KD3300 DC Power Supply Series

User Manual

KORAD User Manual

DONGGUAN KORAD TECHNOLOGY CO., LTD.
Address: F9, Building D2, Kechuang Center, Songshan Lake Intelligent Valley,
No. 7 Yanhe North Road, Liaobu Town, Dongguan City, Guangdong Province.
Tel: +86-769-81111584 Fax: +86-769-81111804
E-mail: krissy@koradtechnology. com
www. koradtechnology. com
www. korad. com. cn

Main Features

10MV/1mA high resolution

Low ripple & Low noise

Series and parallel functions

Cooling fan controlled by heatsink temperature

Constant voltage/constant current

Digital panel control

4 digits display

Software calibration

Button lock function

Output ON/OFF control

standard interfaces: USB, RS232 & LAN (only for KD3303P &KD3305P)

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 / 60Hz
- Connect the protective grounding conductor of AC power cord to an earth ground, to avoid the electrical shock.

Operation Environment

- Location: Indoor, no direct sunlight, dust free, almost non-conductive pollution(note below)
- Relative Humidity: <80%
- Altitude: <2000m
- Temperature: 0-40℃

Storage environment

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

FUSE



Model	110/120V	220/230V
KD3303	T6A/250V	T3A/250V
KD3305	T10A/250V	T5A/250V

Input current: KD3303D - 2.11A, KD3303P - 2.12A (220V)
KD3305D - 3.22A, KD3305P - 3.23A (220V)

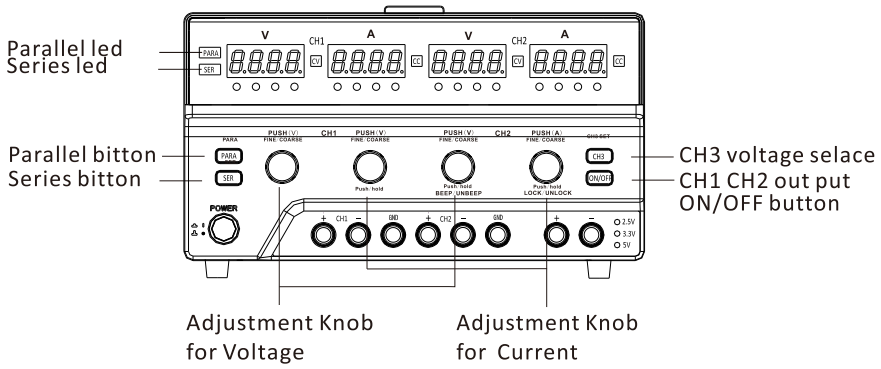
- To ensure fire protection, replace the fuse only with the specified type and rating.
- Disconnect the power cord before fuse replacement.
- Make sure the cause of fuse blowout is fixed before fuserepla cement.

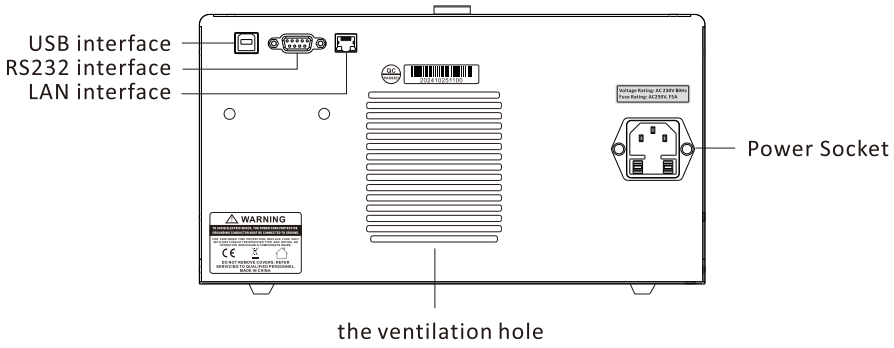
Reaction Time		
Voltage Rise Voltage Drop	≤100mS ≤100mS (10% Rated load)	≤100mS ≤100mS (10% Rated load)
Load Regulation of Parallel		
Voltage	≤0.1%+0.1V	
Load Regulation of Series		
Voltage	≤0.1%+0.1V	
CH3 Specifications		
Voltage Range	5V/3.3V/2.5V	
Current Range	3A	
Voltage Accuracy	±50mV	
Load Regulation	±50mV	
Accessories supplied		
User manual 1 PC, power cord 1PC		
Weight and Dimensions(mm)		
250(W)*150(H)*378(D) KD3303D x 7.7kgs, KD3303P x 7.8kgs, KD3305D x 10.4kgs, KD3305P x 10.5kgs		

Specifications

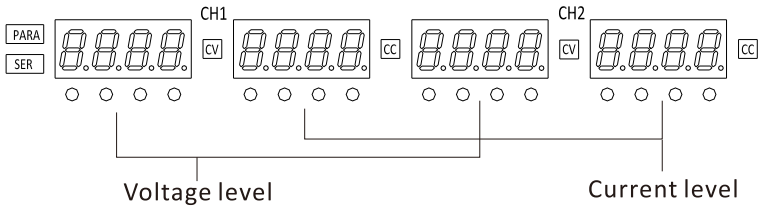
Note: The specifications below are tested under the conditions of temperation 25℃+-5℃ and the warm-up for 20 minutes.

Models	KD3303D/P	KD3305D/P
Voltage Range	0-30V	0-30V
Current Range	0-3A	0-5A
Load Regulation		
Voltage Current	≤0.01%+3mv ≤0.1%+5mA	≤0.01%+5mv ≤0.1%+10mA
Line Regulation		
Voltage Current	≤0.01%+3mv ≤0.1%+3mA	≤0.01%+3mv ≤0.1%+3mA
Setup Resolution		
Voltage Current	10mV 1mA	10mV 1mA
Setup Accuracy(25℃+-5℃)		
Voltage Current	≤0.5%+20mV ≤0.5%+5mA	≤0.5%+20mV ≤0.5%+10mA
Ripple(20-20M)		
Voltage Current	≤1mVrms ≤3mArms	≤2mVrms ≤3mArms
Temp. Coefficient		
Voltage Current	≤150ppm ≤150ppm	≤150ppm ≤150ppm
Read Back Resolution		
Voltage Current	10mV 1mA	10mV 1mA
Read Back Temp. Coefficient		
Voltage Current	≤150ppm ≤150ppm	≤150ppm ≤150ppm





DISPLAY



1.The adjusting method of voltage and current on the CH1 and CH2:

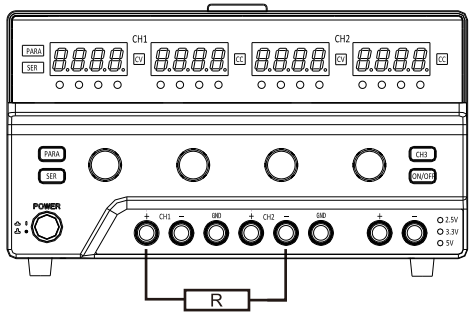
press the adjusting knob of CH1 or CH2 and then the according digit indicator will blink. At this time, rotate the knobs and then the voltage or current will increase or decrease progressively on the adjusted digit. Continuously press the knobs and the adjusted digit will be changed, meanwhile, the corresponding digit indicators will light on and blink.

The adjusting method of voltage the CH3:

Press and hold the button CH3 for 2 seconds, then the voltage on CH3 will switch to another one in this cycle 2.5V, 3.3V and 5V. And the according indicators will light on as well.

2. The Series and Parallel Operation

1. The Series Operation: Press and hold the button SER for 1 seconds to be in the series mode. When the SER indicator on the display lights on, it means the power supply is in the series mode now. At this mode, CH2 is the master operation while CH1 is the slave operation, when the CH1 operation is shielded. At this time, press the button ON/OFF and then the output can be turned on or off. And the output connection is as shown in the figure:



Max voltage in series: KD3303D/KD3303P/KD3305D/KD3305P - 60V
Max current in series: KD3303D/KD3303P - 3A
KD3305D/KD3305P - 5A

2. The Parallel Operation: Press and hold the button PARA for 1 seconds to be in the parallel mode. When the PARA indicator on the display lights on, it means the power supply is in the parallel mode now. At this mode, CH2 is the master operation while CH1 is the slave operation, when the CH1 operation is shielded. At this time, press the button ON/OFF and then the output can be turned on or off. And the output connection is as shown in the figure:

