

Little Dot MK II

Little Dot *MK II* Headphone Amplifier

User Manual



www.little-tube.com



[SAFETY NOTICE]



1. Risk of electric shock - do not open chassis during operation.
2. Do not use inside poorly ventilated areas such as within cabinet
3. Do not use near heat sources, or any other apparatus that produces heat.
4. Clean only with a dry cloth, and do not use near water or moisture.
5. Unplug during lightening storms or when unused for long periods of time.
6. Amplifier may be hot during operation. Do not touch vacuum tubes or chassis during operation or immediately after operation.
7. Keep away from small children and/or pets.
8. In case of damage or malfunction, suspend usage immediately, unplug the power source, and refer all servicing to qualified personnel. Please contact your dealer for assistance.

Little dot MK II introduction

Thank you for purchasing Little Dot MK II vacuum tube headphone amplifier! Hope this manual can help you to enjoy the great respectful pleasure which your little dot MK II takes to you.

Before you use your Little Dot MK II, please read this manual carefully. If you still have any other questions, please visit us at www.little-tube.com, and we will answer your questions as soon as possible!

The Little Dot MK II uses domestic pentode vacuum tube 6J1 as the driver level tube, and the dual-triode tube 6N6 to constitute a SEPP amplification circuit. The SEPP (Single-ended push pull) electric circuit has many merits such as low output impedance, huge dynamic, and low harmonic distortion. The Little Dot MK II can drive 32 ohm-600 ohm headphone easily.

Understanding Your Little Dot MK II

Now please take some time to be familiar to your Little Dot MK II's controls, signs, and input/output connectors.

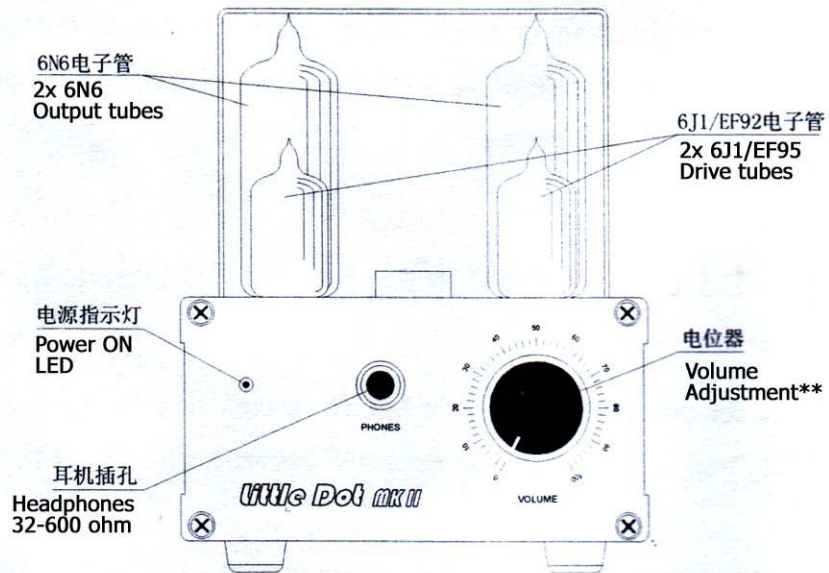


Figure 1: Little Dot MK II Front Panel

****To protect your ears!
Always set to MIN before startup,-
and when amp is powered off.**

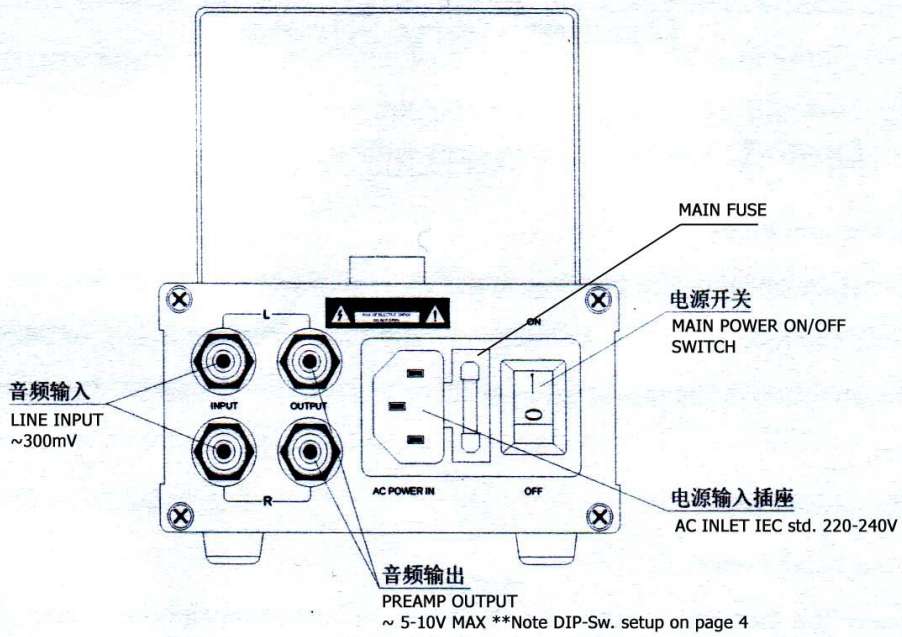


Figure 2: Little Dot MK II Back Panel

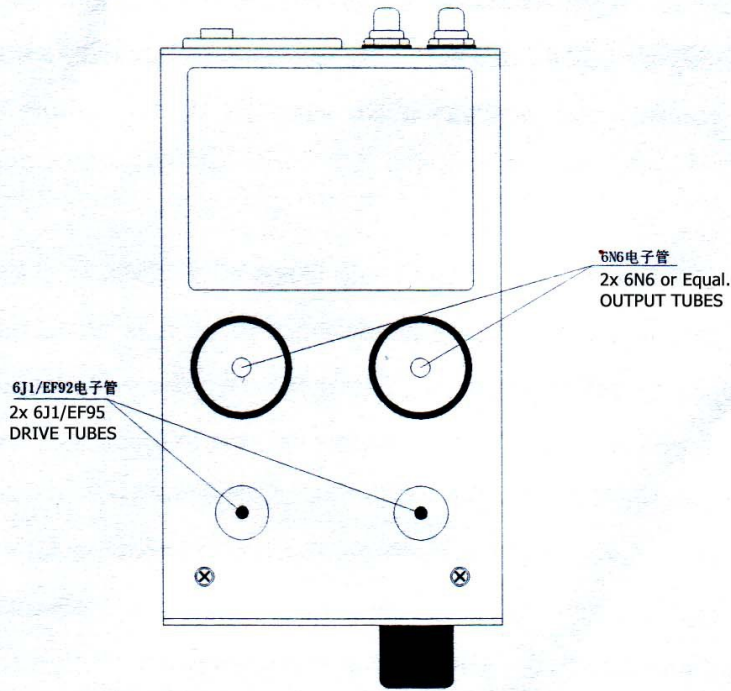


Figure 3: Little Dot MK II Top View

Preliminary Steps



【Notice】: Do the following steps without the plugging your Little Dot in!

1. Install the vacuum tubes:
2. Be careful when opening the packing material. Remove the vacuum tubes, and plug the base pin into the tube socket as the diagram. The tubes must be firmly to the bottom of the socket. Pay attention to the power tubes as there will be a small gap between the base pin and tube socket.

2. Connect the power cord.

3. Connect your headphones:

Please insert the headphone into the 6.35mm diameter headphone outlet on the panel, 3.55mm headphone must be transferred to 6.35 mm, then plug it.

4. Connect the sound source to your Little Dot MK II's RCA signal input jacks with the RCA signal wires included with your Little Dot MKII. Aftermarket RCA cables are fine as well.

5. Check the volume control potentiometer; make sure it's on the bottom counter-clockwise (lowest volume)

6. Gain switch:

There are two red DIP boxes inside of the Little Dot MK II, their function are changing the MK II's amplification gain in order to match headphones of various sensitivity and impedance. If necessary, you can open the machine chassis, and then move the switches on each DIP box to get the gain factor which you require. Each box corresponds to a channel, so please make sure to configure both DIP boxes similarly:

- a) Switch 1 off, Switch 2 off: Gain 10 fit for high impedance or low sensitivity headphones
- b) Switch 1 on, switch 2 off: Gain 5 fit for medium impedance or low sensitivity headphone
- c) Switch 1 off, switch 2 on: Gain 5 fit for low impedance or high sensitive headphone
- d) Switch 1 on, switch 2 on: enlargement 3 fit for low impedance or high sensitive headphone

【Factory default setting is A.】

There are two jumper pin switches inside of the amplifier, which can be used to choose different families of driver vacuum tubes. You can use small tweezers or the other similar tool to operate from the oblong windows on the side of the bottom panel. Short circuit (jumper in place) or open circuit (no jumper) are the two settings:

a) Jumper pin switch open circuit (No jumpers)

Suitable tubes: 6J1、WE301A/B、GE5654、M8100、CV4010、EF95, etc.

b) Jumper pin switch short circuit (jumper in place)

Suitable tubes: EF92、EF91、CV138、CV131 and so on.

【Factory default setting is A..】

Operation

Make sure the power cord, headphone, and RCA signal wires are connected correctly; volume control is set to the lowest level, before turning on your Little Dot MK II:

Flip the power switch on the back panel to the ON position, at this time the power LED will turn on.

Now you can select and play the music you enjoy with your Little Dot MK II on an amazing musical journey!

Appendix one: Little Dot MK II Technical Specifications

1. Input s:
 - a. One set of RCA audio frequency input jacks
2. Output s:
 - a. One set of RCA audio frequency output jacks
 - b. One 6.35mm headphone output jack
3. Gain Factor:
 - a. 3-10x (dependent on gain switches)

4. Frequency response:
20HZ---50KHZ (300 ohm, -1db)

5. THD+N:
0.2% (300 ohm @ 50mW)

6. Output Power:
 - a) 300 mw (600/300 ohm)
 - b) 200 mw (120 ohm)
 - c) 100 mw (32 ohm)

7. Output impedance:
Suitable Headphone Impedance: 32 ohm---600 ohm
Pre-amplifier impedance: 10 K ohm

8. Fuse Rating: 1A (inside the electric power source socket)

9. Size: 210(depth) X 110(width) X 130(high) mm

10. Weight: 2.5 Kg

Appendix two: The accessory list

1. three-prong power cord: x1
2. RCA cable: x1
3. 3.5—6.35 headphone adapter: x1
4. User's manual x1

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