

High Voltage Controls

MIPP E907

High Voltage Status

- High Voltage for the experiment is currently controlled using:
 - Lecroy 1440 Mainframes
 - CKOV, BCKOV, T0s, ToF, TPC, HCAL, Muon Paddles, Horizontal Trigger Counters
 - Bertan 20kV supply
 - TPC cathode
 - Drogie supplies
 - Custom HV buses

Computer Control

- Computer control of the 1440 and Bertan supplies has been developed using the serial interfaces on each device (or GPIB to serial) since these units are inside the controlled area
- These voltages are currently accessible for control and monitoring

1440 Status and Issues

- All phototubes being driven by the 1440 supplies are currently running in a nominal configuration
 - Exception: two channels on the ToF system are known to oscillate
- The TPC anodes are currently monitored and settable via the control software
- The TPC cathode is currently programmable

Status (cont)

- TPC Ramping code is still in testing and not considered to be bullet proof yet and ready for general shifter use.
- TPC Cathode ramping is still in a very rough state.

Monitoring

- All channels being supplied from the 1440 mainframes are currently monitored and checked for:
 - Over/Under voltage conditions
 - Trip conditions
- Voltage conditions and values are currently recorded, time stamped, but not yet integrated with the official database.

The Future of HV

- The goal is to make the high voltage control and monitoring “shifter proof”
- The high voltage WILL be integrated into the MIPP database and the run control
- Ramping for the TPC will be functioning correctly (hopefully by the end of the week)