MKS 937A Multi-Gauge, Vacuum and Pressure Gauge Controller

The MKS 937A Gauge Controller is one of the most ubiquitous pieces of equipment at SLAC. It can be loaded with sensor-specific controller cards for a wide variety of sensor types. It also provides analog outputs, (rarely used), gauge set-point relays, (typically monitored by PLCs controlling vacuum interlocks), and remote control and data via multiple protocols including RS-232, (used heavily by EPICS for monitoring, logging, and initialization)

[toc here, eventually]

Ordering Considerations

*notes on the secret menu for cold cathode gauges / boards.

*local copy of the secret menu

User Manual

Rack Mounting and Cable Management

*1U of spacing between controllers.

*Custom cable management ideas.

Commonly used sensors, and related cabling

*Brookhaven-special Cold Cathode Gauges

*Bakeable pirani Gauges

*TC Gauges

*Baratrons

Interfacing with PLCs

Gauge setpoint trip relays

Each of the up to 5 gauges controlled by the 937A has its own set point trip relay. All relays are accessible via a male, 15-pin D-Sub connector at the rear of the chassis. Interfacing those relays with a PLC requires, at least

Cold Cathode Enable connection.

Interfacing with EPICS

Digi

Serial Cabling

Pointers towards EPICS programming information.