PASPort™

Light Sensor

PS-2106A

Sensor Specifications

Sensor Ranges:	0-2.6 lux 0-260 lux 0-26,000 lux
Accuracy	Better than ±1db of max value of selected range
Resolution:	0.01% of max value of selected range
Max Sample Rate:	1,000 sps
Default Sample Rate:	5 sps
Operating Temperature	0-40°C

Light Sensor Quick Start

The PS-2106 Light Sensor measures Illuminance in units of lux.

Additional Equipment Needed

- PASPORT Link Device (USB Link, **Xplorer**, etc.)
- EZscreen or DataStudio™ software (version 1.5 or later)

Equipment Setup

1. Connect the PASPORT Link Device to a USB port on your computer or USB hub.
2. Connect the sensor to a PASPORT Link Device.
3. The software launches when it detects a PASPORT sensor. From the PASPORTAL screen, select a point of entry:
   - an activity in the Workbook window,
   - EZscreen, or
   - DataStudio.

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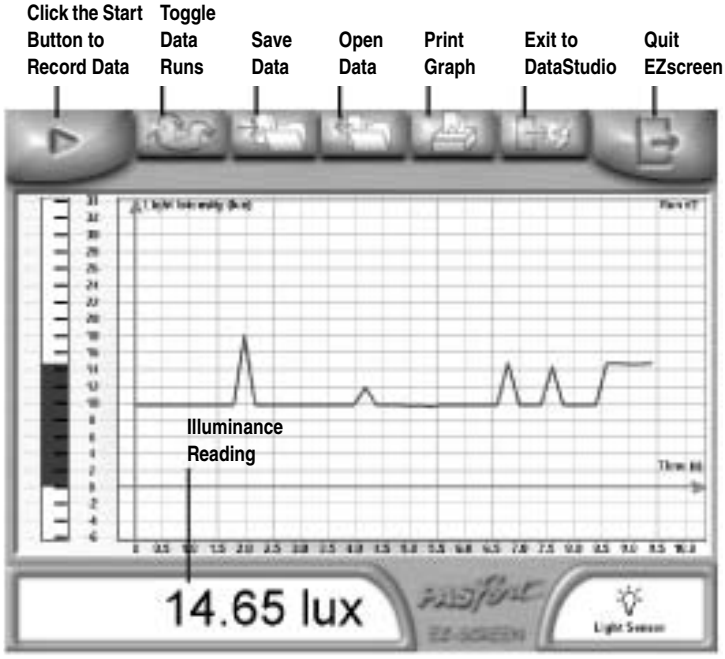

EZscreen Activity

1. To make a spot measurement of light in your classroom, click **EZscreen** in the PASPORTAL window.
2. Click the **Start** button to record data.

Range Selection

To select a range, press one of the three buttons on the sensor. The button of the selected range illuminates steadily.

To help you choose the appropriate range, the sensor continuously monitors light input (even if data is not being recorded) and detects when the light input is too high for the selected range. When this occurs, the button for the next higher range flashes. Press the flashing button to select the proper range.

DataStudio Activity

Using DataStudio, the Light Sensor can be used to investigate the inverse square relationship of light and distance.

Materials

- flashlight
- meter stick or tape measure
- opaque tape

1. Tape the meter stick to a table top.
2. Place strips of opaque tape over the end of the flashlight leaving a 1 cm opening for light to pass through.
3. Place the flashlight so the covered end lines up with the 0 cm mark of the meter stick.
4. Place your Light Sensor on the meter stick and line up the opening of the flashlight with the Light Sensor.
5. Press the Light Bulb button on the Light Sensor.
6. Position the end of the Light Sensor at the 10-cm line and turn on the flashlight.
7. Click **Start** to begin data recording.
8. When the light intensity reading stabilizes, record the light intensity and distance.

Repeat step 8 at 5-cm intervals through 40 cm.

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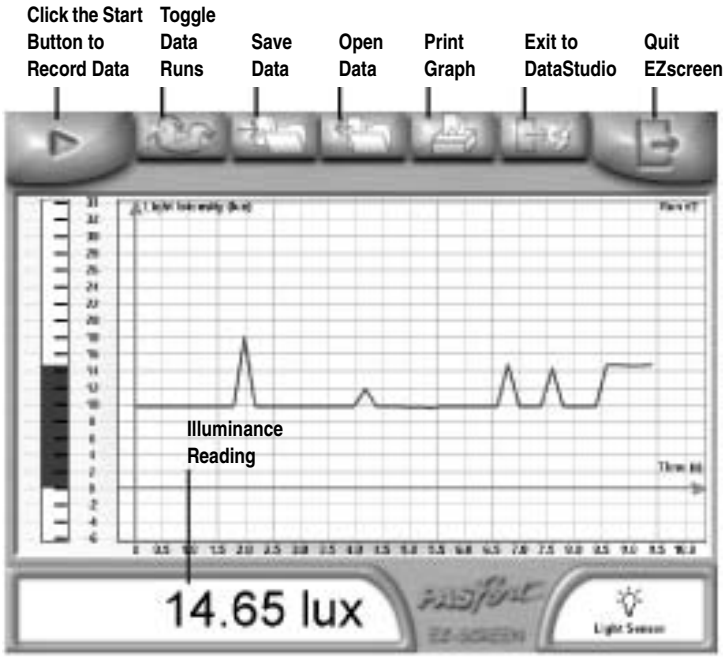

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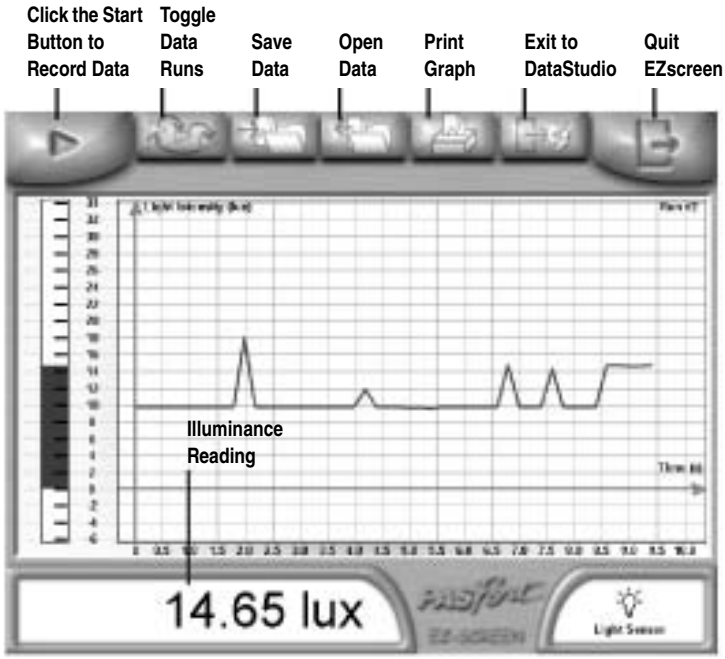

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