

## LM317 adjustable regulator power supply kit

### Kit parameters:

Input voltage: AC17V or DC≤25V

Output voltage: DC1.5V-12 V continuously adjustable

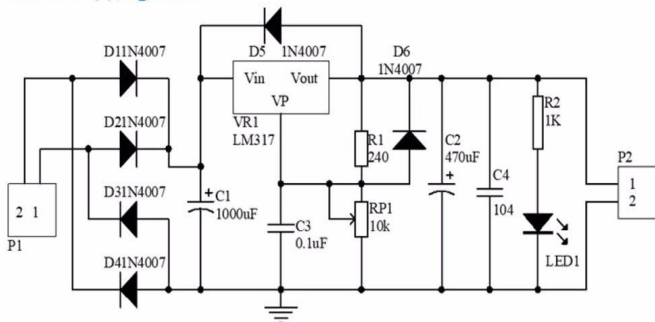
Output current: 1A

Board size: 59.5 x 31.5mm

The output voltage range of LM317 is 1.25V-37V(the designed output voltage range is 1.25V-12V). The maximum load current is 1.5A. It is very simple to use, only two external resistors to set the output voltage. In addition, its linear adjustment rate and load adjustment rate is better than the standard fixed voltage regulator LM317 built-in overload protection, safety zone protection and other protection circuits. In order to ensure the output performance of the voltage regulator, R should be less than 240Ω. The regulated voltage can be adjusted by changing the RP resistance value. D5 and D6 are used to protect LM317. Output voltage calculation formula : $U_o=(1+RP/R)*1.25$ ,LED1 as the voltage indicator, the higher the voltage, the brighter the LED.

Welding notes: resistors and ceramic capacitors are not divided into positive and negative poles, but should be welded according to the plate model, 4007 silver ring end corresponds to the white end of the board, LED graphics have a plane side for the negative pole (short pin), capacitor white side for the negative pole (short pin welding), input is not divided into positive and negative poles, output is divided into positive and negative poles.

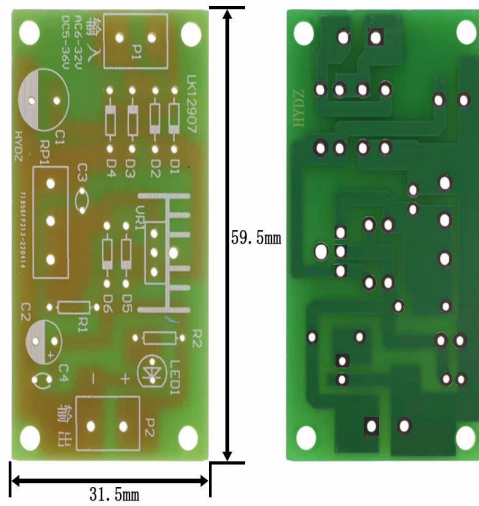
### Circuit diagram



### Component listing

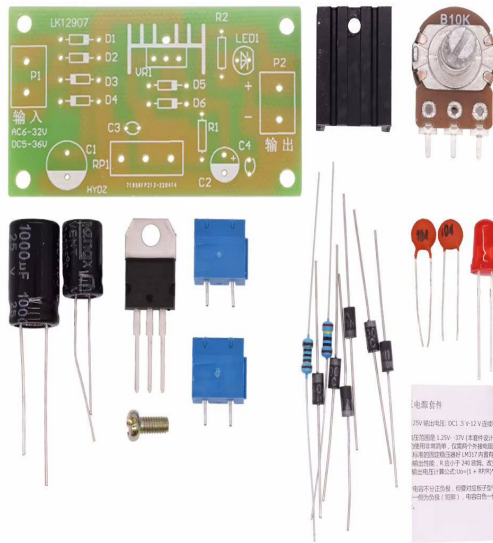
Mark number	Name	Specification	Quantity
D1-D6	Diode	1N4007	6
P1,P2	Terminal blocks	5.08MM 2P	2
R2	Into the color ring resistance	1K	1
R1	Into the color ring resistance	240	1
RP1	Single union potentiometer	10K	1
C1	Into the electrolytic capacitor	1000uF	1
C2	Into the electrolytic capacitor	470uF	1
C3 C4	Ceramics capacitors	0.1uF	2
LED1	Into the light emitting diode	Red 5MM	1
	Heat sink		1
	Screw	M3*6	1
VR1	The integrated circuit	LM317	1

Color ring resistance need according to the color ring resistance value of the table, or multimeter direct measurement



### Product Photos

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电源套件  
24V 输出电压 DC1.5V 12V 50mA  
额定功率 1.2W 1.2W 1.2W 1.2W  
输入电压 24V 24V 24V 24V  
输出电流 1.2A 1.2A 1.2A 1.2A  
输出电阻 100Ω 100Ω 100Ω 100Ω

