

## THE ULTIMATE TOOL FOR COLOR CONTROL

The Spectrometer C-7000 is a portable handheld spectrometer, designed especially for industrial use. At home in any lighting designer's firm or engineering lab, the C-7000 provides an extensive selection of measuring modes for every application.

Utilizing Sekonic's CMOS linear image sensor design and software, the C-7000 can measure every light source (LED, HMI, Fluorescent, Flash, Natural Light spectrum) with remarkable precision and data feedback.



### Precise Measurement

Measures any lights in 1nm output wavelength increments from 380 to 780nm. It conforms to requirement of "Illuminance meter class" for JIS C 1609-1: 2006 "Illuminance meters Part 1: General measuring instruments" Class A, and DIN 5032 Part 7 Class C.

### Flash Measurement

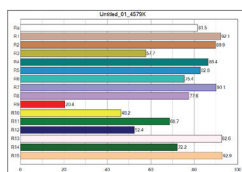
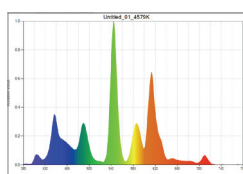
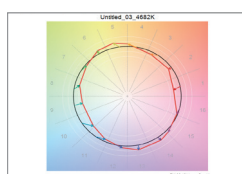
The world's first\* stand-alone spectrometer that measures the flash light with synchro cord connection or cordless mode with its sophisticated and unique accumulation type sensor. \* - As of August 2015, by research of Sekonic Corporation

### Wide Measurement Range of Color Temperature and Illuminance

Wide measurement range of color temperature (1,563 to 100,000K) and illumination (1 to 200,000lx = 0.1 to 18,600fc in ambient light, 20 to 20,500lx · s = 1.86 to 1,900fc · s in flash light)

### User-Friendly Design

270° swivel head, dark calibration without cap, large 4.3" color touch panel LCD and Customize function, convenient AA batteries for power source.



CCT = 4820K	Δuv = 0.0111	
Balance = 100%	Balance = 102%	
Reference CCT = 5000K		
IE Index = 146%	CC Index = 1.2M	
IE Camera Filter = G2, G3	CCF = 3.2M	
IE Camera Filter = G2, G3, G4, G5		
IE Lighting Filter = L279 1/3 MINUS G		
CR		
R1 = 51.1	R2 = 82.6	R3 = 62.9
R4 = 70.2	R5 = 74.4	R6 = 60.7
R7 = 81.9	R8 = 68.6	R9 = 46.8
R10 = 37.9	R11 = 63.4	R12 = 44.4
R13 = 81.5	R14 = 78.2	R15 = 71.0
R16 = 70	R17 = 55	
TM-30-18		
SS = 49	SSM = 49	
TM-30-18		
TLCS-TLMP	TLCS = 44	TLMP = 37
CEI93	v = 0.2054	
Hum-Sat	Hum = 53%	Sat = 42%

### Memory Function and Data Management

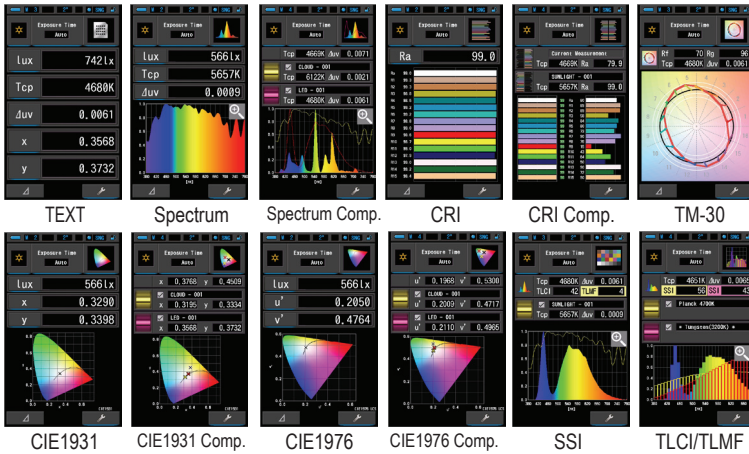
- Up to 999 measurements can be stored in memory
- Analyzes and saves the memorized data in the computer
- 1nm / 5nm increment spectrum output in CSV format
- Output the spectrum distribution graph, CIE chromaticity diagram, CRI bar graph and TM-30 color vector graphic in JPEG/BMP/PNG format
- SDK in Visual Basic (Windows only) for remote control

### Lighting Control For Various Applications

<p>Lighting manufacturers Lighting designers Lighting contractors</p>	<p>Museums Offices Stores</p>	<p>Broadcastings Studios Stages</p>
<p>Research institutes Educational bodies</p>	<p>Plant factories</p>	<p>Testing equipments Medical equipments</p>

## Display Modes

Intuitive color touch screens offer easy navigation, quick selection and easy to read measurements in 12 modes.



## Expanded Measurement

The Spectrometer C-7000 offers a wide selection of measuring values. Access to these values can be quickly selected by a tap of your finger on the appropriate icon.



## C-7000 Specifications

Illuminance Meter Class	* Class A of JIS C 1609-1: 2006 "Illuminance meters Part 1: General measuring instruments" * DIN 5032 Part 7 Class C	
Sensor	CMOS linear image sensor	
Spectral Wavelength Range	380nm to 780nm	
Output Wavelength Pitch	1nm (Requires the C-7000 Utility to output memorized data)	
Spectral Bandwidth	Approx. 11nm (half bandwidth)	
Measuring Range	Ambient light:	1 to 200,000lx, 0.09 to 18,600fc (3 significant digits) / 1,563 to 100,000K (more than 5lx required)
	Flash Light:	20 to 20,500lx*s, 1.86 to 1,900 fc*s (3 significant digits) / 2,500 to 100,000K
Accuracy (Standard Illuminant A, 800lx)	Illuminance: $\pm 5\% \pm 1$ digit (1 to 2,990lx), $\pm 7.5\% \pm 1$ digit (3,000 to 200,000lx)	
	x,y: 0.003	
Repeatability (Standard Illuminant A, 800lx)	Illuminance: 1% + 1 digit (30 to 200,000lx), 5% + 1 digit (1 to 29.9lx)	
	x,y: 0.001 (500 to 200,000lx) / 0.002 (100 to 499lx) / 0.004 (30 to 99.9lx) / 0.008 (5 to 29.9lx)	
Visible-region Relative Spectral Response Characteristics (f1')	Within 9%	
Cosine Response (f2)	Within 6%	
Temperature Drift (fT) (Standard Illuminant A, 1000lx)	Illuminance: $\pm 5\%$ of indicated value / x,y: $\pm 0.006$	
Humidity Drift (fH) (Standard Illuminant A, 1,000lx)	Illuminance: $\pm 3\%$ of indicated value / x,y: $\pm 0.006$	
Power Source	AA (1.5v) x 2 pcs, USB bus power	
Measurement Time	Ambient light:	Auto - Max.: 15 sec., Min.: 0.5 sec. / Manual - 0.1s, 1sec.
	Flash Light:	1s to 1/500s (in 1 step)
Display Mode	Text mode, Spectrum mode, CRI mode, TM-30 mode, SSI mode, TLCI/TLMF mode, CIE1931 (CIE1964) mode, CIE1976 mode, Spectrum Comparison mode, CRI Comparison mode, CIE1931 (CIE1964) Comparison mode, CIE1976 Comparison mode	
Measuring Capability (Display Item)	Correlated Color Temperature (Tcp), Deviation ( $\Delta uv$ ), Tristimulus value (XYZ / $X_{10}Y_{10}Z_{10}$ ), CIE1931/1964 (xyz / $x_{10}y_{10}z_{10}$ ), CIE1976 ( $u', v' / u'_{10}v'_{10}$ ), Dominant wavelength ( $\lambda d$ ), Excitation purity (Pe), Peak wavelength ( $\lambda p$ ), Lux(lx) or Foot-Candle(fc) – ambient light, Lux Second(Hlx) or Foot-Candle Second(Hfc) – flash light, PPF, TM-30 (Rf, Rg), SSI (Tungsten, Daylight, SSI1, SSI2), TLCI/TLMF, CRI (Ra, R1 to R15)	
Other Functions	Up to 999 memory, Preset function, Auto power off, Auto dimmer, 2 or 10 deg. field of view setting, Continuous/Single measurement selection	
Display languages	English, Japanese, Chinese (Simplified)	
Interface	USB 2.0 (Mini B)	
Operating Temperature	-10 to 40 deg. C	
Storage Temperature	-10 to 60 deg. C	
Dimensions	73mm (w) x 183mm (h) x 27mm (d) = 2.9" (w) x 7.2" (h) x 1.1" (d) (excluding protruding part of light receiving) max. thickness 40mm (d) = 1.6" (d)	
Weight	230g = 8.1oz (without batteries)	

\* Features and Specifications subject to change without notice.

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