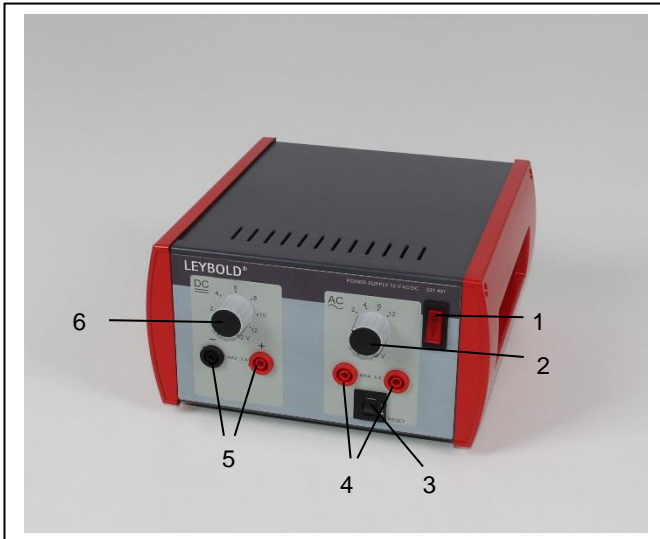


04/18-W13-CHR



Instruction Sheet 521 491

AC/DC power supply 0...12 V / 3 A

- 1 ON/OFF switch (with operation indicator lamp)
- 2 Regulator for AC voltage (in steps of 2 V)
- 3 Circuit breaker
- 4 AC output
- 5 DC output
- 6 Regulator for DC voltage (infinitely adjustable)

Safety Note

The device complies with the safety requirements for electrical measuring, control and laboratory equipment in accordance with DIN EN 61010 part 1, and it is constructed in compliance with safety class I. The device is intended for use in dry rooms that are suited for the operation of electrical equipment and devices.

If the device is used as prescribed, its safe operation is guaranteed. However, safety is not guaranteed if the device is improperly used or carelessly handled. If it has to be assumed that safe operation is no longer possible (e.g. in the case of visible damage), shut the device down immediately.

- When putting the device into operation for the first time, check whether the value for the mains voltage indicated on the rating plate (back of housing) agrees with the local value.
- Before putting the device into operation, examine the housing for damage. In case of malfunction or visible damage shut the device down and make sure that it is not used inadvertently.
- Connect the device only to socket-outlets with grounded neutral wire.
- Before connecting check connecting leads for defective insulation and bare wires.
- Replace a defective fuse only with a fuse that corresponds to the original value (see fuse plate on the back of the housing).
- Never short the fuse or the fuse holder.
- Always keep the ventilation slots free in order to ensure sufficient air circulation for the cooling of internal components.
- Allow only skilled persons to open the device.

Do not switch off the power supply while there is a power source connected to the output, i.e. charging accumulators.

1. Description

Standard student power supply with infinitely adjustable and regulated DC output voltage, AC voltage adjustable in steps; AC and DC outputs galvanically isolated, reliable overload protection and circuit protection by electronic current limitation (DC) and circuit breaker (AC).

All outputs galvanically isolated from the mains, floating. Particularly suited for student experiments off all ages thanks to safe separation in accordance with BG/GUV-SI 8040 (conforms to german RiSU).

2. Technical Data

Output voltages	0-12 V DC, infinitely adjustable, stabilized 2/4/6/12 V AC
Output current	max. 3A
Residual ripple DC	< 100 mV
Overload protection	DC electronic, AC with resettable
Connections	4 mm safety sockets
Connection voltage	230 V, 50/60 Hz or 115 V, according to rating plate
Power consumption	110 V (max)
Current consumption	0.5 A (max)
Idle Current (approx.)	50 mA
Fuse	T 1 A at 230 V T 2 A at 115 V
Electrical isolation	Isolating transformer in accordance with DIN EN 61558-2-6, (compliant to german RiSU)
Dimensions	203 mm x 225 mm x 117 mm
Weight	3 kg

3. Scope of Delivery

Power supply, connecting cord.

4. Operating Principle

The power supply delivers a stabilized DC voltage, continuously adjustable between 0 and 12 V. Moreover, an AC voltage is supplied, which can be set to 2, 4, 6 or 12 V. The AC voltage is not stabilized.

The two outputs can supply each up to 3 A simultaneously.

Both outputs are overload protected. The DC part is protected electronically and resets automatically, while the AC part is provided with a circuit breaker that must be reset manually if it trips.

The specified 100 mV ripple is a triangle (50 mVpp type) with 50 kHz frequency and occurs only at full load. At low load correspondingly less.

5. Operation

Connect the power supply to the mains using the supplied cable. It is recommended to turn down the voltage before powering up.

Activate the "On/Off" switch. The button lights up to indicate that the power supply is turned on.

Connect the external equipment to the direct current (DC) or alternating current (AC) outlet. Adjust the voltage to the desired value.

6. Trouble shooting

The AC output is protected against overload by a thermally activated circuit breaker. If this trips during an experiment, or if there is no voltage on the outputs when the device is turned on: Press the Reset button on the front panel. This resets the circuit breaker. It may of course be necessary to reduce the voltage or reduce the connected load to avoid that the circuit breaker trips again.

If there still is no voltage at the outputs, check the fuse on the back of the housing and replace it if necessary. Replace a defective fuse only with a fuse that corresponds to the original value (see fuse plate on the back of the housing).