The G_{E}^{n} Polarized Target
Microwave Power Supply Operation

Stephen Bültmann (University of Virginia)

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This document describes the operation of the old Varian microwave power supply, using electron tubes. We assume, that the Varian transformer is connected to 208 V and turned on. The power supply is humming from a fan and the cathode ray tubes are glowing.

- Press the lower left button to turn the filament on. There will be a delay and the middle left button blinking.
- If any fault LED's came on (red LED's), press the reset button on the lower right.
- When the filament current is ready (no blinking anymore), press the middle right button to turn the cathode supply on.
- Ramp slowly the cathode (beam) voltage up to 5 kV (you need about 2 minutes for this).
- Set the body and beam current trips to 10 mA and 120 mA, respectively.
- Turn the anode supply on (top right button) and slowly increase the current (upper right potentiometer) to 2 kV.
- Now gradually increase the cathode (beam) and anode voltage, keeping at least 2 kV in differnce. The final volatges for cathode and anode are 9.77 kV and 5.48 kV, respectively. Also watch the beam current to slowly increase. It should read 100 mA in the end, while the body current should stay around 5 mA.