

AEMC DL913 Data Logger User Guide

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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
\triangle	CAUTION – Risk of Danger! Indicates a WARNING. Whenever this symbol is present, the operator must refer to the user manual before operation
<u>A</u>	Risk of electric shock. The voltage at the parts marked with this symbol may be dangerous
(3)	Refers to a type B current sensor. Application or withdrawal not authorized on conductors carrying da ngerous voltages. Type B current sensor as per IEC 61010-2-032
0	Important instructions to read and understand completely
(i)	Important information to acknowledge
→	USB socket
CE	Compliance with the Low Voltage & Electromagnetic Compatibility European directives (73/23/CEE & 89/336/CEE)
Z	In the European Union, this product is subject to a separate collection system for recycling electrical a nd 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:

- 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 (WiFi 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:



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:

- 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:

- 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.

- 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 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.

- 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.

For instrument repair and calibration:

You must contact our Service Center for a Customer Service Authorization Number (CSA#). Send an email to requesting a CSA#, 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

(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.

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.

Full warranty coverage and product registration is available on our website at Please print the online Warranty Coverage Information for your records.

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.

Warranty Repairs

What you must do to return an Instrument for Warranty Repair:

First, send an email to requesting a Customer Service Authorization Number (CSA#) from our Service Department. 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. Please write the CSA# on the outside of the shipping container. Return the instrument, postage or shipment pre-paid to:

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.

Quick Start Guide Translations

Visit our website to view and download a PDF version of this Quick Start Guide:

Español



Français



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 at

Serial #:

Catalog #: 2153.61 / 2153.62 Model #: DL913 / DL914

Please fill in the appropriate date as indicated:

Date Received:

Date Calibration Due:

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



Documents / Resources



AEMC DL913 Data Logger [pdf] User Guide DL913, DL914, DL913 Data Logger, DL913, Data Logger, Logger

References

• **Calcert**

Manuals+,