

Adjustable DC Stabilized Power Supply

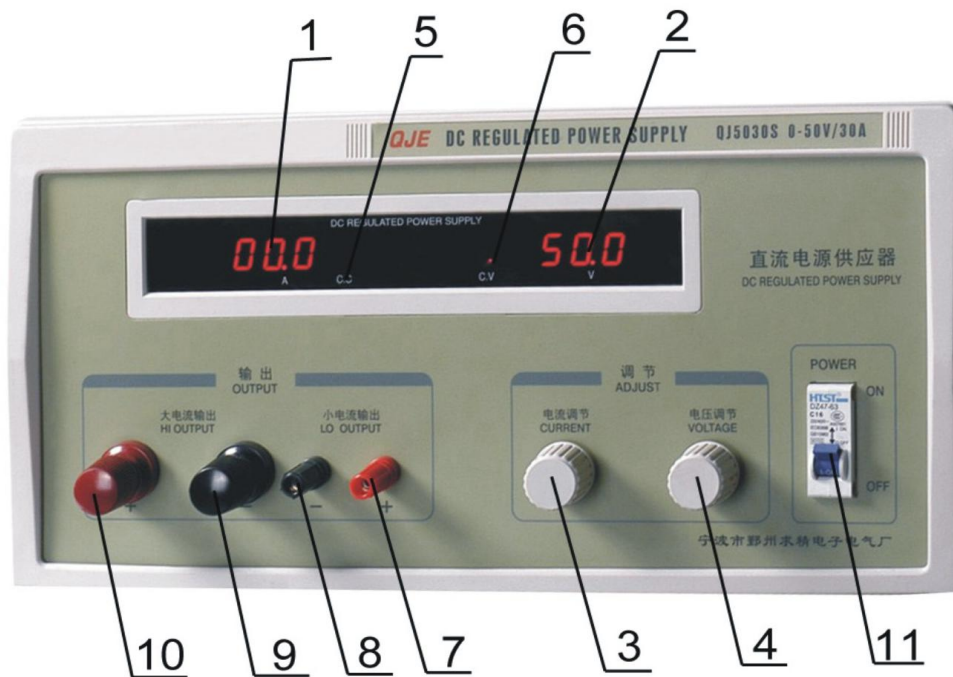
Manual Instructions

Brief

QJ3030S & QJ6020S & QJ6030S & QJ12005S & QJ15003S series of Adjustable DC Voltage and Current Regulated Power Supply is a kind of high precision DC Power Supply with output of continuously adjustable voltage and automatic switch between voltage regulation and current regulation. The output voltage is adjustable starting from Zero Volt and can be set arbitrarily in the rated range. When it is in the status of regulated current, the current regulated is continuously adjustable in the rated range.

1、 Specification

- 1、 1 Input Voltage: 220V $\pm 10\%$ 50Hz $\pm 2\text{Hz}$
- 1、 2 Output Voltage: 0-30V & 0-60V & 0-60V & 0-120V & 0-150V
- 1、 3 Output Current: 0-30A & 0-20A & 0-30A & 0-5A & 0-3A.
- 1、 4 Source Regulation: $1 \times 10^{-3} + 5\text{mV}$
- 1、 5 Load Regulation: $1 \times 10^{-3} + 5\text{mV}$
- 1、 6 Ripple & Noise: $\leq 1\text{mVrms}$
- 1、 7 Protection: Current-limiter Protection
- 1、 8 Voltage Display Accuracy: 1% +3d
- 1、 9 Current Display Accuracy: 2% +3d
- 1、 10 Working Environment: 0—+40°C Relative Humidity: <90%
- 1、 11 Working Hours: 8hours continuously working(Be sure to be less than 1.5hours when it get aged.)



2.Operation

2.1 The locations and functions of the knobs and switches on the panel

- (1) Current Display to display the output current.
- (2) Voltage Display to display the output voltage.
- (3) Current Regulation Adjustment Knob and to set the current-limit protection point.
- (4) Voltage Regulation Adjustment Knob, to adjust the output voltage value.
- (5) Indicator for Stable Current, when the unit is in the status of stable current, it lights.
- (6) Indicator for Stable Voltage, when the unit is in the status of stable voltage, it lights.
- (7) The positive terminal of output, to be connected with the positive end of the load----Normally for test, examine and repair, and be connected with external high precision measuring instrument.
- (8) The negative terminal of output, to be connected with the negative end of the load----Normally for test, examine and repair, and be connected with external high precision measuring instrument.
- (9) The negative terminal of output, to be connected with the negative end of the load---- Connected with the load of large power.
- (10) The positive terminal of output, to be connected with the positive end of the load----Connected with the load of large power.
- (11) Power Switch. Dial up to set the power “ON”; dial down to set “OFF”.

2、 Operation

2、 1 Before turning on the power, turn the knob (3) in clockwise to maximum. After the power is on, adjust (4) to get the target voltage. (4) is a multi-turn potentiometer and is convenient for getting the target voltage.

2、 2 Load Connection

Connect the positive end of the load to the positive terminal (7) or (10) and the negative end of the load to the negative terminal (9). After power is on, (1) displays the output current value and (2) displays the output voltage value. If the current is beyond the rated range and the Indicator for Stable Current is lighted, it represents that there's the overload or short-circuit. Please adjust the load to have the unit recovered.

2、 3 When the unit is used as a Constant Current Power Source, after turning on the power, please firstly turn the Voltage Regulation Adjustment Knob (4) clockwise to maximum, turn the Current Regulation Adjustment Knob (3) counterclockwise to minimum, then connect it with the load and turn the Current Regulation Adjustment Knob (3) clockwise to have the output current get to the target current value.

2、 4 When the unit is used as a Stable Voltage Power Source, please turn the Current Regulation Adjustment Knob (3) must be turned to maximum. The current-limit protection point can be set arbitrarily at the same time and the method is as follows: turn on the power supply, connect the unit with an appropriate load of variable resistance and adjust the resistance to make the output current equal to the value at the current-limit

protection point, then turn the Current Regulation Adjustment Knob (3) to make the indicator light at the critical status, the current-limit protection point is set all right.

3、 Precautions:

- 3、 1 After finishing the work, please put the unit in a place where it is dry and ventilation is good and keep it clean. If there will be no usage for a long time, please pull down the power plug before storing it.
- 3、 2 In the process of repair on this power supply, please be sure to disconnect it with the power.
- 3、 3 When this power supply is used with Wireless Power Emission Equipment, the displayed voltage and current is not stable. (disturbed by the electric wave of strong power) Please use low-resistance analog meter to watch or choose the (D) kind power supply with analog needles of similar specifications from our company.