

# Thermo-Hygrometer Data Logger — Model 1246



**ENVIRONMENTAL TESTERS** 





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# **Statement of Compliance**

Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments certifies that this instrument has been calibrated using standards and instruments traceable to international standards.

We guarantee that at the time of shipping your instrument has met the instrument's published specifications.

An NIST traceable certificate may be requested at the time of purchase, or obtained by returning the instrument to our repair and calibration facility, for a nominal charge.

The recommended calibration interval for this instrument is 12 months and begins on the date of receipt by the customer. For recalibration, please use our calibration services. Refer to our repair and calibration section at <a href="https://www.aemc.com/calibration">www.aemc.com/calibration</a>.

Catalog #: 2121.73		
Model #: 1246		
Please fill in the appropriate date as indicated:		
Date Received:		
Date Calibration Due:		



Serial #:

Chauvin Arnoux®, Inc. d.b.a AEMC® Instruments

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## INTRODUCTION

Thank you for purchasing an AEMC<sup>®</sup> Instruments **Thermo-Hygrometer Data Logger Model 1246.** 

For best results from your instrument and for your safety, read the enclosed operating instructions carefully and comply with the precautions for use. Only qualified and trained operators should use this product.

# **International Electrical Symbols**

(i)	Indicates Important information to acknowledge
<u>-</u> +	Battery
	Magnet
Emilian tion	Chauvin Arnoux® and AEMC® Instruments have adopted an Eco-Design approach in order to design this instrument. Analysis of the complete lifecycle has enabled us to control and optimize the effects of the product on the environment. In particular this instrument exceeds regulation requirements with respect to recycling and reuse.
C€	This product complies with the Low Voltage & Electromagnetic Compatibility European directives.
4	The product has been declared recyclable.
Z	In the European Union, this product is subject to a separate collection system for recycling electrical and electronic components in accordance with directive WEEE 2012/19/EU.

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This instrument is compliant with safety standard IEC 61010-2-030, for voltages up to 5 V with respect to ground. Failure to observe the following safety instructions may result in electric shock, fire, explosion, and damage to the instrument and/or the installation in which it is located.

- The operator and/or the responsible authority must carefully read and clearly understand all precautions to be taken prior to using the instrument. Thorough knowledge and awareness of electrical hazards are essential when using this instrument
- Observe the conditions of use, including temperature, relative humidity, altitude, pollution degree, and location of use.
- Do not use the instrument if it appears damaged, incomplete, or improperly closed.
- Before each use, check the condition of the housing and accessories. Any item on which the insulation is deteriorated (even partially) must be set aside for repair or disposal.
- All troubleshooting and metrological checks must be done by accredited personnel.

# **INITIAL SETUP**

# **Installing Batteries**

- 1. Press the tab of the battery compartment cover and lift it clear.
- 2. Remove the battery compartment cover.
- 3. Insert the new batteries, ensuring correct polarity.
- Close the battery compartment cover; ensuring it is completely and correctly closed.

# Connecting to a Computer

The Model 1246 must be connected to DataView $^{\circ}$  for full configuration. (For detailed setup instructions, see the User Manual on the USB drive that comes with the instrument):

- Install the DataView® software, making sure to select the Data Logger Control Panel as an option (it is selected by default). Deselect any Control Panels you do not need.
- If prompted, restart the computer after installation is complete.
- Connect the instrument to the computer using a USB cable or pair with Bluetooth®.
- 4. Wait for the drivers to install. The drivers are installed the first time the instrument is connected to the computer. The Windows operating system will display messages indicating when the installation is complete.
- 5. Start the Data Logger Control Panel by **double-clicking** the Data Logger shortcut icon in the DataView folder placed on the desktop during the installation.
- 6. Click Instrument in the menu bar, and select Add an Instrument.
- 7. The Add an Instrument Wizard dialog box opens. This is the first of a series of screens that lead you through the instrument connection process. The first screen prompts you to **select** the connection type (USB or Bluetooth). Choose the connection type and **click** Next.
- 8. If the instrument is identified, **click** Finish. The instrument is now communicating with the Control Panel.
- When you are finished, the instrument will appear in the Data Logger Network branch in the Navigation frame, with a green check mark indicating a successful connection.

# Setting the Instrument's Clock

To ensure an accurate time stamp of measurements recorded in the instrument, set the instrument's clock as follows:

- 1. Select the instrument in the Data Logger Network.
- In the menu bar, select Instrument. In the drop-down menu that appears, click Set Clock.

- 3. The Date/Time dialog box appears. Complete the fields in this dialog box. If you need assistance, press F1.
- 4. When you are finished setting the date and time, **click** OK to save your changes to the instrument.

# INSTRUMENT CONFIGURATION

In addition to setting the instrument's clock, other basic setup tasks include:

- Enabling Bluetooth (can be done on the instrument or via DataView)
- Setting measurement units to °F or °C (can be done on the instrument or via DataView)
- Changing the Auto OFF interval (requires DataView)

Detailed information for configuring the instrument via the DataView Data Logger Control Panel is available by pressing the Help button.

# **Enabling Bluetooth**

**Long press** (> 2 sec) the  $\frac{\text{HOLD}}{\$}$  button to enable/disable Bluetooth.

# **Selecting Temperature Units**

**Press**  $\frac{C}{{}^{\circ}Cl^{\circ}F}$  to toggle between  ${}^{\circ}C$  and  ${}^{\circ}F$ .

# **OPERATION**

# **Making Measurements**

- 1. Remove the cap protecting the sensor.
- 2. If the instrument is OFF, **press** and **hold down** the  $\bigcirc$  button until it turns ON. The instrument displays the time, then the relative humidity (top) and temperature (bottom) measurements. (The time is set via DataView.)
- 3. Press the  $\frac{\bigcirc}{{}^{\circ}CJ^{\circ}F}$  button to change the displayed measurements.
  - The first press displays dew point (top) and relative humidity (bottom).
  - A second press shows dew point and temperature.
  - A third press restores the original measurements.
- 4. To change temperature units, **press** and **hold down** Order unit (°C or °F) is displayed.



**NOTE:** The last measurement display selected is saved when the instrument is turned OFF.

- Relative humidity (RH) is the ratio of the quantity of water vapor contained in a volume of air to the maximum quantity this same volume of air can contain at the current temperature.
- Dew point is the lowest temperature to which a mass of air can be subjected, at constant pressure and absolute humidity, without liquid water forming by saturation.

#### **HOLD Function**

Pressing the HOLD button freezes the display. A second press unfreezes the display.

#### MAX MIN Function

You can monitor the maximum and minimum measurements by **pressing** the  $^{MAX}_{MIN}$  button. This displays the words MIN MAX at the top of the display. In this mode, pressing  $^{MAX}_{MIN}$  once displays the maximum value measured during the current session. A second press displays the minimum. A third press restores the normal display. Subsequent presses of  $^{MAX}_{MIN}$  repeat this cycle.

To exit MAX MIN mode, long-press MAX MIN

# **Recording Measurements**

You can start and stop a recording session on the instrument. Recorded data is stored in the instrument's memory, and can be downloaded and viewed on a computer running the DataView Data Logger Control Panel. You can record data by pressing the MEM button:

- A **short press** (MEM) records the current measurement(s) and date/time.
- A long press (REC) starts the recording session. While the recording is in progress, the symbol REC appears at the top of the display. A second long press of MEM REC stops the recording session.



**NOTE:** While the instrument is recording, a short press of  $\frac{\text{MEM}}{\text{REC}}$  has no effect.

To schedule recording sessions, and download and view recorded data, see the Data Logger Control Panel Help.

# **MAINTENANCE**

# **Repair And Calibration**

To ensure that your instrument meets factory specifications, we recommend that it be sent back to our factory Service Center at one-year intervals for recalibration or as required by other standards or internal procedures.

#### For instrument repair and calibration:

You must contact our Service Center for a Customer Service Authorization Number (CSA#). Send an email to <a href="requir@aemc.com">requesting a CSA#</a>, you will be provided a CSA Form and other required paperwork along with the next steps to complete the request. Then return the instrument along with the signed CSA Form. This will ensure that when your instrument arrives, it will be tracked and processed promptly. Please write the CSA# on the outside of the shipping container. If the instrument is returned for calibration, we need to know if you want a standard calibration or a calibration traceable to N.I.S.T. (includes calibration certificate plus recorded calibration data).

**Ship To:** Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments

15 Faraday Drive • Dover, NH 03820 USA

Phone: (800) 945-2362 (Ext. 360) / (603) 749-6434 (Ext. 360)

Fax: (603) 742-2346 E-mail: <u>repair@aemc.com</u>

### (Or contact your authorized distributor.)

Contact us for the costs for repair, standard calibration, and calibration traceable to N.I.S.T.



NOTE: You must obtain a CSA# before returning any instrument.

# **Technical Assistance**

If you are experiencing any technical problems or require any assistance with the proper operation or application of your instrument, please call, e-mail or fax our technical support team:

Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments

Phone: (800) 343-1391 (Ext. 351)

Fax: (603) 742-2346

E-mail: techsupport@aemc.com

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