

## 6 SPECIFICATIONS

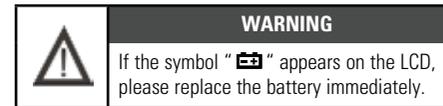
<b>Temperature Units</b>	°F / °C	
<b>Sensor Type</b>	k-type	
<b>Range</b>	-328° ~ 2498°F (-200° ~ 1370°C)	
<b>Accuracy</b>	Range	Accuracy
	-328° ~ -58°F (-200° ~ -50°C)	±(0.1% rdg + 4°F (2.2°C))
	-58° ~ 1832°F (-50° ~ 1000°C)	±(0.1% rdg + 2°F (1°C))
	1832° ~ 2498°F (1000° ~ 1370°C)	±(0.1% rdg + 4°F (2.2°C))
<b>Accuracy (after ice-point calibration)</b>	30° ~ 120°F (-1.1 ~ 48.9°C)	±1°F (0.6°C)
<b>Resolution</b>	0.1°F / 0.1°C	
<b>HOLD</b>	Yes	
<b>Max / Min</b>	T1 & T2	
<b>Differential (T1-T2)</b>	Yes	
<b>Operating / Storage</b>		
<b>Operating Temperature</b>	32 ~ 104°F (0 ~ 40°C)	
<b>Operating RH%</b>	< 70%RH, Non-condensing	
<b>Storage Temperature</b>	-4 ~ 140°F (-20 ~ 60°C)	
<b>Storage RH%</b>	< 80%RH, Non-condensing	
<b>Battery Type</b>	1 x 9V (NEDA 1604)	
<b>Battery Life (typical)</b>	125 hours typical	

## 7 CE CERTIFICATE

The product complies with EMC directive 2004/108/EC  
 Technical standard: Emission EN 61326-1:2006 Class B  
 EN 55011:2009/A1:2010 Group 1 Class B  
 Immunity EN 61326-1:2006 EN 61000-4-2:2009  
 EN 61000-4-3:2006 A2:2010



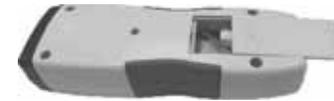
## 8 BATTERY REPLACEMENT



### WARNING

If the symbol "🔋" appears on the LCD, please replace the battery immediately.

- Turn off the instrument
- Remove the battery compartment
- Change the battery
- Replace the compartment cover



## END OF LIFE



CAUTION: This symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal.

## 9 LIMITED WARRANTY

The DTK2 is warranted to be free from defects in materials and workmanship for a period of three years from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEI's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Batteries and consequential damage resulting from failed batteries are not covered by warranty.

Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEI shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss. A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge. Return the unit postage paid and insured to:

8030 SW Nimbus Avenue, Beaverton OR 97008

- Accessories, probes and batteries (Not Covered by Warranty)
- Claims are not acceptable for improper use (including adaptation to particular applications not foreseen in the instruction manual or improper combination with incompatible accessories or equipment, or for repair carried out by unauthorized personnel.)

**1-800-547-5740 • FAX: (503) 643-6322**  
**www.ueitest.com • Email: info@ueitest.com**

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

**UEI** DTK2  
 TEST INSTRUMENTS™

## Differential Thermometer

### INSTRUCTION MANUAL

### ENGLISH



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## 1 INTRODUCTION

Thank you for purchasing the UEI DTK2 dual input K type differential thermometer. This thermometer features a built-in microprocessor and high resolution analog to digital converter chip. The thermocouple probe responds very quickly to a wide range of temperature measurements. The industry standard mini thermocouple jack accepts a wide selection of probe types.

### FEATURES

- Dual input with differential (T1 - T2)
- Min / Max capture (T1 & T2)
- Auto power off with disable feature (15 minutes)
- Large LCD screen
- Complete with bead wire temperature probes and 9V battery
- °C / °F select function
- Magnetic mount

### INCLUDES

- Meter
- 9V battery
- Operation manual
- ATT29A K-type bead probe (2)
- Pouch

## 2 KEYPAD (CONTROLS)

UNIT

PRESS "UNIT" TO SELECT °C/°F.

HOLD

Freeze display

MODE

Press "MODE" to change operation mode T1 or T1-T2. The corresponding reading will display on the primary LCD. The secondary LCD will always display T2.

PWR

Press and hold "PWR" to turn on the meter or press it to turn off the meter. The meter will turn off automatically after 15 minutes if you don't press any key. Press "HOLD" and "PWR" buttons to disable Auto sleep mode.

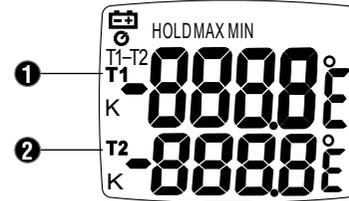
MAX/MIN

Press "MAX/MIN" to change operation mode from live data -> Max.-> Min.-> back to live data. The corresponding value will display on the LCD. The value is calculated since powered on or reset.

SET

Press and hold to enter ice-point calibration. (Please refer to section 5 to ensure correct calibration.)

## 3 LCD DISPLAY



1. Primary LCD: Display T1 (1st thermocouple reading) or T1 - T2
2. Secondary LCD: Display T2

**WARNING!** Always connect thermocouple before turning the unit on for most accurate readings.

**WARNING!** Make sure to plug sensor with correct polarity. Do not be alarmed if erratic readings appear on display prior to normal mode.

## 4 OPERATION

### POWER ON/OFF

#### Note:

Make sure you have plugged in the thermocouple probe before turning on.

Press and hold PWR button to turn on the meter. While the meter is on, press PWR button to turn off the meter.

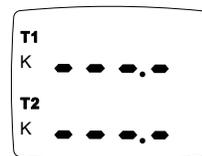
### SLEEP MODE (AUTO POWER OFF)

The meter will turn off automatically after 15 minutes if no buttons are pressed. To disable auto power off function, when the meter is off, press and hold "HOLD" button then press "PWR" button to turn on the meter, the primary LCD shows the following. Sleep mode is now disabled.



### TAKING MEASUREMENT

Connect thermocouple. If probe is open or not connected, the LCD will show "---".

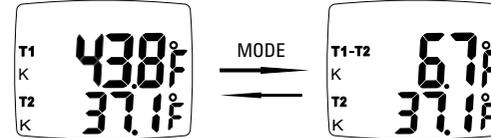


Single Input: (Top View)



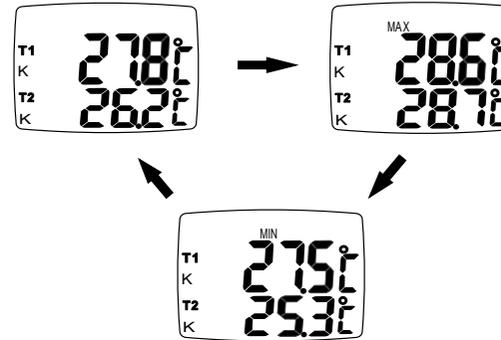
### DIFFERENTIAL (T1 - T2)

Press "MODE" to display differential. Press "MODE" again to return to normal display.



### MAX/MIN

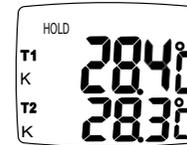
Press MAX/MIN button to change operation mode from live data -> MAX -> MIN -> back to live data. Corresponding value will display on the LCD. These values will reset at power on or when performing a reset on MAX/MIN.



**Reset MAX/MIN:** Press Max/Min button for 2 seconds to reset MAX/MIN analysis value. The MAX/MIN value is updated to current reading.

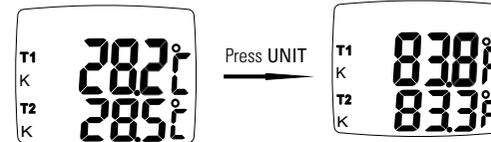
### DATA HOLD

Freeze display of basic measurements or disable. Press HOLD button again to go back to the temperature reading.



### CHANGE UNIT

Press UNIT button to change unit °C or °F. The meter default temperature unit is °F. The meter will default to last selected scale.



## 5 AUTOMATIC ICE-POINT CALIBRATION



The DTK2 has an automatic ice-point calibration function. Please follow these steps to calibrate your meter to the thermocouple probes.

### ITEMS NEEDED:

1. DTK2 Thermometer
2. Two k-type probes
3. Crushed ice/water mixture (distilled water recommended if available)

### CALIBRATION PROCEDURE

1. Connect both probes to the DTK2
2. Place probe tips in the crushed ice/water mixture
3. Power on the DTK2
4. Press and hold SET for five seconds.
  - a. The meter will enter ice-point calibration and 0.0°C will flash on both T1 and T2 readings
5. Stir the ice bath with the probes submerged for one minute
6. Continue stirring the ice/water mixture until the readings return to normal measurement (flashing will stop)  
The ice-point calibration is now complete.