

Instruction Manual RXN & JPS

ZHAOXIN®

INSTRUCTION MANUAL

**RXN&JPS Series High Precision DC
Voltage-stabilized Power Supply**

- RXN-202A(D)
- RXN-302A(D)
- RXN-303A(D)
- RXN-305A(D)
- JPS -202D(G)
- JPS -302D(G)
- JPS -303D(G)
- JPS -305D(G)



(Please read carefully and thoroughly this instruction manual before operation, and keep it safely.)

1. Summary

RXN&JPS Series DC Voltage-stabilized Power Supply design for scientific study, product development, laboratory, junior college, electronic production line.

output voltage and output current between 0 to rated value are continuously adjustable. This type power supply have high precision, high reliability, protect overload protection circuit and is ideal choose for profession.

2. Parameter specification

2-1 Rated working condition:

Input voltage: AC 220V \pm 10% 50/60Hz
Working conditions: Temperature: -10°C to 40°C
relative humidity < 90%
Storage conditions: Temperature: -10°C to 40°C
relative humidity < 80%

2-2 Voltage-stabilizing working condition:

- (1) output voltage between 0 to rated value is continuously adjustable.
- (2) voltage stability $\leq 0.01\% + 2\text{mV}$
load stability $\leq 0.01\% + 2\text{mV}$
- (3) recovery time $\leq 100 \mu\text{s}$
- (4) ripple and noise $\leq 0.5 \text{ mVrms}$ (effective value)
- (5) temperature coefficient: $\leq 200\text{PPM}/^\circ\text{C}$

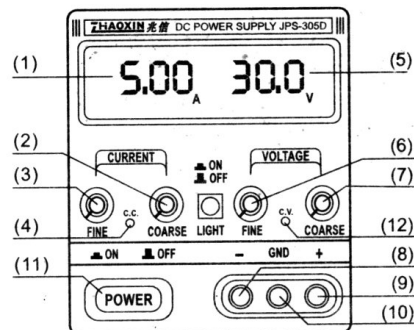
2-3 Current-stabilizing working condition:

- (1) output current between 0 to rated value is continuously adjustable.
- (2) current stability $\leq 0.2\% + 3\text{mA}$
load stability $\leq 0.2\% + 3\text{mA}$
- (3) ripple and noise $\leq 2 \text{ mArms}$ (effective value)

3、Panel features

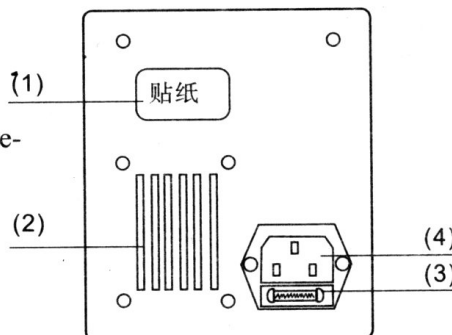
3-1 Font panel features

- (1) Current display
- (2) Output current coarse regulation
- (3) Output current fine regulation
- (4) Current-stabilizing pilot light(it is in the current-stabilizing condition when the light goes on.)
- (5) Voltage display
- (6) Output voltage fine regulation
- (7) Output voltage coarse regulation
- (8) Negative terminal of output(“-”)
- (9) Positive terminal of output(“+”)
- (10) Chassis earth terminal(“GND”)
- (11) Power switch
- (12) Voltage-stabilizing pilot light(it is in the voltage-stabilizing condition when the light goes on.)



3-2 Rear panel features

- (1) Paster
- (2) Radiator fan
- (3) Cartridge fuse seat
- (4) AC input terminal



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4、Operating Instruction

4-1 Matters needing attention:

- (1) AC input: AC 220V \pm 10% 50/60Hz
- (2) Insulation: The radiator in the rear of the machine should have enough space to dissipate heat. When inside temperature $\geq 45^{\circ}\text{C}$ radiator fan start to rotate to dissipate heat. Do not use the machine in a place where the temperature is over 45°C .
- (3) Overshoot Limit of Output Voltage: The voltage of the output terminals is not greater than the preset value when switching the source.

4-2 Method of operation:

- (1) Connect the machine to the mains supply. (AC 220V)
- (2) Put the switch of the power supply to the “ON” position, and the red pilot lamp will go on. (current coarse regulation knob and current fine regulation knob are not zero)
- (3) Regulate “Voltage” knob to the appropriate output voltage. (current coarse regulation knob and current fine regulation knob are not zero)
- (4) Connect the external load to the “+” and “-” output terminal.
- (5) When it is used to meet high requirement, the binding post of output “+” or “-” must be connected with “GND” binding post to reduce the output ripple voltage.

4-3 Current-stabilizing installation

- (1) Regulate the voltage to 2-5V arbitrary value. (current coarse regulation knob and current fine regulation knob are not zero)
- (2) Turn current coarse regulation knob and current fine regulation knob to 0 (turn it to end anticlockwise)

- (3) Short-circuit the wire to output positive negative poles
- (4) Turn current coarse regulation knob and current fine regulation knob clockwise to the appropriate current value
- (5) Remove the short-circuit wire and regulate voltage coarse regulation knob and voltage fine regulation knob to the appropriate voltage value, and now it is ready to be used.

5、Repair

5-1 Cartridge fuse replacement:

If the cartridge fuse is burnt out, the power supply will stop working. If such case occurs, its cause must be found and corrected. Replace it then by the fuse with the same type. Do not open the fuse box, unless problem occurs.

5-2 Repair:

If the interior of the power supply is burnt out, it must be repaired by professional service personnel or by the manufacturer through the distributor. Do not repair it by yourself for the safety reason.

6、Technical parameter

Type Paramter	RXN-202A(D) JPS-202D(G)	RXN-302A(D) JPS-302D(G)	RXN-303A(D) JPS-303D(G)	RXN-305A(D) JPS-305D(G)
Voltage output range	0-20V	0-30V	0-30V	0-30V
Current output range	0-2A	0-2VA	0-3A	0-5A
Current&Voltage display	A means gauge display, D means digital display G means LCD Light RXN means LED display JPS means LCD display			
Display precision	Gauge display is $\pm 2.5\%$, Digital display is $\pm 1\% \pm 1$ word			