

Power Supply

Extra High Voltage – 6000V.DC.



LB2615-002 0-6000V.DC EHV Power Supply with Digital Meter

Description:

This is a special purpose compact laboratory power supply, which may be used for electrical experiments requiring smoothed DC high voltage. The output voltage may be smoothly adjusted from zero to 6000V.DC. at no load. As current is drawn from the unit, the voltage falls quickly so that the short circuit current (zero output volts) is approx. 3mA.

The power supply is used with discharge tubes and similar experiments where the current flow is very small. The output voltage is monitored by a large digital meter.

Mains power is controlled by an ON/OFF switch and the high voltage output is controlled by a separate ON/OFF switch.

Output Voltages Available:

The High Voltage DC. output is filtered by capacitance and is fully floating (does not relate to earth). The 4mm safety output sockets provide twin outputs of 0-3000V.DC. These outputs are connected in series to obtain 0-6000V.DC. but can be used separately.

A low voltage output of 6.3V.AC. at 4 amps max. is provided and is protected by a self resetting thermal overload. This low voltage is normally used for heaters in electron tubes (Teltron or similar). Two pair of 4mm spin free socket head terminals are provided for this output.

Length: 322mm	Width: 155mm	Height: 110mm	Weight: 2.8kg
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⚠ CAUTION:

This Power Supply can supply EXTRA HIGH output voltages and must only be operated by a competent person.

Use extreme caution at all times to prevent an electric shock.

It takes time for the residual voltage within the unit to dissipate. Turn off the DC Power at the switch beside the meter and check the meter is reading zero before disconnecting or changing connections.

Do not use the Power Supply, Mains Cable or Test Leads if they appear damaged.

Arrangement:

Each High Voltage outputs is isolated from earth and is adjustable from 0 to 3,000 Volts. DC. If required, either side of the High Voltage can be referenced to earth by connection to the earth socket.

NOTE 1:

The digital meter always displays the voltage of the 2 outputs in series, therefore it is scaled 0-6 kV.DC.

NOTE 2:

The current available from either output or from the overall output is limited to the safe current of about 3mA on short circuit. The current is limited by resistance, therefore, as current rises from the outputs, the output voltage falls.

NOTE 3:

The output voltage is not regulated and will vary with changes in mains voltage and output load.

NOTE 4:

The two 6.3V.AC. socket pairs are the same output and **cannot** be connected in series.

Specifications:

Input:	220/240V.AC. 50/60 Hz. Approx. 0.5 amp.
Outputs:	Adjustable 2x 0-3,000V.DC. to provide 0-6,000V.DC. with voltmeter. Max.current: approx. 3mA (at short circuit) 2x 6.3V.AC. Max.current: 4 amps total load.
Voltmeter:	Digital with large 3 digit red LED display.
Protection:	High voltage: Current is limited to a maximum of approx. 3mA. Low voltage: By audible thermal, auto-resetting overload.

Designed and manufactured in Australia