## How the power supply works:

Turn on the power, and the tube filament begins to heat up. At this time, the voltage starts to increase from zero voltage. When the tube filament heats up, the voltage boost is just completed. It is the same as the tube rectifier. The eight 470UF capacitors filter very cleanly. An excellent power supply system cannot There will be hum, and the filament is powered by DC 12V. The filament that requires two tubes is connected in series. The DC filament is also used to reduce noise.

**Materials used:** The coupling capacitor adopts Taiwan's FARAD non-polar capacitor MET series, high-frequency low-resistance electrolytic capacitor, 1% precision metal film resistor, and Beijing J-class military-standard electronic tube 6J1.

#### **Parameter:**

[Model number] 6j1 tube preamplifier (replaceable models 6AK5, 6AU6, 5654, etc.) Please refer to relevant information for details

[Power input] AC AC12V 0.8A /5.5\*2.5 plug power supply or transformer (DC is not supported) [Channel type] 2.0/stereo [Knob function] Power switch/volume adjustment [Magnification] 0.85 times amplification

### **Instructions:**

- 1. AC 12V input: Use DC3.5/5.5\*2.1 socket and AC 12V/0.8A power adapter. If you want to use a plug-free AC 12V transformer, you need to solder the power cord to the circuit board. Remember: Do not use DC power input, otherwise it will not work!
- 2. Left channel input/right channel input: It is the audio signal input terminal and can be connected to mobile phones, computers, M3, MP4, and other music players.
- 3. Left channel output/right channel output: It is the audio signal output terminal, which can be connected to the audio signal input terminal of the power amplifier and power amplifier board to provide the subsequent power amplifier with bold music enjoyment!
- 4. Power switch/volume knob: Turn the knob counterclockwise to begin to reduce the volume. When the volume is turned down to the minimum, if you continue to rotate it until a "ticking" sound is heard, the power is turned off and the indicator light goes out; in the off state, Turn the knob clockwise until you hear a "tick" sound and the indicator light lights up, indicating that the power is on. The volume at this time is the minimum. Continue to turn the knob clockwise to increase the volume.

#### Gallbladder preamplifier and gallbladder buffer functions:

Added between digital audio sources such as CD/VCD/DVD/MP3/IPHONE/ipad/MID/mobile

phones and other digital audio sources and power amplifiers/subwoofers/active speakers, it is easy to achieve the best match between the first and the last. The annoying "digital smell" and "transistor sound" of listening to music will disappear immediately, and the entire listening system will have a sweet and delicate "bile smell" with the characteristics of mellow timbre, sweet vocals and strong musical flavor.

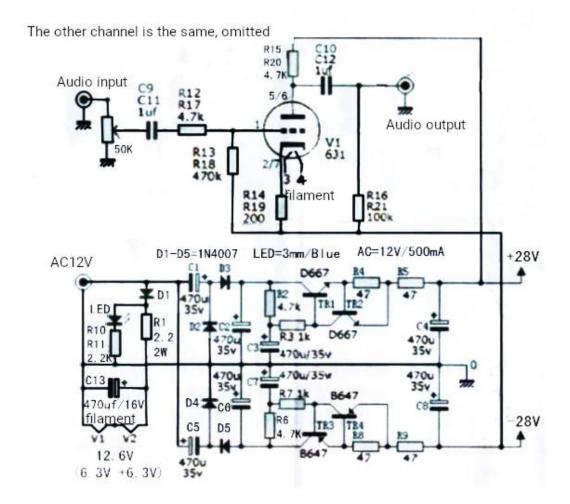
#### How to implement the headphone amplifier function:

Some friends hope that this product can directly drive headphones. This product is designed without a headphone amplifier function. Here is a solution. If the input audio is a signal that can drive headphones, then the output signal can also drive headphones, but the output sound is slightly smaller than the digital sound source. If friends can accept this method, then you can give it a try. After the sound source processing of this product, the sound of the headphones will be better. There will also be a sweet and delicate "bile smell".

# **Components list:**

Component Name		QTY.	Component Name		QTY.
R1	2.2 ohm 2W resistor	1	R13, R18	1/4W resistor 470K	2
R3, R7	1/4W resistor 1K	2	R16, R21	1/4W resistor 100K	2
R2, R6, R12, R15, R17, R20	1/4W resistor 4.7K	6	C1, C2, C3, C4, C5, C6, C7, C8	Electrolytic capacitor 470uf/35V	8
R4, R5, R8, R9	1/4W resistor 47 ohms	4	C9, C10, C11, C12	Film capacitor 1Uf/50V	4
R10, R11	1/4W resistor 2.2K	2	C13	Electrolytic capacitor 470uf/16V	1
R14, R19	1/4W resistor 200 ohms	2	D1 - D5	Diode 1N4007	5
TR1, TR2	Transistor D667	2	Electron tube 6J1		2
TR3, TR4	Transistor B647	2	7-pin electronic tube holder		2
2-digit RCA Lotus	2-digit RCA Lotus	2	LED 3MM		2
Potentiometer	B50K double potentiometer with switch	1	3.5 Power socket		1
PCB	РСВ	1			

#### Schematic:



Installation wiring diagram:

