

## **M-104 ANTENNA KIT USER MANUAL**

<https://chelegance.com/product/m-104-super-portable-4-band-shortwave-antenna-kit-for-sota-pota/>



### **1-1. DESCRIPTION & SPECIFICATION**

This kit is a super portable antenna design, for typical outdoor applications such as SOTA, POTA or automobile operations.

It is designed to be using different frequencies by changing specific coils accordingly.

All the components are packed with a 180\*110\*30mm plastic box which makes it very easy to be carried by operators for field operation.

FREQUENCY RANGE	7/14/21/28 MHz
POWER	50W PEP
CONNECTOR TYPE	UHF-J
LENGTH(EXTENDED)	1.4 METER
DIMENSION	180*110*30MM
WEIGHT	0.32G

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

### **1-2. PART LIST**

- 1 X WHIP ANTENNA
- 1 X ANTENNA BASE
- 1 X 7 MHZ COIL
- 1 X 14 MHZ COIL
- 1 X 21 MHZ COIL
- 1 X 28 MHZ COIL
- 1 X 4-16 ADAPTOR(FOR RADIALS/GROUNDING)
- 1 X 4-10 ADAPTOR(FOR RADIALS/GROUNDING)
- 1 X CARRYING PLASTIC BOX

### 1-3. INSTALLATION GUIDE

- Choose a coil according to the band you will be operate on
- Connect the coil to the base
- Extend the whip antenna to its maximum length and hook it up on top of the coil
- [not a must but strongly recommended] Install radials or copper strap(not included in the kit) to the 4-16/4-10 adaptor, put it between the antenna base and the mount position, and the other end of the strap(if you are using it in the car) connect to the ground point of the car.



- Adjust the length of the whip antenna as well as radials until you get a sensible VSWR readings(From an in/external VSWR meter, VNA or antenna analyzer).

### 1-4. RECOMMENDATIONS ON ACCESSORIES

- In order to improve the efficiency of this GP antenna, having radials are very important and especially for M-104, since it sacrifices the efficiency to meet the portable size.
- It's recommended to have antenna analyzer or VNA to be able to read the parameters of the antenna set up.
- Of course it will be great if you have an antenna tuner

**HAVE FUN WITH M-104, 73!**