

KKG305 Power Supply Calibration Procedures

Equipment to be prepared:

Electronic Load 1PC and Multimeter 1 PC with accuracy range – multimeter voltage 30V-1mV and load current 5.5A-0.01mA.

Calibration Procedures:

As for KKG series unit, press and hold the button M4 to turn on the POWER switch to enter the calibration mode, and the voltage and current display is approximately 0.

1. Verify the minimum voltage value of the power supply:

Method: at the beginning of calibration, the default is the minimum voltage calibration of the power supply. At this time, the voltage LED display is 00.00. Rotate the knob to make the voltage display on the multimeter of the output terminal of the power supply as 5mv-8mv and then stop rotating. After that, press M4 to save (at this time, the default step value of the knob adjustment is about 0.5mv. And you can also increase the step value by pressing the left and right keys to facilitate adjustment).

2. Check the minimum current value of the power supply:

Method: after finishing procedure 1 (saved), press Current(→)adjustment button, and then the voltage display of the power supply is 5.2V, and current display is 0. **Enter the multimeter current gear (milliamp display gear) or the current mA gear of the electronic load**, and then rotate the adjustment knob. When the connected multimeter or load current shows 0.5mA to 0.8mA, stop rotating the knob. Press M4 to save.

3. Check the maximum voltage value of the power supply:

Method: after saving in the previous procedure, remove the ammeter and turn off the electronic load. Connect the voltmeter. And press M1 to switch to the maximum voltage value of the verified power supply. At this gear, the voltage display on the LED display is 30.00 (as for the power supply models with 60V output, the voltage display is 60.00). Then rotate the knob to adjust. When the multimeter display connected with the power supply output terminals is 30V (as for 60V models, the maximum calibrated value is 60.00V), stop rotating the knob. Press M4 to save.

4. Check the maximum current value of the power supply:

Method: after finishing the previous procedure (saved), press Current (→) to switch the maximum current calibration. Access ammeter or set electronic load to 5.5V (as for power supply models with 10A output, set load to 10.5A). And then rotate the knob to adjust the output of the power supply. When the current display on ammeter or electronic load is 5A ($\pm 3\text{mA}$) (as for power supply models with 10A output, the maximum check value is 10A), stop rotating the knob. Press M4 to save.

5. Check the current mA unit display gear of the power supply:

Method: after finishing the previous procedure, press M1, and then the mA indicator lights ON; at this time, the power supply enters 0.1mA calibration gear. At this gear, the voltage display on the LED display is 05.00V and current display is about 000.0mA. Connect the electronic load (here it must be electronic load) to the output terminals of the power supply, and set the electronic load as constant current (CC) 500mA. Press M4 to save.

After finishing calibration, switch off POWER, and then restart the power supply. That is all.