

## PLD Thermionics

Reset Instructions: For power outages only!

1. Check that the gate valve has closed (red indicator light is on if power is restored, or that there is a white spot on close on the indicator below the gate valve motor).

2. Check all three pressure gauges. If the pressure is  $>10^{-5}$  Torr and rising, press EMIS on the ion gauge until it reads OFF, and switch off the Cold Cathode Gauge (MKS). IMPORTANT!!!! If the gate valve is not closed, and the pressure is rising or already  $>10^{-3}$  Torr (may read OFF or Err) proceed to PUMP DOWN INSTRUCTIONS. DO NOT CONTINUE FURTHER, but instead pump the chamber down as if it had been vented Pump Down Instructions.

Otherwise, continue.

3. Switch all power strips off (red switches are up) except the main rough pump switch (just above the silver main power panel).

4. Flip the Main Power Switch on the silver panel (Power Distribution Box) down then up to restore power to the system. Flip all power strips back on. Press the red Reset button on the right side of the main panel (to open the roughing pumps (RP) to the turbo pump (TP)). Then press the red Reset button on the LL panel.

5. The RP should start and the turbo controllers will power up. The Main TP is connected to the UPS so should start automatically. Let the Main TP get close to normal speed (near 35000 rpm, at least 30000 rpm), then start up the Load Lock (LL) TP by pressing start.

6. Check the pressure again on KJL multigauge to make sure the pressure is dropping. (If you turned it off, press EMIS again until it reads a pressure again.)

7. Open the gate valve by pressing the open button on the gate valve power box. If that fails use the 'jog' toggle switch to open the gate 'manually'.

8. Check that the pressure lowers into  $10^{-9}$  Torr range.

PUMP DOWN INSTRUCTIONS: Do 3, then 5 from above to let RPs lower pressure before turning on the turbo pumps. If the UPS does not turn on when you Flip the Main Power Switch, turn it on when the pressure reaches the milli-Torr range to start up the Main TP.