# Temperature/RH Pens

# **PRODUCT MANUAL**

Item # 3401, 3402







Thank you for purchasing a 3401 or 3402 Temperature/RH Pen. In addition to temperature and RH, the 3402 also displays dew point and wet bulb temperatures. Please read this manual thoroughly before using your meter.

## **SPECIFICATIONS**

Size	6.9" x 1.7" 0.6" (17.5cm x 4.2cm x 1.6cm)	
Temperature range	14 to 140°F (-10 to 60°C)	
Temperature accuracy	±1°F (±0.6°C)	
Humidity range	10 to 95% RH	
Humidity accuracy	±3% RH	
3402 Dew Point Range	-4 to 139.8°F (-20 to 59.9°C)	
3402 Wet Bulb Range	23 to 139.8°F (-5 to 59.9°C)	
Power Supply	CR2032 battery	

### **OPERATION**

#### **Power ON/OFF**

Power on the meter by pressing the ON/OFF button. You will see a full display on the screen for one second ("DP","WB" will appear on the screen but are only operational for the 3402 model). The meter will begin measuring temperature and humidity, displaying both readings at the same time.



Note: Be sure to rotate the sensor cap to open it.

#### **Display Modes**

When the meter displays the AIR symbol, the current temperature and RH are being displayed. For model 3402, press the MODE button to switch between AIR, DP (dew point), and WB (wet bulb) modes.



#### **Selecting Temperature Units (C/F)**

Press the F/C (F/C CAL for item 3402) button to alternate between temperature units.

#### **Data Hold**

Press HOLD button until "HLD" appears in display. The current reading is now being held and will not change until the hold function is cancelled. Press the HOLD button to resume regular measurement.



The hold function can be used for humidity and temperature.

#### MIN/MAX

Press the MIN/MAX button; MIN appears on display. The LCD screen is now showing the minimum humidity and temperature readings in memory. Press the MIN/MAX button again; MAX will show on the LCD screen. Press MIN/MAX button once again to return to the current measurement.

To clear the MIN and MAX readings from memory, press and hold the RESET button. The meter reading returns to the normal mode and data in memory has been cleared.





#### **Auto Power Off**

The meter will turn itself off after 20 min. To override the Auto Power Off function, press the ON/OFF and HOLD keys simultaneously before powering on. The display will show "n". Release the ON/OFF button. The meter will now stay on until ON/OFF is pressed to turn it off.



#### **Battery Replacement**

Turn off the meter , then use a coin to open the battery cover. Put the battery (CR2032) into the battery compartment with the "+" side out. Place the battery cover back and lock it with a coin.

#### **Troubleshooting**

#### Meter powers on but there is no display

- -Be sure to press ON/OFF for at least a half second.
- -Ensure the battery is in place with correct polarity and good contact.
- -Remove the battery. Press "ON/OFF" for 10 seconds. Reinstall the battery and try again.
- -Replace with a new battery and try again.

#### **Display Disappears**

- -The meter may have turned itself off after 20 minutes of inactivity.
- -If the low battery indicator is on before the display turns off, replace the battery.

#### **Error Codes**

Code	Problem	Solution
E02	Ambient temperature is below limit.	Put the meter in room temp. for 30 minutes. If E02 recurs, repair is required.
E03	Ambient temperature is above limit.or sensor is damaged.	Put the meter in room temp. for 30 minutes. If E03 recurs, repair is required.
E04	RH code appearing with E02 or E03	Follow steps from E02
E11	RH Sensor is damaged or needs calibration.	Contact Spectrum Technologies for information on calibration procedure.
E33	Humidity sensor damaged.	Repair is required.

#### WARRANTY

This product is warranted to be free from defects in material or work-manship for one year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized modifications, or to incidental or consequential damages beyond the Spectrum product. Before returning a failed unit, you must obtain a Returned Materials Authorization (RMA) from Spectrum. Spectrum is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company.

 $\epsilon$ 

#### **DECLARATION OF CONFORMITY**

Spectrum Technologies, Inc. 12360 S. Industrial Dr. East Plainfield, IL 60585 USA

Model Numbers: 3401, 3402

Description: Temperature/RH Pen Meters

Type: Electrical Equipment for Measurement, Control, and Laboratory

Use

Directive: 89/336/EEC

Standards: EN 50081-1/1992 : EN 55022 EN 50082-1/1997 : EN 55024 (EN 61000-4-2/-3/-8, ENV 50204)

Michael J. Dunning, Weather Products Manager

January 22, 2009

# **Spectrum**° Technologies, Inc.

3600 Thayer Ct. Aurora, IL 60504 (800) 248-8873 or (815) 436-4440 Fax (815) 436-4460

E-Mail: info@specmeters.com www.specmeters.com