

JNCRADIO MC-599 SHORTWAVE DIPOLE ANTENNA

<https://chelegance.com/products/jncradio-mc-599-shortwave-dipole-antenna/>



1-1. DESCRIPTION & SPECIFICATION

The MC-599 is a testament to Chelegance's commitment to quality and innovation. This portable shortwave dipole V antenna is expertly crafted to operate across a wide frequency range of 7-50MHz, with an impressive power capacity of 200 watts PEP.

Continuing the legacy of our acclaimed MC-750 antenna, the MC-599 incorporates a similar, user-friendly marking system on both telescopic whips. This innovative feature simplifies the tuning process significantly. Just align the markings to the corresponding position for your desired band, and you're set for a smooth and efficient operation. This hassle-free adjustment ensures that you can focus more on your communication experience and less on the setup.

The MC-599 is specially equipped with premium wire elements for the 7MHz band, ensuring top-notch performance. These wire elements are designed to be easily configured into an inverted V antenna, providing exceptional reception and transmission capabilities. The setup is straightforward – simply extend the wire elements and secure them at the top using the telescope whips. This design not only optimizes the antenna's

functionality at 7MHz but also ensures a stable and reliable operation, making it an ideal choice for amateur radio enthusiasts who demand quality and efficiency.

The MC-599 is ingeniously designed to offer a wide operational range within each working frequency band, a feature that sets it apart in the realm of amateur radio antennas. This design means you can enjoy extensive coverage without the hassle of constantly adjusting the antenna length for different frequencies. For instance, if you set the antenna to operate at 14MHz, the MC-599 will efficiently cover the entire 20-meter amateur band. This capability not only enhances the ease of use but also ensures consistent performance across a broad spectrum of frequencies, making the MC-599 a highly versatile and reliable choice for radio enthusiasts.

The MC-599 is compact at just 57.5 x 11 x 7.5 cm and lightweight at only 1.43 kg, it's the epitome of convenience. This antenna is perfect for radio enthusiasts who are always on the move. Whether you're heading out for a Parks on the Air (POTA) adventure or a Summits on the Air (SOTA) expedition, the MC-599 is your ideal travel companion. And it is a very simple structure. In a nutshell, it's easy to carry, quick to set up, and ensures that you're always ready to connect, no matter where your journey takes you.

BAG SIZE	57.5*11*7.5cm
FREQUENCY COVERAGE	14-50MHz (7mhz can be DIY in reverse V mode)
PRODUCT WEIGHT	1.43kg
SWR	≤1.5
INPUT IMPENDANCE	50Ω
WITHSTAND POWER	200watt (CW and FT8 halved)
WHIP LENGTH	5.6m
WHIP CONNECTOR	M10
FEEDER CONNECTOR	UHF Female
BALUN BASE CONNECTOR	M14
BALUN MATERIAL	aluminum

//WARNING: Do not power the antenna more than its PEP power ratings.

1-2. PART LIST

- 1 x Bag
- 1 x Antenna Base (BALUN)
- 2 x 5.6m telescope whips with frequency markings
- 2 x 7MHz wire elements



1-3. INSTALLATION GUIDE

- Connect the antenna base(BALUN) to the tripod.



- If you want to use 7MHz band, connect the 7MHz wire elements to the antenna base.
If not, skip this step.



- The two 7MHz wire elements need to be set to an inverted V-shape.



- And the isolator also needs to be secured.



- If you want to use 14-50MHz band, connect the 5.6M whip to the antenna base(BALUN), and stretch the whip.



There are reference marking points printed on the whip antenna. Adjust the length of the whip to meet your desired frequency according to the reference marking points.

(All sections above the mark needs to be fully extended and all sections fully collapsed...
The 7MHz band requires the use of the wire elements provided above.)



- Although there are reference points, you might still need to do fine adjustments to the length of the whip antenna until you get a sensible VSWR readings(From an in/external VSWR meter, VNA or antenna analyzer).

***Please note:**

1. Regarding the product quality, each section of every whip is carefully printed with measurements and undergoes stretching checks. Very low probability of quality issues. Therefore, the possibility of a quality issue is very low. Additionally, we conduct a final inspection before shipment to ensure everything is in proper condition.

2. The correct usage instructions and precautions for the whip:

- The whips should first be attached to the antenna before extending them. After installing the antenna, try extending the whips again.
- When extending the whip, start extending the thinnest section first, and gradually move on to the thicker sections, finishing with the thickest section.
- When collapsing the whip, start with the thickest section, then move to the thinner sections, and finally collapse the thinnest section.
- Note: The whip is the most brittle part of the entire antenna system and needs to be properly protected.

3. Be sure to pull up the GUY LINE ROPES to prevent the antenna from tipping over and damaging the whips, or more dangerously, causing a safety accident.



Tighten and secure as shown

1-4. RECOMMENDATIONS ON ACCESSORIES

CNtoU ACC FOR MC-599 SHORTWAVE DIPOLE ANTENNA:

- Use M10 Bolts to secure the 7MHz wire elements for easy and beautiful fixing.
- Use the Guy Line Ropes to secure the tripod to make the antenna more stable.
- Use the Guy Anchor Rods to secure the Guy Line Ropes or the wire elements' isolator.
- It's recommended to have antenna analyzer or VNA to be able to read the parameters of the antenna set up.

Reach out to us if you have any problems: support@chelegance.com

HAVE FUN WITH MC-599, 73!