



Tech Tips

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11-065 Remote Meter (Pressure) Application Note

This application note describes a simple modification to a Perkin Elmer/Physical Electronics Model 11-065 Ion Gun Control which may be required to obtain the 'Pressure' signal for connection to the RBD 11-065 remote meter.

The 'Pressure' signal from the 11-065 is used to drive the remote meter, which can be conveniently located on the vacuum console. This modification provides a 0 to -10 VDC output which is proportional to 0 to 50 mPa of gas pressure.

Note: On newer 11-065 units, there is already a pressure reference output (J10) that provides a 0 to + 10 VDC output. If the remote meter pegs negative when the ion gun pressure is increased, then simply remove the cover to the remote meter and reverse the two wires that are connected to the meter. The remote meters are factory wired for 0 to - 10 VDC.

Installation

1. Mount a female chassis-style BNC connector on the back of the 11-065 chassis. Make sure the ground connector is connected to chassis ground of the 11-065.
2. Remove the front panel of the 11-065 to allow access to the contacts of switch S4 (the switch under the meter labeled emission/pressure).
3. Locate the switch contact with a yellow wire on it. Using an ohmmeter, verify that this contact is connected to the center contact when S4 is in the 'Pressure' position.
4. Solder a wire between this switch contact and the center contact of the new chassis BNC connector. Do not remove the yellow wire.
5. Connect a BNC cable from the new BNC connector on the 11-065 to the meter input on the remote meter.