SEKONIC
INDUSTRIAL

SPECTROMETER
C-4000

THE DREAM TOOL FOR LIGHTING DESIGNERS BECAUSE ILLUMINATION MATTERS

Bluetooth®

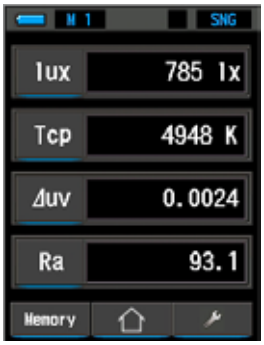
DUAL-PLATFORM…REMOTE CONTROL…ULTIMATE FLEXIBILITY…

The Sekonic Spectrometer C-4000 combines precision light measuring technology, renowned in the industry with the flexibility and convenience of smartphone technology. Designed specifically for the lighting designer and field technician in mind, the C-4000 Spectrometer offers a compact, lightweight, sophisticated and affordable solution for the lighting professional. With its 2.7" color touch screen, Bluetooth® enabled wireless communication and compatibility with Apple® and Android™ smartphone/tablet, the C-4000 offers the most flexible and real time on-location data sharing than any other system in the market today. The C-4000 offers standalone basic numeric reading from the meter, wireless remote measurements via the free Sekonic LD App and smartphone/tablet or advanced Sekonic LD paid App offer extensive functions including plot measurements.

Key Features - Spectrometer (Color Meter)

- Measuring Color Temperature (Tcp) from 1,600K to 40,000K
- Provides Light Quality information such as Ra, Δuv, Lux/fc, TM-30-18 (Rf, Rg), Chromaticity coordinates (x, y) and more
- Smartphone App ready
- Continuous/Single measurement
- USB-C connectivity for update firmware via Utility

Simplified and Clear displayed screen information



Utilizing a color touchscreen display, the C-4000 provides various numerical measurement values such as Lux, Tcp (Color temperature), Δuv, CRI (Ra), TM-30(Rf, Rg), and CIE 1931 (x, y) in an easy-to-read display panel in the meter. Quick and ease numerical values can be checked and confirmed on-site in addition to graphs, when the optional smartphone/tablet App is connected via Bluetooth to your smartphone or tablet. Stored measured values in the C-4000 can be displayed in various display graphs including CRI index, TM-30-18, CIE 1931, and other color interruptive illumination languages with the convenience of your smartphone/ tablet. Remote measurements can be made without the risk of the operators, physical shadow corrupting the measurement or for out of reach measuring locations via your smartphone or tablet.

Compact, portable and ergonomic design

Responding to the demands of lighting designers and location technicians/ installers, the C-4000 provides a compact and portable spectrometer, that offers an impressive array of features in an ergonomic design. Two conveniently positioned physical buttons accomplish power on /off and accurate measuring operation. All other settings and mode selections are easily made via the color touch screen. A built-in USB type C connector port, provides designers/technicians quick and easy firmware updates via a connectivity cable to the PC utility providing the latest features, modifications and enhances keeping the C-4000 always at the cutting edge of lighting control.

SEKONIC LD Smartphone App

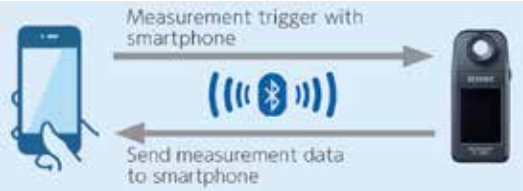
In addition to the C-4000's ability to take measurements itself, by installing the "SEKONIC LD" standard (included) or advanced (purchased) App on your smartphone/tablet and connecting it to your C-4000 via Bluetooth, you can remotely control the C-4000 Spectrometer. View graphs of stored measurement data, configuration settings and functions remotely and much more on the C-4000 meter via the App. Data, screen shots and images can be shared with offsite designers, engineers, technicians and clients.

- **C-4000 Meter** – Basic numerical display
- **C-4000 Meter + Basic Sekonic LD Free APP** – Wireless Measurements, graphic display, imported meter memorized data all displayed via the App and your smartphone/tablet device.
- **C-4000 Meter + Advanced Sekonic LD Paid App** – Everything the free App offers plus plot measurements on lighting layout, add images, notes, GPS locations, date and time to each measurement, create reports in PDF, and generate measured data in CSV plus data share via your smartphone/tablet.

SEKONIC LD

Standard App (included version) basic functions

You can remotely control the C-4000 from your smartphone/ tablet. Measured values are instantly displayed in a graph. In remote measurement, the C-4000 becomes a light-receiving sensor during measurement, and the measured values are saved only on the smartphone/tablet.



Memory data import

Data measured and stored on the C-4000 meter can be imported into the smartphone/ tablet via the SEKONIC LD App.

C-4000 Memory management display

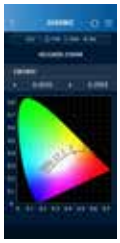
Imported memory data on smart phone via app

Download the Sekonic LD App for iOS

Download the Sekonic LD App for Android

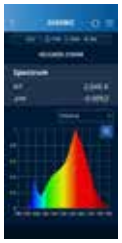
Download the Sekonic manual

Measurement data can be displayed graphically on an Apple® or Android™ smartphone or tablet



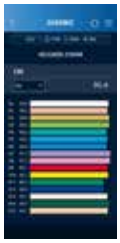
▸CIE1931

CIE 1931 color space is based on the tristimulus values that are mathematically derived from color measurements, representing red, blue and green light and theoretically represent the standard observer's eye. The values of CIE 1931 are denoted by x and y coordinates.



▸Spectrum

The Spectrum displays the spectral distribution of the measured light source in a graph with relative or absolute intensity against the wavelength. The graph can be viewed and saved via the App.



▸CRI

The Color Rendering Index (CRI) is an index that measures the ability of a light source to reveal colors of objects in contrast to a natural light source, such as the sun. Ra is an average of eight out of the 15 CRI values, providing a general assessment of the light sources color capabilities.

▸TM-30-18

Published by IES (Illuminating Engineering Society), TM-30 is a color rendering index system that indicates how well a light source will reproduce a color accurately when it illuminates that object (as compared to a black body radiator – such as the sun).

Increase your measurement accuracy, convenience and efficiency with the paid version of the Sekonic LD App (In-App Purchase).

With the Sekonic LD upgraded PAID version of the App, a variety of features and functions are available at your fingertips providing a smooth and convenient workflow. From a quick and easy measure and record process to sharable measurement reports on the fly, the Sekonic LD upgrade App compatible with Apple® or Android™ smartphones or tablets offers the perfect extension to your C-4000 Spectrometer experience. All measuring and recording processes can be done just by yourself!

▸Import drawings/ photos and create Titles

Capture drawings or photos of the on-location site for evaluation with your smartphone and create titles with notes of the details and save them.

▸Plot the measured value directly on the drawing or image

Measured values can easily be positioned directly on the imported image (up to 999). Selectable units of display for each plot can be lx, K (Kelvin), Δuv, Ra, Rf/Rg, x.y.

▸Add note/image references in real time

Special lighting situations that occur and require detailed notes and images, can be created during the measurement process. Images can be taken on the spot or saved images can be linked.

▸GPS coordinates to recall measurement location

Measurement data can be stored with linked GPS coordinates for easy recall of onsite location. Included along with other critical information in the location report.

▸App Ready Report

Create PDF or CSV reports within the Sekonic LD. The report includes GPS location, location image or captured drawing with plotted values, CSV detailed measurement data and Spectrum, CRI, TM-30 and CIE 1931 graphs for each measured plotted light source.

▸Share data from the Sekonic LD App via your smart phone

Quickly and easily share reports, measurement data with notes and images on-location via your smartphone or tablet.

SPECIFICATIONS

C-4000 Specifications	
Illuminance meter class	JIS C 1609-1:2006 for General Class A Illuminance Meters Equivalent (excluding oblique incident light characteristics) DIN 5032 Part 7 Class C Equivalent (excluding oblique incident light characteristics)
Light receptor element	CMOS linear image sensor
Measurement wavelength range	380 nm to 780 nm
Measurement range *1	Illuminance: 5 lx to 10,000 lx (0.46 fc to 929 fc)
	Color temperature (Tcp*2): 1,600 K to 40,000 K
Accuracy (Light source A)	Illuminance: ± 5 % ± 1 digit (5 lx to 3,000 lx), ± 7.5 % ± 1 digit (over 3,000 lx)
	x, y: ±0.003 (800 lx)
Repeatability (2 σ , Light source A)	Illuminance: 1 % + 1 digit (30 lx to 10,000 lx), 5 % + 1 digit (5 lx to 29.9 lx)
	x, y: 0.001 (500 lx to 10,000 lx)
	x, y: 0.002 (100 lx to 499 lx)
	x, y: 0.004 (30 lx to 99.9 lx)
	x, y: 0.008 (5 lx to 29.9 lx)
Spectral response characteristics (f1')	9 % or less
Oblique incident light characteristics (f2)	12 % or less
Temperature characteristics	Illuminance: ± 5 %
	x, y: ± 0.006 (Light source A, 1,000 lx)
Humidity characteristics	Illuminance: ± 3 %
	x, y: ± 0.006 (Light source A, 1,000 lx)
Power Supply	AA battery (1.5V) × 2, USB bus-power
Measurement time	Max. 10 sec, Min. 0.5 sec
Display value	Illuminance (lx), Tcp*2 (K), ⊿uv, CRI (Ra), TM-30 (Rf, Rg), Chromaticity coordinates (x, y)
Other functions	Data memory up to 99 items, Auto power-off, Auto dimming
Language	Selectable from English, French, German, Italian, Spanish, or Japanese
Interface	USB connector (type C), Bluetooth
Operating temperature	5 deg. C to 35 deg. C, without condensation
Operating humidity	85 % or less (at 35 deg. C), without condensation
Transportation and storage conditions	-10 deg. C to 60 deg. C, 85 % RH or less (at 35 deg. C), without condensation
Dimensions	Approx. 62 mm (width) × 140 mm (height) × 30 mm (depth) (excluding protruding part of light receiving)
Weight	140 g (without batteries)
Included accessories	Light receptor cap, Soft case, Strap

*1: "Under" is displayed when the illuminance is less than 5 lx (0.46 fc) or the Tcp is less than 1,600 K, and "Over" is displayed when the illuminance is over 10,000 lx (929 fc) or the Tcp is over 40,000 K.

*2: Tcp is Température de Couleur Proximale (Correlated Color Temperature).

Features and Specifications subject to change without notice.

OPTIONAL ACCESSORY

C-4000 holder (under development)

By using a holder that perfectly fits the C-4000, you can attach it to a tripod or monopod to measure hard-to-reach areas, and easily measure ceilings, high walls, floors, etc. Equipped with a general-purpose 1/4 inch screw hole. (Please use commercially available tripods and monopods.)

* Be careful not to swing the C-4000 or hit it against the floor or wall.

Visit us at www.sekonicindustrial.com to learn more about these fine light measuring meters.

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