

AEMC 1110 Lightmeter User Guide

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AEMC 1110 Lightmeter



Product Information

The Lightmeter Model 1110 is a data logger designed to measure the intensity of light in a given area. The product comes with a NIST traceable certificate, and the recommended calibration interval is 12 months from the date of receipt by the customer. The product is compliant with Low Voltage & Electromagnetic Compatibility European directives and has been declared recyclable.

Statement of Compliance

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.

Symbols and Definitions

CAUTION – Risk of Danger! Indicates a WARNING. Whenever this symbol is present, the operator must refer to the user manual before operation. Indicates important information to acknowledge. The product has been declared recyclable.

Definition of Measurement Categories (CAT)

Product Usage Instructions

Precautions for Use

These safety warnings are provided to ensure the safety of personnel and the proper operation of the instrument. Read this instruction manual completely and follow all the safety information before attempting to use or service this instrument. Safety is the responsibility of the operator! Tests are to be carried out only on dead circuits! Check for live circuits before making resistance measurements (safety check). Always make connections from the instrument to the circuit under test. These megohmmeters are sources of high voltage, as is the sample.

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

- 1. Download and install the necessary drivers from the manufacturer's website.
- 2. Connect the instrument to the computer using a USB cable or pair it with Bluetooth.
- 3. 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.
- 4. Click Instrument in the menu bar, and select Add an Instrument.
- 5. 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.

Thank you for purchasing an AEMC® Instruments Lightmeter Data Logger Model 1110. For the best results from your instrument and for your safety, you must read the enclosed operating instructions carefully and comply with the precautions for use. Only qualified and trained operators should use this product.

Symbols and Definitions

| \triangle | CAUTION - Risk of Danger! Indicates a WARNING. Whenever this symbol is present, the operator must refer to the user manual before operation. |
|-------------|---|
| (i) | Indicates important information to acknowledge. |
| - +1 | Battery |
| | Magnet |
| 4 | The product has been declared recyclable. |
| | 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. |
| CE | This product complies 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 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 FOR USE

These safety warnings are provided to ensure the safety of personnel and the proper operation of the instrument.

- Read this instruction manual completely and follow all the safety information before attempting to use or service this instrument.
- Safety is the responsibility of the operator!
- Tests are to be carried out only on dead circuits! Check for live circuits before making resistance measurements (safety check).
- Always make connections from the instrument to the circuit under test.
- These megohimmeters are sources of high voltage, as is the sample connected to them. All persons
 performing or assisting in the tests must follow all safety precautions to prevent electrical shock to themselves
 and to others.

- AEMC considers the use of rubber gloves to be an excellent safety practice even if the equipment is properly
 operated and correctly grounded.
- When testing capacitance samples, make sure that they have been properly discharged and that they are safe
 to touch. Dielectric insulation samples should be short-circuited for at least five times the amount of time they
 were energized.
- Never open the back of the instrument while connected to any circuit or input.

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

Some Model 1110 features (such as measurement units and min/max/average settings) can be configured through the instrument keypad. Others require the instrument to be connected to DataView® for configuration. (For detailed setup instructions, see the User Manual in the USB drive that comes with the instrument). To connect the Model 1110 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 it 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 (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



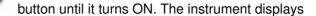
Press

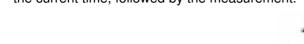
to toggle between lx (lux) and fc (foot-candles).

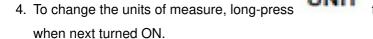
OPERATION

Making Measurements

- 1. Remove the cap protecting the sensor.
- 2. Place the sensor in the location to be measured, ensuring you do not position yourself between the sensor and light source(s).
- 3. If the instrument is OFF, press and hold down the the current time, followed by the measurement.







the button. The instrument will continue to use this unit

5. To save the measurement to the instrument's memory, press the



hutton

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
- 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



stops the recording session. Note that while the



instrument is recording, a short press of

has no effect

To schedule recording sessions, and download and view recorded data, see the DataView® 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#). Send an email to repair@aemc.com 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
- 15 Faraday Drive
- Dover, NH 03820 USA
- Phone: (800) 945-2362 (Ext. 360) / (603) 749-6434 (Ext. 360)
- Fax: (603) 742-2346
- E-mail: repair@aemc.com.

(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.

www.aemc.com.

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. 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 ourwebsite at www.aemc.com/warranty.html. 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.

REGISTER ONLINE AT: www.aemc.com/warranty.html

WARRANTY REPAIRS

What you must do to return an Instrument for Warranty Repair: First, send an email to repair@aemc.com 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:

• 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: repair@aemc.com.

• 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.

AEMC® Instruments

15 Faraday Drive • Dover, NH 03820 USA

• Phone: (603) 749-6434

• (800) 343-1391

• Fax: (603) 742-2346

• www.aemc.com

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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 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 www.aemc.com.

· Serial #:

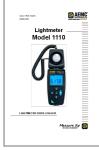
• Catalog #: 2121.71

• Model #: 1110

Please fill in the appropriate date as indicated:

- · Date Received:
- Date Calibration Due:
- Chauvin Arnoux®, Inc.
- d.b.a AEMC® Instruments
- www.aemc.com.

Documents / Resources



AEMC 1110 Lightmeter [pdf] User Guide 1110 Lightmeter, 1110, Lightmeter

References

- Get Electrical Testers Power Analyzers | AEMC Instruments
- AEMC Warranty Registration
- Get Electrical Testers Power Analyzers | AEMC Instruments
- AEMC Warranty Registration

Manuals+,