SWITCHING DC POWER SUPPLY

OPERATION MANUAL

INDEX

1. Introduction …… (1)

2. Model type …… (2)

3. Specifications …… (3)

3. Front panel & operations ……(4-6)

4. Accessories & Maintenance ……..…….(7)

1、INTRODUCTION

300 series power supply is a newly developed model with high stability and accuracy. Its unique block-like structure makes it easily to be extended from single channel to multi-channel. It is an ideal instrument for R&D departments, colleges and factories.

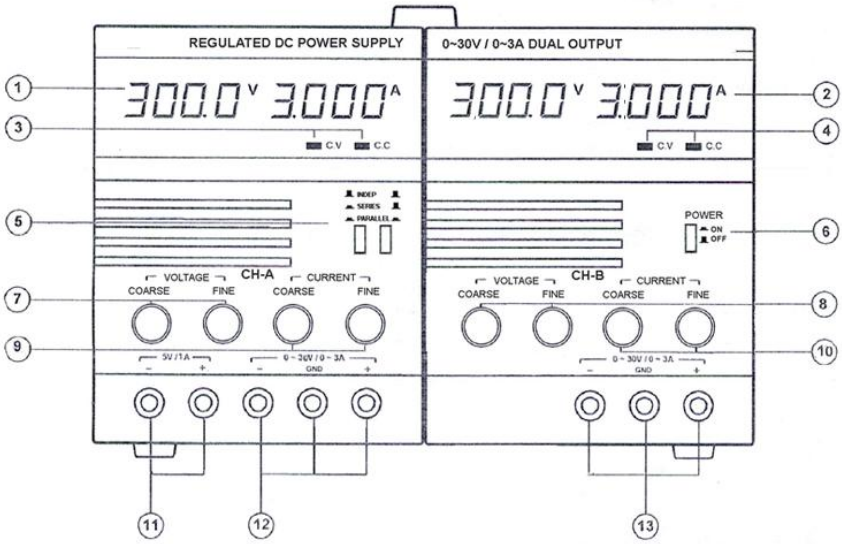
2、MODEL TYPE

Model	Voltage 0~30V	Voltage 0~60V	Current					Fixed output 5V/2A	Dual output	Spot
			0~2A	0~3A	0~5A	0~10A	0~20A			
302A	●		●							●
303A	●			●						●
305A	●				●					●
3010A	●					●				
3020A	●						●			
302B	●		●					●		●
302B	●			●				●		●
302B	●				●			●		●
302DII	●		●					●	●	●
303DII	●			●				●	●	●
305DII	●				●			●	●	●
3010DII	●					●		●	●	
3020DII	●						●	●	●	
6010DII		●				●		●	●	
6020DII		●					●	●	●	
605D		●			●					●

2.1 specifications

Model	Dual output models	Single output models
Variable Output:		
Output Voltage	0~30V continuously adjustable	
Output Current:	0~ specified value continuously adjustable	
Source Regulation	≤0.01% +3mV	
Load Regulation	≤0.01% +3mV	
Ripple & Noise	≤ 20mVrms	
Tracing Error	0.5% +10mV	---------
Display	3 or 4 digit LED	3 or 4 digit LED
Display Error	≤0.5% + 1digit	
Fixed Output		
Output Voltage	5V	
Output Current:	2A	
Source Regulation	≤5mV	
Load Regulation	≤0.01%+ 3mV	
Ripple & Noise	≤ 20mVrms	
Others		
Line Power Supply	220V±10%	
Operating Ambient	Temperature：0℃-40℃，Humidity：≤90%RH	
Dimension	240X150X270(mm)	120X150X270(mm)
Weight	Approx. 8kg	Approx. 5kg

3、FRONT PANEL & OPERATION



Panel description：3 or 4 digit display

Left "B" series

right "A series"

overall "DII" series

3.1 Functions of the controls on front panel

(1)(2) 3 or 4 digit LED display.

(3)(4) CV and CC indicators. If the current (calculated by Ohm's law) through the load is lower than the preset current value of the power supply, CV indicator lights, the power supply is working in Constant Voltage status. Otherwise, CC indicator lights, the power supply is in Constant Current status. And the actual current though the load is limited to the preset current value.

(5) Independent/Series/Parallel Controls. When the power supply is set in series mode, two channels are connected serially. Voltage of Channel A will follow that of Channel B. Then a pair of same value and different polarity voltage is acquired, and you can get a doubled voltage from positive port of CH-B and negative port of CH-A. When the power supply is set in parallel mode, two channels are connected parallel. And you can get a doubled current from either port of two channels.

(6) Power switch.

(7)(8) Voltage adjustment. If in tracking state, the switches of channel A are not available.

(9)(10) Current adjustment, to set constant current value.

(11) Output port No.1, fixed 5V/1A output.

(12) Output port No.2, it is controlled by switch (7) and (9).

(13) Output port No.3, it is controlled by switch (8) and (10).

3.2 Operation

Connection of output ports:

Port No.2 and No.3 is in floating mode, you can get different polarity voltage by connecting positive or negative terminal on both sides to the ground-terminal in the middle. Port No.1 is a fixed output. Its negative terminal had been grounded internally.

Voltage Setting:

Adjust voltage knob to get desired voltage.

Current Setting:

Turn current control knob CCW to get a small value of current, short cut output port, adjust current knob to get a desired value.

Serial Usage:

Select series mode with Buttons (5), Use "+"end of port no.3 and "-" end of port no.2 as output terminal. Output voltage is the summation of channel A and channel B.

Parallel Usage:

Select series mode with Buttons (5), Use either one of output terminals of two channels, a doubled current can be acquired.

4、ACCESSORIES & MAINTENANCE

Power Cord	1pc
User's Manual	1pc
Fuse	1pc

4.1 Caution

1、If there is no problem with the line power and CV indicator dose not light after power on, the fuse probably was broken. Power off and disconnect the power cord, and change the fuse.

2、When working in Constant Voltage state，if output voltage lower than what was preset and CC indicator lights, the instrument automatically turn to Constant Current state. You must check the load or increase the output current.

3、When working in Constant Voltage state, if output current lower than what was preset and CV indicator lights, the instrument automatically turn to Constant Voltage state. You must check the load or increase the output voltage.

4、When the instrument is unstable in Constant Voltage state，Probably the line voltage is under 90% of the rated value. If the problem is not caused by the line voltage, contact your nearest dealer.