Temperature Tester 343 Instruction Manual



Test Products International, Inc.

9615 SW Allen Blvd., Ste. 104 Beaverton, OR USA 97005 503-520-9197 • Fax: 503-520-1225 info@testproductsintl.com

Test Products International, Ltd.

342 Bronte Road South, Unit 9 Milton, Ontario L9T5B7 Canada 905-693-8558 • Fax: 905-693-0888

Test Products International, Europe Ltd.

Longley House, International Drive, Southgate Crawley, West Sussex RH10 6AQ England +44 (0) 1293 530196 • Fax: +44 (0) 531870

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EC Declaration of Conformity

This is to certify that the 343 conforms to the protection requirements of the council directive 89/336/EEC, in the approximation of laws of the member states relating to Electromagnetic compatibility by application of the following standards:

EN 50081-1 1992 Emissions Standard EN 50082-1 1992 Immunity Standard

To ensure conformity with these standards, this instrument must be operated in accordance with the instructions and specifications given in this manual.

General Guidelines

<u>ALWAYS</u>

- Test the 343 before using it to make sure it is operating properly.
- Inspect temperature probes before using to make sure there are no breaks or shorts.
- Double check all connections before testing.

NEVER

- Insert the probe into an electrically charged medium.
- Touch the probe tip and shaft after it has been inserted in hot material.

TECHNICAL DATA

Features and Benefits

Water Resistant	Operates in any environment.
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Auto Power Off Instrument automatically shuts off after 20 minutes of inactivity.

Field Calibration Perform ice bath calibration via the front keypad.

Specifications

Input Type : K-Type Thermocouple Probe

Accuracy
±3°F (1.6°C)
±(0.3% of reading, + 1.8°F (1°C))
±(0.4% of reading, + 1.8°F (1°C))

General Specifications

Display	LCD, 4 Digits, 9999 counts
Update Rate	2.5 times per second
Operating Temperature	32° to 122°F (0° to 50°C)
Storage Temperature	-13° to 158°F (-25° to 70°C)
Power Supply	9 Volt Alkaline Battery
Battery Life	200 hrs. Typical
Size (HxLxW)	40mm x 190mm x 65mm (1.5" x 7.25" x 2.5")
Weight	315g (11.1 oz)

MEASUREMENT TECHNIQUES

WARNING: Please follow manufacturers test procedures whenever possible. Make sure probe tip and shaft are thoroughly cleaned before inserting it into any food product.

1. Controls and Functions:

Push Buttons

\bigcirc	Turns the 343 on and off.
°C/°F	Selects Centigrade of Fahrenheit
Min/Max	Selects Min or Max reading measured
T1/T2/ΔT	Selects probe and differential mode
HOLD	Freezes the reading on the LCD

2. Step by Step Procedures

- Connect a temperature probe or probes to the 343.
- b. Turn the 343 on.
- c. Insert the tip of the probe into the substance being measured.
- d. Read the temperature on the LCD, allowing approximately 30 seconds for the reading to stabilize. Use the push buttons to switch between probes and access other functions as described above.

FIELD CALIBRATION

The 343 has the ability to be field calibrated. Accuracy of +/-1°F within the 30°F to 120°F range can be achieved by performing an ice bath calibration.

The temperature of an ice bath is approximately $32^{\circ}F(0^{\circ}C)$. Fill a plastic or metal container with crushed ice and add clean water to a depth of at least 4 inches. Stir the ice and water for 2 to 3 minutes prior to performing calibration to ensure the water is completely chilled. Make certain there is plenty of ice in the mixture and always use clean water. Distilled water works well.

1. Step by Step Procedures

- a. Connect both temperature probes to the 343.
- Press and hold down the MIN/MAX and HOLD buttons and turn the 343 on. CALF will be displayed and the 343 will enter calibration mode and begin cycling between T1 and T2.
- Insert the probes into the ice bath and allow the readings to stabilize.
- Once the reading on both inputs has stabilized, press the HOLD button. SAVE will be displayed and calibration is complete.

FOR FULL FACTORY CALIBRATION PLEASE RETURN YOUR THERMOMETER TO: TPI / ATTN: SERVICE DEPT. 9615 SW ALLEN BLVD SUITE 104 BEAVERTON, OR 97005

Standard Accessories	Part No.
9V Battery	A009
Temperature Probe (2 each)	GK13M
Protective Boot	A303
Soft Pouch	A255
Instruction manual	

Optional Accessories

Probes

Part No. See Catalog

MAINTENANCE

- Battery Replacement: The 343 will display battery symbol when the internal 9 Volt battery needs replacement. Replace battery as follows:
 - a. Disconnect and remove all temperature probes from 343.
 - b. Loosen the 4 screws from the back of the 343.
 - c. Remove the back cover.
 - d. Remove old battery and replace it with new battery.
 - f. Reassemble instrument in reverse order from above.

2. Cleaning your 343

Use a $\ensuremath{\text{mild}}$ detergent and slightly damp cloth to clean the surfaces of 343.