SPECIFICATIONS

Temperature—
Range: 32.00 to 122.00 °F / 0.00 to 50.00 °C
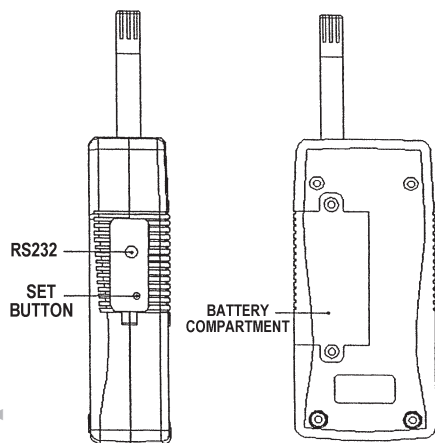**Resolution:** 0.01°

Humidity—
Range: 10 to 95%RH
Resolution: 0.01%

Dew Point—
Range: –13.50 to 120.10 °F / 25.30 to 48.90 °C
Resolution: 0.01°

Data output: RS-232 PC serial interface

RS232
SET
BUTTON
BATTERY
COMPARTMENT

OPERATION

1. Turn the meter on by pressing the POWER button.

2. Take the desired measurements.

3. Turn the meter off by pressing and holding the POWER button, release the POWER button when the meter emits a continuous beep. To preserve battery life, always turn the meter off when not in use.

SELECTING °F OR °C (Temperature/Dew Point)

1. Turn the meter on by pressing the POWER button.

2. Press and hold the SET button until "*CODE*" appears at the bottom of the display.

3. Release the SET button "*1000*" will appear at the top of the display.

4. Press the REC/ENTER button. "*0 F*" will appear at the bottom of the display and "*0*" or "*1*" will appear at the top of the display.

5. Press the FUNC/SEND button to select the desired unit of measure (*0* = °C   *1* = °F).
   Note: When pressing the FUNC/SEND button, "*0 F*" will not change at the bottom of the display.

6. With the desired value on the display, press the REC/ENTER button to confirm and save the selection.

7. Press the HOLD/ESC button to return to the measurement display.

The unit of measure selected will be the default unit of measure for both temperature and dew point until it is re-set.

SELECTING HUMIDITY OR DEW POINT DISPLAY

1. Turn the meter on by pressing the POWER button.

2. Each press of the FUNC/SEND button will toggle the top display between showing Humidity ("%RH" appears) and Dew Point Temperature ("Dew" appears). Temperature will always appear at the bottom of the display.

The Dew Point temperature will be displayed in the same unit of measure as the temperature display (See the "Selecting °F or °C" section).

HOLD FUNCTION

The hold function allows the readings on the display to be "frozen" so that they may be recorded.

1. Press the HOLD/ESC button to "freeze" the display at the current reading. "HOLD" will appear at the top of the display.

While in the hold mode, pressing the REC/ENTER, FUNC/SEND, or SET buttons will have no affect and will not change the "frozen" reading.

2. Once the reading has been recorded, press the HOLD/ESC button to return the display to the current reading. "HOLD" will no longer appear on the display.

RECORD MODE (Min/Max Memories)

While in the Record Mode, the maximum and minimum readings for Humidity or Dew Point (depending on the display mode) will be recorded. Also, while in the Record Mode, the Automatic Shutoff feature is disabled so that long term monitoring may be performed.

To enter the Record Mode, press the REC/ENTER button. "REC." will appear on display.

To recall the maximum and minimum readings since entering the Record Mode ("REC" appearing on the display), press the REC/ENTER button.

The first press of the REC/ENTER button will display the maximum reading achieved since entering the Record Mode. ("MAX" will appear on the display).

The second press of the REC/ENTER button displays the minimum reading achieved since entering the Record Mode. ("MIN" appear on the display).

To return the display to the current reading, press the HOLD/ESC button. "MAX" or "MIN" will no longer appear on the display.

To exit from the Record Mode, press and hold the REC/ENTER button for 3 seconds. "REC" will no longer appear on the display. *The maximum and minimum readings are automatically cleared once the Record Mode has been exited.*

AUTOMATIC SHUTOFF (Enable/Disable)

With the Automatic Shutoff feature enabled, after 10 minutes, if no button has been pressed, the meter will automatically shut off to preserve battery life.

When automatic shutoff is enabled, prior to shutting off, the meter will alarm to indicate that it is about to turn off. To prevent the meter from shutting off at this point, press any button twice (except POWER).

The automatic shutoff feature setting is overridden while in the Record Mode. (See the "Record Mode" section)

To Enable/Disable the Automatic Shutoff feature:
1. Turn the meter on by pressing the POWER button.

2. Press and hold the SET button until "$CODE$" appears on the display.

3. Release the SET button "1000" will appear on the top display.

4. Press the REC/ENTER button, "^0F" will appear at the bottom of the display.

5. Press the SET button until "OFF" appears at the bottom of the display.

6. Press the FUNC/SEND button to enable/disable the automatic shutoff feature.
   (0 = Disabled 1 = Enabled).
   Note: When pressing the FUNC/SEND button, "OFF" will not change at the bottom of the display.

7. With the desired value on the display, press the REC/ENTER button to confirm and save the selection.

8. Press the HOLD/ESC button to return to the measurement display.

The automatic shutoff feature will now be enabled/disabled until it is re-set.

REAL-TIME DATA OUTPUT

The meter features an RS-232 output via 3-pole 3.5 mm plug that will output the current display readings in real-time. An RS-232 lead with a 3-pole 3.5 mm jack on one end (plugs into "RS 232 OUT") and a 9-pin female D-Subminiature connector on the other end (plugs into the PC's serial port) will be required to link the instrument with a PC. The output is a 16-digit data stream that may be utilized by accessory item# 4237 (See the "Optional Accessories" section) or by user specific applications.

The 16-digit data stream will be appear in the following format: D15, D14, D13, D12, D11, D10, D9, D8, D7, D6, D5, D4, D3, D2, D1, D0

Each digit indicates a particular status as shown below:

D0 = End word

D1 to D8 = Display reading (D1 = LSD, D8 = MSD. Example: If the reading is 1234, then D8 to D1 is 00001234)

D9 = Decimal point position (DP) for display reading from right to left.
(0=No DP, 1=1 DP, 2=2 DP, 3 = 3 DP)

D10 = + or – indicator (0=Positive, 1=Negative)

D11 & D12 = Symbol for display reading
(01=°C, 02=°F, 04=% RH)

D13 = Upper/Lower display reading indicator
(1=Upper display reading, 2=Lower display reading)

D14 = Always outputs a value of 4

D15 = Start word

ALL OPERATION DIFFICULTIES

If this meter does not function properly for any reason, replace the battery with a new, high-quality battery (see the "Battery Replacement" section). Low battery power can occasionally cause an number of "apparent" operational difficulties. Replacing the battery with a new fresh battery will solve most difficulties.

BATTERY REPLACEMENT

An erratic display, faint display, no display, or a battery icon appearing on the display are all indicators that the battery needs replacement. Remove the battery compartment screws. Lift out the battery compartment. Remove the exhausted battery and replace it with a new 9 volt alkaline battery. Replace the battery compartment and tighten the screws securely.

OPTIONAL ACCESSORIES
Data Acquisition System
Complete DAS–4™ Data Acquisition System captures, displays, and stores real-time readings on any IBM-compatible PC. The software will also import the Data Logger readings from the meter. Information can then be imported into databases. Supplied complete with software and 5-foot RS-232 cable with plug.

TRACEABLE® GENERAL PURPOSE HYGROMETER/ THERMOMETER/ DEW POINT METER INSTRUCTIONS