

PAR DLI METER

USER MANUAL



- To ensure accurate measurement, please read this manual carefully before installation and follow the instructions herein.
- WARNING: CHOKING HAZARD - Accessories contain small parts

SCAN THE QR CODE to download **Software & User Manual**

TUTORIAL VIDEO ON HOW TO USE

Need more help? CONTACT US. <https://cd50.net/499>

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KEY FEATURES

- Easy to measure PAR (Photosynthetically Active Radiation) flux and DLI (Daily Light Integral)
- Records up to 5 years of data and can export in CSV file.
- Easy to read 30 days data in the device.
- Date and Real Time Clock Display.
- DLI (Daily Light Integral) function.
- IP65 waterproof

SPECIFICATIONS

Typical test conditions, unless otherwise specified:
Ambient Temp: 23+/-3°C, RH:50%-70%, Altitude:0~100meter

Measurement	Specification	
	PPFD	DLI
Measurement Range	0-5000 $\mu\text{mol}/\text{m}^2/\text{sec}$	
Repeatability	$\pm 1 \mu\text{mol}/\text{m}^2/\text{sec}$	0.01mol/m ² /d
Display Resolution	0.01 $\mu\text{mol}/\text{m}^2/\text{sec}$ (0-99.99);	0.01mol/m ² /d
	0.1 $\mu\text{mol}/\text{m}^2/\text{sec}$ (100-999);	
	1 $\mu\text{mol}/\text{m}^2/\text{sec}$ (1000-5000)	
Measuring Rate	1 per second	1 per 3 minutes

Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Operating & Storage RH	0-95%, non-condensing
Cut-On Wavelength	400±10nm
Cut-Off Wavelength	700±10nm
Power Requirements	2pcs AAA alkaline battery
Dimension	70mm (2.76") diameter x 30mm (1.18") height
Weight	85g (0.19 lb) with batteries

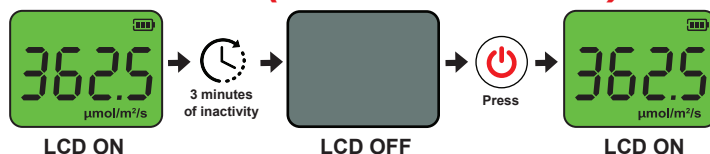
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GETTING STARTED

Hello there! Congratulations on your new product! Our products are packaged and shipped with the utmost care. In the unlikely event that your item is incorrect, incomplete, or unsatisfactory, please contact us via dpglobal1us@gmail.com and we will see to fix it immediately.

The PAR DLI meter is designed to measure PAR (Photosynthetically Active Radiation) flux and DLI (Daily Light Integral) in wavelengths ranging from 400 to 700nm. There is a proportional relationship between the number of photons absorbed in 400 to 700nm band and the rate of photosynthesis in plants, which is important for horticultural studies and monitoring plant physiology.

REMINDER (POWER-SAVING MODE)



The screen will turn off if no operation after 3 minutes, while the device continues measurement in the background. Press the button to reactivate the display.

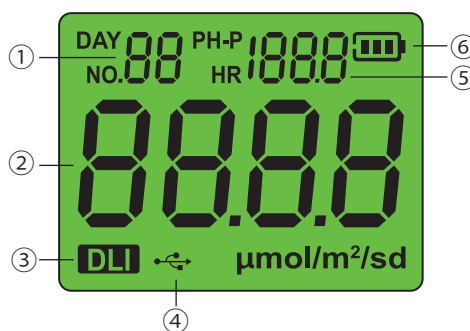
PACKAGE CONTENTS

1. PAR Meter
2. Type-C Cable
3. 2 x AAA Batteries
4. Soil rod
5. Screwdriver
6. Spare screw
7. User Manual

Device includes 1/4" screw mount for tripod and selfie stick compatibility

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LCD CONTENTS

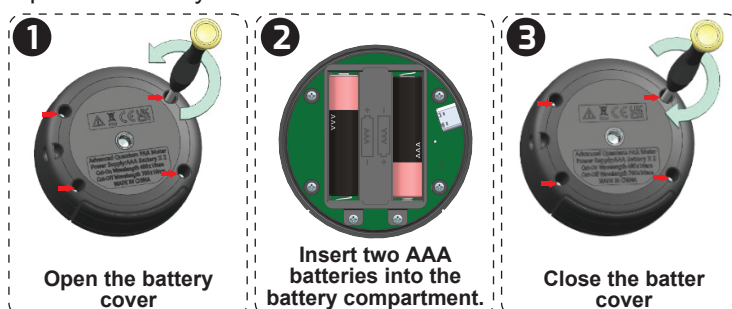


- ① The Day of data recording
- ② PPFD measurement / DLI measurement
- ③ DLI (Daily Light Integral) icon
- ④ PC connection icon
- ⑤ Photoperiod, unit in hours
- ⑥ Battery level indicator

OPERATING INSTRUCTIONS

1. BATTERY INSTALLATION:

Open the battery cover and insert two AAA batteries.



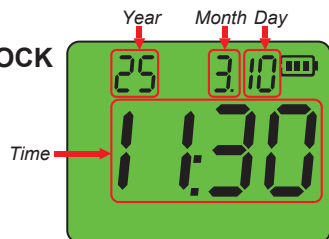
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2. TURN ON/OFF DEVICE

- 1 Press button to turn on the device.
- 2 Press and hold button for 3 seconds to turn off the device.
- 3 The LCD display will automatically shut down if there is no operation in 3 minutes, and the measurement and data recording functions will not stop, short press button to turn on the LCD display.

3. VIEW DATE & REAL TIME CLOCK

- 1 In the PPFd measurement interface, press button to enter the Real Time Clock.



4. ADJUST DATE & REAL TIME CLOCK

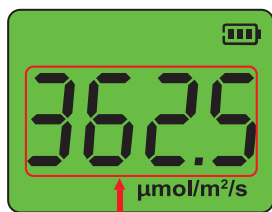
- 1 In the Real Time Clock, press and hold button for 3 seconds to enter setting mode.
- 2 Short press button to adjust the value.
- 3 Press button to switch Year, Date and Clock.



5. TYPES OF MEASUREMENTS

1) PPFd MEASUREMENT:

- 1 The real-time PPFd measurement value will change dynamically per second, the measurement unit is $\mu\text{mol}/\text{m}^2/\text{sec}$



PPFD measurement value

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6. RESTORE FACTORY SETTING

- 1 Press and hold and button simultaneously for more than 3 seconds, the LCD will show "CLEAR", then the device will restore factory setting.



DLI MEASUREMENT EXPLANATION

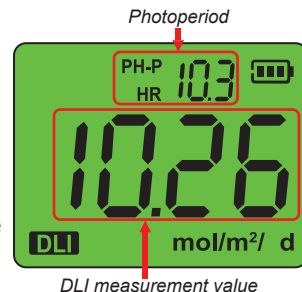
The device is designed to record DLI (Daily Light Integral) data logs. It will automatically record 10 measurement values every 3 minutes, the average value of those 10 measurements will be stored in the device as a single DLI value, representing the DLI value for the past three-minute interval. Upon completing the accumulation of 24 hours data, a total daily DLI will be calculated and saved in the device.

The Photoperiod is defined as the cumulative number of hours within 24-hour period, which the average measurement exceeds $0.1 \mu\text{mol}/\text{m}^2/\text{sec}$. The Photoperiod will increase by 0.1 hours for every 6 minutes of light exposure. The Given that measurements are taken at 3-minute intervals, the DLI meter may not capture intermittent light changes that last for less than 3 minutes.

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2) DLI MEASUREMENT:

- 1 Press button to view the DLI recorded data, the upper right corner displays the photoperiod hours for the current day, while the DLI measurement value, shown in $\text{mol}/\text{m}^2/\text{d}$, is displayed in the middle of the screen.

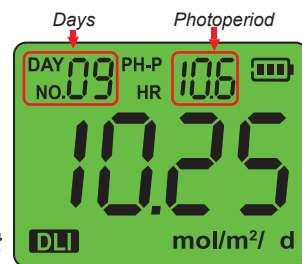


DLI measurement value

3) VIEW THE RECORDED DLI MEASUREMENTS

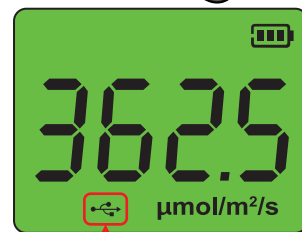
- 1 In DLI measurement mode, press button to view the datalog of DLI and photoperiod for the first 30 days.

Photoperiod: Hours of daily light



4) EXPORT DATA IN PC:

- 1 This PAR meter can record up to 5 years of data.
- 2 Open the back cover of the device via screwdriver, connect the device to the computer via type-C cable, the USB flash drive will pop-up in PC.
- 3 Click and open the USB flash drive user will see the **MEAS_YEAR-MONTH-DATE.csv** and **DLI.csv** documents.



PC connection icon

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Preparation for use

Please ensure that you are familiar with the operation of your measuring device and do some test measurements to ensure the proper function of the device. If you are using it for quality inspections or for expertise please check if the instrument is calibrated and it is within the defined calibration interval. Our company assumes no liability for consequential damages.

Safety Precautions

Please read these safety precautions carefully before using your measuring device. This will help you to avoid damaging the product and prevent personal injury.

WARNINGS

- Store the measuring device at a location which cannot be accessed by children.**

The measuring device and its accessories include parts which can be swallowed. Make sure that these parts (e.g. housing covers, battery etc.) do not fall into the hands of children who might swallow them. Otherwise, danger of suffocation prevails.

- Avoid any and all contact with liquid crystals.**

If the display is damaged (e.g. broken), danger of injury due to contact with glass shards or discharge of liquid crystals exists. Make sure that skin, eyes and mouth do not come into contact with the liquid crystals.

- Handle batteries with care.**

Rechargeable and normal batteries may leak or explode if handled incorrectly. Please adhere to the following safety precautions: Only use the batteries which are recommended for this meter. Make sure that the battery is inserted correctly. If the meter is not used regularly, remove the battery and close the battery compartment cover. When not in use, batteries should be stored in a cool place.

A YEAR WARRANTY:

Please contact us via dpglobal1us@gmail.com if you have any issue of the device, we will resolve your issue ASAP.

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