

KJL10TC Thermocouple Vacuum Instrument Instruction Manual

1. Specifications

Power :	115 or 220 Volts AC, 50/60 Hz, 8' cord, 3 wire polarized plug
Size :	1 1/2" H x 5" W x 5 5/8 D
Weight :	1 3/4 lbs.
Display :	30 Segment LED bar graph
Process Control :	One set point, adjustable from ATM to 1 micron, output is through a SPDT relay rated at 2 Amps @ 115 VAC
Tube Type :	KJL-6000 or DV-6M or compatible
Sensitivity Range :	1 to 1000 microns, best sensitivity is 10 to 200 microns
Tube Drive Amps :	21 mA AC
Tube Drive Volts :	380 mV AC
Tube Output :	10 mV DC @ High Vacuum
Warranty :	One year for parts and labor

2. Installation

2.1 Unpacking and Inspection

Inspect the shipping container for external damage. After unpacking inspect the instrument for any shipping damage. If visible damage exists, a claim should be filled with the carrier. If any thing is missing from your order contact the Kurt J. Lesker Company

Included with each KJL10TC is :

- 1 KJL10TC Controller
- 1 KJL-6000 Thermocouple Tube
- 1 Instruction Manual

2.2 Thermocouple Tube Installation

Situate the gauge tube in a clean, dry vacuum system. Ideally the open end should point down so as to be self-draining should any vapors condense in it. Thread metal tubes into 1/8" female NPT threads. For best accuracy the tube should outgas in the vacuum system for approximately 24 hours.

2.3 Final Installation

Put the instrument on a stable surface. Install the 3 prong power cord to a 115 VAC single phase outlet. Plug the TC cable into the TC tube. The process control set point relay is rated at 2A at 115. To connect to the relay use the three colored wires on the back panel:

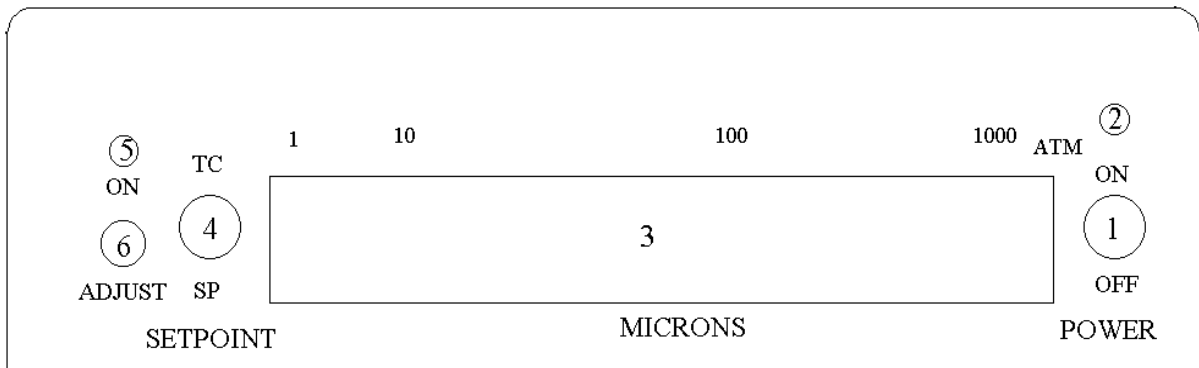
BLACK Wire = COMMON

GREEN Wire = N.O.

RED Wire = N.C.

3 Operation

FIGURE 3.1



- | | |
|-----------------------------|-------------------------------|
| 1. Power on/off Switch | 4. Vacuum/Set Point Switch |
| 2. Power Light | 5. Set Point Light |
| 3. Vacuum Display (microns) | 6. Set Point Adjustment Screw |

The KJL10TC is activated by throwing the power switch (Fig. 3-1.1) to the on position. The power light (Fig. 3-1.2) should light, indicating normal operations. The display (Fig. 3-1.3) will have only one LED lit, it is a single moving LED in a bank of thirty. With the vacuum/set point switch in the "TC" position, the instrument reads the vacuum at the TC tube. By switching to "SP", the current set point position is shown on the display. To change the set point, adjust the set point adjust screw (3.1-6) until the desired level is shown on the display. The set point light will be on whenever the vacuum on the TC tube is greater than the value of the set point.