Before using the power supply, please read the user manual carefully.

Warning: Do not connect any load to the power supply before it's turned on. Likewise, make sure to disconnect the load before shutting down the power supply. Damages to the power supply can happen if you do not follow this. Such damages are not under warranty.

Warning: If you are running inductive load like magnetic coils, DC motors, stepper motors, etc., make sure to change the voltage/current slowly, and NEVER turn the power supply on or off with a inductive load connected!

I Summary

This serial single output switch power supply is a kind of DC regulated power supply.

It has high efficiency, stronger load ability, and long continuous working period characteristics. Also it has perfect over temperature, short-circuit and current limited protections. It can act as constant voltage as well as constant current DC power supply. This series of power supplies are first choices for scientific and research institutions, colleges, factories units ect. See the models from the table1.

Single output switch power supply

Model	Output Voltage	Output Current	Display	Display Accuracy
LW-1510KDS	0-15V	0-10A	3LED display	±1%±1
LW-1520KDS	0-15V	0-20A	3LED display	±1%±1
LW-3010KDS	0-30V	0-10A	3LED display	±1%±1
LW-6402KDS	0-64V	0-2A	3LED display	±1%±1
LW-6403KDS	0-64V	0-3A	3LED display	±1%±1
LW-6405KDS	0-64V	0-5A	3LED display	±1%±1
LW-1001KDS	0-100V	0-1A	3LED display	±1%±1
LW-1002KDS	0-100V	0-2A	3LED display	±1%±1
LW-1003KDS	0-100V	0-3A	3LED display	±1%±1

(Table 1)

II Technical parameters

1. Rated working condition and dimensions

Input voltage: 220V/50Hz

Working condition: Temperature: -10^{0}C to 40^{0}C

Relative humidity: <80%

Storage condition: Temperature:-20^{0}C to 80^{0}C

Relative humidity: <70%

2. Power effect: CV≤0.05%+1mV

CC≤0.05%+10mA

3. Load effect: CV≤0.1%+5mV

CC≤0.1%+10mA

4. Ripple & noise: CV≤10mV r.m.s.

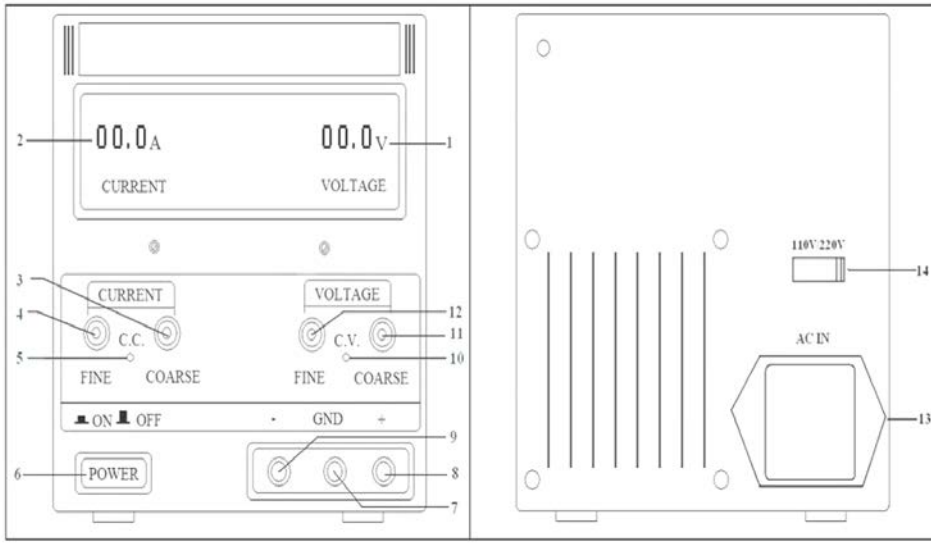
CC≤20mA r.m.s.

5. Display modes and accuracy

3LED digital display

Digital accuracy: ±1%±1 digit

III Panel control and Indicators



1. Digital voltmeter：Display output voltage (V)

2. Digital ammeter：Display output current (A)

3. Current coarse regulation knob: Coarsely regulate the value of output current.

4. Current fine regulation knob: Finely regulate the value of output current.

5. Current regulation indicator light: The indicator light is on when the power supply is under the condition of current regulation.

6. Power supply switch

7. “GND” terminal: Ground terminal (green)

8. “+” output terminal: Positive polarity (red)

9. “-” output terminal: Negative polarity (black)

10. Voltage regulation indicator light: The indicator light is on when the power supply is under the condition of voltage regulation.

11. Voltage coarse regulation knob: Coarsely regulate the value of output voltage.

12. Voltage fine regulation knob: Finely regulate the value of output voltage.

13. Power socket: Input AC power source, fuse is under the input interface.

14. Select switch of input voltage: AC input should be 220V ± 10% 50Hz or 110V ± 10% 60Hz if the input voltage is wrong, the power supply can not work normally, even it will lead to serious result.

IV Instruction

1. Matters need attention

(1) AC input: Please make sure the input voltage should be in accordance with the select voltage. For example, when the select voltage is 220V (see14), the input voltage should within 198-242V.

Working condition: There should be enough space for cooling of the power supply. When the temperature inside of power supply is over 75^0C, the power supply will stop working. After the inside temperature is lower than protection value, the power supply will come to work again.

2. Operating procedure

(1) Determine the correct input voltage (110V or 220V, there is a selective switch in the back panel).

(2) Plug in power

(3) Constant voltage setting: the knobs (3) and (4) should be clockwise regulated to the maximum. Regulate the coarse and fine voltage regulation knobs (11) and (12) to set the necessary voltage value, and then connect the load to the “+” and “-” output terminal. The Voltage regulation indicator light will be on, at this moment the power supply is working under the condition of constant voltage.The output voltage remains the same, while the output current changes with the load. When used in places with high demand, make sure one of the output terminal “+” or “-” must reliably connects with post head “GND” so as to reduce output ripple voltage.

(4) Constant current setting: clockwise regulate the coarse and fine voltage

regulation knobs (11) and (12) to set the necessary voltage value, regulate the knobs (3) and (4) to the minimum, and then connect the load to the “+” and “-” output terminal. Then clockwise regulate (3) and (4) to the necessary current value, the Current regulation indicator light will be on, at this moment the power supply is under the constant current. That is the current remains the same, while the voltage changes with the load.

V Maintenance

1. Replacement of protective tube: If the protective tube burn out, the power will stop working. Replace it with equivalent protective tube. The crisper should not be opened unless something goes wrong.

2. The power supply is precisely regulated before it goes out. Please do not open the power supply unless you are a professional. If there is something wrong, please contact with dealer. Do not repair the power supply by yourself as there is high voltage circuit in the power supply.

VI attachment

User manual	1
Power cord	1