within 50W for V/U bands.

Telescopic Antenna Matching Lengths

Adjustment rules: Collapse the specified number of sections from the bottom; extend all others to maximum length. If "+XXcm" is indicated, extend that specific section by the given length.

Frequency	Adjustment Instruction
7.010 MHz	Max length, Section 1 not extended.
7.050 MHz	Max length, Section 1 not extended + 34CM.
10.100 MHz	Max length, 7 sections not extended + 4.5CM.
14.250 MHz	Max length, Section 1 not extended.
18.100 MHz	Max length, 4 sections not extended.
21.000 MHz	Max length, 5 sections not extended + 26CM.
21.400 MHz	Max length, 5 sections not extended + 21CM.
24.900 MHz	Max length, 6 sections not extended + 5CM.
28.000 MHz	Max length, 7 sections not extended + 19CM.
29.600 MHz	Max length, 8 sections not extended.
51.000 MHz	Max length, 10 sections not extended + 10CM.

Mounting Height Recommendation

7MHz Band: 4-6 meters

10MHz Band: 4-6 meters

14MHz Band: 4-6 meters

18MHz Band: 3-4 meters

21MHz Band: 2-4 meters

24MHz Band: 2-3 meters

28MHz Band: 2-3 meters

29MHz Band: 2-3 meters

51MHz Band: 2-3 meters

Design & Installation Notes

Portability: Designed for field use. Setup takes only a few minutes by one person. **Not suitable for balconies or permanent installation.**

Weather Resistance: Usable in light wind and drizzle. **Do not use in strong winds.**

Antenna Sag: Slight sagging when fully extended is normal.

Configuration: Supports Horizontal or Inverted-V orientation. Horizontal offers higher efficiency; Inverted-V saves space. Default configuration is Inverted-V.

Scales: The antenna includes common frequency markings. Align the scale with the antenna segment joint to get the desired frequency (performance may vary slightly by environment).

Advanced Configuration (Optional)

The red terminal on the antenna panel can connect two copper wires (~9-10m each side) in an inverted-V shape. By using the 20m band installation method, you can achieve simultaneous operation on 7MHz and 14MHz. The 7MHz elements can also serve as guy lines.

Assembly Instructions

40m-30m bands: Install loading coils (C) and hairpin matcher (D).

20m-6m bands: Do **not** install loading coils or hairpin matcher.

Support Hardware

Tripod: Use a 4m tripod. The blue fitting has an inner diameter of 28mm, compatible with most standard tripods (tripod not included).

Solo Operation Tip: A solar umbrella stand can be used for easy height adjustment.

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