Digital-Control DC Power Supply

KD3000-6000 Series User Manual

KORAD User Manual

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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

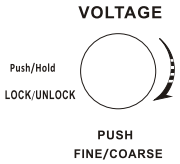
Specifications

Note: The specifications below are tested under the conditions of temperation 25℃+-5℃ 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℃+-5℃)			
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	≤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			
KD3003,KD3005,KD6003:110mm(W)*156mm(H)*260(D) KD3003x4Kg,KD3005x4.8Kg			

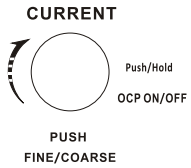
Mode 2

In mode 2,rotate the adjustment knobs to adjust the voltage and current values. The default of the voltage initial settings is 1v while that of the current is 100mA. The voltage and current levels can be changed by pushing the knobs.



Operation of LOCK Function

press and hold for 3 seconds to lock the front panel and then press again and hold for 3 seconds to unlock the panel.



Operation of Over Current Protection

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

Power Switch and Output Terminals

On / Off main power.

outputs voltage and current.

Connects the ground (earth) terminal.

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 Inut 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

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

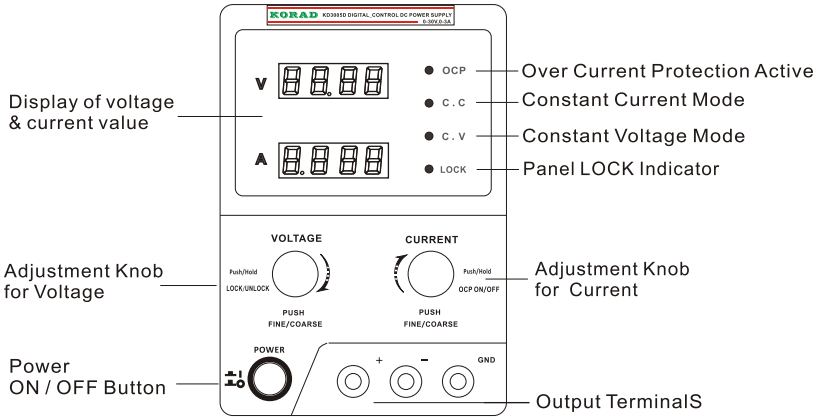
Storage environment

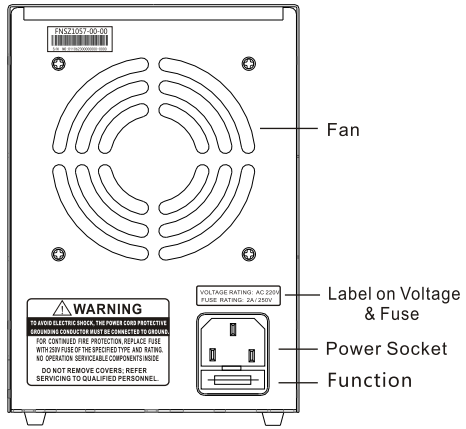
- Location: Indoor
- Relative Humidity: < 70%
- Temperature:-10-70℃

FUSE ⚠

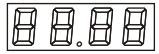
Model	110/120VV	220/230V
KD3003	T4A/250V	T2A/250V
KD3005	T5A/250V	T3A/250V
KD6003	T5A/250V	T3A/250V

- 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.

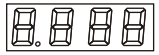




DISPLAY

Voltage level **v** 

Voltmeter displays the setup value of output voltage .

Current level **A** 

Displays the setup value of output current .

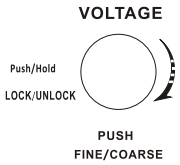
Condition Indicators - LED Panel Lights

- **OCP** Over Current Protection indicator. When the power supply is in OCP mode this light is on.
- **C.C** C.C indicates constant current. When the power supply is in constant current mode, this light is on.
- **C.V** C.V indicates constant voltage. When the power supply is in constant voltage mode, this light is on.
- **LOCK** Panel LOCK Indicator

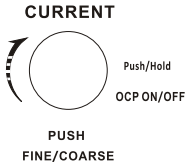
Voltage and Current Adjustment Knob Operation

There are 2 adjustment modes for the voltage and current levels, that is, Mode 1 and Mode 2. Mode 1: Before setting, push the knobs to adjust the voltage and current levels. Mode 2: adjust directly, no need to push the knobs. And these 2 modes can be shifted by pushing the voltage adjustment knob and the current adjustment knob at the same time and holding for 2 seconds.

Mode1



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;



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 flikers, then the resolution of the knob rotation can be changed.
Will be closed.