

Digital-Control DC Power Supply

KD3000-6000 Series User Manual

KORAD

User Manual

Main Features

Low noise: cooling fan controlled by

Heatsink temperature;

Constant voltage / constant

Digital panel control

4 digits display

Software calibration

Over Current Protection

Button lock function

Specifications

Note: The specifications below are tested under the conditions of temperature 25°C±5°C and the warm-up for 20 minutes.

Models	KD3003D	KD3005D	KD6003D
Voltage	0-30V	0-30V	0-60V
Current	0-3A	0-5A	0-3A
Load Regulation			
Voltage	≤0.01%+2mV	≤0.01%+2mV	≤0.01%+2mV
Current	≤0.1%+5mA	≤0.1%+10mA	≤0.1%+5mA
Line Regulation			
Voltage	≤0.01%+3mV	≤0.01%+3mV	≤0.01%+3mV
Current	≤0.1%+3mA	≤0.1%+3mA	≤0.1%+3mA
Setup Resolution			
Voltage	10mV	10mV	10mV
Current	1mA	1mA	1mA
Setup Accuracy (25°C±5°C)			
Voltage	≤0.5%+20mV	≤0.5%+20mV	≤0.5%+30mV
Current	≤0.5%+5mA	≤0.5%+10mA	≤0.5%+5mA
Ripple(20-20M)			
Voltage	≤1mVrms	≤2mVrms	≤1mVrms
Current	≤3mA _{rms}	≤3mA _{rms}	≤3mA _{rms}
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			
KD3003,KD3005,KD6003:110mm(W)*156mm(H)*260(D) KD3003x4Kg,KD3005x4.8Kg			

SAFETY INSTRUCTION

Safety Guidelines

- Do not block or obstruct the cooling fan vent opening.
- Avoid severe impacts or rough handling that leads to damage.
- Do not discharge static electricity .
- Do not disassemble unless you are qualified as service personnel.

AC INPUT



- AC Input Voltage: 110V / 120V / 220V / 230V , 50 / 60 Hz
- Connect the protective grounding conductor of the AC power cord to an earth ground, to avoid electrical shock.

Operation Environment

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- Location: Indoor, no direct sunlight, dust free, almost non-conductive pollution (note below)
- Relative Humidity: < 80%
- Altitude: < 2000m
- Temperature: 32 - 104°F

Storage environment

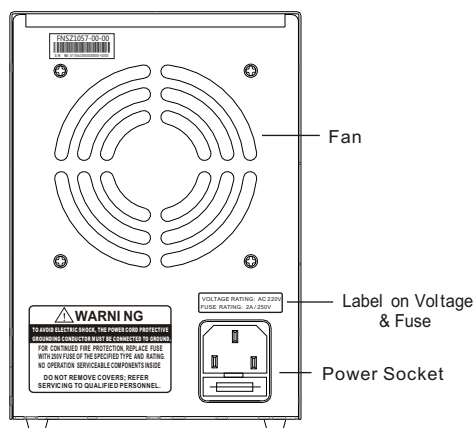
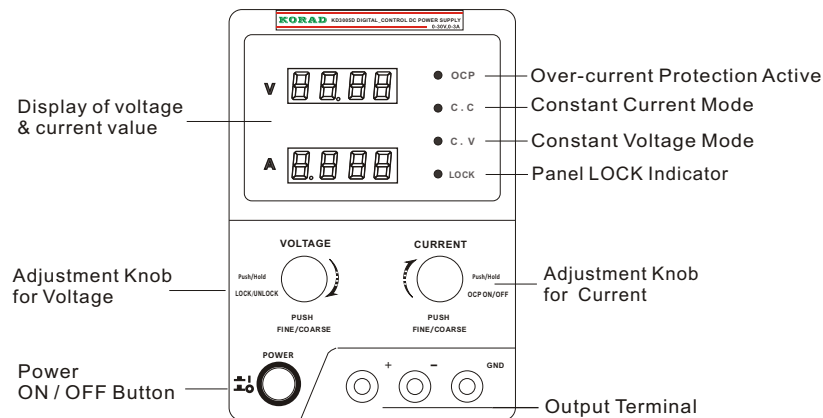
- Location: Indoor
- Relative Humidity: < 70%
- Temperature:-10-70°C

FUSE

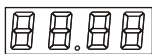


Model	110/ 120 VV	220/230 V
KD3003	T4A/250 V	T2A/250 V
KD3005	T5A/250V	T3A/250 V
KD6003	T5A/250V	T3A/250 V

- To ensure fire protection, replace the fuse only with the specified type and rating.
- Disconnect the power cord before fuse replacement.
- Make sure the cause of fuse blowout is fixed before fuse replacement.



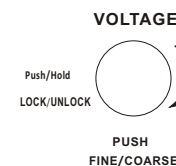
DISPLAY

Voltage level **V**  Voltmeter displays the setup value of output voltage .

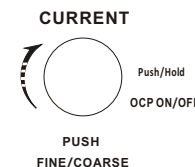
Current level **A**  Displays the setup value of output current .

Condition Indication

- **OCP** OCP indicator
- **C . C** C.C is constant current indicator. When powersupply is in the mode of constant current, his light is on.
- **C . V** C.V is constant voltage indicator. When power supply is in the mode of constant voltage, this light is on.
- **LOCK** Panel LOCK Indicator






Voltage Adjustment Knob: Push the voltage adjustment knob and then the voltage meter will flicker, when voltage output can be changed by adjusting the knob. Then the resolution of the knob rotation can be changed. Push it to change the resolution of voltage adjustment; press and hold for 3 seconds to lock the front panel and then press again and hold for 3 seconds to unlock the panel.




Current Adjustment Knob: Push the voltage adjustment knob and then the voltage meter will flicker, when voltage output can be changed by adjusting the knob. And push the knob again when the meter flickers, then the resolution of the knob rotation can be changed. press and hold for 3 seconds to start OCP mode, where the output will be cut off when the output current reaches the set value. In the OCP mode, rotate this knob to recover the output. Press and hold for 3 seconds again and then the OCP function will be closed.

POWER

 On / Off main power.

  outputs voltage and current.

 Connects the ground (earth) terminal.