



myVolt™ Mini  
Power Supply

Operating Manual



## **Table of Contents**

- 1. Introduction**
- 2. Safety Warnings**
- 3. Set up and Operation**
- 4. Maintenance and Cleaning**
- 5. Trouble Shooting**
- 6. Specifications**

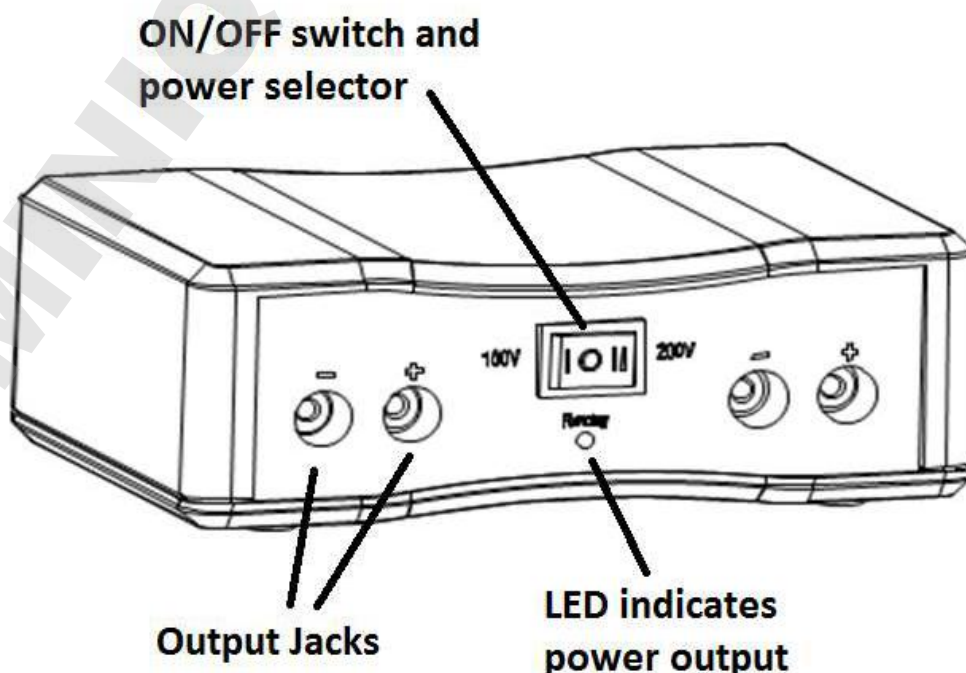
# 1. Introduction:

The Mini Power Supply can provide 100 VDC or 200 VDC output. Two sets of output jacks allow connection of 1 or 2 gel tanks. The outputs are wired in parallel.

This electrophoresis power supply is for research only and not designed for medical, clinical or diagnostic applications.

This operating manual includes product safety information and operating instructions. Before using the Mini Power Supply, please read this manual in its entirety and be sure to fully understand the features and methods for proper operation. Keep this manual for future reference.

Please check the product carefully when first opening the box, and if there are any parts missing, or there is any damage, please contact your distributor or contact Benchmark Scientific's Customer Service Department at 908-769-5555 or by email [info@benchmarkscientific.com](mailto:info@benchmarkscientific.com).



## 2. Safety Warnings



Please carefully read this instruction manual in its entirety before operation to avoid personal injury. Only trained personnel should operate the Mini Power Supply.



Always allow clearance of 1 inch (2.5cm) to the sides, front and rear of the Mini Power Supply when it is operating to allow for sufficient air flow and cooling.



Always turn off the power after operation. When not in use, detach the power supply and store it in an area that is free from moisture and dust.



To avoid electrical shock, do not use this product with wet hands.



Always use the Mini Power Supply in an environment with low humidity and low dust, also keep it away from water, direct sunlight / strong light, corrosive gas, high magnetic fields, heaters, fires and other heat sources.



Do not attempt to open or repair the Mini Power Supply. Contact your distributor or Benchmark Scientific for service.

### 3. Setup and Operation

The power supply should be set up on a level and stable surface, such as a laboratory counter. Choose a dry location that is not near a sink or running water.

Set the On/Off switch to the middle “Off” position, connect the included power cord to the power inlet on the back of the instrument, and the other end of the cord to an appropriate electrical outlet. Check the rating label on the back of the power supply and make sure that the electrical supply from the outlet matches the requirements. The Mini Power Supply can accept input voltage from 100VAC to 240VAC.

With the power switch in the “Off” position, connect the electrophoresis gel box using electrical leads to the appropriate “+” (red) and “-” (black) output jacks on the front of the power supply.

**CAUTION:** Only use insulated electrical leads that are designed for electrophoresis applications with shielded banana connectors.

**CAUTION:** Only use electrophoresis gel boxes that have appropriate safety covers and safety features to prevent electric shock to the user.

**CAUTION:** Always make sure that the gel box used has the appropriate buffer. An incorrect concentration of buffer can cause excess current which will cause the fuse in the unit to blow.

When the electrical leads are properly connected, the power selector switch can be set to the appropriate voltage: 100V or 200V. The LED on the front of the power supply will light up to indicate that current is flowing.

When an electrophoresis run starts, visually inspect the electrodes in the gel tank. Small bubbles coming from the electrodes will indicate that current is flowing.

## 4. Maintenance and Cleaning

The Mini Power Supply does not require any routine or special maintenance.

Always disconnect the power cord and electrical leads for cleaning. When cleaning the surfaces of the instrument, use a cloth damp with water.

There are no user-serviceable parts inside. Do not open the casing of the Mini Power Supply.

## 5. Troubleshooting

	<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
1	No indicator light	Power not connected	Connect the power supply
		Fuse damaged	Change a fuse
		Switch broken	Contact distributor for service
		other	Contact distributor for service
2	Indicator light blinking	The resistance of the load is too low. Excess current is causing the maximum power (wattage) to be exceeded.	Adjust the concentration of buffer to maintain proper level of resistance.

## 6. Specifications

Model Specification	Mini Power Supply E2100
Operating Temp. range	4°C ~ 40°C
Input voltage	AC100-240V 50/60Hz
Output voltage	DC 100 or 200 V
Output error (max.)	DC 100V $\pm 4.5\%$ DC 200V $\pm 7.2\%$
Output power (max.)	40W
Ports	2 pairs
Relative humidity	$\leq 70\%$
Dimension s (mm)	160x115x60
Weight (kg)	1

The Mini Power Supply is covered by a 2 year warranty against manufacturing defects.

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