



QJ3003T QJ3005T QJ5003T

User's Manual

Variable DC Power Supply, Linear Type

Models	QJ3003T	QJ3005T	QJ5003T
Voltage	0-30V	0-30V	0-50V
Current	0-3A	0-5A	0-3A
Load Regulation			
Voltage	≤0.01%± three words	≤0.01%± three words	≤0.01%± three words
Current	≤0.1%± three words	≤0.1%± three words	≤0.1%± three words
Line Regulation			
Voltage	≤0.01%± three words	≤0.01%± three words	≤0.01%± three words
Current	≤0.1%± three words	≤0.1%± three words	≤0.1%± three words
Setup Regulation			
Voltage	10mV	10mV	10mV
Current	1mA	1mA	1mA
Setup Accuracy(25 °C±5 °C)			
Voltage	≤0.5%± two words	≤0.5%± two words	≤0.5%± two words
Current	≤0.5%± two words	≤0.5%± two words	≤0.5%± two words
Ripple(20-20M)			
Voltage	≤1mVrms	≤1mVrms	≤2mVrms
Current	≤3mArms	≤3mArms	≤3mArms
Temp.Coefficient			
Voltage	≤150ppm	≤150ppm	≤150ppm
Current	≤150ppm	≤150ppm	≤150ppm
Read Back Resolution			
Voltage	10mV	10mV	10mV
Current	1mA	1mA	1mA
Read Back Temp.Coefficient			
Voltage	≤150ppm	≤150ppm	≤150ppm
Current	≤150ppm	≤150ppm	≤150ppm
Accessories			
User manual*1,;Power cord*1			
Weight and Dimension			
QJ3003T/QJ3005T/QJ5003T: 116mm(W)*180mm(H)*265mm(D)			
QJ3003T:4.8Kg QJ3005T/QJ5003T:5.3Kg			



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Features:

Product Type: Linear Transformer Type with Super Quiet Output

Input Voltage: 220V AC 50Hz,

Single Chip CPU for Precision Control and Display

The discrete potential meter gives reliable and precision adjustment

Four digits LED to show both Current and Voltage

Higher stability with low Drift for both Constant Current and Constant Voltage control

Lock key to avoid any damage to the device by mistake

Limited current protection, you can set up Protection Value where it is limited

Over Protection Current (OPC) feature to preset OPC, it will shut off the output when the current reaches the OPC value.

Over Heat Protection: If the cooling fan fails to run, the system will detect it and stop working to protect the system

Intelligent Heat Radiation: The fan speed changes with the output power value to lower the noise.

The power Supply will work under full load as described.

Safety Guide

Basic Safety Idea:

Do not block the air conduct on the Power supply

Do not damage the body before use the power supply

Do not discharge static of the power supply

Do not open the power supply without technicians

AC Input 110V AC t 60Hz

Fuses

Please double check the fuse before start the power supply

Use right fuse

Unplug the power supply when you change the fuse

Change the fuse before you know why the fuse is broken

The illustration of the changing fuse

Unplug the main power from outlet, take fuse out and insert a correct one as the figure shows.

Current and Voltage Display Panel

Current adjustment knob

More Info about the Set up

1. When the power is turned off, the computer will save the current set Voltage and current value, the current set values are in two definitions: Limited Current and Over Current Protection Current, they are saved in different memories; When in Constant Voltage Mode, CV LED lights on to keep the Voltage constant, The current display changes by the resistance of the load; When in Constant Current mode, CC LED lights on, to keep the current constant, but the Voltage changes by the resistance of the load.
2. If the load is too small, or very close to short circuit, please turn of the OCP function, because the OCP will detect a large current that is over the set OCP current, it will shut off the power supply automatically, the power supply will not be able to work at all. Or you can set the Constant Current Value smaller than the OCP current value, the power supply will work properly.
3. If the fan is not running after the power is turned on, please check the fan and make sure it would not get much heat to burn the power supply.

QJ3005T Set Up Procedures Voltage Knob Vs Current Knob

1. Set Up Out-Put Voltage

Turn on the main power, the upper displays the voltage, Press the Voltage Button, the 10th Digits LED blinks, Tune the Voltage Knob to set the voltage to 10thV/20thV30thV;

Press the Voltage Button again to set the single digit, the blinking LED can be set up by turning the voltage Knob, from 0-9 V, then do the same to set up the digits after the decimal point,3 seconds after, the LED will stay stable, the set-up is done. The Maximum value it 32.00V

2. Constant Current Set up

Turn on the main power, Press the current button, the Single digits blinks, turn the Current Knob, set from 1 A– 5A,Press the current button again, the digits after decimal blinks, turn the Current knob to set from 0-9,do the same to the other digits to set each digit. 3 seconds after, the LED stops blinking, the Constant Or Current Limitation is set up. The maximum set for current is 5.200A When the current goes over the limit, the buzzer will sound.

3. Over Current Protection Set Up

Turn on the main power, Press and hold the Voltage Button for 3 seconds, the LCD will show ON or OFF, by turning the Voltage Knob, you can change it. When it shows ON, you will see the OCP (Over Current Protection) on the right corner of the LCD , with this OCP shows on, the power supply is under Current Protection mode, the system will automatically shut off when the current reaches the set current value, the power supply has to be turned off to restart , otherwise, it is locked. If you need to change the set current, refer to the above clause 2. After set up the Current, Press and hold the Voltage button for 3 seconds, then the limitation set up is done.

When the OCP is not showing up, it means the power supply is not in OCP mode.

4. To release from the Locked Mode

Turn on the main power, Press and hold the current button for 3 seconds, right down corner will show LOCK LED on, at this mode, the output is set at output LOCK mode, output Voltage is locked and can not be adjusted. If you want to release this lock, press and hold the Current button again for 3 seconds, the lower corner LOCK disappears. The LOCK is released.

Overview

Refer to the illustrations on page 2 of this manual.

1	power button	8	panel lock indicator
2	current adjustment dial	9	voltage adjustment dial
3	Ampere meter	10	earth (ground) terminal, connected to the chassis and earth pin of the power supply socket
4	Volt meter Displays the voltage limit.	11	output terminals
5	over current protection indicator	12	fan
6	constant current indicator Light up when the device is in constant current mode.	13	power supply socket
7	constant voltage indicator Light up when the device is in constant voltage mode.	14	fuse holder

