THE COLOR TOUCH SCREEN LIGHT METER WITH POWER CONTROL AND EXPOSURE PROFILE

Creative image makers, still or motion, have known for generations that light and the ability to control it has always been the key to capturing the essence of still or moving images. Today's sophisticated cameras and lighting equipment offer more control and creative possibilities than ever before. To compliment these advances in the photographic, cine and video worlds, Sekonic offers the most innovative and advanced light-measuring instrument in the industry.

Seven Meters in One

PHOTO mode:

The L-478-series takes the mystery out of mixing ambient light and flash. Select the measurement mode that fits your shooting style with just the touch of your fingertip. Measure the brightness of a single light source or the exposure for the entire scene. Measure flash with cord or cordless mode or trigger your flash units wirelessly with the built-in radio transmitter (L-478DR). Rest assured that every measurement is backed with the most accurate readings via Sekonic's Exposure Profiling System that matches and compensates for your DSLR exposure charactistics.

✔ **Flash Meter**
✔ **Ambient Meter**
✔ **Incident Meter**
✔ **Reflected 5 degree spot meter (with optional viewfinder attachment)**

HD_CINE/CINE Mode

The L-478 series has motion capture modes accomodating today's sophiscated video and CINE camera systems. With the touch of your finger, select the shutter speeds, frame rates and shutter angles for your camera. Create unique frame rates and shutter angles for special effects. For quick and creative shoots, select your favorite custom stored compensation filter or gel pack. Via Sekonic's Exposure Profiling System, every measurement is accurate and precise.

✔ **HD Cine Meter**
✔ **Cine Meter**
✔ **Illuminance/Luminance Meter**

Pressure sensitive 2.7" large color LCD Screen with tap or scroll interface. Adjustable color brightness for fast, more intuitive, better interactive control.	Programmable to match the exposure characteristics of your DSLR or Cine camera. Match the response of film or digital exposure characteristics, dynamic range, reflected, incident, flash or ambient light throughout the ISO range of your camera, using Data Transfer Software.	Elinchrom, Phottix and PocketWizard radio system are available for flash triggering and/or power control.	The world's first meter to offer HD/CINE and CINE mode with features such as: frame rate, shutter angle, lux, foot-candle, cd/m2 and foot-lambert.	Measure ambient and flash output simultaneously. Displays ambient/flash ratio in two separate ways: on a graphic color bar, as a percentage of flash. In addition, total exposure is shown in f/stop.

Digital Exposure Control - Camera Calibration

Because every digital camera, lens, and software is unique in its ability to capture and process light they can produce differences in the Tonal Range (dynamic range) and exposure of an image. Knowing the limits of your camera's ability to make better exposures with less post-processing ensures you'll get what you see.

Sekonic's pioneering Data Transfer Software enables quick dynamic range mapping and camera/meter calibration for the most precise control of light. Create and store up to ten camera exposure profiles with Sekonic or X-Rite brand calibration targets. Sekonic or X-Rite brand targets or use the touch display to directly enter profile information obtained from other sources. See page 10 for full explanation on the Data Transfer Software.

Three Wireless Triggering/Power Control System Available (L-478DR series only)

The L-478DR series has a built-in wireless triggering system that offers a cordless solution for triggering and/or flash power control. The L-478DR series offers many of the features available to wireless shooters including selective zone/group triggering, multi-channel selection and even camera triggering (w/PocketWizard only). There are three models compatible with each radio system:

L-478DR - - - PocketWizard

PocketWizard
Technology Built-In

Original L-478DR started with PocketWizard radio: Standard system and ControlTL system. The Sekonic L-478DR features 1) triggering any flash unit with a PocketWizard connected and measuring them at the same time, and 2) remote flash power control of up to three separate zones of lighting. Utilizing PocketWizard ControlTL technology, changing flash power output is as easy as sliding your finger tip on an intuitive touch screen slider. Change the power settings on your Nikon or Canon Speedlights mounted on PocketWizard FlexTT5 transceivers or select studio flash units connected to ControlTL receivers. Switch Zones on or off to measure remote flash units separately for precise lighting ratios scenario.

L-478DR-EL - - - Elinchrom
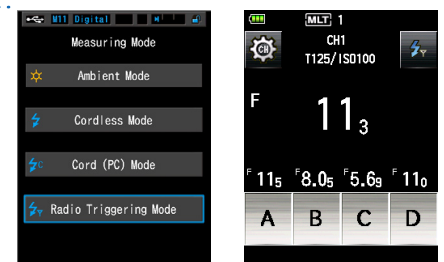
elinchrom
Technology Built-In

The L-478DR-EL's power screen enables separate selection of any of the four lighting Groups, 1,2,3,4, for flash brightness adjustment in 0.1 increments by simply tapping buttons on the me-ter's touch screen. The F-number value for the light being measured appears in a central area on the screen as well as over respective group selection button. The measured value for each group is maintained as a visual record of the brightness difference of the lights in use so that lighting ratios can be easily determined. Once flash adjustment is made for each group, ALL flashes can be triggered for a total reading for exposure. The L-478DR-EL can also be used to measure and adjust modeling light brightness of Elinchrom flashes for cine/video lighting applications. The L-478DR-EL triggering and power control is compatible with all Elinchrom flashes that use the EL-Skyport trigger-ing system. ControlTL receivers. Switch Zones on or off to measure remote flash units separately for precise lighting ratios scenario.

L-478DR-PX - - - Phottix
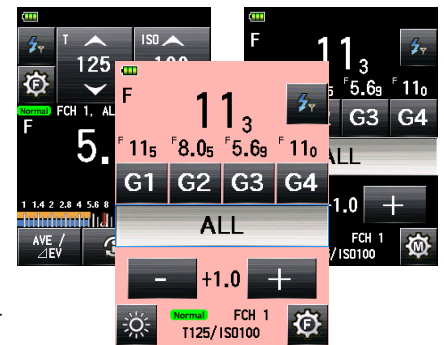
Phottix
Technology Built-In

The L-478DR-PX flash control screen allows selection of a single group or a combination of groups for flash brightness measurement. The F-number value for the light being measured appears in a central area on the screen as well as over respective group selection button. The measured value for each group is maintained as a visual record of the brightness-difference of the lights in use so that lighting ratios can be easily determined. The L-478DR-PX group selection and triggering is compatible with Phottix flashes and radios that are compatible with the Phottix Strato II protocol. This includes flashes connected to the Strato and Strato II receivers and the Atlas II transceivers. Compatible Phottix flashes include the Indra series, Juno series and Mitros+ series.

Flash Analyzing Function

The L-478-series meters offer a quick and easy way to balance flash and ambient light with one press of the measuring button. That's because they measure ambient and flash simultaneously and automatically indicate the percentage of flash in the total exposure. Touch the screen to adjust settings to get the perfect ambient to flash ratio. The meter's analog display uses color bars to graphically display the relationship between the ambient and flash levels.
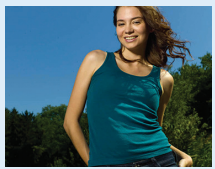
20% Flash   **50% Flash**   **80% Flash**

Percentage of flash

Ambient component (orange)

Flash component (blue)

Enhanced HD Cine / Cine Features

Today's digital cameras offer both still and motion capture. Offering shooters seamless cross platform media capabilities, these cameras provide a variety of uses in a single production. To complement this sophisticated cameras, the L-478 series has two motion capture modes in addition to still capture to accommodate any shoot. Touch to set shutter speeds and frame rates for HD-Cine cameras or quickly select frame rates and shutter angles for Cine cameras. Creating unique frame rates and shutter angles for special effects is just a finger tip touch away.

Frame Rate
Shutter Speed
Shutter Angle
Frame Rate

HD CINE Mode   **CINE Mode**

Infinite Frame Rate/ Shutter Angle

Special effects and light sources can push standard camera settings to their limits. That's why the L-478 series also allows creating unique frame rates and shutter angles up to 20 user costumized values to enable precise exposure and lighting, producing the very best images and reducing time in post-production.

Unique Filtration Compensation Mode

Like all light and exposure meters, the L-478 series are calibrated for visual light. Because meters can't measure filtered light by design, Sekonic designers added a unique Filter mode that enables getting exact light levels with touch screen ease. Touch the L-478 series to instantly call up light-source or camera filtration expressed in industry standard terms. For special filters or applications, create a unique filter factor and give it a name. Up to four filters can be used together as a pack to assure full control in virtually any situation.

Filter Compensation Selection in Tool Box

Select Filter Name to Edit in Menu

DATA TRANSFER SOFTWARE

Digital Camera Exposure Profiling & Light Meter Utility
Data Transfer Software
SEKONIC

The L-858D and L-478 series light meters are designed to learn the exposure characteristic of your digital camera. By compensating for exposure and dynamic range limitations, these programmable meters can guide in capturing a perfectly exposed digital image for the ultimate in reproduction quality print or presentation.

The link between these programmable light meters and the camera is Sekonic's Data Transfer Software (DTS). The Sekonic DTS program evaluates test target images capture from your camera and creates an exposure profile of your camera's capabilities. These profiles are then transferred to either the L-858D or L-478 series light meters for real time use. In addition, the DTS program offers exposure profile editing, loading and unload different profiles as well as firmware update. Custom Settings for both the L-858D and L-478 series are quick and easy through the use of the DTS program in place of making the changes in the meters.

The only light meters that show you the Dynamic Range of your D-SLR.

The dynamic Range of a digital camera can be different due to it's unique camera sensor file format (Tiff, JPEG, RAW, etc.), selected ISO and more. Knowing the limits of the digital camera (or film) is essential in exposure control. The graph below shows the Latitude or Dynamic range of a particular digital camera (or film), as well as the Clipping points (where the exposure exceeds the dynamic range of the sensor film).
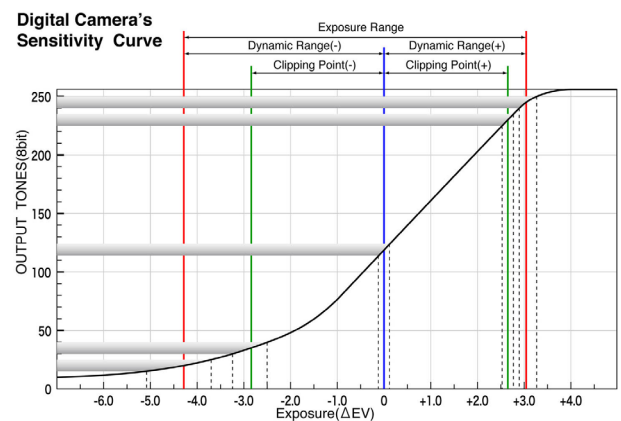

Photographed by a Camera with Narrow Exposure Range

Photographed by a Camera with Normal Exposure Range

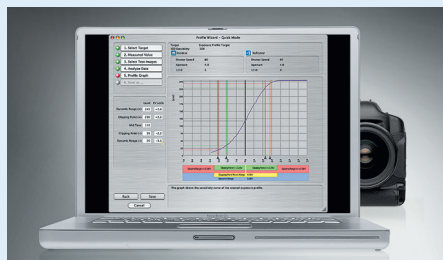Photographed by a Camera with Wide Exposure Range

Exposure profiling

Step 1

Shoot target (Sekonic or X-Rite brand) with the equipment you use most.

Step 2

Transfer images into your computer. If images are captured as RAW files convert them to TIFF or JPEG for analyzing. Enter ISO, incident and reflected shooting data into the Data Transfer Software and DTS will evaluate and create a graph of dynamic range and clipping points for your camera. Name and save the profile data for future use.

Step 3

Connect the meter to your MAC or PC computer and transfer the exposure profiles. Profiles can be stored and recalled at any time. Exposure latitude warnings alert you when the exposure exceeds the range ofthe camera.

Main Screen

## Display a graph of the sensitivity curve for your DSLR

Data Transfer Software automatically analyzes the test images and displays the sensitivity curve of your camera. It also enables you to set the dynamic range and clipping point in your way, and to transfer the exposure profile data into the light meter. Additionally, it is possible to compare multiple exposure profiles on a basis of ISO sensitivity or camera.
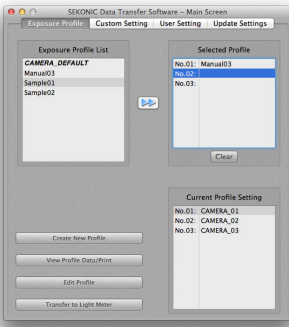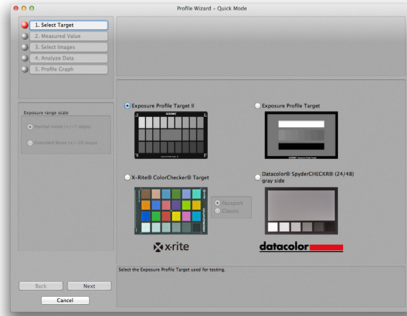
## The Wizard - The Easy way to create Exposure Profile

The Wizard enables you to create the exposure profile in an easy way by just following the instruction on the screen. To create a new profile, select "Quick Mode - for a fast and simple profile" , "Advanced Mode - for a more precise exposure profile" or "Manual Input Mode - direct input Manually".
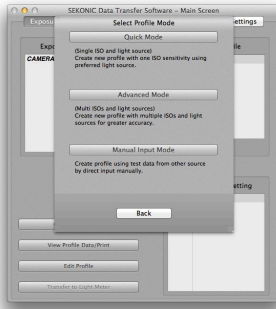
"Profile Mode" Selection Screen

"Select Target" Screen
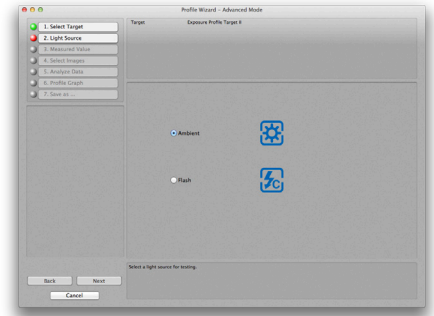
"Select Light Source" Screen

Analyze the test images automatically

A preview and Exif information are displayed when clicking a thumbnail image, so you can be free from entering the exposure value of each selected image.

Just select the necessary images and align the cross mark for the analyzing area, and then the data is automatically analyzed.
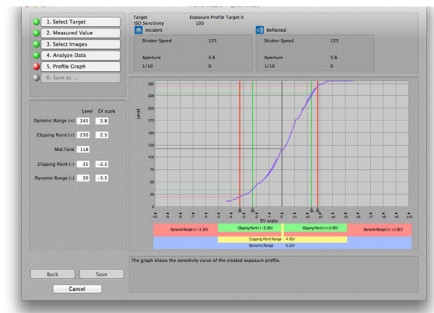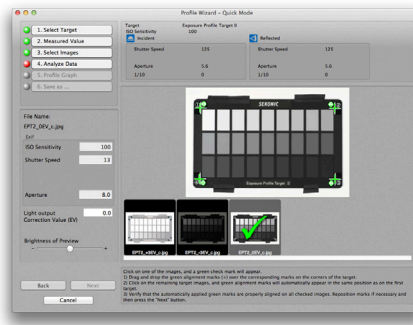
Transfer the data via USB from the computer to the light meter.

Connect the USB cable to the USB port (on the side of the light meter) and the other end to the USB port (on the computer) to transfer the computer data to the light meter. While transferring the data, the USB icon blinks on the connected light meter's screen to confirm that the data transfer is in progress and the meter and computer are correctly connected. It's also possible to transfer data from the light meter to the computer.

Customize your meters via Data Transfer Software

Custom Settings for both the L-858 and L-478 series are quickly and easily made through the Data Transfer Software. Both the meter's firmware and Data Transfer Software are automatically updated while DTS is connected to the internet.
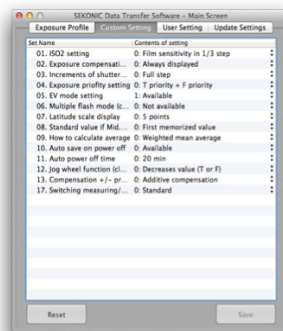
Custom Setting

Update Screen

Specification and Comparison Chart

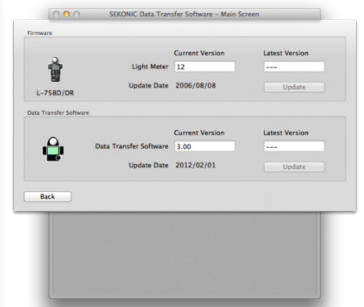| Product Name and Model			L-858D	L-478DR series
Measuring System	Incident light	Swivel head	Horizontal (270 degrees)	Horizontal (270 degrees)
		Lumidisc	Retractable	Retractable
	Reflected light	Switching incident/reflected	Operation on LCD	Removable
		Light receiving angle	1° (Built-in)	VF 5° (Optional VF)
Measuring Mode	Ambient light	T priority	Yes	Yes
		F priority	Yes	Yes
		TF priority	Yes	Yes
		HD_CINE (T priority)	Yes	Yes
		CINE (f/s priority)	Yes	Yes
		Lux/FC	Yes	Yes (w/Optional VF)
		Cd/m^2/FL	Yes	Yes (w/Optional VF)
	Flash light	Cordless/cord-in	Yes	Yes
		Radio triggering	Yes (optional)	Yes (Built-in)
		Multiple cumulative flash	Yes (Unlimited)	Yes (99 times)
		HSS	Yes	No
		Flash duration analysis	Yes	No
Measuring Range (ISO100)	Ambient	Incident light	EV	-5 to 22.9	-2 to 22.9
		Reflected light	EV	-1 to 24.4	3 to 22.9
		Illuminance	Lux	0.1 to 2,000,000 lx	0.63 to 2,000,000 lx
			FC (Foot-Candle)	0.01 to 180,000 fc	0.10 to 180,000 fc
		Luminance	Cd/m^2	0.1 to 980,000 cd/m^2	1.0 to 980,000 cd/m^2
			FL (Foot-Lambert)	0.03 to 290,000 fl	0.29 to 290,000 fl
	Flash	Incident light	F	F0.5 to F161.2(=128.9)	F1.0 to F161.2(=128.9)
		Reflected light	F	F1.0 to F161.2(=128.9)	F2.8 to F161.2(=128.9)
		Illuminance	Lux·s	No	No
			FC (Foot-Candle)·s	No	No
Display/Setting Range	ISO Sensitivity		3 to 13,107,200 plus 850	3 to 409,600 plus 850
	Ambient	Aperture	Range	F0.5 to 161.2 (=128.9) in 1, 1/2, 1/3 step	F0.5 to 161.2 (=128.9)) in 1, 1/2, 1/3 step
			Analog scale	F1.0 to 90 in 1/3 step	F1.0 to 90 in 1/3 step
		Shutter speed	Range	30m to 1/64,000s in 1, 1/2, 1/3 step	30m to 1/64,000s in 1, 1/2, 1/3 step
			Analog scale	4s to 1/2,000s in 1/3 step	4s to 1/2,000s in 1/3 step
		Frame Rate	Range	1 to 1,000 f/s plus other 20 settings (customized from 0.001 to 99,999.999)	1 to 1,000 f/s plus other 20 settings (customized from 0.001 to 9,999.999)
		Shutter angle	degrees	1 to 358 deg. plus other 20 settings (customized from 0.001 to 360)	1 to 358 deg. plus other 20 settings (customized from 0.001 to 360)
		EV	Range	-73.9 to 103.8 for incident / -69.9 to 105.3 for reflected	-27.9 to 55.8
			Analog scale	-3.0 to +3.0 EV for incident / -7.0 to +7.0 EV for reflected	-3.0 to +3.0 EV for incident / -7.0 to +7.0 EV for reflected
	Flash	Aperture	Range	F0.5 to 161.2(=128.9) in 1, 1/2, 1/3 step	F0.5 to 161.2(=128.9) in 1, 1/2, 1/3 step
			Analog scale	F0.1 to 90 in 1/3 step	F1.0 to 90 in 1/3 step
		Shutter speed	Range	30m to 1/16,000s in 1, 1/2, 1/3 step	30m to 1/1,000s in 1, 1/2, 1/3 step
		Flash duration	Range	1/40 to 1/55,500s (25ms to 18us)	No
			t value	0.1 to 0.9 (in 0.1 step)	No
Functions		Exposure Profile		Yes	Yes
		Memory		Yes (9 times) both incident and spot	Yes (9 times)
		Average		Yes	Yes
		Contrast Function		Yes (+/-9.9EV in 1/10 step)	Yes (+/-9.9EV in 1/10 step)
		Flash Analyzing		Yes (in 10% step)	Yes (in 10% step)
		Filter compensation		Yes (-12 to 12EV)	Yes (-12 to 12EV)
		Filter factor number compensation		Yes (preset 24 types plus 6 settings)	Yes (preset 24 types plus 6 settings)
		Exposure compensation		Yes (-9.9 to +9.9)	Yes(-9.9 to +9.9)
		Calibration compensation		Yes (-1.0 to +1.0)	Yes(-1.0 to +1.0)
		Custom settings		Yes (17 items)	Yes (13 items)
		LCD backlight		Yes	Yes
		Water registance		Yes	No
		Diopter adjustment		Yes (-1 to 2.5 D)	No
		Tripod socket		Yes	No
Others		Operating temperature		-10 to 50℃	-10 to 50℃
		Storage temperature		-20 to 60℃	-20 to 60℃
		Power source		1.5V x 2 (AA battery)	1.5V x 2 (AAA battery)
		Weight (without battery)		240g	140g
		Dimensions (W x H x D)		94 x 176 x 49	57 x 140 x 26
		LCD		2.7" color dot matrix LCD	2.7" color dot matrix LCD
Standard Accessory		Software/Utility		Yes (Downloaded from website)	Yes (Downloaded from website)
		Operating Manual		Yes (Downloaded from website)	Yes (Downloaded from website)
		Quick Guide / Start Up Guide		Yes (included in the package)	Yes (included in the package)
		Lens Cap		Yes	No
		Strap		Yes	Yes
		Synchro terminal cap		Yes (built-in)	Yes (built-in)
		Soft case		Yes	Yes
		Lumidisc		Yes (same as Lumisphere)	Yes (same as Lumisphere)
		Anti glare film		Yes	Yes
Optional Accessory		Viewfinder		No	Yes (5°)
		Lumishphere		Yes	Yes
		Lumidisc		Yes (same as Lumisphere)	Yes (same as Lumisphere)
		Lumigrid		No	No
		Deluxe case		No	Yes
		Synchro cord		Yes	Yes
		Radio transmitter		Yes	No (built-in PCB)
		Step-up ring		Yes	No
		18% Gray card (folded)		Yes	Yes
		Exposure Profile Target / II		Yes	Yes

L-478D	L-308X	L-398A	L-208
Horizontal (270 degrees)	No	Horizontal (300 degrees)	No
Retractable	Removable (Optional)	Removable	No
Removable	Slide	Removable	Slide
VF 5° (Optional VF)	40° (Built-in)	30° (Lumigrid)	33° (Lumigrid)
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	No	No	No
Yes	Yes	Yes	No
Yes	Yes	Yes	No
Yes (w/Optional VF)	Yes	Yes (FC only)	No
Yes (w/Optional VF)	No	No	No
Yes	Yes	No	No
No	No	No	No
Yes (99 times)	No	No	No
No	No	No	No
No	No	No	No
-2 to 22.9	0 to 19.9	4 to 17	3 to 17
3 to 22.9	0 to 19.9	9 to 17	3 to 17
0.63 to 2,000,000 lx	2.50 to 190,000 lx	No	No
0.10 to 180,000 fc	0.23 to 17,000 fc	0 to 1,250 fc (scale)	No
1.0 to 980,000 cd/m^2	No	No	No
0.29 to 290,000 fl	No	No	No
F1.0 to F161.2(=128.9)	F1.0~F90.9	No	No
F2.8 to F161.2(=128.9)	F1.0~F90.9	No	No
No	No	No	No
No	No	No	No
3 to 409,600 plus 850	3 to 8,000 plus 850	6 to 12,000	12 to 12,500
F0.5 to 161.2 (=128.9)) in 1, 1/2, 1/3 step	F0.5 to 90.9 in 1, 1/2, 1/3 step	F0.7 to 128 in 1, 1/3 step	F1.4 to 32 in 1, 1/2 step
F1.0 to 90 in 1/3 step	No	No	No
30m to 1/64,000s in 1, 1/2, 1/3 step	Photo Mode: 60s to 1/8,000s HD_CINE Mode: 1/8s to 1/8,000s in 1, 1/2, 1/3 step	60s to 1/8,000s in 1 step	30s to 1/8,000s in 1 step
4s to 1/2,000s in 1/3 step	No	No	No
1 to 1,000 f/s plus other 20 settings (customized from 0.001 to 9,999.999)	8 to 128f/s	8, 18, 24, 64, 128	No
1 to 358 deg. plus other 20 settings (customized from 0.001 to 360)	45, 90, 180, 270, 360: CINE Mode	No	No
-27.9 to 55.8	-6 to 27.2	1 to 20	3 to 17
-3.0 to +3.0 EV for incident -7.0 to +7.0 EV for reflected	No	No	No
F0.5 to 161.2(=128.9) in 1, 1/2, 1/3 step	F0.5 to 90.9 in 1, 1/2, 1/3 step	No	No
F1.0 to 90 in 1/3 step	No	No	No
30m to 1/1,000s in 1, 1/2, 1/3 step	1s to 1/500s in 1, 1/2, 1/3 step	No	No
No	No	No	No
No	No	No	No
Yes	No	No	No
Yes (9 times)	No	Yes (1 meory with indicator)	No
Yes	No	No	No
Yes (+/-9.9EV in 1/10 step)	No	No	No
Yes (in 10% step)	No	No	No
Yes (-12 to 12EV)	No	No	No
Yes (preset 24 types plus 6 settings)	No	No	No
Yes(-9.9 to +9.9)	No	No	No
Yes(-1.0 to +1.0)	Yes (-1.0 to +1.0)	No	No
Yes (13 items)	Yes (3 items)	No	No
Yes	Yes (under EV5)	No	No
No	No	No	No
No	No	No	No
No	No	No	No
-10 to 50℃	0 to 40℃	0 to 40℃	0 to 40℃
-20 to 60℃	-20 to 60℃	-20 to 60℃	-20 to 60℃
1.5V x 2 (AAA battery)	1.5V x 1(AA battery)	No battery (amorphous sensor)	3.0V × 1(CR2032 battery)
130g	80g	190g	40g
57 x 140 x 26	63 x 110 x 22	58 × 112 × 34	45 × 65 × 24
2.7" color dot matrix LCD	B&W, Segment type	No	No
Yes (Downloaded from website)	No	No	No
Yes (Downloaded from website)	Yes (Downloaded from website)	Yes (included in the package)	Yes (included in the package)
Yes (included in the package)	Yes (included in the package)	Yes (included in the package)	Yes (included in the package)
No	No	No	No
Yes	Yes	Yes	Yes
Yes (built-in)	Yes	No	No
Yes	Yes	Yes	Yes
Yes (same as Lumisphere)	No (Optional)	Yes	No
Yes	No	No	No
Yes (5°)	No	No	No
Yes	No (built-in)	Yes	No (built-in)
Yes (same as Lumisphere)	Yes	Yes	No
No	No	Yes	No
Yes	No	Yes	No
Yes	Yes	No	No
No	No	No	No
No	No	No	No
Yes	Yes	Yes	Yes
Yes	No	No	No