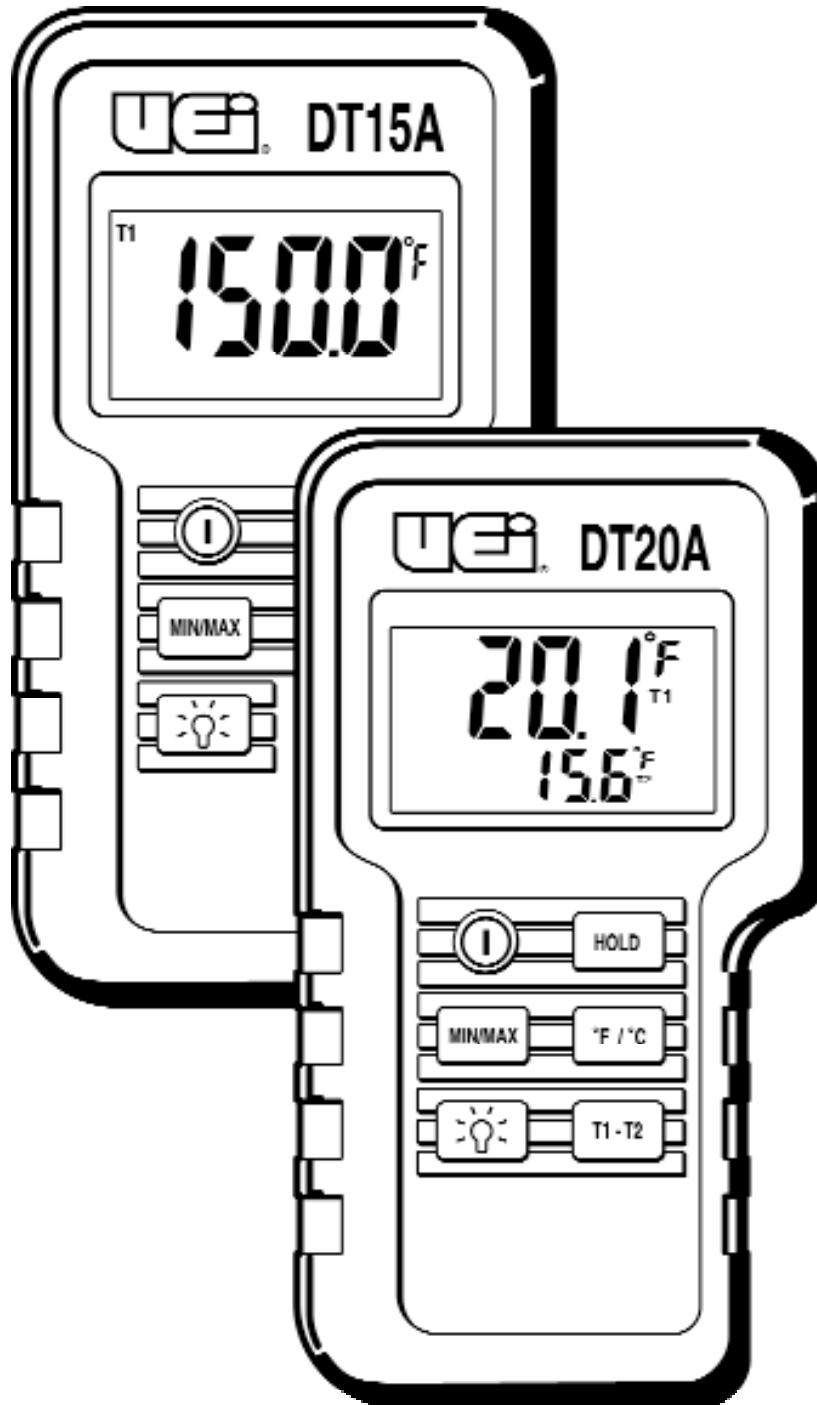




INSTRUCTION MANUAL

# DT15A/DT20A



Single Input Thermistor/Dual Input Thermistor

1-800-547-5740 • Fax: (503) 643-6322  
www.ueitest.com • email: info@ueitest.com

## Introduction

The DT15A/DT20A gives you economy and convenience in a dual input thermistor-type thermometer. It has two replaceable probes for easy, precise measurements and a large backlit digital display that stands out in comparison to its compact design.

### Features include

- -58° to 571°F (-50° to 300°C)
- Dual probe inputs
- Dual display lets you monitor any two of T1, T2 or differential ( $\Delta T$ )
- MIN/MAX record
- High visibility backlit display
- Data hold
- Includes two replaceable, submersible metal probes

## Safety Notes

Before using this meter, read all safety information carefully. In this manual the word "**WARNING**" is used to indicate conditions or actions that may pose physical hazards to the user. The word "**CAUTION**" is used to indicate conditions or actions that may damage this instrument.

- Do not attempt to use this meter if either the meter or the test leads have been damaged. Turn it in for repair at a qualified repair facility
- Place **ONLY** thermistor probes in input jacks
- Be sure the probe you are using can withstand the temperature extreme it may be exposed to
- Properly maintain your thermometer and calibrate it regularly

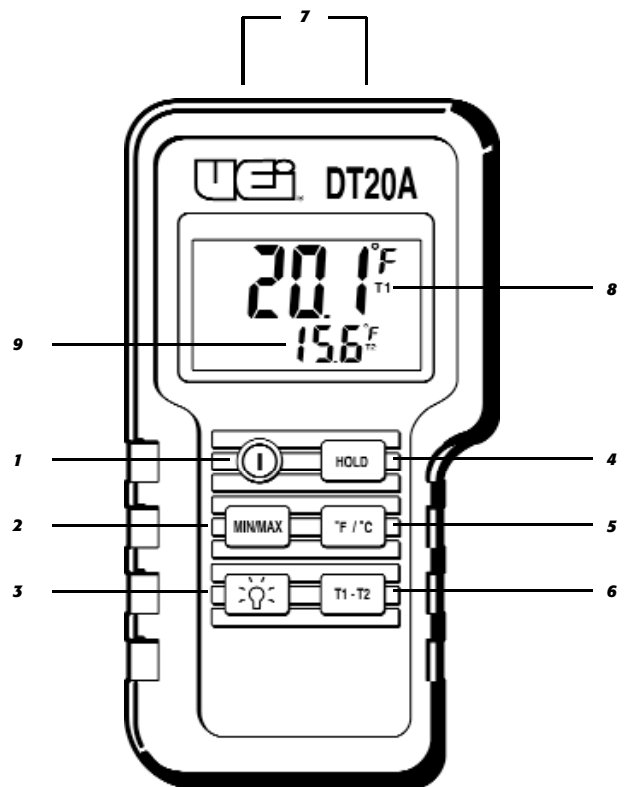


### WARNING!

*Always be aware of hazardous surroundings while operating this instrument.*

## Controls and Indicators

1. **Power Push-button:** Used to turn the power to the meter on or off.
2. **MIN/MAX Push-Button:** Displays the captured minimum and maximum values for all parameters.
3. **Back Light Push-Button "☾":** Powers back light on and off.
4. **Hold Push-button:** Freezes screen data.
5. **°F/°C Select:** Toggles display data from degrees Fahrenheit to degrees Celsius.
6. **T1-T2 Push-button (DT20A only):** Toggles screen information between T, T2 and T1-T2.
7. **Thermistor Ports:** 1/8" mini jack plugs for the thermistor probes used; T1 on the left T2 on the right for DT20A.
8. **LCD Display:** Display screen of function and data information.
9. **Second Display (DT20A only):** Displays of T2 or T1-T2 data.



**NOTE:** DT20A shown. DT15A does not have dual display or T1-T2 button.

# Operating Instructions

## Functional Description

The meter will momentarily flash all LCD segments on the display when it is first turned on, emit four quick beeps the it will go blank for approximately 3 seconds before starting operation. The instrument will only provide information with probes plugged in.

The DT15A has a single screen of information to view the temperature in °F or °C, recorded minimum or maximum, or held value.

The DT20A has a split screen to view both T1 and T2, or T1-T2 and your choice of either T1 or T2. The choices for format are the same as with the DT15A. Numerous viewing combinations are available to ensure you get the information you need.

- MIN/MAX function starts when the meter is powered on, and continues to capture values while operating with probes connected
- Temperature readings are easily toggled between Fahrenheit and Celsius
- The back light illuminates the LCD for viewing in low light areas
- The HOLD button will freeze the display data and suspend the MIN/MAX function
- The display will begin to blink when battery voltage is low

**NOTE:** *If no probes are plugged in, three dashes will appear in the temperature data screens. This will also be recorded as a Max until the power is switched off then back on.*

This instrument operates and updates silently.

## Auto Power Off

This instrument will shut off automatically in approximately 60 minutes. For recording or operating over longer periods of time you can defeat the auto power off function by holding down the hold button while turning the unit on. the unit will start with one solid beep to indicate that auto power off function is not activated.

## Mode Options

When the instrument is initially turned on, the primary screen displays T1 and the secondary screen displays T2 (DT20A). The following table lists the modes of operation that can be invoked by pressing the buttons indicated. The table assumes your instrument has been powered on with temperature probe(s) installed:

Button	Response/Display
ON/OFF	Turns instrument on (default setting) and off. Three beeps emitted at power up.
MIN/MAX	Press once and the display indicates MIN. You are now able to change scales to display minimum in degrees °F or °C, and on the DT20A you are able to cycle through T1-T2 options. Press a second time to display MAX - You have the same display. Press again to return to real time readings.
Back Light	Press momentarily to activate or turn off the backlight.
Hold	Press momentarily to hold all readings. This also stops the recording of MIN/MAX values. Hold down while turning unit on to disable auto power off. Confirmed with one solid tone.
°F/°C	Press momentarily and the unit toggles between Fahrenheit (the default) and Celsius temperatures. The current mode is indicated on the right side of the LCD.
T1-T2	(DT20A only) Press momentarily to display T1-T2 on the lower display with T1 on the upper display. Press again to display T1-T2 on the lower display with T2 on the upper display. Pressing a third time will return the display to T1 on the upper display and T2 on the lower display.

## Maintenance

### Periodic Service



### **WARNING!**

*Repair and service of this instrument is to be performed by qualified personnel only. Improper repair or service could result in physical degradation of the meter. This could alter the protection this meter provides to the operator. Perform only those maintenance tasks that you are qualified to do.*

### Cleaning

Periodically clean your meter's case using a damp cloth. **DO NOT** use abrasive, flammable liquids, cleaning solvents, or strong detergents as they may damage the finish, impair safety, or affect the reliability of the structural components.

Do not allow moisture to directly contact the temperature probe jacks, or enter the instrument's housing. Remove the instrument from its boot to ensure moisture is not trapped during cleaning.

**Battery Replacement**

Always use a fresh replacement battery of the specified size and type. Immediately remove the old or weak battery from the meter and dispose of it in accordance with your local disposal regulations. Batteries can leak chemicals that corrode electronic circuits. If your meter is not going to be used for a month or more, remove and store the battery in a place that will not allow leakage to damage other materials.

To install a new battery, follow these procedures:

1. Remove the temperature probes from the top of the instrument.
2. Remove the rubber boot, by sliding the instrument out toward the top faceplate cut-out.
3. Lay the instrument face down on a clean, flat surface.
4. Remove the battery cover by sliding it straight down.
5. Remove and replace the batteries, observing indicated polarity.

**Calibration**

To ensure your instrument is performing at its peak, send it to the UEi factory or a qualified calibration facility for annual calibration.

**Troubleshooting**

If I See This Malfunction	I Should Check For	Then Take This Corrective Action
Instrument does not turn on	Battery voltage	Replace low batteries
	Time delay	Allow 5 seconds after power-on for data to show up on screen
	Battery polarity	Ensure batteries are installed as shown in battery compartment
Dashes appear in data screen	Probes	Insert missing probes
Dashes appear during review of maximum recorded value	Open probe	Check for intermittent or momentarily removed temperature probe
Minimum or Maximum value not captured	Hold function activated	Hold function suspends capture of MIN/MAX values
Instrument turns off during recording	Auto power off defeat	Follow procedures outlined in Operating Instructions

This instrument contains no user serviceable parts beyond those listed in this table. In the event your instrument is physically damaged or does not function properly after taking the listed action, please return the instrument to UEi following the warranty and service instructions.

**Specifications**

Range	Resolution	Accuracy
-50° to -20°F/°C	1°	±1% ±1.5°F/°C
-19.9° to 199.9°F/°C	0.1°	
200° to 571°F	1°	
200° to 300°C	1°	

Specifications are for operating temperatures between 64 and 77°F (18 to 25°C). Specifications valid for 1 year after calibration.

H x W x D	5.5" x 3" x 1.25"
Weight	.44 lbs.
Thermistor	100k

**Operating Conditions**

32° to 122°F (0° to 50°C) at 0 to 85% relative humidity (non-condensing).

**Standard & Optional Accessories**

**Standard**

Temperature Probe ..... ATT55A

**Optional**

Air Probe ..... ATT56A

Surface Probe ..... ATT57A

Soft Carrying Case ..... AC319



# DT15A/DT20A

## Single Input Thermistor/Dual Input Thermistor

### Limited Warranty

The DT15A/DT20A 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:

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

