

Thermo-Anemometer Data Logger Model 1227

Quick Start Guide ENGLISH



Measure up

www.aemc.com

 **AEMC**[®]
INSTRUMENTS
CHAUVIN ARNOUX GROUP

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 its published specifications.

An N.I.S.T. 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 www.aemc.com.

Serial #: _____

Catalog #: 2121.72

Model #: 1227

Please fill in the appropriate date as indicated:

Date Received: _____

Date Calibration Due: _____



Chauvin Arnoux®, Inc.
d.b.a AEMC® Instruments
www.aemc.com

Thank you for purchasing the Thermo-Anemometer Data Logger Model 1227. For best results from your instrument:

- **read** these operating instructions carefully
- **comply** with the precautions for use

	WARNING, risk of DANGER! The operator must refer to these instructions whenever this danger symbol appears.
	Information or useful tip.
	Battery.
	Magnet.
	The product has been declared recyclable after analysis of its life cycle in accordance with the ISO14040 standard.
	AEMC has adopted an Eco-Design approach in order to design this appliance. Analysis of the complete lifecycle has enabled us to control and optimize the effects of the product on the environment. In particular this appliance exceeds regulation requirements with respect to recycling and reuse.
	
	Indicates conformity with European directives and with regulations covering EMC.
	Indicates that, in the European Union, the instrument must undergo selective disposal in compliance with Directive WEEE 2002/96/EC. This instrument must not be treated as household waste.
	



The Model 1227 is designed to operate with system voltages less than 75V_{DC}.

Precautions

This instrument is compliant with safety standard IEC 61010-2-030, for voltages up to 5V 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 all conditions of use, including temperature, relative humidity, altitude, pollution degree, and location of use.
- Do not use instrument if it appears damaged, incomplete, or improperly closed.
- Before each use, check condition of housing and accessories. Any item on which the insulation is deteriorated must be set aside for repair or disposal.
- Always hold the sensor handle, and keep your fingers away from the propeller.
- 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.
4. Close the battery compartment cover; ensuring it is completely and correctly closed.

Connecting to a Computer

The Model 1227 must be connected to DataView[®] before it can be configured. (For detailed setup instructions, see the User Manual in the USB drive that comes with the instrument.) **To connect the Model 1227 to your computer:**

1. Install the DataView[®] software, making sure to select the Data Logger Control Panel as an option (it is selected by default). De-select any Control Panels you do not need.
2. If prompted, restart the computer after installation is complete.
3. 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.
9. 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.
2. 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 seconds) the  button to enable/disable Bluetooth.

Selecting Temperature Units

Press  to toggle between °C and °F.

OPERATION

Making Measurements

Air Speed:

1. Connect the sensor to the instrument.
2. If the instrument is OFF, press and hold down the  button until it turns ON.
3. Press and hold down the  button. While holding this button down, short-press the  button to cycle through the measurement options until VELOC appears on the LCD.
4. While continuing to hold down , short-press  to select the air speed units of measure. Options are M/S (meters per second), F/M (feet per minute), KM/H (kilometers per hour), and M/H (miles per hour). When the desired measurement is displayed, release .
5. To change temperature units, short-press .
6. Hold the sensor in the air flow. The arrow on the inside of the propeller must point in the direction of the flow. This ensures the temperature sensor faces the incoming air, allowing it to display an accurate value more quickly.
7. The air speed and temperature measurements are displayed on the LCD. (Wait for the measurements to stabilize before accepting the reading.)

Air Flow:

1. Press and hold down the  **SET** button. While holding this button down, short-press the  **HOLD** button to cycle through the measurement options until the desired FLOW setting appears on the LCD. Choices are:
In - measures incoming (blowing) air flow with a cone.
out - measures outgoing (suction) air flow with a cone.
CUST - measures air flow without a cone. If you select this option, you must enter the area of the ventilation register into the DataView Data Logger Control Panel, as explained in step 4 below. The instrument can then calculate air flow using the speed measurement and ventilation area setting.
2. While continuing to hold down  **SET**, short-press  to select the air flow units of measure. Options are M3/S (cubic meters per second), M3/H (cubic meters per hour), L/S (liters per second), and CF/M (cubic feet per minute). When the desired measurement is displayed, release  **SET**.
3. To change temperature units, short-press  **MAP**.
4. **If you are using an air flow cone:** Skip the remainder of this step and proceed with step 5 below.

If you are not using a cone: Connect the instrument to a computer using DataView. Select the instrument in the Data Logger Network and click **Instrument -> Configure**. Then go to the **Anemometer** tab, select **Custom**, and enter the area of the ventilation register. (Consult the DataView Data Logger Help system for assistance.) When finished, place the sensor in front of the ventilation register, and go to step 7 below.

5. Place the air flow measurement cone on the sensor. Depending on the measurement you want to make (flow in or flow out), place the sensor with the arrow pointing towards the cone (outgoing flow) or away from it (incoming flow).
6. Place the cone on the ventilation register. The arrow inside the propeller must point in the direction of the air flow. This will be towards the outside of the cone for a blowing measurement, or towards the inside of the cone for a suction measurement.
7. The air flow and temperature measurements are displayed on the LCD. (Wait for the measurements to stabilize before accepting the reading.)

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  **REC** button:

- A short press (MEM) records the current measurement(s) and date.
- 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 that while the instrument is recording, a short press of ^{MEM}REC has no effect.

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

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#). 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 or (603) 749-6309
E-mail: repair@aemc.com

(Or contact your authorized distributor.)

Cost for repair, standard calibration, and calibration traceable to N.I.S.T. are available.

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

Technical and Sales Assistance

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

Contact: Chauvin Arnoux[®], Inc. d.b.a. AEMC[®] Instruments
Phone: (800) 945-2362 (Ext. 351) • (603) 749-6434 (Ext. 351)
Fax: (603) 742-2346
E-mail: techsupport@aemc.com



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