

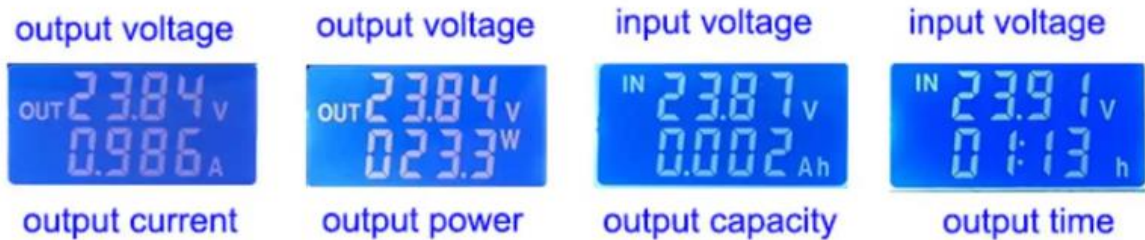
### 3. Key description



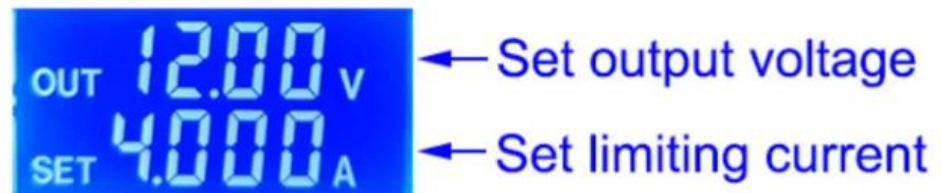
Interface KEY	normal interface	regulating voltage and constant current	Set the parameters
<b>SW</b>	Short press: switching current A  power W  capacity Ah  time h display  Long press: switching input voltage   output voltage display	<b>NULL</b>	Short press: toggle the parameters to be set  Long press: null
<b>U/I</b>	Short press: enter the interface of regulating voltage constant current  Long press: enter the interface of setting parameters	Short press: switch between regulating voltage value, regulating constant current value and exiting regulating Long press: null	Short press: null  Long press: exit the setting parameters interface and return to the normal interface
<b>Rotary encoder</b>	Short press: toggle output to turn on and off Long press: null	Short press: adjust the parameter shift accordingly Long press: null  Left-rotation: the corresponding bit of adjustment parameter decreases Right-rotation: the corresponding bit of adjustment parameter increase	Short press: adjust the parameter shift accordingly Long press: turn   off if parameters allow  Left-rotation: the corresponding bit of adjustment parameter decreases Right-rotation: the corresponding bit of adjustment parameter increase

Note: after the product triggers the protection mechanism, the output will automatically turn off, the LCD will display the protection code, and press any key to exit the protection interface

# Normal Interface



## Interface for setting voltage and constant current



# Interface to set parameters



# Protection Interface



## 5. Method of use

5.1. Switch display parameters -- in the normal interface, press SW to switch the display below the display screen, and switch the display content between current A power W capacity Ah time h. Long press SW button to switch the uplink display on the display screen and switch the display content between input voltage IN output voltage OUT.

5.2. Set output voltage -- press U/I button in the normal interface to enter the interface of setting voltage constant current. It can be seen that a

certain digit of the output voltage value is flashing. Rotate the encoder left and right to adjust the major and minor. Short press the rotary encoder to choose which bit of output voltage to set. After setting, press U/I button 2 times to return to the normal interface. Or automatically return to the normal interface after stopping operation for 10s.

5.3. Set constant current value (that is, the maximum current value allowed to output by the module) -- press U/I button in the normal interface to enter the setting voltage constant current interface. Then press U/I button and switch to setting constant current value. You can see a bit of the setting constant current value flashing. Rotate the rotary encoder left and right to adjust the major and minor. Short press the rotary encoder to choose which bit to set the constant current value. After setting, press U/I to exit the setting voltage constant current interface and return to the normal interface. Or automatically return to the normal interface after stopping operation for 10s.

5.4. Set the default on/off state of module power-on -- long press U/I in the normal interface to enter the parameter setting interface. You can see that it shows "OPEN OFF" or "OPEN ON". "OPEN OFF" means the output is turned OFF by default when power is ON, and "OPEN ON" means the output is turned ON by default when power is ON. Long press rotate encoder to switch two states. After setting, long press U/I to return to the normal interface.

5.5. Setting of protection parameters on state and threshold -- long press U/I to enter the parameter setting interface in the normal interface. Press SW until the protection you want appears. LUP -- undervoltage protection threshold; OUP -- overvoltage protection threshold; OCP -- overcurrent protection threshold; OAP -- ultra-capacity protection threshold; OHP timeout protection threshold. Short press rotate encoder to select which bit you want to set the protection parameter. Long press the rotary encoder to set the protection parameters on or off (only timeout protection and supercapacity protection can be set to turn on/off, and other protection parameters are turned on by default.). Rotate the encoder left and right to make the parameters bigger and smaller. After

setting, long press U/I to return to the normal interface.

5.6. Calibration voltage and current -- press U/I button to enter the parameter setting interface under normal interface. Press SW key for a short time until the interface with zero appears, with zero + out + a symbol. Press and hold the rotary encoder to complete zero calibration. Short press SW button until a parameter interface with CAL appears. The calibration input voltage interface with the symbol CAL+IN+V; The calibration output voltage interface with the symbol CAL+OUT+V; The calibration output current interface with the symbol CAL+OUT+A. Rotate the encoder left and right to adjust the size of parameters. After the adjustment is completed, long press the rotary encoder to confirm the adjustment is completed, and the parameter value is no longer flashing. Long press U/I to return to the normal interface.

Note: in order to ensure the accuracy of calibration, calibration voltage -- above 12V can only be started; Calibration current - start calibration only when the current is above 1A.