AEMC®
INSTRUMENTS
CHAUVIN ARNOUX GROUP

Data Logger
Models DL913 & DL914

DATA LOGGERS

Measure Up
WITH AEMC® INSTRUMENTS

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 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.

Serial #: _____

Catalog #:   **2153.61 / 2153.62**

Model #:   **DL913 / DL914**

Please fill in the appropriate date as indicated:

Date Received: _____

Date Calibration Due: _____

PRODUCT PACKAGING

(1) of the following:
Data Logger Model DL913 / Data Logger Model DL914
Cat. #2153.61 / Cat. #2153.62

(1) Small Classic Tool Bag
Cat. # 2133.72

(1) 10 ft USB Type A to Type B cable
Cat. #2136.80

(4) Stainless Steel Mounting Brackets &
(4) Stainless Steel Machine Screws

Also Included:

(1) Quick Start Guide

(1) USB Stick with User Manual & DataView® Software

(1) USB Power Adapter (5 V, 2 A)

Thank you for purchasing a **Data Logger Model DL913** or **DL914**.

For the best results from your instrument, read the operating instructions, and comply with the precautions for use.

▢	Signifies that the instrument is protected by double or reinforced insulation
⚠	**CAUTION - Risk of Danger!** Indicates a WARNING. Whenever this symbol is present, the operator must refer to the user manual before operation
⚡	Risk of electric shock. The voltage at the parts marked with this symbol may be dangerous
⊗	Refers to a type B current sensor. Application or withdrawal not authorized on conductors carrying dangerous voltages. Type B current sensor as per IEC 61010-2-032
❗	Important instructions to read and understand completely
ⓘ	Important information to acknowledge
⟿•	USB socket
CE	Compliance with the Low Voltage & Electromagnetic Compatibility European directives (73/23/CEE & 89/336/CEE)
♻	In the European Union, this product is subject to a separate collection system for recycling electrical and electronic components in accordance with directive WEEE 2002/96/EC

Definition of Measurement Categories (CAT)

CAT IV corresponds to measurements performed at the primary electrical supply (< 1000 V).
Example: primary overcurrent protection devices, ripple control units, and meters.

CAT III corresponds to measurements performed in the building installation at the distribution level.
Example: hardwired equipment in fixed installation and circuit breakers.

CAT II corresponds to measurements performed on circuits directly connected to the electrical distribution system.
Example: measurements on household appliances and portable tools.

⚠ Precautions Before Use

These instruments comply with safety standard IEC 61010-2-032 for voltages and categories of installations at an altitude below 6500 ft (2000 m) and are rated for 600 V CAT IV installations with a degree of pollution equal to 2. Failure to observe the following safety instructions may result in electric shock, fire, explosion, damage to the instrument, or damage to other equipment.

- The operator and responsible authority must read and understand the precautions needed before using the instrument
- This instrument requires the user to have knowledge and awareness of electrical hazards
- 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. If the insulation is deteriorated (even partially) on any item, it must be set aside for repair or scrapping
- All troubleshooting and calibration checks must be completed by accredited personnel
- Do not apply or remove the sensors from hazardous live parts or systems

Charging the Battery

1. Press the ◢ button to turn the instrument ON.
2. If the battery indicator is less than full (for example ▮▮☐), connect the instrument to external power via the provided USB cable. The battery indicator will blink to indicate that the battery is charging.
3. When the battery is fully charged, the battery indicator will stop blinking and appear completely filled (▮▮▮▮).

Initial Setup

⚠ **WARNING:** Connect the instrument to the DataView® control panel to set the date before first use.

Some features can be configured through the instrument keypad, such as enabling the Wi-Fi type. Other features require a connection between the instrument and DataView® for configuration. For detailed setup instructions, reference the user manual in the USB drive that comes with the instrument.

To connect your instrument to your computer:

1. Install the DataView® software. Make sure to select the Data Logger Control Panel as an option (it is selected by default). Deselect any Control Panels that you do not need.

   If you plan to create DataView reports, you must also check the option **DataView® Core**.

2. If prompted, restart the computer after installation is complete.

3. Connect the instrument to the computer using Wi-Fi Direct (Wifi access point) or via USB.

4. Wait for the drivers to install. The drivers are installed the first time the instrument is connected to the computer. The operating system will display messages to indicate when they are installed.

5. Use the Data Logger shortcut icon in the DataView® folder on the desktop (placed during installation) to launch the Data Logger Control Panel.

6. Click **Instrument** in the menu bar. Then, select **Add an Instrument**.

7. The **Add an Instrument Wizard** dialog box will open.

   This is the first of a series of screens that will lead you through the instrument connection process. The first screen will prompt you to select your type of instrument and the model.

   For a first-time connection, your choices are **USB** or **Wifi access point (Wi-Fi Direct)**. If you connect via USB, you can change the type to a network connection via **Ethernet (Wifi)** or **IRD server.**

8. Choose the connection type, and click **Next**.

9. Once the instrument is identified, click **Finish**. The instrument is now communicating with the Control Panel.

10. The instrument will appear in the **Data Logger Network** branch in the **Navigation** frame with a green check mark to indicate a successful connection.

Setting the Instrument Clock

To ensure an accurate time stamp of measurements recorded in the instrument, set the instrument's clock using the process below:

1. Select the instrument in the **Data Logger Network**.

2. In the menu bar, select **Instrument**.

3. In the drop-down menu that appears, click **Set Clock**.

4. Complete the fields in the **Date/Time** dialog box.

   If you need assistance, press F1.

5. When the date and time are set, click **OK** to save your changes to the instrument.

Other Configuration Settings

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

- Selecting and enabling the Wi-Fi type
- Setting the current range
- Setting the aggregation period
- Selecting the recording mode

These tasks can be completed through either the instrument front panel or DataView®. In addition, the Control Panel allows you to set a number of other parameters, including configuring Permanent mode, changing communication settings, erasing memory, and others. Detailed information for configuring the instrument via the DataView Data Logger Control Panel is available by pressing the Help button.

To change the following settings via the instrument front panel:

Wi-Fi Type:

1. Press ◺ twice.

   The message **WIFI AP (**Wi-Fi access point), **WIFI ST** (Wi-Fi Station), or **WIFI OFF** will appear at the bottom of the display.

   Wi-Fi AP (Wi-Fi access point) enables Wi-Fi Direct.

   Wi-Fi ST (Wi-Fi Station) enables Wi-Fi via router.

   Wi-Fi OFF turns the Wi-Fi off.

2. Press ⏎ to cycle through the options.

   Selecting a setting automatically enables it.

Enabling/Disabling Wi-Fi:

When Wi-Fi is enabled, the word **ON** and either the 📶 (Wi-Fi via router) or 📡 (Wi-Fi Direct) icons are displayed in the configuration screen.

1. To change the setting, press ◄ or ► to highlight 🔧.

2. Then, press ⏎ to switch between enabled and disabled.

Current Range:

1. Press either ◄ or ► until 🔧 is highlighted.

2. Use ▲ or ▼ to display the **I RANGE** screen.

3. Press ⏎ to toggle between **300 A** and **3000 A** and the number of turns the sensor is wrapped around the conductor (1 to 3).

Aggregation Period:

1. Press either ◄ or ► until 🔧 is highlighted.

2. Use ▲ or ▼ to display the **AGG PER** screen.

3. Press ⏎ to cycle between **1**, **2**, **3**, **4**, **5**, **6**, **10**, **12**, **15**, **20**, **30**, and **60** minutes.

Recording Mode:

1. Press either ◄ or ► until 🔧 is highlighted.
2. Use ▲ or ▼ to display the **rEC** screen.
3. Press ↵ to cycle between normal recording mode and extended recording mode.

    In normal recording mode, the instrument records a sample every second.

    In extended recording mode, the instrument's storage interval is four per aggregation period. To conserve battery power, the instrument powers down between samples and wakes up 5 seconds before the next sample. While extended recording mode extends battery life, it reduces measurement resolution.

Making Measurements

1. Connect the instrument's three (DL913) or four (DL914) integral current probes to the distribution system under test. Consult the user manual if you need assistance.
2. Press 🔘 to turn the instrument ON.
3. The first screen that will appear is the **Measurement** 〰️ screen. The information shown will depend on the instrument model.

    DL913 shows the L1, L2, and L3 current measurements and frequency.

    DL914 shows the L1, L2, L3, and L4 current measurements and frequency (after pressing ▲ or ▼).
4. Press ► until the 〰️ icon is highlighted. The **MAX** screen will appear. This screen displays the maximum aggregated averages for each probe over a period of time.

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.

1. Connect the instrument's three (DL913) or four (DL914) integral current probes to the distribution system under test.
2. Press 🔘 to turn the instrument ON.
3. Check the Memory indicator. If it appears full (🗄), delete one or more recordings from memory. You must use the Control Panel to erase any recordings from the instrument.
4. Press 📐 to display the **Start** screen.
5. Press ↵ to start the recording. The REC symbol will blink to show that a recording is pending and remain solid when the recording is in progress in normal recording mode. If the REC symbol blinks every 5 seconds, the instrument is recording in extended recording mode.
6. To stop the recording, press 📐. The word **STOP** will appear instead of **START** at the bottom of the screen. Press ↵ to end the recording.

To view a recording, connect the instrument to a computer running the DataView Data Logger Control Panel, and follow the instructions in the User Manual.

Remote User Interface

The remote user interface is available via PC, android tablet, or smartphone and allows you to view information about the device.

1. Enable Wi-Fi on the device.

   The remote user interface can work with an access point Wi-Fi link ((•)) or a router Wi-Fi link 📶.

   The remote user interface does not work with an IRD server link.

2. On a PC, connect as indicated in § 5.3.2 of the user manual.

   On an android tablet or smartphone, share a Wi-Fi connection.

3. In a web browser, enter http://IP_address_instrument.

   For a Wi-Fi access point connection, enter http://192.168.2.1.

   For a Wi-Fi router connection, enter the address indicated in the information menu (see § 4.2) of the user manual.

You must refresh the display regularly because it does not automatically refresh.

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.

(i)   **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, e-mail or fax our technical support team:

Limited Warranty

The instrument is warrantied to the owner for a period of two years from the date of original purchase against defects in manufacture. This limited warranty is given by AEMC® Instruments, not by the distributor from whom it was purchased. This warranty is void if the unit has been tampered with, abused, or if the defect is related to service not performed by AEMC® Instruments.

What AEMC® Instruments will do:

If a malfunction occurs within the warranty period, you may return the instrument to us for repair, provided we have your warranty registration information on file or a proof of purchase. AEMC® Instruments will repair or replace the faulty material at our discretion.
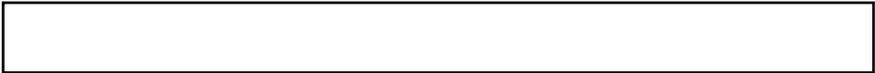
Caution: To protect yourself against in-transit loss, we recommend that you insure your returned material.

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

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