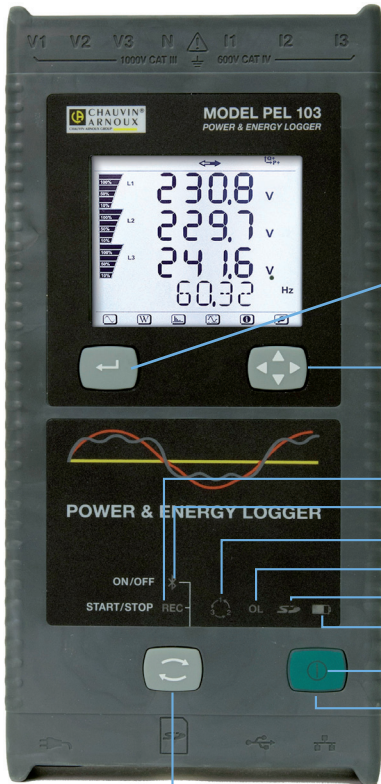


# QUICK START GUIDE OF THE PEL 102/103 (GB)

## Control Features



PEL 103

### CONTROL BUTTON:

Starts/stops the recording session and enables/disables Bluetooth.

The function is obtained by a 2 s press on the **CONTROL** button, which causes the lighting of the REC LED for 3s followed by the Bluetooth LED, one after another.

### REC LED (START/STOP)

- A release while lit starts recording (if stopped)
- A release while lit stops recording (if started)

### BLUETOOTH LED (ON/OFF)

- A release while lit enables Bluetooth (if disabled)
- A release while lit disables Bluetooth (if enabled)



PEL 102

Same features as the PEL 103 without the LCD display, Enter or Navigation buttons.

### ENTER BUTTON

(PEL103 Only):

Displays partial energies (long push).

### NAVIGATION BUTTON

(PEL103 Only):

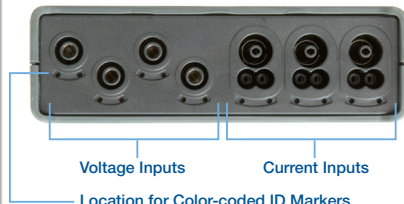
Enables browsing and the selection of data view.

### ON/OFF BUTTON:

- **To turn ON:** Connect the power cord into an AC outlet.
- **To turn OFF:** Disconnect the power cord from the AC outlet, then press the ON/OFF button for >2s.

**NOTE:** The instrument cannot be turned OFF while connected to an AC outlet or if a recording is in progress.

## TOP VIEW: Lead Inputs



Voltage Inputs

Current Inputs

Location for Color-coded ID Markers

(see page 4 for input connection diagram)

## BOTTOM VIEW: Connections



Power Cord Connection

SD Card Slot

USB Connection

Ethernet RJ 45

## LED Status

LED	STATUS
①	<b>Green LED: Recording Status</b> <ul style="list-style-type: none"> <li>- LED blinks once per second every 5 s: Logger in standby (not recording)</li> <li>- LED blinks twice per second every 5 s: Logger in recording mode</li> </ul>
②	<b>Blue LED: Bluetooth</b> <ul style="list-style-type: none"> <li>- LED OFF: Bluetooth OFF (disabled)</li> <li>- LED ON: Bluetooth ON (enabled - not transmitting)</li> <li>- LED blinks twice per second: Bluetooth ON (enabled - transmitting)</li> </ul>
③	<b>Red LED: Phase Order</b> <ul style="list-style-type: none"> <li>- OFF: Phase rotation order correct</li> <li>- LED blinks once per second: Phase rotation order incorrect</li> </ul>
④	<b>Red LED: Overload</b> <ul style="list-style-type: none"> <li>- OFF: No overload on inputs</li> <li>- LED blinks once per second: At least one input is in overloaded</li> <li>- LED ON: Indicates a current probe is either mismatched or missing</li> </ul>
⑤	<b>Red/Green LED: SD-Card Status</b> <ul style="list-style-type: none"> <li>- Green LED ON: SD-Card is OK</li> <li>- Red LED blinks five times every 5 s: SD-Card is full</li> <li>- Red LED blinks four times every 5 s: less than 1 week capacity remaining</li> <li>- Red LED blinks three times every 5 s: less than 2 weeks capacity remaining</li> <li>- Red LED blinks twice every 5 s: less than 3 weeks capacity remaining</li> <li>- Red LED blinks once every 5 s: less than 4 weeks capacity remaining</li> <li>- Red LED ON: SD-Card is not present or locked</li> </ul>
⑥	<b>Yellow/Red LED: Battery Status</b> <p>When the AC power cord is connected, the battery charges until it is full.</p> <ul style="list-style-type: none"> <li>- LED OFF: Battery full (with or without power supply)</li> <li>- Yellow LED ON: Battery is charging</li> <li>- Yellow LED blinks once per second: Battery is recovering from a full discharge</li> <li>- Red LED blinks twice per second: Low battery (and no power supply)</li> </ul>
⑦ <i>under ON/OFF button</i>	<b>Green LED: ON/OFF</b> <ul style="list-style-type: none"> <li>- LED ON: External power supply present</li> <li>- LED OFF: No external power supply</li> </ul>
⑧ <i>embedded in the connector</i>	<b>Green LED: Ethernet</b> <ul style="list-style-type: none"> <li>- LED OFF: No activity</li> <li>- LED ON blinking: Activity</li> </ul>
⑨ <i>embedded in the connector</i>	<b>Yellow LED: Ethernet</b> <ul style="list-style-type: none"> <li>- LED OFF: The stack failed to initialize or the Ethernet controller failed to initialize</li> <li>- Blink Slow, toggle every second: The stack initialized properly</li> <li>- Blink Fast, toggle 10 times per second: The Ethernet controller initialized properly</li> <li>- Blink Twice, toggle 2 times, then pause: DHCP Error</li> <li>- LED ON: Network initialized and ready for use</li> </ul>

## Installing PEL Transfer



**Do not connect the instrument to the PC before installing the software and drivers.**

1. Insert the CD into your CD-ROM drive.  
If auto-run is enabled, the program will start automatically into your browser. If auto-run is not enabled, select **Start.html** in D:\SETUP (if your CD-ROM drive is drive D. If this is not the case, substitute the appropriate drive letter).
2. Select your language and click **ENTER**. Give authorization to your browser to open the file.
3. Select the Software column.
4. Select PEL Transfer Software.
5. Download the file, run it and follow the instructions.



**Note:** For complete installation instructions, refer to the manual that is supplied on the CD-ROM.

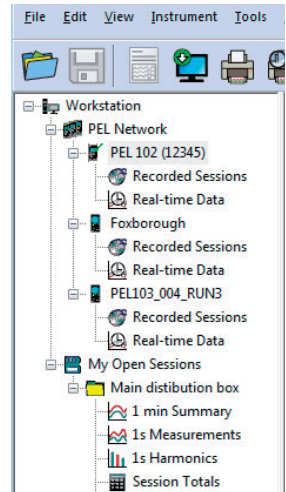
## SD-Card

SD-Cards (up to 2 GB) and SDHC-Cards (4 GB up to 32 GB) are supported. Insert the supplied SD-Card into the PEL and format it.

- 2GB card supports a 4 week recording if harmonics are not recorded.
- When the SD-card is inserted in the instrument, formatting is possible with some restrictions when connected to PEL Transfer.
- Formatting is possible without restriction when inserted into a PC using the supplied SD-card reader.
- Hot extraction is possible when not recording.

## Opening the PEL Transfer

- Connect the power cord to an AC outlet. The instrument will power on.
- Connect the supplied USB cable to the PEL and the PC. Wait for the drivers to finish installing before proceeding.
- Double-click the PEL icon  located on your desktop to open the PEL Transfer.
- Select the **Add an Instrument** icon  from the toolbar or the main **Instrument** menu.
- Follow the instructions from the **Add an Instrument** wizard. If the PEL Transfer cannot locate the instrument in the drop-down list, click on the Refresh button, or disconnect and reconnect the USB cable.
- When a connection to the instrument has been established, the instrument's name should appear along the left side of the PEL Transfer within the **PEL Network Branch**.



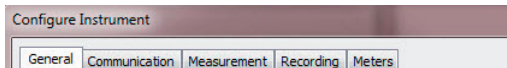
Example of the PEL Network Branch

## Configuring the Instrument

To configure your PEL, select the instrument in the PEL Network branch.

Open the Configure Instrument dialog box from the **Configure** icon  on the toolbar, the **Instrument** menu, or the **Status** frame.

This dialog box consists of five tabs:



- **General:** Provides instrument labeling fields, auto power off control, LCD control, operation button control, set clock and format SD card options.
- **Communication:** Options for Bluetooth and LAN connections.
- **Measurement:** Distribution system selection, voltage ratio, frequency selection and setting for current sensors.
- **Recording:** Options for selecting recording parameters.
- **Meters:** Resets meters and options for partial energy reset periods.

Click on the  button to transfer the new configuration to the instrument.

