

Standard Operating Procedure

Title: SOP-010 Power Supply

PI: Art Erdman **Lab Location:** Mayo G217

Issue Date: 5/1/14 **Revision Date:** NA

Prepared by: Alex Cherwinka **Approved by:** Rich Oliphant

Hazard Identification:

Physical Danger

Exposure Assessment:

Electricity

- Electrical Shock
The power supply is capable of producing very large quantities of voltage. There is a risk of electrical shock and/or equipment damage due to the supplied voltages from the power supply as well as damage due to stored energy from internal capacitors.

Control Plan:

- Read and become familiar with machine's operating procedures before operating
- Always know where the power *off* switch is located in case of emergency
- Always turn switch to *off* position when not operating power supply
- Always disconnect the power supply from the power source before servicing, repairing, or making any adjustments
- Keep all electrical cords away from touching exposed ends connected to power supply
- Circuit should always be completely set up before turning on power supply
 - Don't have any loose ends that are connected to the power supply
- Wear electrically insulated protective garments as needed

Experimental Procedures:

- Put on all safety equipment and tie back loose hair or clothing before operating
- Check to make sure all parts of machine are working and functioning properly
- Make sure power supply is off and set up wires and complete circuit as desired
- When ready, turn on power supply
- When finished, turn off power supply before disconnecting any wires.
- Disconnect circuit and place all wires and other equipment back in the appropriate place
- Clean workspace

For other inquiries, see the User Manual in Appendix.

Waste Management Procedures:

When finished with the power supply, always clean the area. Paper towels and cleaning solution can be found in G217-11. Dispose of debris appropriately.

Place all materials back in the appropriate place.

Spill and Accident Procedures:

If an accident occurs, report immediately to the lab supervisor (G217-05) or other appropriate staff member. If no one is around, dial 911 on the landline phone near the door of G217-11 to reach the campus police. The lab first aid kit is located on the wall near the sink. A first aid pamphlet from DEHS is located in all of the MDC's first aid kits.

Appendix:

BK PRECISION[®]

INSTRUCTION MANUAL

Models 1620A / 1621A / 1622A / 1623A / 1626A / 1627A

DC REGULATED POWER SUPPLIES