

SEKONIC

Digital Type Exposure Meter for Measuring Flash and Ambient Light

DIGIPRO X-1 MODEL L-518

The micro computer
has changed the exposure meter.



COPAL

Exposure Meter Incorporating the Latest Electronics

DIGIPRO X-1 Opens A New Exposure Meter Era

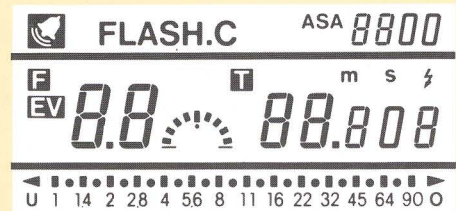
To meet the increasing demands of professional photographer, this exposure meter is the first of its kind to incorporate five different functional modes. These are possible thanks to a micro computer.

5 Functional Modes in an Exposure Meter for the First Time

DIGIPRO X-1 incorporates five functional modes. It is a multifunctional exposure meter designed to meet the wide demands of photographer, from measuring flash and ambient light to measuring long exposures with a second by second countdown timer.

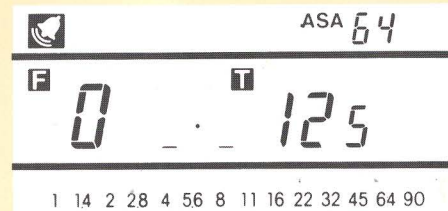
- (Mode 1) Flash light, via synccord
- (Mode 2) Flash light, cordless measurement
- (Mode 3) Flash light, cumulative measurement
- (Mode 4) Ambient light measurement (T.F priority switch)
- (Mode 5) Countdown Timer (second by second)

Information Concentrated Type Crystalline Liquid Display



According to each mode, all necessary information is displayed on the crystalline liquid panel.

Warning Bell Employed for First Time in an Exposure Meter

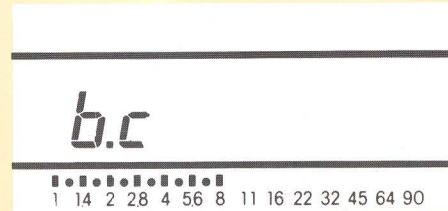


The bell is set into functional position by pressing the bell key. When the brightness changes by more than 1 EV or each time the metering button or operational keys are pressed, the bell beeps and the operations can be confirmed. The bell mode is cancelled by pressing the bell key a second time.

Easy to Read Combination Digital and Analog Display

Aperture stop (F value) and shutter speed are displayed by large and easy-to-read digital figures. The F value is also displayed by bar/dot type analog readout.

Battery Check Mechanism that Gives Instantaneous Battery Level Reading

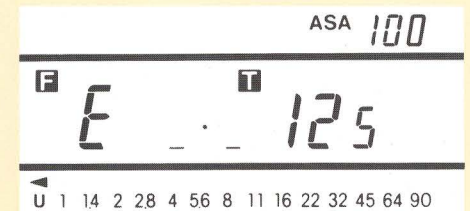


When the power source key is set at ON and is continuously pressed, the battery power level is displayed by our bar/dot system. In this way, complete condition of the battery is shown at a glance.

Memory Mechanism for Set Values (ASA, F stops, Shutter speeds etc.)

The set value is memorized even after the electric power source is cut off. Therefore, the need to reset the value, each time shooting is performed, is eliminated.

Improper Exposure is Displayed by E (Error) symbol



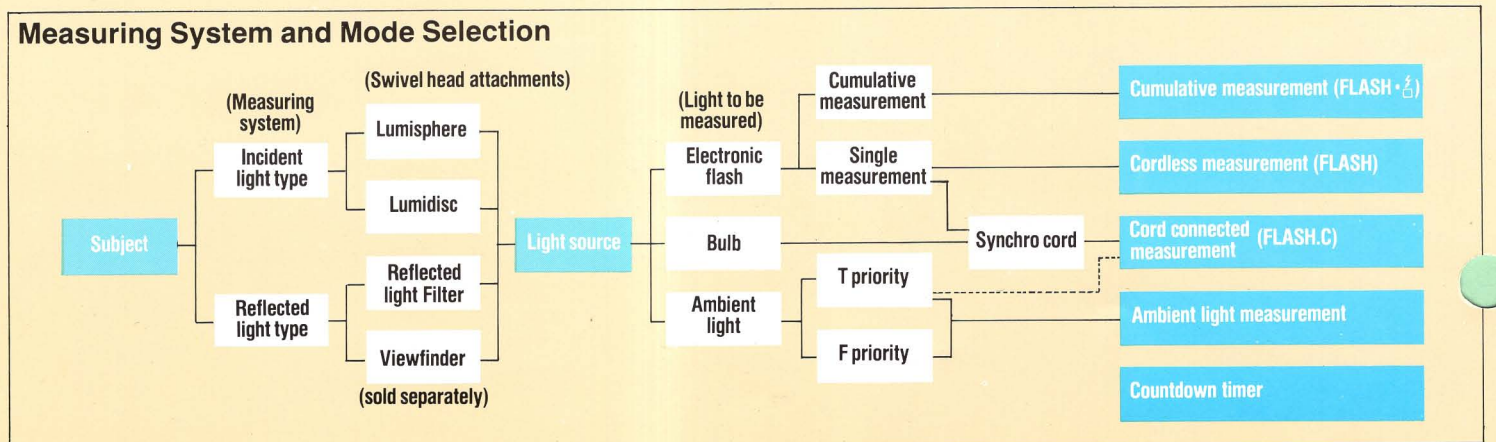
After the film speed (ASA) and shutter speed are set and the actual metering is performed, the E display together with an 'T' (under exposure) or 'O' (over exposure) mark appears, according to the light volume, to indicate improper exposure. The E display also appears to indicate improper exposure when metering under the ambient light measuring mode and the shutter speed and aperture-stop are freely changed but the values exceed the limit.

In the case of electronic flash light, synchronized measuring is possible between 1 sec. and 1/500 sec.

Measuring Range is a Wide EV-1 to EV 18 (ASA 100)

In the case of ambient light measuring, brightness can be continuously measured and time or aperture priority switching is possible.

After measuring, calculation is possible by changing the ASA speed or shutter speed.

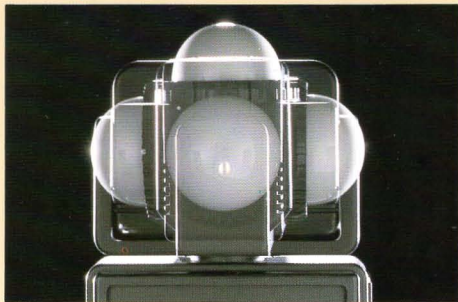


Technology to Meet Wide Professional Needs

Energy-saving Design

More than two hours of measuring is possible when using one penlight AA battery, and more than four hours of measuring can be performed when using an alkaline battery (continuous use according to our test conditions). A mechanism is installed whereby the power source is automatically set at OFF after the power source is kept at ON position for a certain length of time.

Swivel Head Turns to Right and Left and Upwards



The swivel head can be freely turned toward the light source or subject while the display panel and operational keys are kept facing the photographer.

Slide Capsule Prevents Erroneous Operations

Programming keys that are set only once and not required to be set again for the same shooting, such as the ASA speed key and measurement mode key, are situated on the bottom row and can be covered with the slide capsule.

Synchro Terminal with Lock Mechanism

This mechanism prevents inadvertent disconnections of the exclusive synchro cord.



Volume Adjustment that Allows Exposure Compensation.

The adjustments (approx. ± 1 EV) of the measured value can be made, to suit the photographer's photographic intentions, by manipulating this volume.

Compactly Designed for Portability

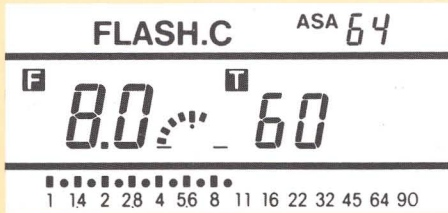
Utility Designed Incorporating Sekonic's Advanced Technology



Measuring of Flash Light

Mode 1

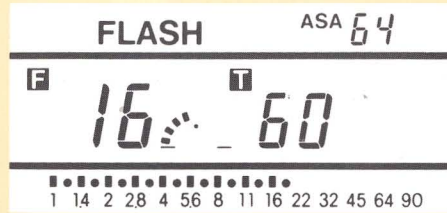
Synchro Cord Connected Measurements (FLASH.C)



When measuring at the position of the subject when producing flash with an electronic flash unit or bulb, connect the exposure meter and the electronic flash unit with the synchro cord. Also use this method when performing synchronized photography under the cordless mode in daylight and the exposure meter does not detect the flash from the electronic flash unit. The shutter speed can be freely set between 1 sec. to 1/500 sec. F ↔ Av (aperture value) switching can be performed before or after measurements.

Mode 2

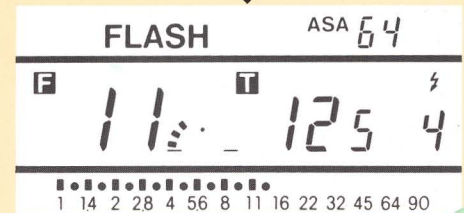
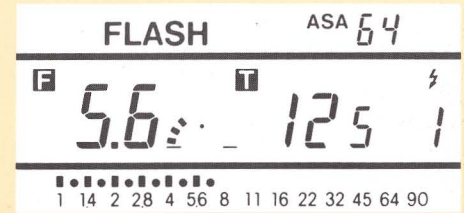
Cordless Measurements (FLASH)



Use the cordless measuring mode when the subject is far away from the electronic flash unit and the synchro cord is not long enough, or when the synchro cord gets in the way. Shutter speed range is 1 sec. to 1/500 sec. F ↔ AV switching can also be freely performed.

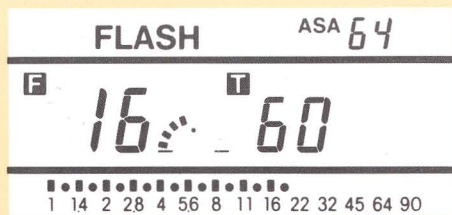
Mode 3

Cumulative Measurements (FLASH·Σ)



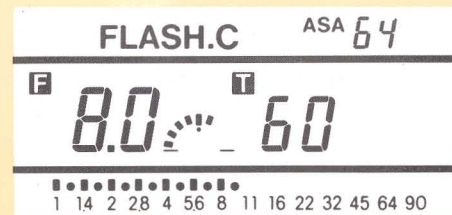
When the volume of light is insufficient with just one electronic flash, or in cases of special photography using multi-exposures, cumulative measuring is possible by repeating electronic flashes without connecting the synchro cord. Cumulative measurements can be made up to nine times, regardless of flash intervals, if the flashes are repeated while the display is still on. Of course, F ↔ AV switching can also be freely performed.

Calculations Can Be Freely Performed by Changing ASA Speeds



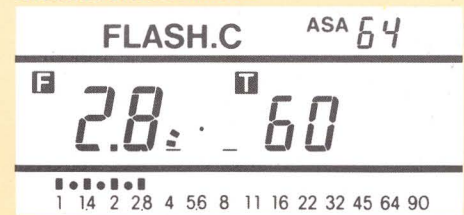
After measurement is performed, the ASA speed of the film can be changed and its corresponding aperture stop can be freely calculated. This calculation can be performed under both the flash light measuring mode and the ambient light measuring mode.

F ↔ AV (aperture value) Switching Can Be Freely Performed



F value and AV (aperture value) can be freely switched by just pressing a key before or after measuring is performed. AV is an integral number of an F value.

Ambient Light Measurements are Possible Even with the Flash Light Measurement Mode



When the flash and ambient lights are to be compared during flash photography, detach the synchro cord and press the metering button switch. In this way, the time synchronized ambient light can also be measured with the same FLASH.C Mode.



(ASA 64, 1/60 sec., measured value F11) One 1200WS electronic flash unit.



(ASA 64, 1/30 sec., measured value F32) 1200WS electronic flashed integrated four times.

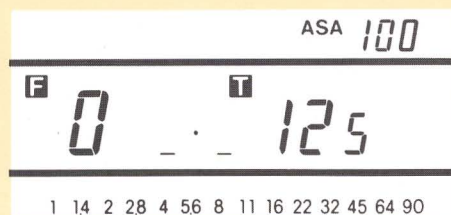
Measuring of Ambient Light

Mode 4

Ambient Light Measurements

DIGIPRO X-1 can measure ambient light, such as natural light and electric lighting, with T(time) priority or F(aperture) priority, like and ordinary exposure meter. T ↔ F switching is easily performed by just pressing a key.

T Priority Measurements



In the case of T priority, the measured aperture value is displayed by digital figures and also by dots. If the brightness is changed while pressing the measurement button, the aperture value display also changes accordingly. The displayed aperture value is coupled from F1.0 to 90.9.

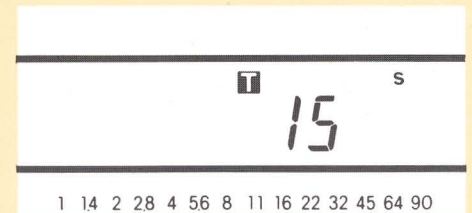
F Priority Measurements



The shutter speed can be measured according to the set aperture value. The aperture value can be displayed by digital figures or by dots. Measurable shutter speeds are from 30minutes to 1/8000 second.

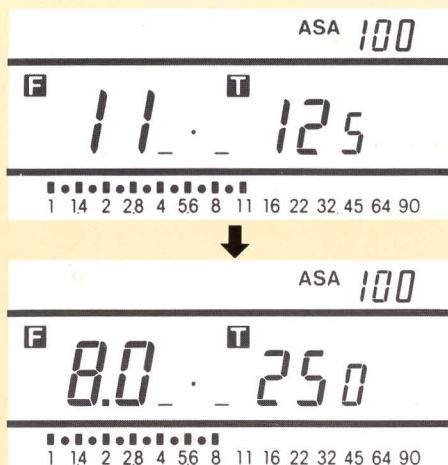
Mode 5

Countdown Timer



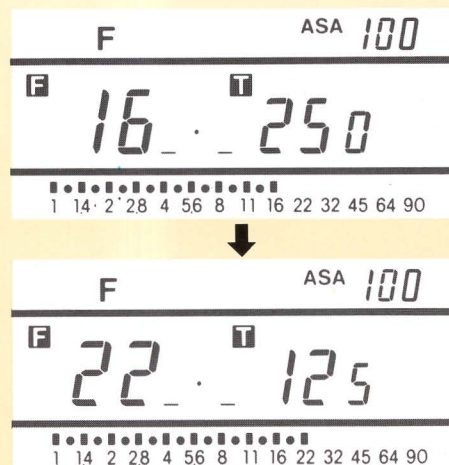
When set at Timer mode, it can be used as a subtracting type timer from 59 minutes 50 seconds to 1 second. The desired time can be speedily selected with the Up and Down keys. When the Timer key is pressed after setting, subtraction takes place every second and when the set time is reached the bell beeps to indicate completion.

T Priority Calculations



After T priority measurement is performed, the shutter speed can be changed and speedily calculated, to make the most suitable combination with the aperture value that meets the intentions of the photographer. Calculations by changing the film ASA speed can also be freely performed.

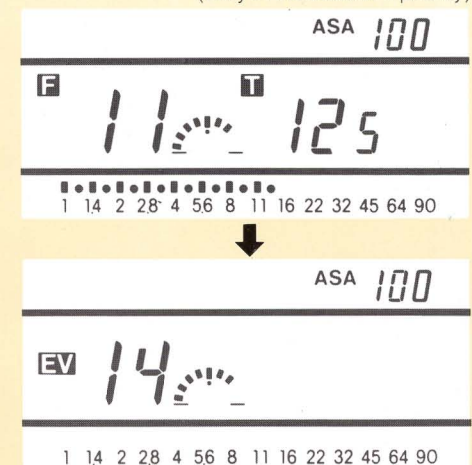
F Priority Calculations



After measurement is performed, calculations can be freely performed by changing the aperture value. Of course, calculations can also be performed by changing the film ASA speed.

F ↔ EV Switching

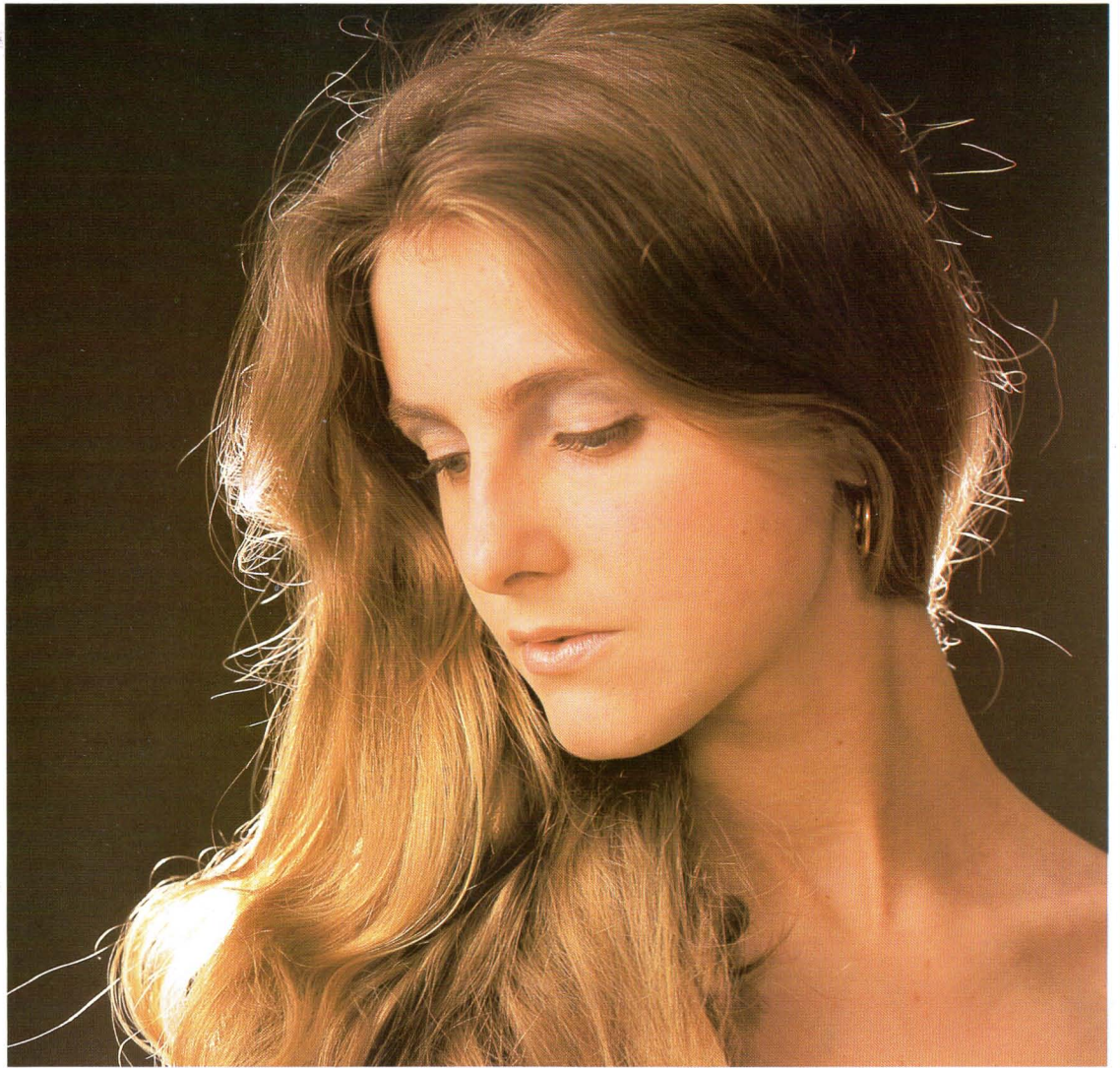
(Only in the case of T priority)



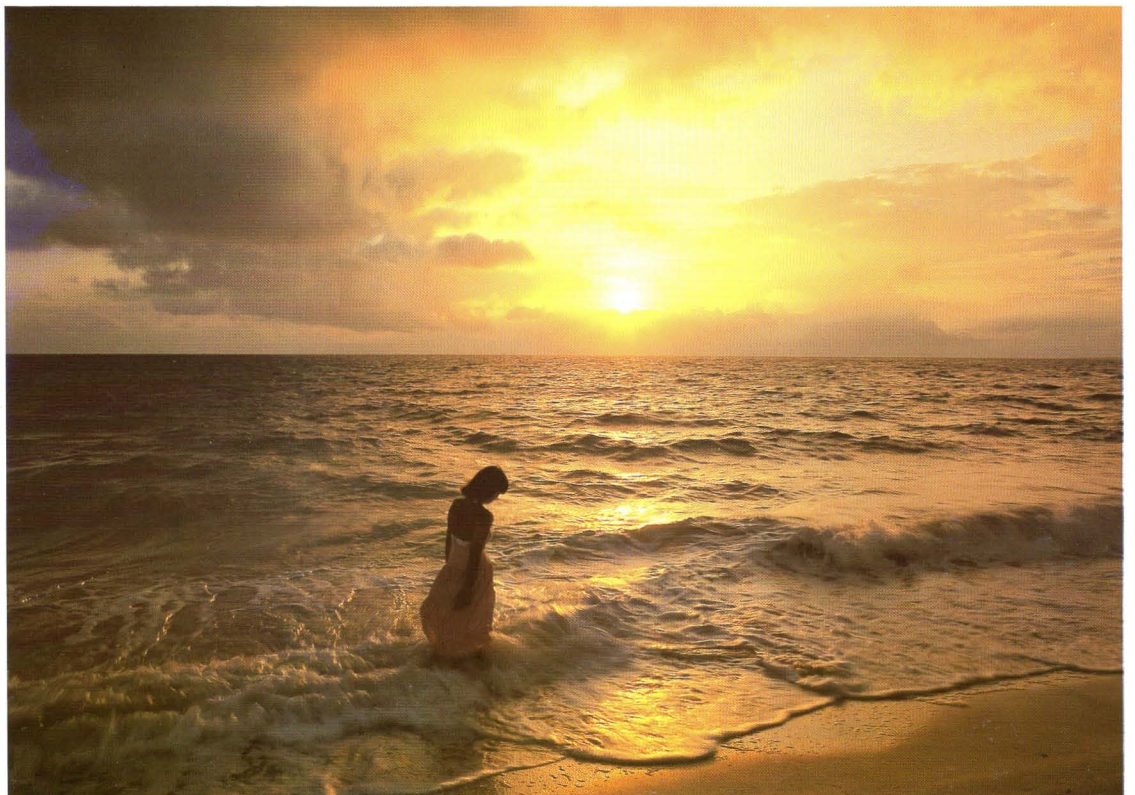
When the F.EV switch key is pressed, the displayed F value can be switched to EV. In order to return it to F value, just press the key once more. This can be performed either before or after measuring.

Movie Photography Measurements

The measuring method is the same as in the case of ordinary cameras. Measuring is performed by setting the shutter speed according to the filming speed of the camera.



(ASA 32, 1/60 second, measured value F8) Backlight 1kw spot, measured value F22



(ASA 64, 1/30 second, measured value F11)



Accessories

(1) Lumisphere

Incident light type. Used for measuring exposures when shooting portraits and three-dimensional subjects.

(2) Reflected-light Filter

Reflected light type light receiver with a 55-degree acceptance angle. The average measurement of the entire subject can be obtained from the position of the camera.

(3) Lumidisc

Used when measuring the illumination ratio of the main and auxiliary light sources, or when the subject is of a flat shape. It is also used when measuring intensity of illumination.

(4) Synchro Cord (5 meters)

Has three plugs to connect the exposure meter, electronic flash unit, and the camera. It is not necessary to change the connection between the camera and the exposure meter each time measurements are repeated.

(5) Viewfinder (Sold separately)

Reflected light type light receiver with a 10-degree acceptance angle which is used for spot metering. It is used for partial metering of distant subjects.

Technical Data

Measuring system	<ul style="list-style-type: none"> Incident and reflected light types. Multi-functional digital exposure meter for flash and ambient light use. 	Other displays	<ul style="list-style-type: none"> Under display of measuring range. F, EV, T display sections are displayed by E (error). Dot display section is displayed by 7. Over display of measuring range. F, EV, T display sections are displayed by E (error). Dot display section is displayed by 8. Battery check. Indicated by b.c. Battery level is indicated by dots. Bell (beep) coupled indication. Bell mark is displayed on mode display section. Countdown timer set display. 00 display.
Measuring range (ASA 100)	<ul style="list-style-type: none"> Flash light...F1.0 to F90 + 0.9AV Ambient light...EV -1 to EV18 	Battery used	<ul style="list-style-type: none"> One penlight AA dry battery (1.5V) With power indication volume (± 1 EV continuous variable display type)
Measuring accuracy	<ul style="list-style-type: none"> Within ± 0.1 EV 	Others	
Light receiving section	<ul style="list-style-type: none"> Incident light type...Lumisphere, Lumidisc. Reflected light type...Reflected-light Filter (acceptance angle 55°), Viewfinder (acceptance angle 10°). Sold separately. Two-way swivel type...Left and right 270°. Upward 90°. Light sensor...Silicon diode. Spectral characteristics can be corrected by filter. C=340 K=12.5 	Standard accessories	<ul style="list-style-type: none"> Lumisphere, Lumidisc, Reflected-light Filter, Synchro cord.
Correction factor		Size	<ul style="list-style-type: none"> 142 (154) x 64 x 28mm () indicates length when slide is extended
Measuring mode	<ul style="list-style-type: none"> FLASH.C...Cord connected flash mode. FLASH...Cordless flash mode. FLASH $\frac{1}{2}$...Cumulative flash mode. 	Weight	<ul style="list-style-type: none"> Approx. 200 grams (without battery).
Flash			
Ambient light	<ul style="list-style-type: none"> Blank display on mode display section...Time priority mode. F display on mode display section...Aperture priority mode. 		
F, EV switching	<ul style="list-style-type: none"> Flash light...No display. (AV) 0 to 15. Ambient light...EV display -5 to 24.9 		
Memory display (Display of each numeral)	<ul style="list-style-type: none"> ASA...6 to 8,000 (1/3 SV step) TIME...Flash light 1 to 1/500 second (1 TV step). Ambient light 30 minutes to 1/8000 second (1 TV step). (In the case of aperture priority measurements 1/10 TV step). F value...1.0 to 90 + 0.9AV (1/10 AV step). Dot display 1.0 to 90 1/2 AV display EV...-5 to 24.9 (Ambient light display 0.1 EV step) AV...0 to 15 (Electronic flash measurement display 0.1 AV step) (The F display disappears and there is no other display.) 		



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