

1. Specifications

Power :	9 Volt Battery or 9V Adapter 4 ma Current Draw Max.
Size :	5.75" H x 3.60" W x 1.30" D
Weight :	0.82 lbs.
Display :	0.7" 4 Digit Liquid Crystal Display
Battery Life :	180+ hours on a 9V Alkaline Battery
Warm Up Time :	15 Seconds
Tube Type :	DV-6M or DV-4D

DV-6M Tube

Usable Range :	1 - 1000 microns
Best Range :	10 - 200 microns
AC Drive Voltage :	0.38 VDC

DV-4D Tube

Usable Range :	0.01 - 20 mm Hg.
Best Range :	0.2 - 5 mm Hg.
AC Drive Voltage :	0.32 VDC

Warranty : One Year for parts and labor

2. Installing

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 filed with the carrier. If anything is missing from your order contact:

*Kurt J. Lesker Company
1515 Worthington Avenue
Clairton, PA 15025*

Phone : (800) 245-1656
Fax : (412) 233-4275

Included with each TC-500 is:

- 1 TC-500 Controller**
- 1 Thermocouple Cable**
- 1 9V Battery**
- 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 to outgas in the vacuum system for approximately 24 hours before operating with the vacuum gauge.

2.3 Final Installation

Install a 9V alkaline battery into the back of the unit or install the optional AC power adapter. The adapter plugs in to the "9V" connector on the side of the unit.

3. Operation

If the TC-500 is being used with a DV-4D thermocouple tube, the tube select switch on the side of the unit should be set to 4D. For a DV-6M tube, set the switch to 6M position. Connect the thermocouple cable to the instrument and the TC tube being used. Turn the unit on with the power switch on the side. For the first 2 seconds the **BAT** indicator will blink and the percentage of batteries life will be displayed. After the battery check, the unit will display the vacuum reading from the tube. It might take a few seconds for the tube to stabilize. This is normal.

- If the thermocouple tube is disconnected or is damaged then the unit will display " - - ".
- If the battery is low (12% or less power left), the **BAT** indicator will come on. The unit will not start to give erroneous readings until the battery reaches 0%.
- The unit displays "**760**" when it is at atmosphere with a DV-4D tube connected.
- The unit displays "**1000**" when it is at atmosphere with a DV-6M tube connected.

TC-500 Thermocouple Vacuum Instrument

Instruction Manual



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