Manual

1. Instrument introduction

DPX6012S, DPX3203S, DPX6005S (optional) CNC step-down power supply is a full CNC programmable step-down power supply, with small size, high power, high efficiency, stable operation; 1.8-inch color liquid crystal display, display data is comprehensive and clear; the power supply is controlled by advanced microprocessor. It can accurately adjust and display voltage and current; use button and knob to operate, set parameters are convenient and fast, and can communicate with computer through the host computer to adjust the output voltage and current and monitor the output voltage and current in real time, which is very suitable for debugging, maintenance and experiment. power supply.

2. Instrument characteristics:

Advanced microprocessors allow precise adjustment and display of output voltage and current.

With 1.8-inch color LCD display, real-time display of voltage, current, capacity, time and power supply.

It is convenient and quick to adjust and read parameters with buttons and knobs, especially when saving and recalling parameters.

Can set the Output overvoltage (Ovp), overcurrent (Ocp), and overpower protection (Opp) , support turn off the output when the output exceeds the set value.

Comes with cooling fan ensures that the power device will not be damaged by overheating.

Constant voltage, constant current output.

With input reverse connection protection, it can prevent damage to the power supply due to reverse connection.

3. Technical indicators

Specification	DPX6012S (With communication)	DPX3203S (With communication)	DPX6005S (With communication)

Input voltage range	6-75V	6-62V	6-40V
Output voltage adjustment range	0-62V (Input needs to be greater than the output)	0-60V (Input needs to be greater than the output)	0-32V (Input needs to be greater than the output)
Output current adjustment range	0-12A	0-5A	0-3A
Input protection	Reverse protection	Reverse protection	Reverse protection, overvoltage protection
Output protection	Overvoltage, overcurrent, overpower protection		
Output power	0-744W	0-300W	0-62W
Output voltage setting resolution	10mV	10mV	10mV
Output current setting resolution	10mA	10mA	1mA
Output ripple	<200mVpp (Input 48V, Output 24V, Current 5A)	<100mVpp (Input 48V, Output 24V, Current 5A)	<100mVpp (Input 35V, Output 12V, Current 2A)
100Hz toggle transmission ratio	<1/10000	<1/10000	<1/10000
Voltage, current display accuracy	10mV, 10mA	10mV, 10mA	10mV, (1<1A 1ma. 1>=1A 10ma)
Voltage display error	10mV, 10mA	±1%+20mV	±1%+20mV
Current display error	±2%+20mA	±2%+20mA	±2%+1mA
Response time	<80ms	<50ms	<50ms
Storage operation	M0-M9 total 10 sets of parameter storage		
Heat dissipation method	Onboard heatsink and cooling fan		
Cooling fan start condition	Output current greater than 1.5A or output power greater than 50W	Output current greater than 1A or output power greater than 40W	Output current greater than 0.5A or output power greater than 25W
Operating ambient temperature	0-60°C		
Storage ambient temperature	-20~70°C		
Use environment	Indoor use, maximum humidity 80%		
Weight	190g	170g	95g

Dimensions	135 × 95 × 38 (mm) (length × width × height)

4. Display description
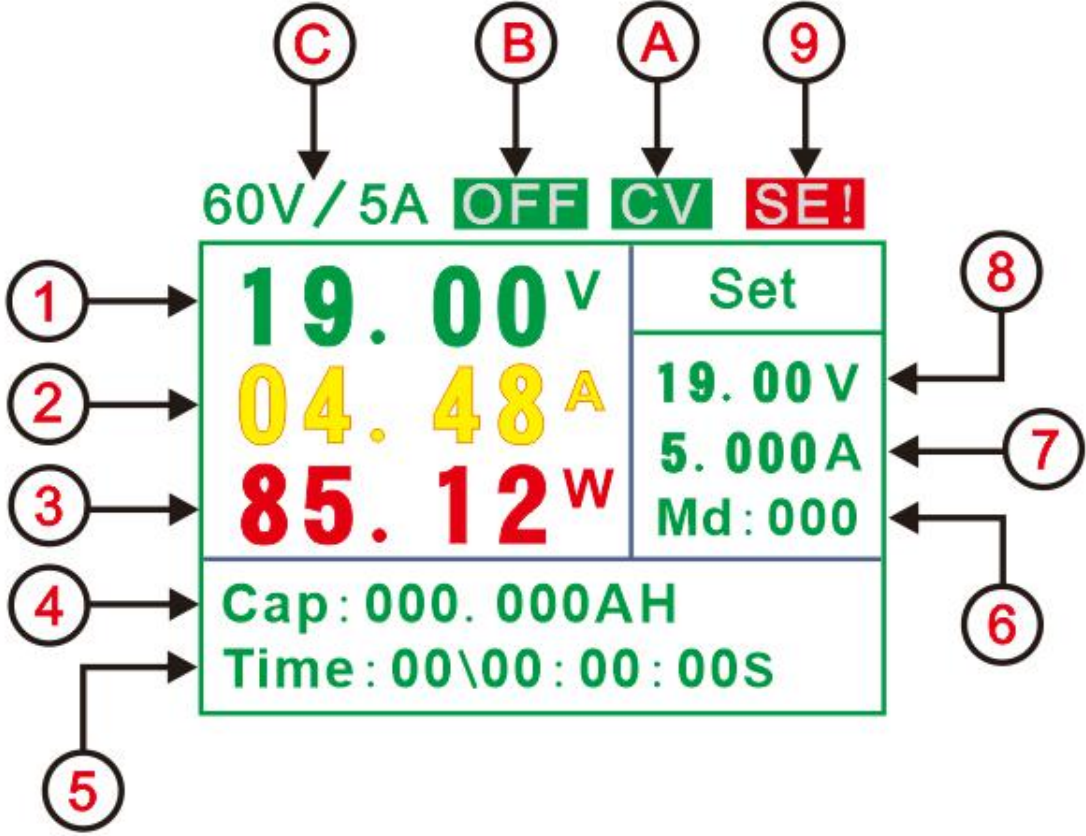
1	Display actual output voltage value	7	Display set current value
2	Display actual output current value	8	Display set voltage value
3	Display actual output power value	9	Save callout status display
4	Display real-time Coulomb cumulative values	A	Power output status display

| 5	Display run time value	B	Switch status display
6	Display save and recall address bits	C	Model

5. Connections

1) Wiring

The power input interface (IN), and the output interface (OUT) have clear positive and negative marks, do not connect wrong and reverse.

2) Set the voltage and current value

Click the "Set" button to switch the set output voltage and current value. Press the "<" or ">" key to cut the step value of the set parameter and adjust the encoder knob to change the output voltage or current value.
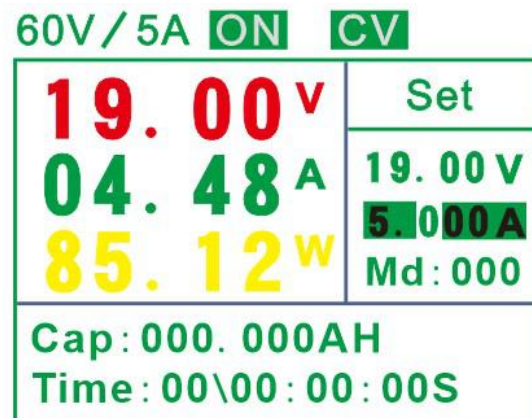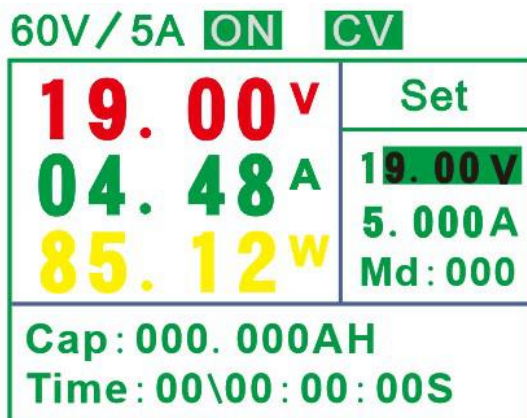
3) Turn the output on and off

After setting the voltage and current values, you can directly press the "OUT" button to turn the output on or off. At the same time, the switch status will display "ON" or "OFF". The following shows the display status of the power output on and off respectively.
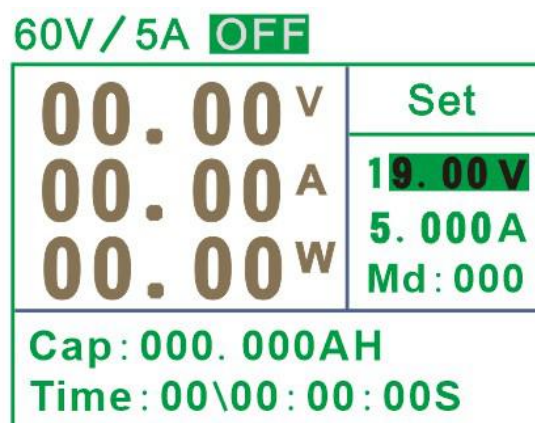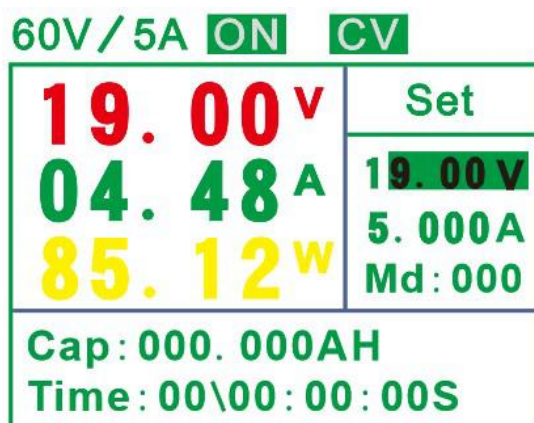
4) Cumulative coulomb value and time clear

Click the "Shift" button first, then click the "<" button to clear the accumulated AH number and time.

60V/5A ON CV Sft		60V/5A ON CV	
19.00 V	Set	**19.00** V	Set
04.48 A	19.00 V	**04.48** A	19.00 V
	5.000 A		5.000 A
85.12 W	Md:000	**85.12** W	Md:000
Cap:010.000AH		Cap:000.000AH	
Time:00\01:36:00S		Time:00\00:00:00S	

5) Set system parameters

First click the "Shift" button, then click the "Set" button to enter or exit the system parameter setting page, click the "Set" button to switch the setting parameters (OVP, OCP, OPP), the parameter setting mode is the same as changing the output voltage and current value. If the system output status exceeds the set value, the power will automatically disconnect the output and display the cause of the disconnection in the output status item. When the set parameter value is 0, the protection is not turned on.

60V/5A ON CV			60V/5A ON CV		
System Set		Set	System Set		Set
Ovp	09.00V	19.00V	Otp	000°C	19.00V
Ocp	5.000A	5.000A	Ads	000	5.000A
Opp	30.00W	Md:000	Bps	9600	Md:000
Cap:000.000AH			Cap:000.000AH		
Time:00\00:00:00S			Time:00\00:00:00S		

6) Parameter saving

Click the "M\L" button to enter the parameter save, adjust the coding knob to change the parameter save address bit (0-9); then click the "<" button to save the current set voltage and current value to the currently set address bit; click "The M\L" button exits the parameter save.

60V/5A ON CV		60V/5A ON CV SE!	
19.00V	Set	**19.00**V	Set
04.48A	19.00V	**04.48**A	19.00V
	5.000A		4.480A
85.12W	Md:000	**85.12**W	Md:001
Cap:000.000AH		Cap:000.000AH	
Time:00\00:00:00S		Time:00\00:00:00S	

7) Parameter recall

Click the "M\L" button to enter the parameter callout function, adjust the coding knob to change the address bit (0-9) of the parameter call; click the ">" key to directly output the voltage and current value corresponding to the currently selected address bit.

60V/5A ON CV		60V/5A ON CV LD!	
19.00V	Set	**18.00**V	Set
04.48A	18.00V	**05.00**A	18.00V
	5.000A		5.000A
85.12W	Md:001	**90.00**W	Md:001
Cap:000.000AH		Cap:000.000AH	
Time:00\00:00:00S		Time:00\00:00:00S	

6. Precautions

1. Do not exceed the voltage and current range, otherwise the meter will be damaged.

2. The positive and negative poles cannot be reversed, and the reverse may damage the instrument.

3. The working temperature is   -10 ~ 50 ° C, the storage temperature is -20 ~ 70 °   C, and the instrument should be in a dry environment.

4. Do not attempt to disassemble the instrument. Failure to seal the package will void the warranty.