

DC REGULATED POWER SUPPLY

MODEL: SL1709SB

The unit is a DC regulated power supply with two 3¹/₂ LCD digital back light meter. The output voltage can adjust from 0 to 15V and output current from 0 to 2A. This unit has overload protection to prevent damage.

1 SPECIFICATIONS

1.1 Input Voltage: AC 220V \pm 10% 50Hz \pm 2Hz

1.2 Output Voltage: 0~15V(conti. adj.)

1.3 Output Current : 0~2A(conti. adj.)

1.4 Supply Regulation: CV \leq 1 \times 10⁻⁴+0.5mV

$$CC \leq 2 \times 10^{-3} + 6\text{mV}$$

1.5 Load Regulation: CV \leq 1 \times 10⁻⁴+2mV

$$CC \leq 2 \times 10^{-3} + 6\text{mV}$$

1.6 Ripple and Noise: CV \leq 1.0mVrms

$$CC \leq 3\text{mA rms}$$

1.7 Protection: Current Limit

- 1.8 Meters: Indicator accuracy: $\pm 2.5\%$**
 $3\frac{1}{2}$ digital meters accuracy:
Voltmeter: $\pm 1\% + 2$ words
Ammeter: $\pm 2\% + 2$ words

1.9 Operation Ambient

- 1.9.1 Temperature: $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$**
1.9.2 Humidity: $< \text{RH}80\%$
1.9.3 Atmosphere Pressure: $86\text{kPa} \sim 104\text{kPa}$
1.10 Operating Time: 8hr. conti.
1.11 Size: $225\text{mm} \times 95\text{mm} \times 160\text{mm}$ (L×B×H)
1.12 Weight: 2.2kg

2 DESCRIPTION

The block diagram is shown in Fig1, consists of rectifier and filter, auxiliary supply, reference voltage, current comparator, voltage comparator, regulator and sampling circuits.

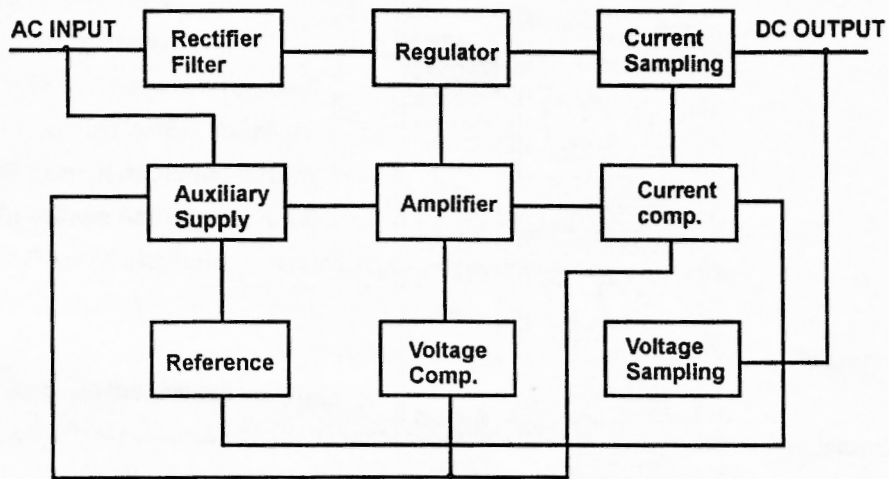


Fig. 1

3 OPERATION

Fig.2 is panel outline.

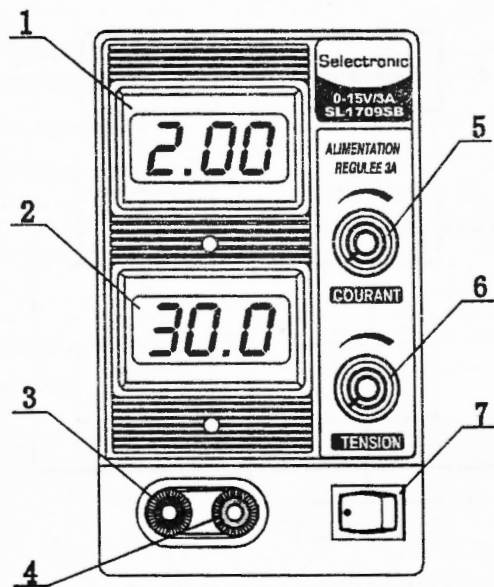


Fig.2

3.1 Controls of Panel

- (1) Current Meter**
- (2) Voltage Meter**
- (3) Output Negative Terminal**
- (4) Output Positive Terminal**
- (5) Current Adjustment Knob**
- (6) Voltage Adjustment Knob**
- (7) Power Switch: Press down left power on, conversely power off.**

3.2 Operation

3.2.1 When using as constant voltage supply, set (5) on max. CW. Firstly then turn on (7) and set (6) to the desired voltage.

3.2.2 When using as constant current supply, after turn on (7) set (6) on max. CW. And set (5) on min. CCW. Then connect load and set (5) to the desired current.

3.2.3 When using as constant voltage supply, can set protection point of current limited arbitrarily: firstly set (5) on min. CCW. Then short – circuit output terminals and set (5) CW. Let output current to the desired limited current point.

3.3 If want more accurate please use high accuracy meter externally for calibration.

3.4 Notice

3.4.1 This unit has short-circuit protection. If there occurs short-circuit, the unit should be turned off and make trouble shooting to prevent unit aging.

3.4.2 Store this unit on a dry ventilated and clean place.

3.4.3 Cut off input supply when maintenance.

3.4.4 Care for ventilation and send out heat when using high power output.

3.4.5 Caution: If this unit have any trouble, the output may rise over max. Rated voltage! Care for load to prevent damage.

3.4.6 The ground terminal of power cord must be grounded reliably to ensure using safety.

4 ACCESSORY