



# REGULATED DC POWER SUPPLY

## INSTRUCTION MANUAL

中文/English

1501T

1502T

1503T

1505T

1502A

1502S

1502DD

1502D+

1502USB

2003

303

303S

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Thank you for purchasing this product, please read this manual before using. After read it, please keep it for the future use.



## I. Overview

The BEST power supply series were designed for digital products like smart mobile phones, MP3 and so on. This high precision regulated DC power supply has functions like voltage test, on-off test, short circuit cut-off, current limiting protection, recovery after short circuit. With the general output terminals, it can apply to use in laboratories, schools and production lines.

## II. Parameter specification

Model	1501T	1502A	1502T	1502S	1502USB	1502DD	1502D+	1503T	1505T	2003	303	303S
Output Voltage(DC)	0V~15V		0V~15V /0V~5V	0V~15V						0V~20V	0V~30V	
Supply Voltage(AC)	220V/110V ± 10% 50/60Hz											
Working condition	Temperature: -10°C~40°C Humidity: < 90%											
Storage condition	Temperature: -20°C~40°C Humidity: < 80%											
Power stability	≤0.01% ±2mV											
Load Rated degrees	≤0.01% ±2mV ( I <sub>max</sub> < 1A )											



Ripple noise	$\leq 0.5\text{mvrms}$ ( 5Hz~1MHz ) $I_{\text{omax}} > 1\text{A}$								
Temp. Coefficient	$\leq 300\text{PPM}/^{\circ}\text{C}$								
Output Current	$\leq 1.5\text{A}$	$\leq 2\text{A}$	$\leq 0.5\text{A}/\leq 2\text{A}$	0~2A	0~2A	0~3A	0~1A 0~5A	0~3A	
Overload Current	$\geq 1.5\text{A}$	2A	0.5A/2A	2A	0~2A	3A	5A	0~3A	
Overload Current Setting	No				Accurate figures setting		No		Accurate figures setting
Remarks	-				When the rotary potentiometer setting current, the current display digital tube will automatically switch to the setting value. When the potentiometer no action time is over 3s, it will automatically switch to the loading current value.				

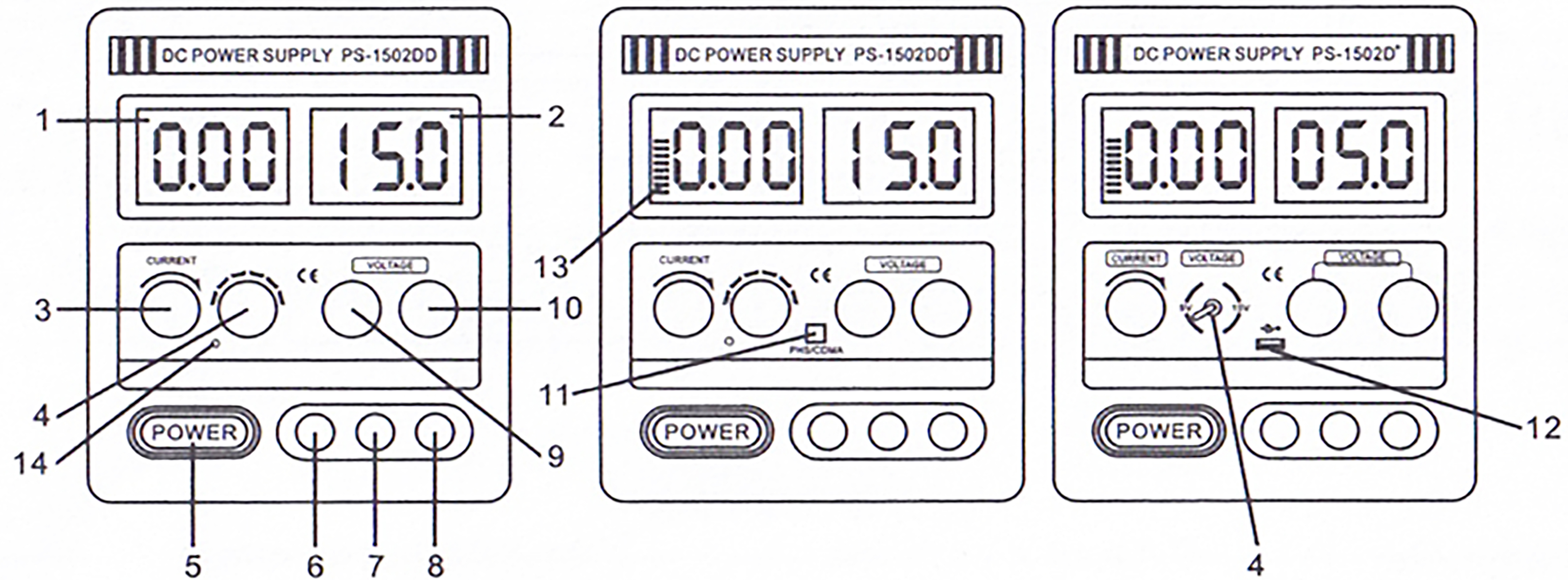
### III. Performance Comparison Table

Model	1501T	1502A	1502T	1502S	1502USB	1502DD	1502D+	1503T	1505T	2003	303	303S
Voltage display precision	0.1V	0.1V			0.1V							
Current display precision	20mA	50mA			0.01A			10mA	0.1A		0.01A	
Output voltage choice	0V~15V	0V~15V	0V~15V /0V~5V	0V~15V	0V~15V			0V~15V	0V~15V /0V~5V	0V~20V	0V~30V	
Mobile singal display	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PSP power supply function	No			Yes	No							
Alarm function	Yes											



## IV. Instruction manual

### Front panel introduce

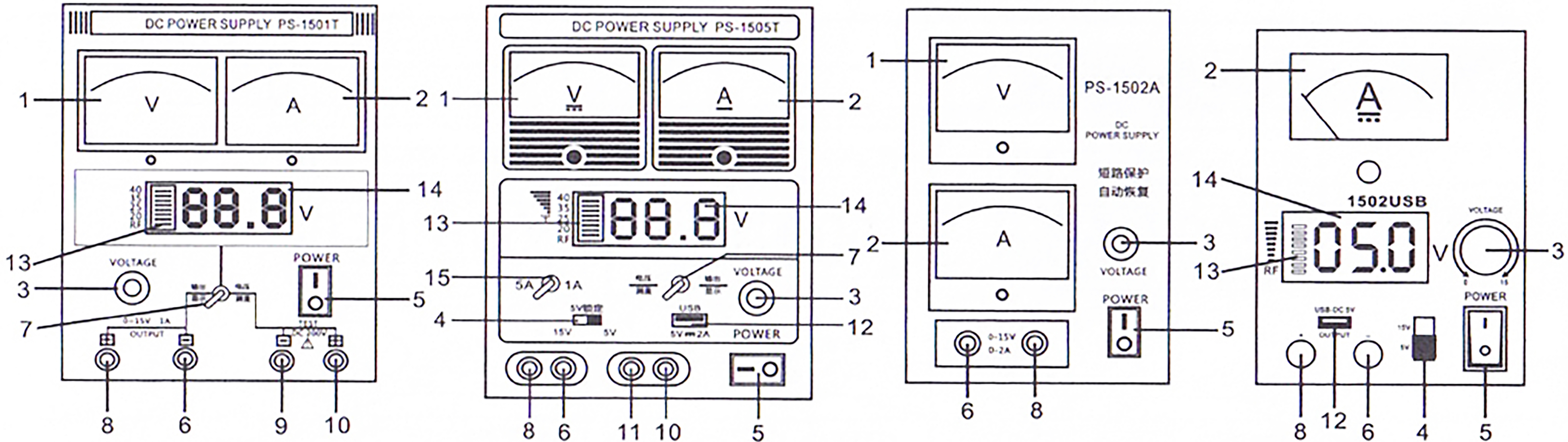


1. Digital ammeter
2. Digital voltmeter
3. Output current adjust
4. Voltage gears adjust
5. Power switch

6. Output cathode
7. Ground terminal
8. Output anode
9. Voltage fine tuning knob
10. Voltage coarse tuning knob

11. PHS/CDMA switch knob
12. USB interface(5V)
13. Mobile phone RF signal indicator
14. LED indicator





- 1. Analog ammeter
- 2. Analog voltmeter
- 3. Voltage adjust knob
- 4. Voltage gears adjust
- 5. Power switch

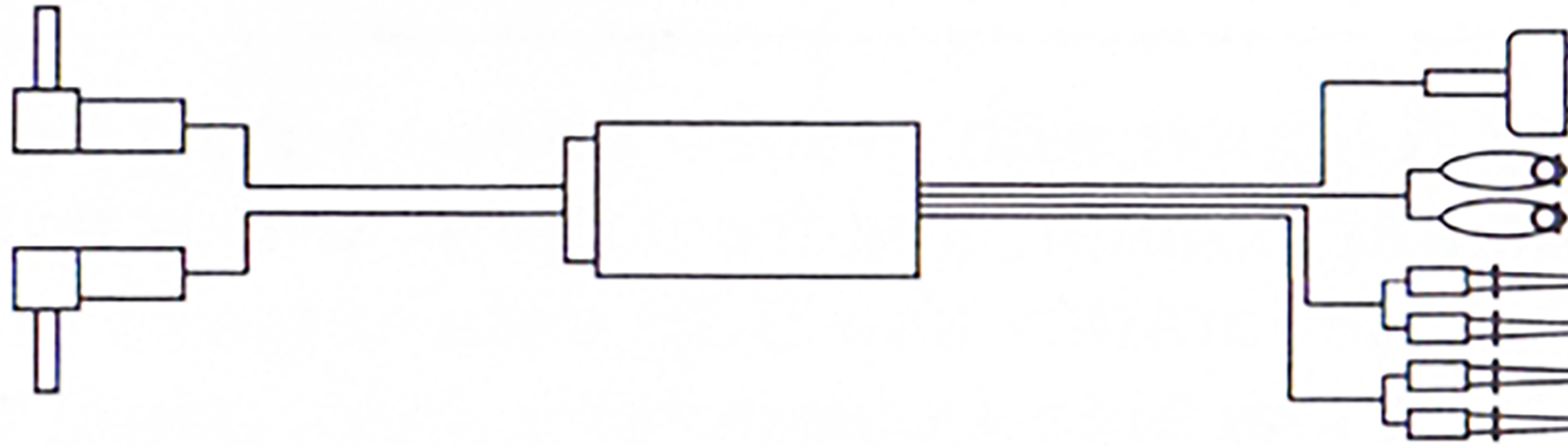
- 6. Output cathode
- 7. Output/Test mode switch
- 8. Output anode
- 9. Voltage test cathode
- 10. Voltage test anode

- 11. Ground terminal
- 12. USB interface(5V)
- 13. Mobile phone RF signal indicator
- 14. Digital voltmeter
- 15. Output current adjust switch

**NOTE:** Please do not use the ground terminal with the Output anode at the same time, or will lead to short circuit and less protection, and damage the circuit.



## Dedicated output connections



### Purpose

For maintenance of all brands mobile phones, and 3C digital products supply by low voltage ( less than 30V ). According to the mobile voltage setting the voltage and setting the overload protect current. Don't adjust to high to prevent too much current and burn the phone.

### V. Warning

1. Must set the output voltage and current properly before connect the mobile phone, do not adjust the voltage, current and convert the output pressure, so as not to burn the mobile phone.
2. Power supply are not allow at full load state for long time. Control your utilization rate of less than 60%. When place order, you should be based on the actual operating current includes an allowance.



## **VI. PSP power supply function**

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1502USB power supply function with mobile phone PSP power supply function, a square USB port on the back panel, and front panel with a flat-shaped USB port of the power supply, please separately use USB data cable to connect the rear panel square USB port, the host machine ( computer ), front panel flat-shaped USB port and the mobile phone, to complete PSP function. This time power supply is provided to the mobile phone PSP power supply and data transfer functions.

## **VII. Maintenance**

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1. Fuse replace:  
If the fuse was burn out and LED not shows, that DC power supply will stop working. Must be found out the fuse burn out reason, and then replace the fuse.
2. Don't working on the environment with a temperature over 40°C. The radiator is in the rear equipment, use back of the chassis should sufficient space to facilitate cooling.
3. The DC power supply precisely adjusted at the factory. To avoid effect the machine precision, please don't adjust the machine circuit parameter.