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Canon A[E-]

A new generation.



Electronic system photography catches up with technology.

#### 7 Main Features of the Canon AE-1

The First SLR with a Central Processing Unit
As completely as possible, formerly mechanical controls have been replaced by smaller, electronically automated ones, which render more reliable service and lightning-fast, precision performance. And all functions come under the governing brain of a Central Processing Unit (CPU) which coordinates the SLR

system response to any shooting situation.

True Shutter-Speed Priority AE

With priority given to shutter speed and the aperture set automatically, no action shot need ever be lost. Because the AE-1 meters within a split-second and the aperture is set just before the shutter is actually released, the possibility of error due to sudden change in conditions is virtually eliminated.

Exceptional Versatility Combined with Handling Ease

Electronic controls and the replacement of many mechanical parts make the AE-1 extremely compact and lightweight. The camera and all its accessories have been designed with all controls centralized and within instant reach for maximum ease of handling. And all metering information is conveniently displayed in the viewfinder.

Electronics Command an Entire Photographic System

The AE-1's main accessories are the Power Winder A for continuous shooting and the Speedlite 155A electronic flash. Both couple to the electronic circuitry of the AE-1 to increase its automatic shooting capabilities and expand the range of its photographic possibilities. Independent operating controls allow an easy switch over to manual control if so desired.

Classifying Photographs with the Data Back A

Canon's exclusive imprinting process, which conveniently imprints dates and other data on the film at the very moment of taking the picture, is available as an accessory easily attached to the AE-1. With this device, photos can be easily classified or chronologically arranged for research or any other purpose.

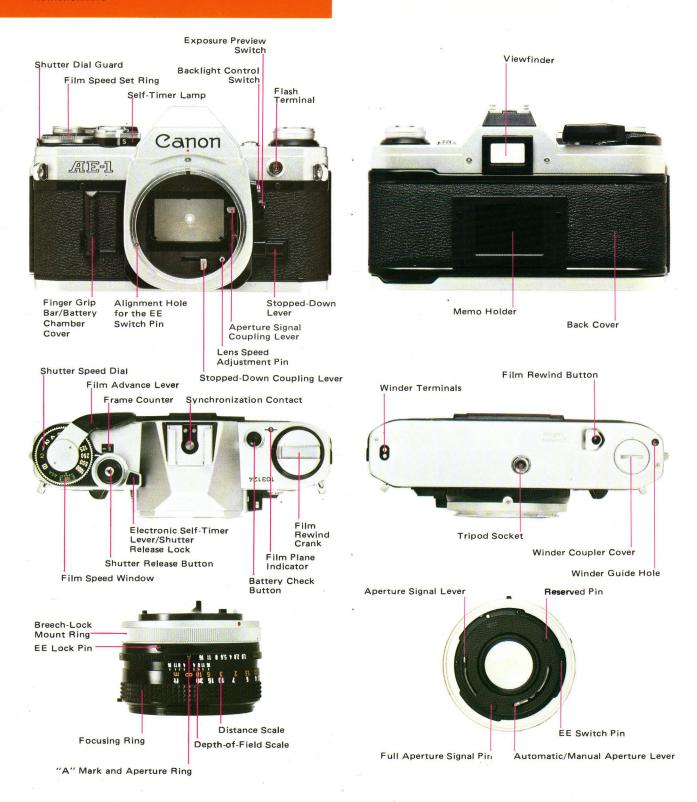
Making the Most of Canon FD Lenses

The AE-1 utilizes the full range of Canon FD lenses. Canon makes superb, quality lenses for every possible photographic application and every possible photographic effect. FD lenses have been designed to meet the most stringent requirements of professional photographers.

Accessories for All Kinds of Photographic Purposes

A great assortment of accessories and attachments are available to make the AE-1 an all-embracing system of photography. With the addition of these accessories, almost nothing is outside the realm of the AE-1's photographic possibilities.





# **Specific Features with Special Performance**

#### Large Shutter Speed Dial with Protective Guard

The shutter speed dial is especially large to enable finger-edge control as the camera is held. A protective guard prevents unintentional movement of the dial, and the ASA ring is located underneath.





#### Comfortable, Short-Throw Film Advance Lever

A short-throw, 120° film advance lever allows the film to be rapidly advanced for action photography. It also features a comfortably molded, plastic tip.

#### Two-Step Electromagnetic Shutter Release Button

This special two-step shutter release button permits one-finger control of all of the camera's automatic functions. A slight depression turns power on and activates the exposure meter; a full depression triggers electromagnetic release of the shutter, preceded by AE aperture setting.





#### **Electronic Self-Timer**

The governor mechanism of the conventional self-timer has been replaced by solid state circuitry in the AE-1. The electronic self-timer releases the shutter after a lag of 10 seconds, while a red LED signal flashes to indicate its operation.

#### Convenient Finger Grip Bar

The raised contour of the battery chamber cover conveniently provides a firm, handy grip for excellent security in action situations.





#### Stopped-Down Lever

A convenient sliding stopped-down lever is provided for checking the depth-of-field. It also features a locking button which can fix it in the stopped-down position.

#### **Backlight Control and Exposure Preview Switches**

The AE-1 features a backlight exposure compensation of 1.5 gradations more on the aperture scale than the actual setting. This convenient button is for shooting against bright light. Below it is the exposure preview switch to check the AE aperture setting that is displayed in the viewfinder.





#### **Battery Check Button**

By pressing the battery check button, the battery's charge can be ascertained by reading the exposure meter needle in the viewfinder. It also serves to cancel operation of the electronic self-timer.

#### Compact, 6V Battery

Only one, compact 6V silver oxide or alkaline manganese battery is required to power all of the AE-1's marvellous electronic features. Its large voltage capacity is well enough for one year under normal use.



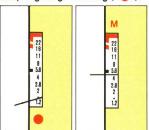


#### Handy Memo Holder

A memo holder is featured on the back cover. The end tab of the film carton may be inserted as a memo to indicate the film type and number of exposures, or other information.

#### Complete Information in the Viewfinder

The AE aperture setting is clearly displayed in the viewfinder aperture scale which includes two red warning zones to indicate overexposure. Flashing red LED signals give vivid visual indication of manual ("M") aperture setting and underexposure/coupling range warning ("\(\tilde{\text{\text{o}}}\)").





#### Exclusive Canon Breech-Lock Mount

The breech-lock mount, one of the high-quality features of Canon FD lenses, enables rapid changes from one lens to the next, according to the demands of the situation.

#### The World's Premier Electronic SLR

The whole concept of an SLR camera will never be the same. With the debut of the Canon AE-1, a new chapter in the history of the single lens reflex camera has been written.

For the first time in the world, camera functions are under the command of a Central Processing Unit (CPU). Application of electronics for automation of controls has attained such a high technological development as to finally make possible a camera such as the AE-1. Electronics are used not only for determining the exposure, but also for automatic control of practically every working part.

Furthermore, completely automatically-controlled operation has become a reality with the various accessories that make the AE-1 the world's foremost SLR camera. These are features totally unprecedented in the history of photography. For example, the Power Winder A can be quickly attached for power-driven, automatic film winding at a pace of two frames per second to handle any action situation, no matter how fast the movement. The automatic exposure CPU-controlled Speedlite 155A, the first of its kind in the world, requires but an instant to mount it on the camera, extending the automatic functions of the camera all the way into any lighting situation.

The spontaneous performance that the AE-1 delivers will actually change the technique of shooting with an SLR, from deliberate, fixed photography to an active pursuit of the subject, no matter how fast the action; from a static approach to true involvement with the moving subject. This new way of shooting will undoubtedly be recognized as the only real way in the future. And, it is definitely the direction in which future photography is headed. The AE-1 has revolutionized conventional photography, taking the leadership in a new generation of SLR design.



# The SLR with a Central Processing Unit

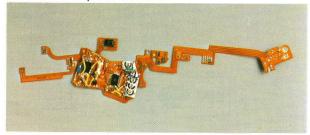
#### The World's Latest Breakthroughs in Electronic Technology

The new Canon AE-1 has adopted some of the world's latest breakthroughs in electronic technology to completely revolutionize the concept of the SLR camera. As completely as possible, electronically automated controls have replaced mechanical ones.

The AE-1's electronic circuitry has several times higher integration than could be possible by solely using conventional LSI (Large Scale Integration). Its special I<sup>2</sup>L (Integrated Injection Logic) performs functions that are equivalent to well over a thousand elements, all within a tiny 3mm square chip. Circuit size and power consumption are thus reduced.

Among Canon's innovations in the AE-1 are the incorporation of a highly sensitive silicon photocell and MOS-BI logarithmic amplifier in one IC (Integrated Circuit), and the use of hyperbolic function resistance in the electronic circuitry design, a design which assures quick response and amazing accuracy and reliability.

Another innovation is the adoption of a flexible wiring substrate with the CPU. This completes all electrical contacts between its circuitry, eliminating the former need for wire conductors and solder connections, with the result being greater circuit reliability and compactness.



#### Central Processing Unit

The CPU is the brain of the sophisticated electronic system which handles all signal information and gives all commands in shooting. Not only is its performance incomparably precise and reliable, it is virtually infallible.

It is composed of highly integrated circuits including two bi-polar ICs and an LSI which contains more than a thousand elements. The CPU is able to process with extreme accuracy a complex variety of information simultaneously, so that every camera function totally responds to the actual shooting conditions.

The operational amplifier of the CPU recalls that of a miniature analog computer and, besides accurate, high speed data processing, it allows digital mode data storage. Since data stored in the digital mode is not affected by external conditions, the indicated value given by the CPU is always unerringly transmitted to the aperture control system.

Upon tripping the electronic shutter, the CPU activates the travel of the first shutter curtain and after the time interval corresponding to the selected shutter speed, it activates the closing of the second shutter curtain in flawless sequence. With such excellent electronic precision, you will never miss a shot with the AE-1.

#### **Functional Power Distribution**

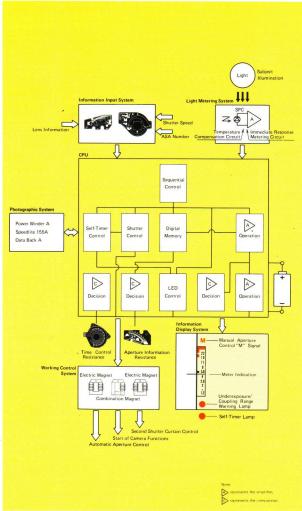
Despite the AE-1's many electronic features, IC and LSI circuitry and individual control of the camera's functions provide remarkable battery economy. The power is automatically switched on or off only upon depression of the shutter release

button so that power consumption is absolutely minimized. It is supplied only to the necessary systems as required and automatically discontinued to system not in actual use. Since the AE-1's electronic shutter can be triggered with only a slight electrical pulse, it also results in a tremendous power saving. Thus, normal life of the 6V silver oxide battery is prolonged approximately one year, or approximately 20,000 exposures.

#### **Automated Precision Assembly**

Modularization of the AE-1's internal mechanism permits automated assembly for higher quality and precision. Furthermore, computer use in the design and production processes sets impeccable tolerance standards for the manufacturing, assembly and inspection of each component. An IC tester controlled by computer checks 230 crucial points essential to the performance of the LSI and IC circuitry and insures perfect quality control.

Canon AE-1 Electronic Circuit Block Diagram



# True Shutter-Speed Priority AE

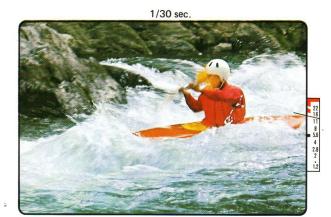
Automatic exposure (AE) lends its greatest advantage in action photography, where time-consuming manual adjustments become virtually impossible. In order to capture action at its fastest, the right shutter speed is much more important than the aperture opening which merely influences the depth-of-field. Thus, shutter-speed priority AE has proven to perform far more effectively than the aperture priority systems of other camera makers.

The Canon AE-1 uses Central Emphasis Metering method for which Canon's fine SLR cameras are already well-known. This method has proven to be the most reliable way of assessing the correct exposure for flawless results.

#### Immediate Response Metering

The AE-1 is unique in that it meters and sets the aperture immediately before the shutter is released. The AE-1's metering system employs a highly sensitive silicon photocell which responds more quickly and is considerably more sensitive than the conventional CdS photocell, especially under dim light conditions owing to the incorporation of an electric discharge circuit. Its output signal is amplified by a MOS-BI logarithmic amplifier constructed in a single IC which is stable against changes in temperature, humidity and noise.

The aperture is automatically determined and set within a split-second (40 milliseconds at EV1, to be exact) before the shutter is released, thereby eliminating any possibility of error due to a sudden change of lighting conditions.



1/500 sec

#### Incredibly Lightweight, Compact Body

The AE-1 features an extremely well-balanced, lightweight body with all controls perfectly located at fingertip command. The camera is designed so that you can devote your complete attention to creative photography; with all controls and information display located in the most convenient places. And since its weight has been kept down to only 590g (body only), the AE-1 is extremely easy to hold and carry.

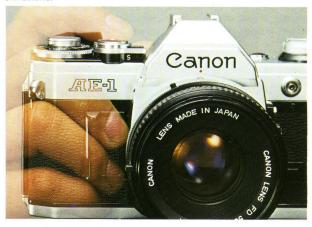
#### Quick, 120° Short-Throw Film Advance Lever

The film advance lever of the Canon AE-1 smoothly winds the film for the next shot with a quick, 120° throw — the shortest film advance available ever with an AE SLR. In action photography, this can be of tremendous advantage, allowing you to rapidly advance the film in a barrage of rapid-fire shooting.

Moreover, the AE-1's film advance lever has 30° stand-off angle which keeps it always ready for the photographer's reflexive responses to subjects in action.

#### Convenient Finger Grip Bar for Better Stability

The battery chamber cover has a raised contour which serves as a firm, handy grip. This enables both better stability for slow shutter-speed exposures and excellent security in action situations.

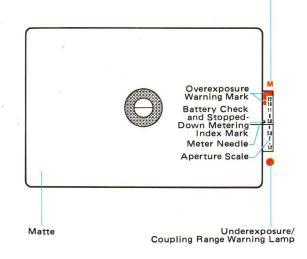


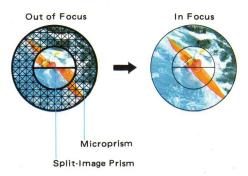
#### Easy-to-Read Viewfinder Information

The AE-1's viewfinder has a split-image/microprism focusing screen with all pertinent information neatly arranged to the right of the visual field in order to enable an immediate assessment of shooting conditions at a glance. The information display consists of a calibrated aperture scale with stopped-down metering index mark and exposure meter needle to indicate the AE aperture setting and two CPU-controlled LEDs that flash to give the photographer clearly visible warnings.

When the aperture value computed by the CPU is larger than the full aperture f/stop of the lens in use or when it is out of the meter coupling range, the "O" LED below the aperture scale flashes to indicate that correct exposure cannot be obtained with the given shutter speed. When the aperture ring of an FD lens is set for manual aperture setting, the "M" LED located above the aperture scale flashes.

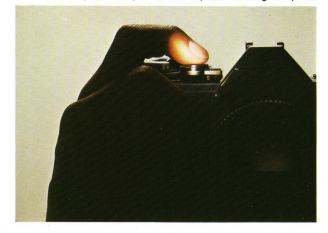
With the AE-1's unique information display, you always know everything about every shot right away, without ever removing your eye from the viewfinder.





#### Automatic Exposure Preview with the Shutter Release Button

The shutter release button of the AE-1 enables you to preview the correct AE aperture setting before shooting. It instantaneously advises you of the exposure setting computed



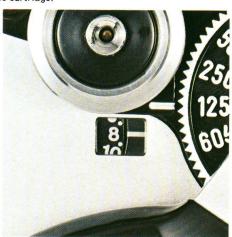
by the CPU. You can therefore assess exposure conditions in less than a second and quickly make any shutter speed adjustments you wish. With full depression of the shutter release button, you have exactly the shot you want.

#### New, Unique Electronic Self-Timer

The conventional mechanical SLR self-timer mechanism has been replaced in the AE-1 by solid state circuitry that offers greater reliability, compactness and smoother noiseless operation. It employs a timer circuit incorporated into the CPU which releases the shutter 10 seconds after the self-timer lever has been set and the shutter release button has been pressed. A red LED behind the lever flashes to indicate its operation. You can release the shutter prematurely, should the moment so require or you can cancel its operation with the battery check button.

#### **New Film Frame Counter**

The film frame counter counts every consecutive frame and automatically resets itself when the back cover is opened. After film is rewound into the cartridge, you may safely leave the film leader exposed and, if you do your own developing, directly wind the film onto a developing tank reel without needing to pry open the cartridge.



# Electronics Command an Entire Photographic System

The range of the AE-1's possibilities are enlarged and enhanced by the addition of the special electronic accessories designed exclusively for it. Their coordinated automatic features assure that the proverbial chance-of-a-lifetime shot will never pass you by.

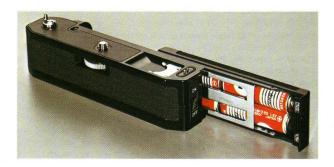
#### **POWER WINDER A**

**Power Winder A for Continuous Shooting** 

#### Automatic Exposure with Power Film Advance

The Canon Power Winder A quickly attaches to the AE-1 body and can continuously and rapidly advance the film automatically at a rate of approximately two frames per second. With full advantage of the automatic exposure control afforded by the electronic CPU circuitry, even with rapid-fire shooting perfect exposure is obtained.





#### Continuous or Single Frame Shooting

You can shoot one or more frames at a time using the Power Winder A by intermediately withdrawing finger pressure from the shutter release button. This is very convenient since the film is advanced automatically after every frame. AE-coupled shutter speeds for continuous photography range from 1/60 to 1/1000 sec. For single frame AE photography, any other shutter speed than "B" is available.

#### Compact Design for Great Ease in Handling

Weighing only 300g, even with batteries loaded, the Power Winder A is easy to carry and extremely fast and easy to mount. Its basic loaded battery pack A is designed for both convenience and balance in handling.

#### Four Penlight Batteries Power Source

Power consumption with the Power Winder A is so low as to require only four penlight batteries. Under normal conditions, they can power film drive for more than 20 rolls of 36-exposure film, and are extremely easy to change and load.

#### Shutter Release Button Control

To afford the greatest freedom for responding to lightningfast action, the Power Winder A is activated by depressing the shutter release button of the camera.

#### Film End Warning

The Power Winder A is provided with a red LED lamp as a film end warning and an automatic cut off circuit stops the Power Winder A when film ends, or when battery charge is less than the voltage prescribed. Thus, the photographer can safely concentrate all his attention on shooting.

#### **Specifications**

Winding Speed: About 0.5 second.

Operations: Activated by the shutter release button of the camera.

**Shutter Speed Coupling Range:** 1/60 to 1/1000 second for continuous photography. "B" to 1/1000 second for single frame photography. (However, "B" setting is not coupled for AE photography).

Frame Counting: By the frame counter of the camera.

**Automatic Cut Off Circuit:** At the time of completion of a roll of film or when battery power is insufficient, the Power Winder A automatically stops and its LED glows.

Mounting: Attached via the tripod socket after the winder coupler cover has been removed.

**Power Source:** Four penlight batteries (size AA); good for more than 20 rolls of 36-exposure film under normal temperatures.

Size:  $141\times42\times34$ mm (5-9/16" $\times$ 1-5/8" $\times$ 1-5/16") Weight: 300g (10-9/16 ozs.) (including batteries)

Subject to change without notice.

# SPEEDLITE 155A

**CPU-Programmed Flash Photography** 

#### Automation of Shutter Speed and Aperture Setting

The Speedlite 155A is a computerized electronic flash specially designed for the AE-1. It automatically synchronizes the shutter speed at 1/60 sec., sets the aperture for the correct exposure, along with the appropriate flash duration indicated by the CPU. A pilot lamp indicates flash charging.

The Speedlite 155A has an aperture selection switch for f/2.8 (red) and f/5.6 (green) for films with ASA 100. The Speedlite 155A's outstanding feature is the automatic switching of the flash photography mode over to the normal AE photography mode when it is not sufficiently charged for the next flash.

#### **Specifications**

Type: Computer thyristor (energy-saving) flash with series control and direct contact connection.

Guide Number. 17 (m. ASA 100)

Recycling Time: Less than seven seconds with alkaline batteries; or less than five seconds when using Ni-Cd batteries. Pilot lamp glows when flash is ready.

**Number of Flashes:** More than 300 using alkaline batteries. More than 90 using Ni-Cd batteries.

Flash Control: A sensor measures the amount of light reflected from the subject.

Aperture Selection Switch: Three Settings; Red (f/2.8 at ASA 100), MANU., and Green (f/5.6 at ASA 100)

Effective Distance Range: 0.5m to 6m at f/2.8 (ASA 100); 0.5m to 3m at f/5.6 (ASA 100)

**Illumination Angle:** More than  $45^{\circ}$  vertically. More than  $60^{\circ}$  horizontally (adequate for a 35mm lens).

Color Temperature: Approximate to that of sunlight.

Power Source: Four AA size batteries.
Usable Film Speeds: ASA 25 to ASA 800

Aperture Scale: 1 to 32 Distance Scale: 0.5 to 15m

Size: 70×51×105mm (2-3/4"x2x4-1/8")
Weight: 300g (10-9/16 ozs.) (including batteries)

Accessories: Synchronization cord A and case. (Sold separately)
Subject to change without notice.



Canon has developed the Data Back A accessory in order to permit data imprinting on the film at the very moment the picture is taken. The Data Back A imprints dates—day, month and year, letters of the alphabet and Roman numerals, in the lower right hand corner of the picture.

Imprinting is perfectly synchronized with film exposure or it can also be performed manually if desired.

And there are three settings to choose according to the film in use. A red LED lamp indicates the moment of imprinting.

#### **Specifications**

Attachment: Replacement of the AE-1's back cover.

**Data Setting Dials:** 

Right dial: 32 figures (0 to 31) and two blanks. Central dial: 39 figures (0 to 31, A to G) and a blank.

Left dial: 39 figures (0 to 9, 76 to 87, "I" to "X", "a" to "g")

and a blank.

Data Imprinting: Special synchronization cord connection. The built-in lamp imprints the necessary data on the film from the back. By pressing the manual button, the data can be also imprinted.

**Exposure Adjustment:** Three different positions to choose from according to the film type and its ASA sensitivity.

Indicator Lamp: An LED indicates data imprinting.

Power Source: One 6V silver oxide battery (Eveready or UCAR No. 544 or Mallory PX28) or alkaline manganese battery (Eveready or UCAR No. 537 or Mallory 7K13) which is good for more than 8,000 exposures.

Size: 100×48.5×14.5mm (3-15/16"×1-15/16"×9/16")

Weight: 160g (5-5/8 ozs.) (including battery)

Accessories: Special synchronization cord and case.

Subject to change without notice.



(To be marketed in the near future)

# Making the Most of Canon FD Lenses

The AE-1 makes use of the full line of Canon FD lenses, which range from fish eyes to super-telephotos. All Canon lenses are precision quality crafted and designed to meet the most exacting standards of professional photographers. FD lenses are incredibly sharp throughout the entire focusing range and Spectra and Super Spectra Coating assures brilliant color balance in color photography. All FD series lenses feature full aperture metering, AE coupling to the AE-1's electronic system, and breech-lock bayonet mount for stability and fast, easy handling.



# Accessories for All Kinds of Photographic Purposes

In addition to the Power Winder A, Speedlite 155A and Data Back A, Canon offers a great variety of accessories and attachments that can be used with the AE-1 to make it suitable for almost any conceivable photographic purpose. These include accessories for close-ups, for macrophotography, for copy work, and even for microphotography. And in every case they are made to meet Canon's exacting standards of high quality and precision.



Type: 35mm SLR (Single-Lens-Reflex) camera with electronically controlled AE (Automatic Exposure) and focal plane shutter.

Picture Size: 24 x 36mm

Interchangeable Lenses: Canon FD series with full aperture metering and AE coupling. Canon FL series with stoppeddown metering.

Lens Mount: Canon Breech-Lock mount, Canon FD, FL and R lenses can be used.

Viewfinder: Fixed eye-level pentaprism.

Field of View: 93.5% vertical and 96% horizontal coverage of the actual picture area.

Magnification: 1:0,86 at infinity with a standard 50mm lens.

Viewfinder Information: Split-image/microprism rangefinder, aperture scale with meter needle and stopped-down metering index mark doubling as battery power level check mark. Two red zones to warn of overexposure, manual aperture control "M" signal and underexposure/coupling range warning lamp.

Finder Attachment: Angle finder, magnifier, 10 dioptric adjustment lenses and eyecup.

Mirror: Instant-return, large reflector mirror with shock absorbing mechanism.

AE Mechanism: Shutter-priority, electronically controlled AE metering system.

Light Metering System: TTL (Through-The-Lens) Central Emphasis Metering Method employing a silicon photocell as photo-sensitive element.

Exposure Meter Coupling Range: With ASA 100 film, EV1 (f/1.4 at one second) to EV18 (f/16 at 1/1000 second).

Film Speed Dial: ASA 25 to ASA 3200.

**Exposure Correction:** By pressing the backlight control switch, exposure is corrected by opening the diaphragm 1.5 gradations more on the aperture scale than the actual setting.

Exposure Preview: Exposure can be confirmed in the viewfinder when the shutter release button is depressed halfway or the exposure preview switch is pressed.

**Shutter:** Cloth focal plane shutter with four spindles. Shock and noise damping mechanism is incorporated. All shutter speeds are electronically controlled.

Shutter Speeds:  $1/1000 \sim 1,2$ , B.

Shutter Speed Dial: The number 2 for two seconds is marked in orange; other numbers are in white. There is a shutter dial guard to prevent unintentional movement of the dial. The ASA ring is located underneath the shutter speed dial.

Shutter Release Button: A large button type magnetic release switch. Depressing the shutter release button halfway switches on the light metering circuit, while full depression releases the shutter. The shutter release button has a locking device, besides a socket for the cable release in the center.

Self-Timer: Electronically controlled self-timer. It releases the shutter after a lag of 10 seconds. A red LED lamp revealed blinks on and off to indicate its operation.

Stopping-Down the Lens: Stopping-down the lens can be performed by pushing the stopped-down lever after setting the aperture ring.

Power Source: One 6V silver oxide battery (Eveready or UCAR No. 544 or Mallory PX28) or alkaline manganese battery (Eveready or UCAR No. 537 or Mallory 7K13). The battery lasts approximately one year under normal use.

Battery Check: Battery power level can be checked by the meter needle in the viewfinder after the battery check button is depressed. Flash Synchronization: X synchronization is at 1/60 second. M synchronization is at 1/30 second and below.

Flash Terminal: The accessory shoe has a synchronization contact and automatic flash control contacts. On the front of the camera body is the flash terminal, JIS-B type for flash units with cords. It has a built-in protective rim to prevent electrical shock.

Automatic Flash: With the Canon Speedlite 155A, the shutter speed and aperture are automatically set. The amount of light is automatically controlled for correct flash exposure.

Back Cover: The camera's back cover has a memo holder. It can be replaced by the Canon Data Back A. It opens when the rewind crank is pulled up.

Film Loading: Easy film loading with multi-slot take-up spool.

Film Advance Lever: Single stroke with 120° throw and standoff angle of 30°. Film can be wound with several short strokes. The Canon Power Winder A winds film automatically.

Frame Counter: Additive type, automatically resets itself when the back cover is opened. While rewinding film, it counts the frame numbers downward.

Film Rewinding: Performed by pressing the rewind button on the bottom and by using the rewind crank on the top. The rewind button is automatically reset when the film is advanced.

Safety Devices: The camera does not function when the battery power is drained. The film cannot be wound while the shutter is in operation.

Size: 141x87x47.5mm (5-9/16"x3-7/16"x1-7/8"). (body only)
Weight: 590g (20-13/16 ozs.) (body only) 790g (27-7/8 ozs.)
with the 50mm f/1.8 S.C. standard lens.

Subject to change without notice.



FD Series (For Full-Aperture Metering or AE Operation)

Type	Lens	Construction Elements Groups		Angle of View	Minimum Aperture	Closest Focusing Distance (m) (ft.)		Filter Size (mm)	Hood	Length (mm) (ins.)		Weight (g) (lbs.) (ozs.		
Full-Frame Fish-Eye	Fish-Eye FD 15mm f/2.8 S.S.C.	10	9	180°	f/16	.3	-1	Built-in	Built-in	60.5	2-3/8	485	1	1
Super Wide-Angle	FD 17mm f/4 S.S.C.	11	9	104°	f/22	.25	.9	72	-	56	2-3/16	450	1	0
	FD 20mm f/2.8 S.S.C.	10	9	94°	f/22	.25	.9	72	_	58	2-5/16	345		12
	FD 24mm f/1.4 S.S.C. ASPHERICAL	10	8	84°	f/16	.3	ì	72	_	68	2-11/16	500	1	2
	FD 24mm f/2.8 S.S.C.	9	8	84°	f/16	.3	1	55	†BW-55B	52.5	2-1/16	330		12
Wide-Angle	***FD 28mm f/2 S.S.C.	9	8	75°	f/22	.3	1	55	†BW-55B	61	2-3/8	343		12
	FD 28mm f/2.8 S.C.	7	7	75°	f/22	.3	1	55	†BW-55B	49	1-15/16	280		10
	*FD 35mm f/2 S.S.C.	9	8	63°	f/22	.3	1	55	†BW-55A	60	2-3/8	345		12
	*FD 35mm f/3.5 S.C.	5	5	63°	f/22	.4	1.5	55	†BW-55A	49	1-15/16	236		8
Standard	*FD 50mm f/1.4 S.S.C.	7	6	46°	f/16	.45	1.5	55	†BS-55	49	1-15/16	305		11
	*FD 50mm f/1.8 S.C.	6	4	46°	f/16	.6	2	55	†BS-55	38.5	1-1/2	200		7
	FD 55mm f/1.2 S.S.C.	7	5	43°	f/16	.6	2	58	†BS-58	52.5	2-1/16	510	1	. 2
	FD 55mm f/1.2 S.S.C. ASPHERICAL	8	6	43°	f/16	.6	2	58	†BS-58	55	2-3/16	575	1	4
Macro	FD 50mm f/3.5 S.S.C. Macro with Extension Tube FD 25	6	4	46°	f/22	20.5 (cm)	8.1 (in)	55	None Necessary	59.5	2-5/16	310		11
	***FD 100mm f/4 S.C. Macro with Extension Tube FD 50	5	3	24°	f/32	.4	1.31	55	None Necessary	112	4-7/16	530	1	3
Short Telephoto	***FD 85mm f/1.2 S.S.C. ASPHERICAL	8	6	28°30′	f/16	1	3.5	72,	-	71	2-13/16	756	1	11
	FD 85mm f/1.8 S.S.C.	6	4	28°30′	f/16	.9	3	55	†BT-55	57	2-1/4	425		15
	FD 100mm f/2.8 S.S.C.	5	5	24°	f/22	1	3.5	55	†BT-55	57	2-1/4	360		13
Telephoto	FD 135mm f/2.5 S.C.	6	5	18°	f/22	1.5	5	58	Built-in	91	3-9/16	630	1	6
	FD 135mm f/3.5 S.C.	4	3	18°	f/22	1.5	5	55	†BT-55	83	3-1/4	465	1	0
	FD 200mm f/2.8 S.S.C.	5	5	12°	f/22	1.8	6	72	Built-in	140.5	5-9/16	700	1	9
	FD 200mm f/4 S.S.C.	6	5	12°	f/22	2.5	8	55	Built-in	133	5-1/4	675	1	8
	***FD 300mm f/2.8 S.S.C. FLUORITE with Extender FD 2X	6	5	8°15′	f/22	3.5	12	Exclusive Insertion Type	Built-in	230	9-1/16	1,900	4	3
	FD 300mm f/5.6 S.C.	6	5	8°15′	f/22	4	13	58	Built-in	173	6-13/16	1,125	2	8
	***FD 400mm f/4.5 S.S.C.	6	5	6°10′	f/22	4	13	Exclusive Insertion Type	Built-in	282	11-1/8	1,300	2	14
	***FD 600mm f/4.5 S.S.C.	6	5	4°10′	f/22	8	27	48	Built-in	460	1'6-1/8	4,200	9	4
	***FD 800mm f/5.6 S.S.C.	6	5	3°06′	f/22	14	45	48	Built-in	572	1'10-1/2	4,250	9	6
Zoom	FD 35-70mm f/2.8-3.5 S.S.C.	10	10	63°-34°	f/22	†††1	3.5	58	†W-69	120	4-3/4	575	1	4
	FD 85-300mm f/4.5 S.S.C.	15	11	28°30'-8°15'	f/22	2.5	8	Series IX	Built-in	243.5	9-9/16	1,695	3	12
	FD 100-200mm f/5.6 S.C.	8	- 5	24°-12°	f/22	2.5	8	55	Built-in	173	6-13/16	765	1	11

FL and Manual Series (For Stopped-Down Metering)

Туре	Lens Fish-Eye 7.5mm f/5.6 S.S.C.	Construction Elements Groups		Angle of View	Minimum Aperture			Filter Size (mm)	Hood	Length (mm) (ins.)		Weight (g) (lbs.) (		t (ozs.)
Circular Fish-Eye		11	8	180°	f/22	Fixed Focus		Built-in	_	62	2-7/16	380		13
Tilt and Shift	TS 35mm f/2.8 S.S.C.	9	8	63°/79°	f/22	.3	1	58	†BW-58B	74.5	2-15/16	545	1	3
Super Telephoto	**FL 400mm f/5.6	7	5	6°10′	f/32	4.5	15	††48	Exclusive	338	1'1-5/16	3,890	8	9
	**FL 600mm f/5.6	6	5	4°10′	f/32	10	35	††48	Built-in	448	1'5-5/8	5,000	11	0
	**FL 800mm f/8	7	5	3°06′	f/32	18	60	††48	Built-in	508	1'8	5,360	11	13
	**FL 1200mm f/11 S.S.C.	7	5	2°05′	f/64	40	130	††48	Built-in	853	2'9-9/16	6,200	13	11
Artifi <mark>cial</mark> Fluorite Telephoto	FL 300mm f/5.6 FLUORITE	7	6	8°15′	f/22	4	13	58	Built-in	168	6-5/8	850	1	14
	FL 500mm f/5.6 FLUORITE	6	5	5°	f/22	10	33	95	Built-in	300	11-13/16	2,700	5	15

S.S.C. = Super Spectra Coating S.C. = Spectra Coating

\*Equipped with a coupling pin for Canon Auto Tuning System

\*\*Front component interchangeable type. Focusing adapter (2 elements, 1 group, FL automatic diaphragm, with A-M ring)

\*\*\*New lenses.

TFD lens hoods are of bayonet mount.

TFD lens hoods are of bayonet mount.

TFilter is of insertion type with holder.

TMAcro focusing capability to 30 cm (1 ft.) from film plane.

Subject to change without notice.

# Canon

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