



## Owners Manual

### Power Supply DF 1731 SB-3A



#### Introduce

Dear customer,  
we congratulate you of getting  
Your new power supply.  
With this choice you have decided to  
a Product which combines good design  
and clever technical features.

Please read the following instructions  
carefully and follow these instructions  
to get the troubleless fun of the system.

#### Features

- Two separate voltage and current adjustable outputs.
- Fixed power output.
- Short circuit protected.
- Parallel or serial operation of the two outputs
- Two displays for adjusted voltage and current

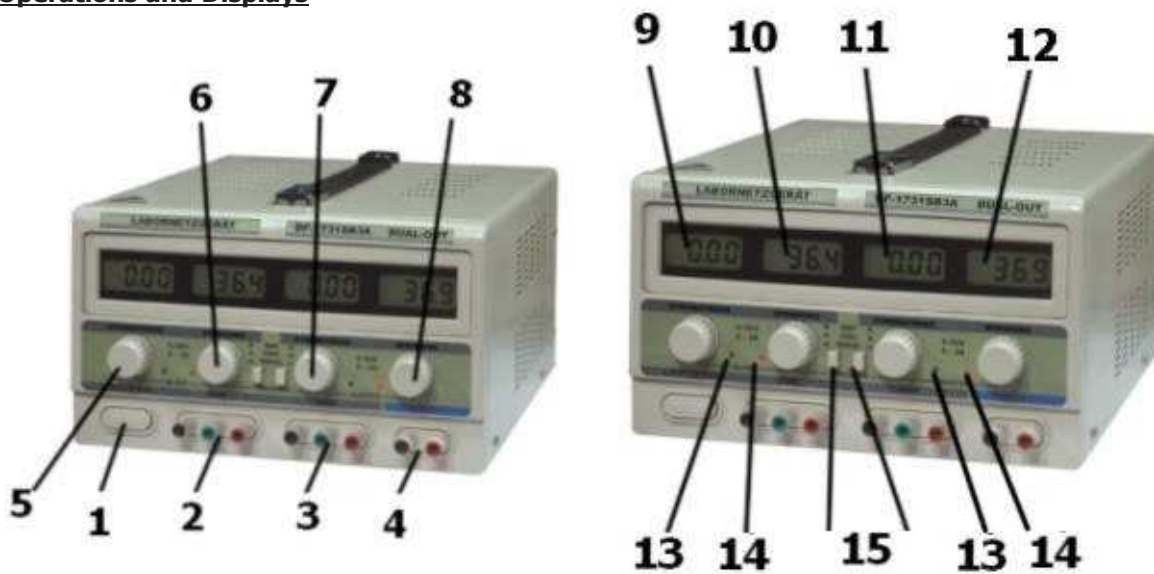
#### **Specifications:**

Input Voltage :	230V +/- 10% / 50 Hz
Output Voltage:	2x 0-30 V stepless adjustable, 1x5V fixed
Output current:	2x 0-3 A stepless adjustable, 1x 3 A max
Setting accuracy:	CV 1x10 <sup>-4</sup> + 500 $\mu$ V, CC 5x10 <sup>-3</sup> + 1 mA
Load regulation:	CV 1x10 <sup>-4</sup> + 2 mV, CC 2x10 <sup>-3</sup> + 3 mA
Residual ripple:	1x10 <sup>-4</sup> +2 mV, CC 2x 10 <sup>-3</sup> + 3 mA
Safety Function:	Current limiting
Display Accuracy:	a) Voltage: LCD +/- 1 % + 2 digits b) Ampere: LCD +/- 2 % +2 digits
Dimensions:	BxHxT 265x165x360 mm

#### Safety Device

- Connecting device only to a socket with grounded neutral conductor.
- Do not put device on moist or wet background.
- Do not turn out for any extreme temperatures of direct solar radiation or extreme humidity or wetness.
- Replace defect fuse only with the original value fuse. Please avoid short circuit of fuse and holder.
- Practice measuring work only in dry clothes and with recommended equipment.
- Please take care of good temperature ventilation.
- Do not put any liquid near of the unit to avoid short circuit.
- Do not place the system near of strong magnetic fields.
- Before operation the system must be temperature stabilized to avoid humidity.
- Opening of the system and service is only allowed qualified service personal.

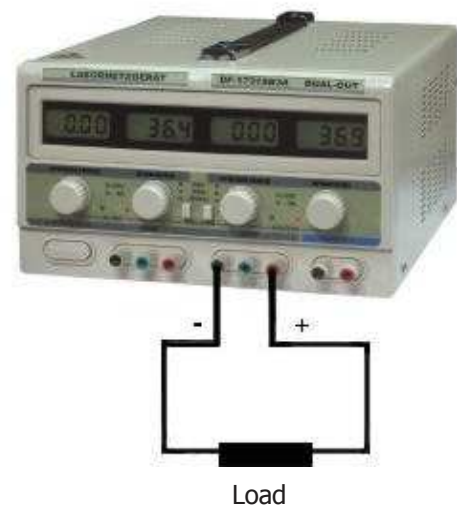
## Operations and Displays



1. Power Switch
2. Output 2 (voltage and current adjustable)
3. Output 1 (voltage and current adjustable)
4. Output 3 (fixed output +5 Volt 3 A)
5. Adjustknob current output 2
6. Adjustknob voltage output 2
7. Adjustknob current output 1
8. Adjustknob voltage output 1
9. LCD-Display current output 2
10. LCD-Display voltage output 2
11. LCD-Display current output 1
12. LCD-Display voltage output 1
13. limited current display (LED is on when current ist limited)
14. limited voltage display (LED is on when voltage is limited)
15. Function switch for parallel,seriell and seperated mode

## Connection of load

- At first connect your load according the figure.
- The voltage and current will be shown at the display.
- When the constant-current LED lights the current is limited to the adjusted level.
- In these case check the load if there is a short circuit, or a resulting current which is to high for the power supply.



### Mode with two separated outputs

- Put **function-switch (15)** as shown in the figure to separated mode.
- When you use supply as a constant-voltage source put **Outputcurrentadjust (7)** at first to MAX and turn the supply ON.

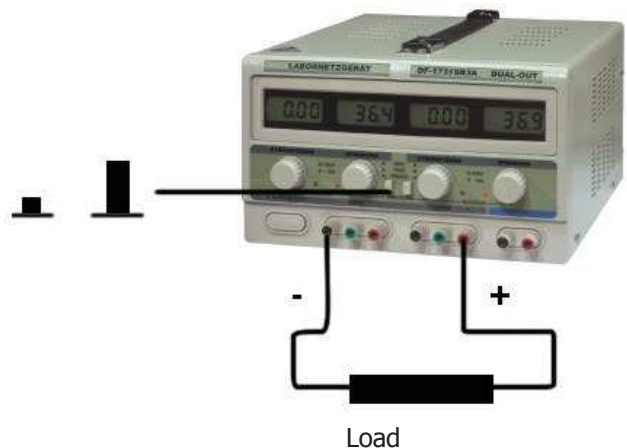


Functionswitch (15)

- Now put voltage to the right level.
- Now the **constantvoltage LED (14)** lights.
- When using supply as a constant-current-source put voltage-knob at MAX and current-knob at MIN.
- Now connect load and turn current-knob to get the needet current-level.
- The **constant-voltage-LED (14)** will get off and **constant-current-LED (13)** will light.
- When you use supply as a constant-voltage-source put **current-knob (7)** to MAX.
- As needed the current can be limited by turning the **current-knob (7)** to the right level.

### Seriell Mode

- Put **function-switch (15)** to position as shown in the figure.
- Now connect load as shown.
- With **voltage-knob (8)** from output 1 the voltage can be adjusted from 0 to 60 Volt. The **current-knob(5)** of output 2 must be adjusted to MAX.



### Parallel Mode

- Put **function-switch (15)** as shown in the figure.
- In these mode the voltage is adjusted by **voltage-knob (8)** of output 1.
- Both outputs have the same voltage.
- The output-current will be adjustet by output 1.
- **The maximum-current is 6 Ampere.**
- In parallelmode the load must be connectet at the two outputs as show. Other connection can damage supply.

