
10 Band Amateur Radio Shortwave Balcony Field Day Portable Whip Antenna

Parameter:

Transmit frequency: 3.5Mhz---53Mhzamateur band

Receive frequency: 0.5-500Mhz

Power: 100W

SWR: <1.5

extension rod: 60cm,

Antenna effective vibrator Stretched length: 560cm

Antenna stretched full length: 650cm

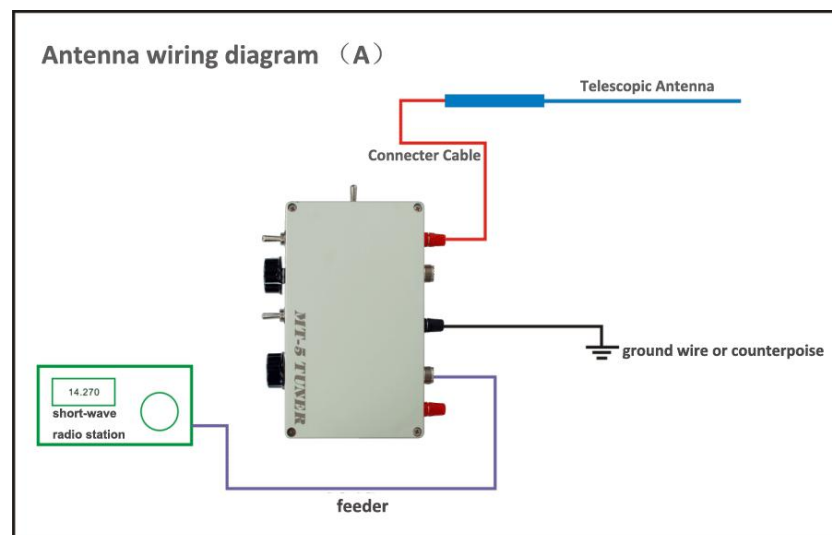
Net weight: 2.40KG

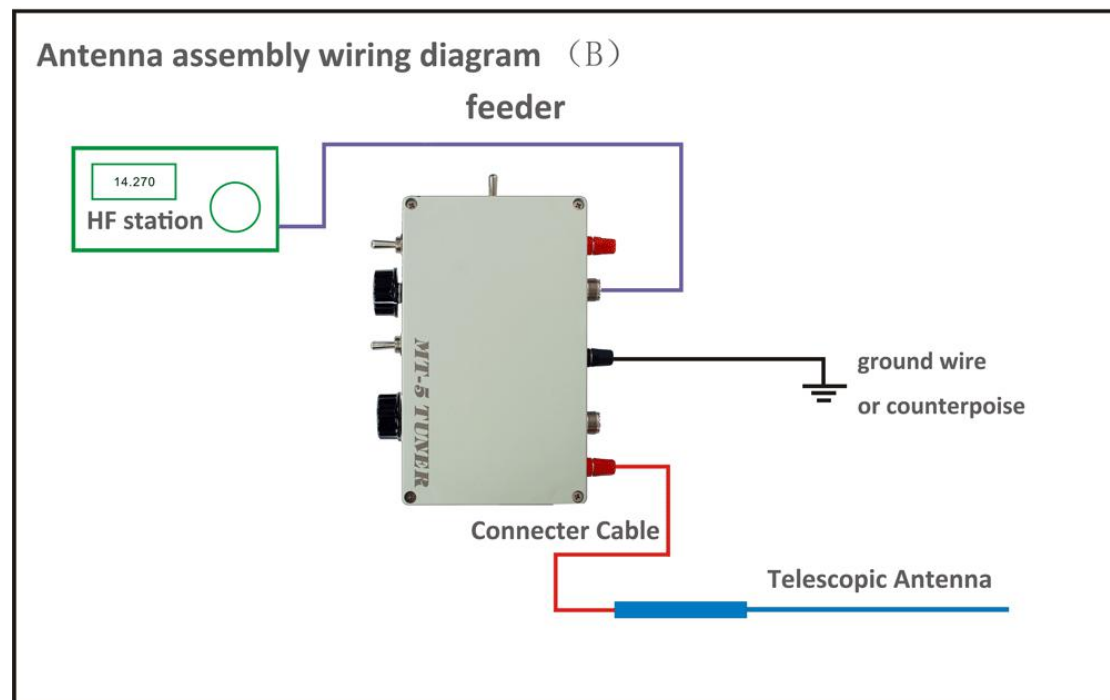
The antenna kit contains items:

- 1.The main rod x1
- 2.Extension rod x1。
- 3.feederx1。
- 4.Connector red cable x1。
- 5.MT-5 TUNER Antenna tuning Box x1。



Antenna assembly wiring diagram





MT-TUNER tuning box knobs and interfaces are defined below:



BAND: Inductance Band switch

TUNE: Capacitance Tuning knob

K2: "L 串" means Inductance Band Series in the circuit; "L 并" means Inductance Band Parallel in the circuit.

K3: "C 串" means Capacitance TUNE Series in the circuit; "C 并"表示 Capacitance TUNE Parallel in the circuit.



K1: Inductance Segment control.

LA control BAND inductance Smaller overall。

LB control BAND inductance Overall bigger。

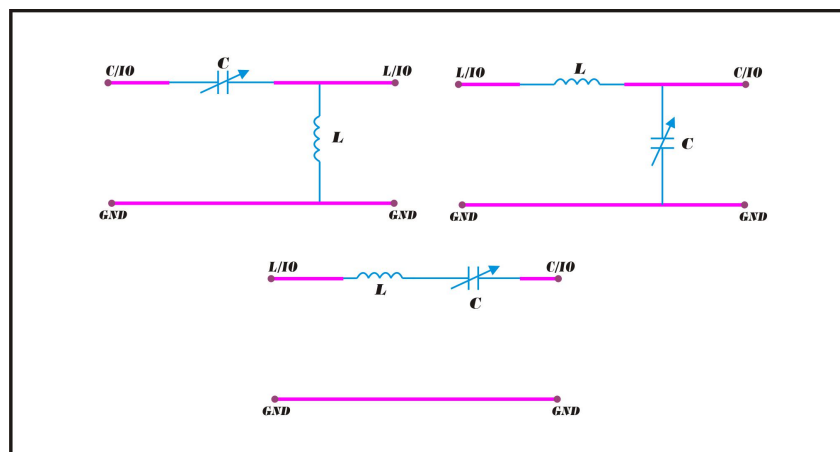


C/Io the red binding post is connected to the M port core. Output or input for capacitor default connect the HF Radio Station.

L/Io the red binding post is connected to the M port core, Output or input for the inductor, default connect the pull rod.

MT-5 TUNER The equivalent circuit of the antenna tuning box.

The input and output design can enter from the capacitor end into the inductor end, and vice versa.



Transmit Approximate parameters: (connection type take A as example)

A. The antenna tuning box connect the red connector cable is **3 meters** long.

The antenna stands on the balcony, radio station power supply is mains supply.

band	Amateur band MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	G、F	8-9	LB	L 并	C 串	
10m	28.000-29.700	C	7-8	LA	L 串	C 并	
12m	24.890-24.990	C	7-8	LA	L 串	C 并	
15m	21.000-21.450	B	6-7	LA	L 串	C 并	
17m	18.068-18.168	C	6-8	LA	L 串	C 并	
20m	14.000-14.350	G	6-8	LA	L 串	C 并	
30m	10.100-10.168	K	3-5	LA	L 串	C 并	
40m	7.000-7.100	E	4-6	LB	L 串	C 并	
60m	5.3515-5.3665	H	5-6	LB	L 串	C 并	
80m	3.5-3.9	I、J	2-4	LA	L 串	C 并	

B. The antenna tuning box connect the red connector cable is **3 meters** long.

The antenna stands on the balcony, battery power supply.

band	Amateur frequency MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	A	7-9	LB	L 串	C 并	The tie rod stays 4 knots without pulling
10m	28.000-29.700	C	7-9	LA	L 串	C 并	
12m	24.890-24.990	D	7-8	LA	L 串	C 并	
15m	21.000-21.450	B	6-7	LA	L 串	C 并	
17m	18.068-18.168	D	7-8	LA	L 串	C 并	
20m	14.000-14.350	G	6-8	LA	L 串	C 并	
30m	10.100-10.168	K	3-5	LA	L 串	C 并	
40m	7.000-7.100	E	5-6	LB	L 串	C 并	
60m	5.3515-5.3665	I	6-7	LA	L 串	C 并	
80m	3.5-3.9	K	6-7	LB	L 串	C 并	

C. The antenna tuning box connect the red connector cable is **0.3 meters** long.
The antenna stands on the balcony, radio station power supply is mains supply.。

band	Amateur frequency MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	A、B	8-9	LA	L 串	C 并	The tie rod stays 3 knots without pulling
10m	28.000-29.700	B、C	7-8	LA	L 串	C 并	
12m	24.890-24.990	B	7-8	LA	L 串	C 并	
15m	21.000-21.450	D	7-8	LA	L 串	C 并	
17m	18.068-18.168	E	6-8	LA	L 串	C 并	
20m	14.000-14.350	G	5-6	LA	L 串	C 并	
30m	10.100-10.168	D	5-6	LA	L 串	C 并	
40m	7.000-7.100	H	5-7	LA	L 串	C 并	
60m	5.3515-5.3665	J	6-7	LA	L 串	C 并	
80m	3.5-3.9	K、J	4-6	LB	L 串	C 并	

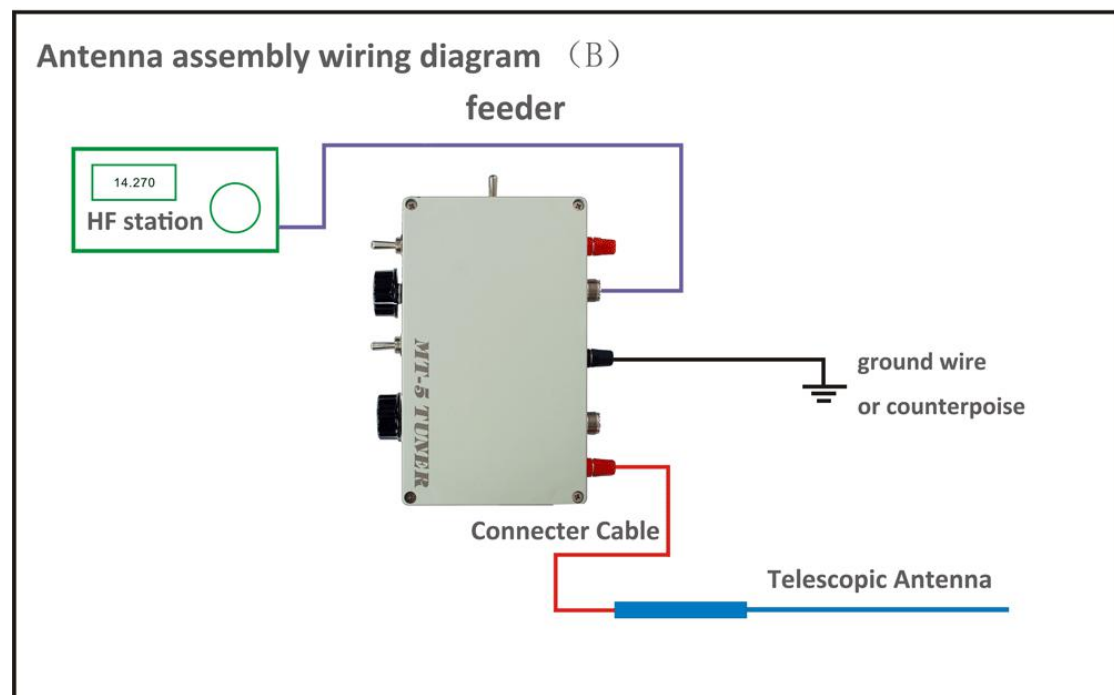
D. The antenna tuning box connect the red connector cable is **0.3 meters** long.
The antenna stands on the balcony, battery power supply.

band	Amateur frequency MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	A	8-9	LA	L 串	C 并	The tie rod stays 3 knots without pulling
10m	28.000-29.700	B、C	7-9	LA	L 串	C 并	
12m	24.890-24.990	B	7-9	LA	L 串	C 并	
15m	21.000-21.450	D	7-8	LB	L 串	C 并	
17m	18.068-18.168	C	6-8	LB	L 串	C 并	
20m	14.000-14.350	E	4-6	LB	L 串	C 并	
30m	10.100-10.168	E	3-4	LB	L 并	C 串	
40m	7.000-7.100	G	7-8	LB	L 串	C 并	
60m	5.3515-5.3665	J	9	LB	L 串	C 并	
80m	3.5-3.9	/	/	/	/	/	

E. The antenna tuning box connect the red connector cable is **3 meters** long. ,
Field GP, battery Power supply.

band	Amateur frequency MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	A	7-9	LA	L 串	C 并	Tie rod shortened by 3-4 knots。
10m	28.000-29.700	C	7-9	LA	L 串	C 并	
12m	24.890-24.990	B	6-8	LA	L 串	C 并	
15m	21.000-21.450	C	7-9	LA	L 串	C 并	
17m	18.068-18.168	E	7-9	LA	L 串	C 并	
20m	14.000-14.350	F、G	7-8	LA	L 串	C 并	
30m	10.100-10.168	I	4-6	LB	L 串	C 并	
40m	7.000-7.100	F	5-7	LA	L 串	C 并	
60m	5.3515-5.3665	I	6-7	LA	L 串	C 并	
80m	3.5-3.9	K	5-7	LA	L 串	C 并	

Take picture B as an example. The output of the radio comes in from LIO, and the red wire connects to the lever to come out from CIO.



The antenna tuning box connect the red connector cable is **0.3 meters** long. The antenna stands on the balcony, radio station power supply is mains supply

band	Amateur frequency MHz	Parameters may vary with the environment					备注
		BAND scale	TUNE scale	K1	K2	K3	
6m	51.000-53.000	A	8-9	LB	L 并	C 串	
10m	28.000-29.700	B、A	7-8	LA	L 并	C 串	
12m	24.890-24.990	B	7-8	LA	L 并	C 串	
15m	21.000-21.450	D	7-8	LA	L 并	C 串	
17m	18.068-18.168	D	7-8	LA	L 并	C 串	
20m	14.000-14.350	C	4-5	LA	L 并	C 串	
30m	10.100-10.168	E	8-9	LB	L 并	C 串	
40m	7.000-7.100	J	8-9	LA	L 并	C 串	
60m	5.3515-5.3665	J	7-8	LB	L 并	C 串	
80m	3.5-3.9	K	6-7	LA	L 并	C 串	

This tuning box can adjust the positive V and reverse V antenna, and the 10-20m long-line antenna, the adjustment principle is the same, but the frequency band is not necessarily so complete, I tried to achieve 80m, 40m on my unilateral 5m positive V , 20m, 18m adjustment, you can try.

In various balconies and outfield environments, the scales of the BAND and TUNE knobs of the tuning are not the same. The red connecting line connects the tuning and the lever. The length of this line can be changed according to your actual situation. In addition, the antenna can also be directly connected to a 10m or 20m long wire, and the adjustment method is the same.

Master the method and draw inferences from one another.

Please understand that the balcony antenna can't achieve such a good effect as the top floor antenna, and balcony antenna can't have the effect of positive V and reverse V. This is unrealistic.

Any questions, please email to info@ailunce.com

Operation Video: <https://youtu.be/HWz4QTF7Vr8>