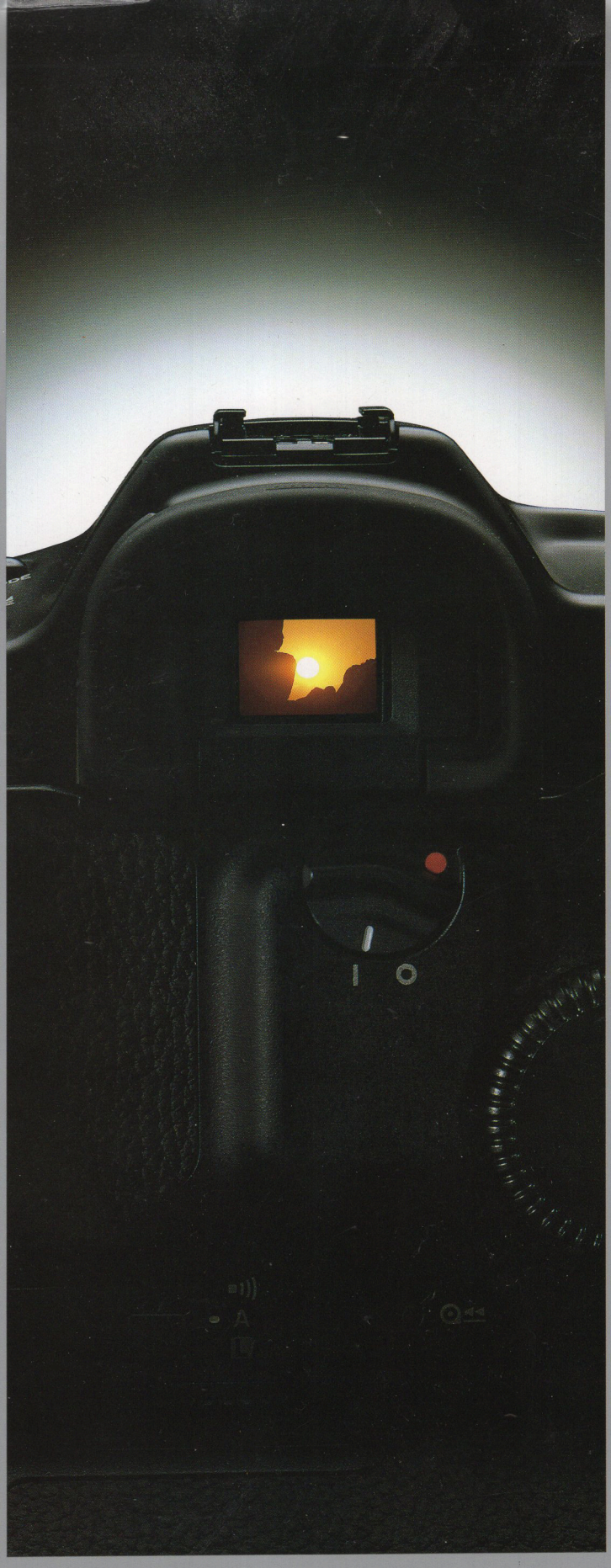
Canon

EOS 1

The New Classic



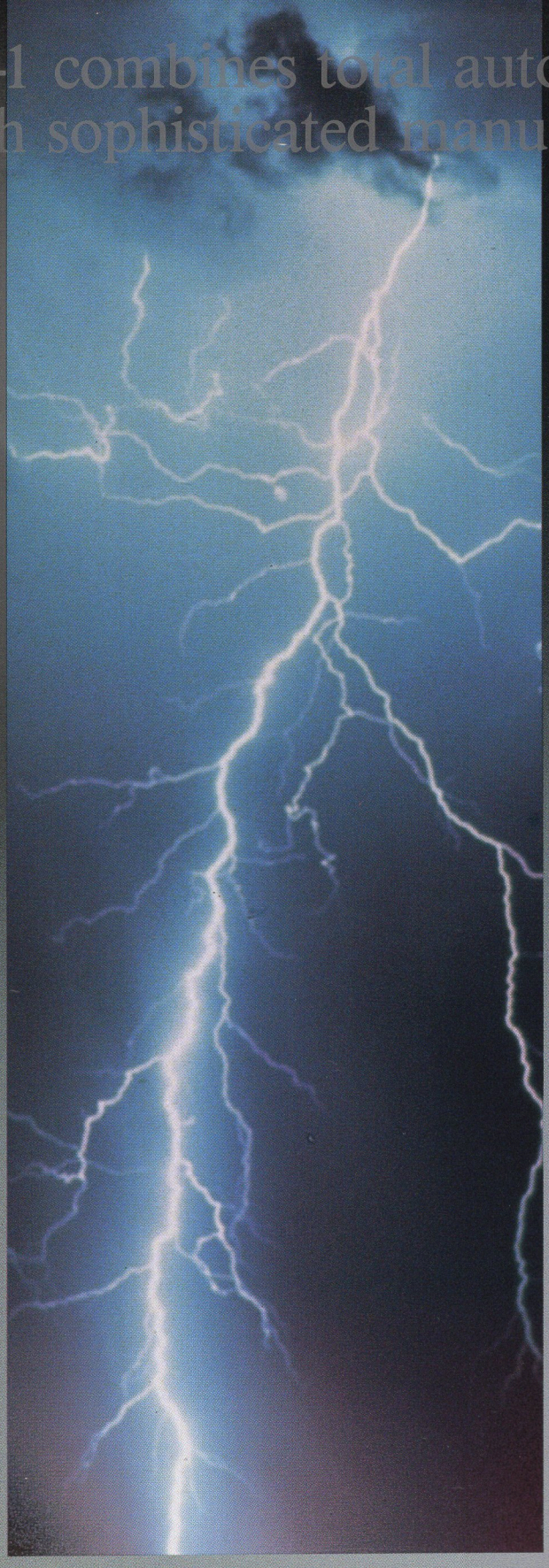
You are about to discover the advent of
a brilliant creative tool. A camera that provides
the ultimate in control.
Then lets you decide for yourself how to use it.



EOS 1



The new EOS-1 combines total automatic operations with sophisticated manual control.



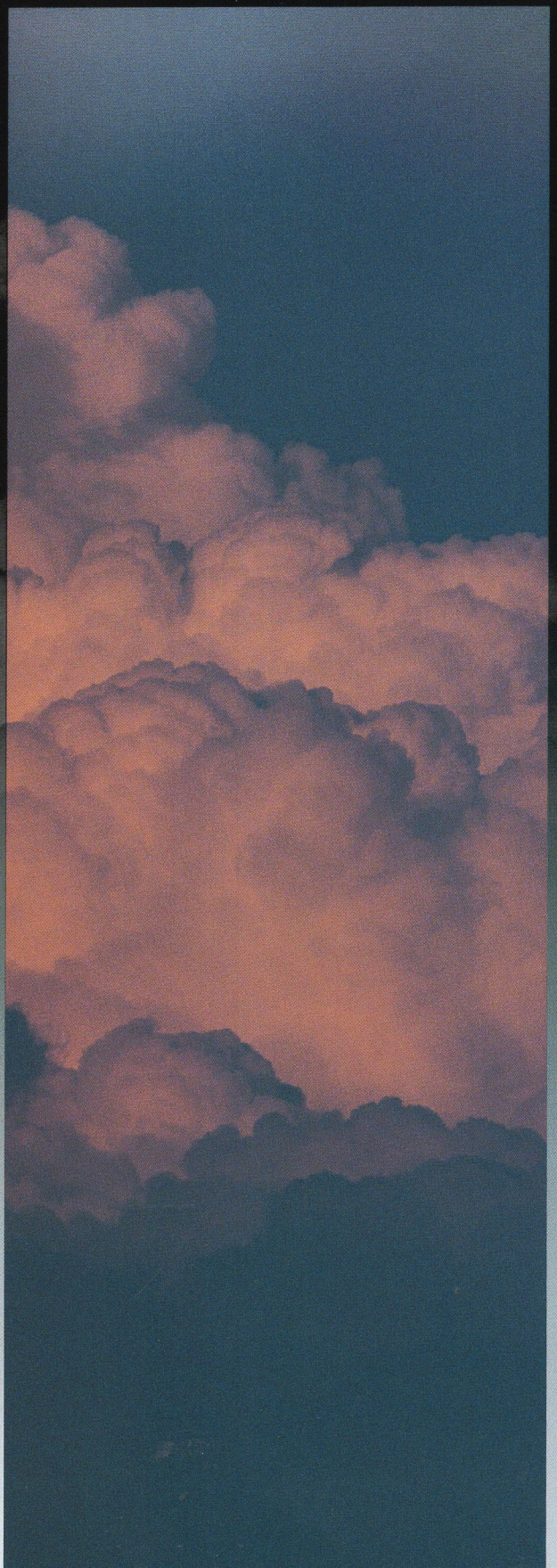
In the accelerating evolution
of modern camera technology, even minor
improvements seem like major events.
But now there truly is a major event.
The new Canon EOS-1. Created to meet
the needs of the most demanding professional
and advanced amateur photographers.
And to become the classical standard against
which all others must be measured.


MODE
AF
ISO
ME
METERING
PUSH
M
250
2.8
ONE SHOT
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The new EOS-1 with multiple modes plus Custom Function Control becomes your personalized photographic tool.



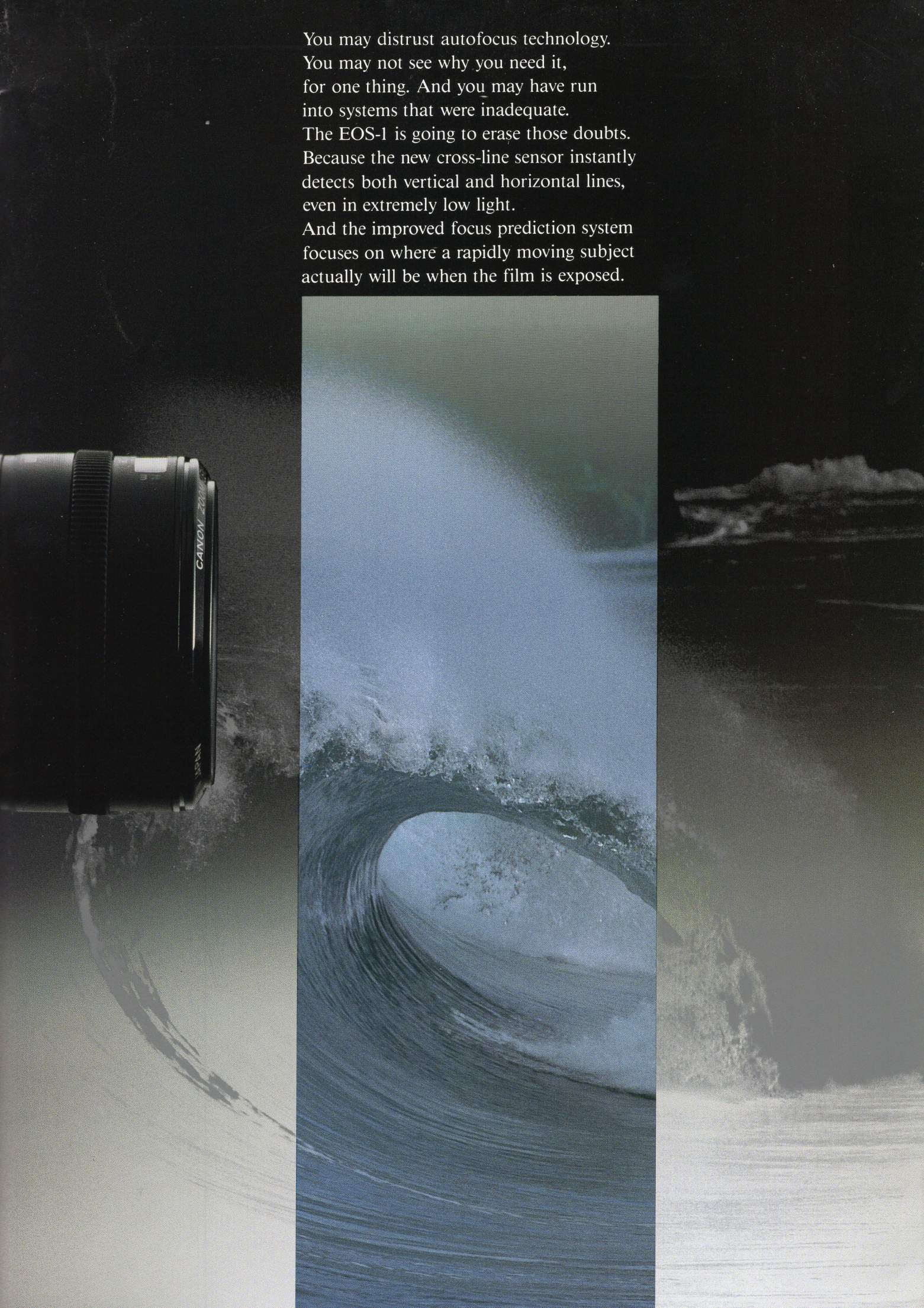
This is what the new Canon EOS-1 provides so brilliantly: Full automation for the tasks that are tangential to the creative process of making photographs. Plus an ability to manually control the camera. Custom Function Control lets you define certain aspects of the automatic operation for your individual photographic needs.



Now there's an advanced autofocus system that is reliable enough to improve your "success ratio" in critical situations.



You may distrust autofocus technology.
You may not see why you need it,
for one thing. And you may have run
into systems that were inadequate.
The EOS-1 is going to erase those doubts.
Because the new cross-line sensor instantly
detects both vertical and horizontal lines,
even in extremely low light.
And the improved focus prediction system
focuses on where a rapidly moving subject
actually will be when the film is exposed.





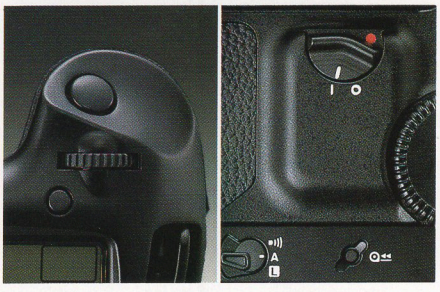
This is the camera for people who know that photographs aren't just taken. And they certainly aren't snapped. They're *made*.
And Canon wouldn't have it any other way.



You use the automation the way you want, when you want it.



The EOS-1 has been designed to provide you, the professional photographer, with total control over every photographic situation you might encounter. This means going beyond automation to a totally integrated system that permits the "fine-tuning" of various key aspects of the photographic process. That which is



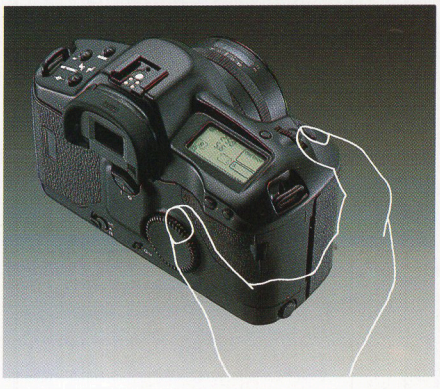
merely incidental to the act of making photographs — film advance, film rewind, etc. — is fully automated. Yet in order to create a camera good enough to meet any photographic situation, it was necessary to reach beyond even the most sophisticated automatic operation. And to devise a form of "new" manual operation that takes advantage of advanced technology to work faster and with more precision than ever before possible. Essential options for personalized operation let you "design" the camera to fit your demands.

Input dials

The EOS-1 is the first camera to incorporate two electronic input dials.

The main dial works in combination with various mode selectors to allow the photographer to quickly dial in operational choices. It selects the exposure control, AF operation and metering pattern. It also selects shutter speeds or aperture values during shutter-priority or aperture-priority operation. It sets the auto exposure bracketing values and exposure compensation. It selects the film winding speed, number of multiple exposure presets, and manual film speed settings. And it also selects the EOS-1's unique Custom Function Controls.

The quick control dial has a switch that enables operation. In the manual



exposure mode, this dial can be used to manually set aperture value or shutter speed — depending on the custom function selected — with the main dial setting the other value. In the AE mode, the quick control dial can be used to set exposure compensation values.

Listing the options above gives you a sense of the total control offered by the EOS-1. But only by handling the camera and actually using the two dials can you appreciate just how simple and convenient they are to operate, since they quickly become intuitive — particularly in the metered manual shooting mode, with each input selection instantly confirmed in the viewfinder's exposure level scale.

Display panel

Just as the two electronic input dials enable quick, effortless decision-making, the display panel lets you quickly check operating conditions. The display panel has been inclined toward the rear slightly for better readability and is equipped with an integrated electro-luminescence function that makes it easy to see in the dark.

Viewfinder and information display

The bright, 20mm high-eyepoint

viewfinder has a field of view that is virtually 100%, ensuring that you see exactly what you are photographing. The viewfinder employs a fixed pentaprism and has seven types of interchangeable focusing screens. A built-in integrated +/−2 dioptric adjustment function allows compensation for photographers who wear glasses.

Basic information is displayed along the bottom and at the side of the viewfinder. Information along the bottom includes manual exposure indicator, AE lock, shutter speed or aperture value, Depth-of-Field AE indicators, exposure compensation indicator, flash charge completion and AF confirmation. Along the side are a detailed exposure level scale with overexposure and underexposure indicators. Exposure values are displayed with dots in 1/3-step increments. When using AE lock, the difference between the locked value and actual value is indicated. Below this scale is a frame counter that shows the number of frames remaining.



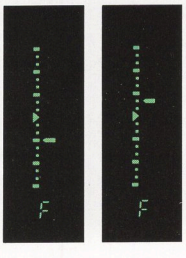
Depth-of-field preview

Depth-of-field preview provides a visual confirmation of the zone of focus. With only a touch of a button, you can easily preview the scene in any exposure mode, thanks to the EMD (Electro-Magnetic Diaphragm) which achieves precise control.



Metered manual control

The two electronic input dials make metered manual operation exceptionally easy and precise. In this mode, the shutter speed is set using the main dial while the aperture is set by the quick control dial. These values are displayed digitally in the viewfinder. And the metered manual exposure's deviation from the correct exposure indicator is clearly indicated by the moving marker on the exposure scale in the viewfinder for instant confirmation. The "matching-needle" feel of the system has a mechanical sense that is reliable and reassuring. Canon's "new" metered manual, together with body-integral auto bracketing and 1/3-stop precision are a dream come true for the pro shooting transparency films.



Manual focus

Nearly all Canon EF lenses have a switch on the lens barrel that lets you shift from AF to manual operation. The manual focusing "feel" is pleasingly smooth, without the rasping operation common to some AF lenses. Canon's L series lenses with ultrasonic motors also allow manual focusing in the One-Shot AF mode once the lens has focused on the subject. By using the electronic focusing ring system after AF has completed, you make the final decision on focus.

Custom Function Control

Individual photographers have unique needs. The EOS-1 is flexible enough to allow reconfiguration for a number of specialized purposes. Eight custom functions are selectable.

1. Automatic film rewind can be canceled. This eliminates rewind noise when shooting in quiet areas.

2. The film leader can be left outside the film cartridge after automatic rewind is completed, making it easy to retrieve film during development. Film cartridges can also be partially used, removed, then reloaded later.

3. Automatic DX-coded film speed setting can be canceled. This is useful for photographers who frequently adjust film speed. The user-set ISO film speed can be easily confirmed in the display panel.

4. Autofocus can be initiated by pressing the AE lock button. (Regular operation is activated by pressing the shutter button halfway.) By separating focusing and metering operations, focus-lock shooting becomes more flexible.

5. The aperture value is set with the main electronic input dial and the shutter speed with the quick-control dial during manual exposure mode operation. (The opposite of regular operation.) You can decide the combination that's easiest for the way you hold the camera.

6. The shutter speeds and aperture values are set in 1-step increments. (Normal operation is in 1/3-step increments.)

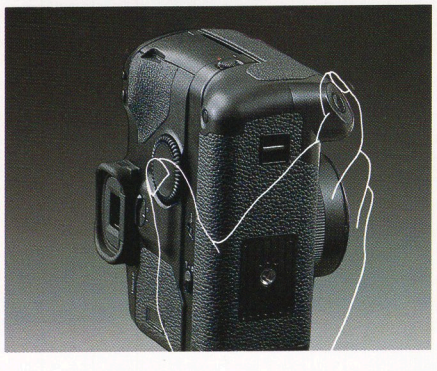
7. Additional manual focusing is disabled after completion of one-shot AF mode operation. (When using ultrasonic motor lenses.)

8. Switch from evaluative metering to center-weighted average metering.

Ergonomic design

The EOS-1 has been created to serve as a hard-working professional tool. As such, particular care has been taken to allow the photographer to achieve high-level photographic techniques with absolutely minimal stress. The shutter button height and release stroke can be easily adjusted at a Canon service facility without disassembling the camera. Shutter release time lag is only 55 ms, regardless of the lens being used. And image loss time is also minimal.

The camera is rugged. The grip is covered with rubber to prevent slipping. The camera holds easily, with the key controls where your fingers fall naturally. Using the electronic input dials and mode selector buttons quickly becomes second nature. The size and placement of the quick control dial makes it particularly easy to input information while holding the camera vertically. Even with the Power Drive Booster E1 attached, principle operations for vertically-held shots are carried out the same way, since there is a shutter button and AE lock button on the booster. The quick control dial also offers quick adjustments even when the booster is mounted.



The autofocus system responds instantly.

The new AF system incorporated in the EOS-1 has been improved to meet the high standards of professional photographers. It's faster. It works better under low-light conditions. And it's more precise.

There are three focusing modes:

1. **One-shot AF mode.** AF operation is completed and locked once in-focus is achieved. When shooting in this mode, the shutter will not release until AF is completed. With evaluative metering, AF lock and AE lock occur simultaneously. Metering continues until just before the exposure is made when using spot metering or partial metering.

2. **Predictive AI servo AF mode.** This sophisticated mode enables focus prediction control for moving subjects. This involves shutter-release priority, and during continuous shooting, the lens is adjusted for the movement of the subject. Custom Function No. 4 even allows for convenient AF lock in servo.

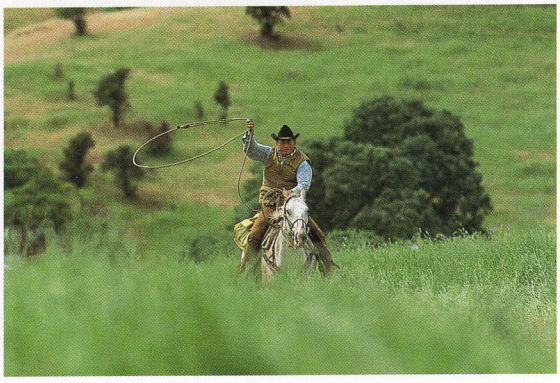
3. **Manual mode.** A switch on the lens barrel permits the change from AF to manual operation. The green LED indicator in the viewfinder still lights up to indicate that the subject is in focus.

Speed

The AF system on the EOS-1 focuses even faster than the system used on the EOS 630. This higher speed enables AI servo AF shooting at up to 4.5 frames per second when using the Power Drive Booster E1 plus an ultrasonic motor lens or one of the professional L series lenses. It's quick enough to catch each segment of fast-breaking action.

High-precision focusing

Conventional AF systems can only detect vertical lines. A newly-developed







cross-type BASIS solves this problem by also being able to detect horizontal lines. Use of this cross-line system greatly reduces the number of difficult subjects for AF. It also results in much more precise focusing, particularly when using lenses with maximum apertures of f/2.8 or larger, and works extremely well with difficult to focus wide-angle lenses, improving speed and accuracy.

Moving subject predictive control

The EOS-1's AF system is better at tracking moving subjects. When using



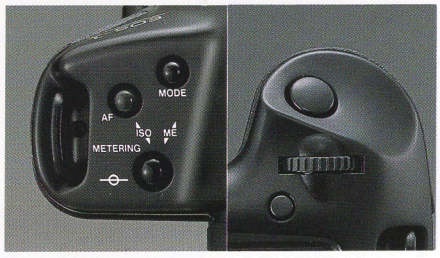
ultrasonic motor lenses or the newly developed L series lenses, AF tracking continues until just before exposure begins. Depending on the speed of the moving subject, the camera automatically activates the focus predict system.

Improved low-light performance

The AF system operates comfortably at low-light levels down to EV-1 (With lenses having maximum apertures of f/2.8 or larger and film speed set at ISO 100). This means the EOS-1 focuses quickly and precisely in dark hallways, dimly lit rooms, gardens at twilight — situations where human vision itself is limited, making manual focusing difficult. Having accurate AF operation available for these low-light situations creates new possibilities for sophisticated available-light photography.



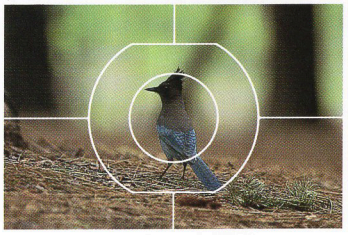
Four metering systems provide total control over the vagaries of



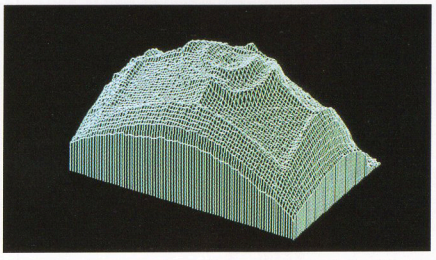
The EOS-1 features four metering modes that are easily selected by using the main electronic input dial.

Evaluative metering

Six-zone evaluative metering provides exceptionally precise metering under difficult photographic conditions, making it easy to handle backlit subjects. In this mode, light is measured separately in six zones. Ambient light, subject size and subject pattern are input and "evaluated" by a microprocessor using a highly complex algorithm that determines the correct exposure.



Center-weighted average metering



By increasing the value of the light in the central area — the place where the main elements are most likely to be — more selective metering can be accomplished under conventional



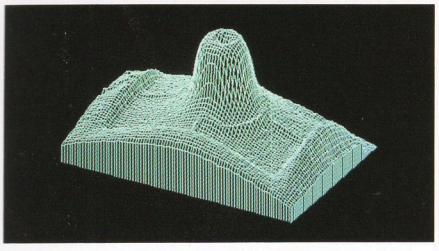
light.

lighting conditions. This pattern will be familiar to Canon F-1 users.

Custom Function No. 8 replaces evaluative metering with center-weighted average metering.

Partial metering

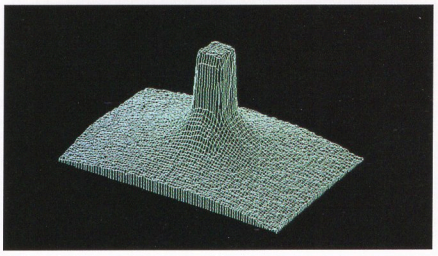
Partial metering limits selectivity to



the area within the outer (8mm dia.) circle in the viewfinder, approximately 5.8% of the viewfinder screen. It can be used effectively when there is a strong light contrast between the main subject and the rest of the scene, such as for photographs with a particularly light or particularly dark background. Choose this system if you want to meter a selected area of the frame then stipulate the final exposure using exposure compensation.

Fine spot metering

The most selective of the metering patterns, fine spot metering reads only



the light within the smaller circle (5mm dia.) and thus limits the input value to 2.3% of the screen surface, allowing very precise readings of the key parts of a photographic composition. Metering is exceptionally precise because the spot metering sensor is located on the BASIS sensor itself.



Versatile exposure control and blazingly fast shutter speeds meet

Automatic exposure

A complete selection of AE choices provides the kind of operating flexibility you need for the variety of work you do. And using the electronic input dial makes it simple to shift from one AE mode to another as photographic conditions vary.

■Shutter-priority AE

Shutter speeds can be set in 1/3-step increments, ranging from 30 seconds to 1/8000 second. Custom Function No. 6 enables settings in 1-step increments.

■Aperture-priority AE

As with shutter speeds, aperture values can be set in 1/3-step increments that are adjustable to 1-step by Custom Function No. 6.

■Depth-of-Field AE

Using this mode makes it easy to control exactly how much of the scene will be in sharp focus from front to back. You simply focus on the element nearest you that is to be sharply in focus, then to the element farthest away that you want in focus. The camera automatically selects the correct AF distance (about 7:10 of the distance between nearest point and farthest), the aperture required to keep everything between the two points in focus, and the equivalent shutter speed for lighting conditions. Depth of field can be confirmed by pressing the electronic preview button. This mode is also useful when extremely shallow depth of field is required, since you can set the nearest-point/farthest-point perimeters at the same place.

■Intelligent Program AE

This convenient mode calculates both shutter speed and aperture value by taking into consideration the focal length of the lens being used, which is input automatically to the main microprocessor from the lens microprocessor as soon as the lens is installed. Intelligent program AE thus automatically calculates the minimum possible shutter speed for the lens, providing reasonable protection against camera-shake. With zoom lenses, information is transferred simultaneously for any focal length selected, and the program is adjusted to match that focal length. Program shift is possible in 1 EV steps. Used with auto exposure bracketing, you have the best in convenience and security for fast breaking situations.



any challenge.

Manual exposure

Metered manual using the bar dot display in the viewfinder can be operated with the main dial selecting shutter speeds and the quick control dial handling the aperture values. Or using Custom Function No. 5 can reverse this, with the main dial handling the aperture and quick control dial inputting shutter speeds. The viewfinder display shows user-set shutter and aperture values, and the dot display at the right of the finder indicates correct exposure setting.

■1/8000 second top shutter speed

The blazingly fast 1/8000 second shutter speed stops practically anything in mid-flight. Shutter speeds range in 1/3-step increments from 30 seconds to 1/8000 second, providing superior precision, and appear in the display panel. When shooting in the bulb mode, elapsed time is displayed up to a total of 120 seconds.

■1/250 second flash sync speed

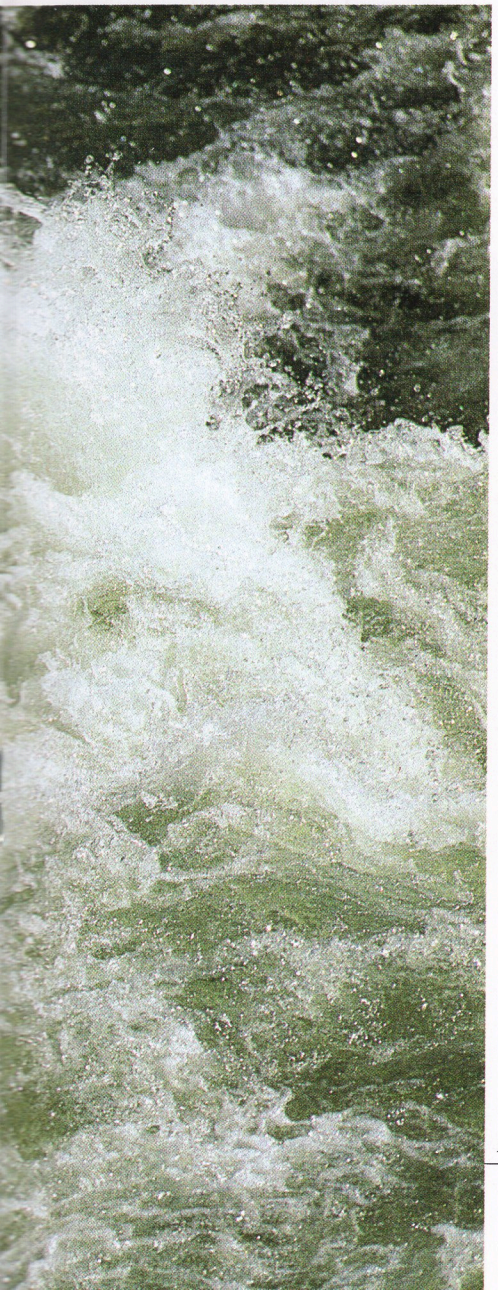
The fast flash-synchro shutter speed of 1/250 second broadens the possibilities of daylight fill-in flash photography.

■Auto exposure bracketing

Canon's unique camera-integral system allows auto exposure bracketing without accessories. AEB is a way to make certain of a shot that offers tricky exposure problems. The AEB function automatically makes three continuous exposures, shifting the exposure value up and down from the exposure determined by the camera's light meter. The function can be set within a range of +/− 3 steps in 1/3-step increments. AEB is set according to the film winding mode, and since it can only be canceled manually, continuous auto exposure bracketing is possible.

■Multiple exposures

The multiple exposure function lets you expose the same frame up to nine times. The number of exposures is preset by using the main electronic input dial while pressing the shooting mode selector and metering mode selector. Operation can be easily canceled or reset during mid-operation. Motor drive-powered continuous multiple exposures offer a great range of creative effects. Film registration remains virtually perfect between exposures.



1/8000 sec. shutter speed



1/250 sec. flash sync speed

Built-in power backed by a power-booster motordrive provides stop-action control.









Power Drive Booster E1

The film transport system presents two configurations. The camera is lightweight and compact when the Power Drive Booster E1 is not attached, and the built-in motor drive advances the film at a rate of 2.5 frames per second. If you need more speed, attaching the Power Drive Booster E1 raises the film advance speed to 5.5 fps, enabling very rapid-fire continuous shooting. In addition, the rugged, sure-grip power drive booster has a shutter button and AE lock button positioned on the base so that operating the camera vertically feels the same as when holding it horizontally. The motordrive batteries power the camera when attached. "AA" alkaline or Ni-Cd batteries can be used.





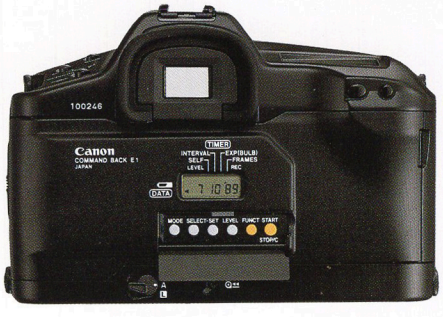




Command Back E1

The Command Back E1 provides the photographer with sophisticated timer control operations and allows various types of data imprinting to be carried out. You can capture periodic scenery changes over a fixed length of time, enabling ecological or astronomical photographic studies. A special self-timer function releases the shutter after a predetermined period of time. The interval timer releases the shutter at fixed intervals, spaced anywhere from 1 second to 23 hours 59 minutes apart. The long release timer holds the shutter open for a preset period of time during bulb operation. And the frame counter setting stops the camera after a set number of exposures has been made. Data imprint functions include the date, time of day, a frame counter number, or an arbitrary 6-digit number plus the letters A through F.

When the Command Back E1 is being used, functions assigned to the quick control dial are handled by the main electronic input dial in conjunction with the exposure compensation button.



New flash technology gives you your kind of light.





A-TTL flash program AE

Canon's A-TTL auto flash system yields natural-looking flash photography. Flash synchro speeds range from 1/250 to 1/60 second. A warning is given before exposure if the subject is out of flash coupling range. And flash output is controlled automatically via measurement of the light reflected off the film plane. With fill-in flash, the flash level is automatically adjusted by the A-TTL flash program AE to maintain a natural balance between the brightness of the subject and the background. Upon flash charge completion, the A-TTL flash program AE automatically sets the shutter speed according to the brightness of the background. The aperture value for exposure is determined based on both the background brightness as detected by the camera body in the four outer zones of the evaluative metering system and on the main subject's distance, determined by the flash unit's infrared preflash function.

430EZ



The new Speedlite 430EZ provides superior light control for truly natural-looking flash photography — both ordinary and fill-in — by using the EOS-1's A-TTL auto-flash program. An AF auxiliary light enables positive autofocus even in total darkness. There is a user-controlled flash fill ratio to achieve the exact effect you desire. Flash exposure compensation is possible in 1/3-step increments. And flash charging time is less than 1.5 seconds, allowing rapid-fire flash photography.

Second-curtain sync means the flash is fired at the end of a slow shutter speed exposure, preserving the natural flow of moving light. The stroboscopic function fires the flash at up to ten times per second. The flash's internal zoom adjusts to suit the flash output to the focal length of the lens being used. An LCD panel with EL illumination displays key data. And the flash head swings 90° upward or to the right, and 180° to the left for bounce-flash photography. A hot shoe lock pin holds the flash securely.

A high-quality external battery pack has been created for use with the Speedlite 430EZ, ensuring adequate power for extended photography sessions. The Transistor Pack E provides approximately 2,000 flashes (with alkaline-manganese batteries) or 1,500 flashes (with Ni-Cd batteries).



(w/"EL" illumination)



Transistor Pack E

More flashes



Macro Ring Lite ML-3



300EZ

A complete selection of EF lenses provides the best focal lengths for each situation.



EF 50mm f/1.0L





Compact-Macro EF 50mm f/2.5

Canon's system of sophisticated autofocus lenses are widely recognized as setting the standards for superior optical performance. The new large-aperture L series EF lenses provide an even wider choice of professional-use autofocus lenses.

The EF 50mm f/1.0L — EF 85mm f/1.2L — EF 20-35mm f/2.8L

Large-aperture lenses are often essential for serious photography. With the EF 50mm f/1.0L, Canon has created a lens with brightness capabilities surpassing those of the human eye. The EF 85mm f/1.2L is also an exceptionally fast short telephoto lens that serves as an excellent portrait lens. The EF 20-35mm f/2.8L is a super wide-angle zoom lens which remains bright during zooming.

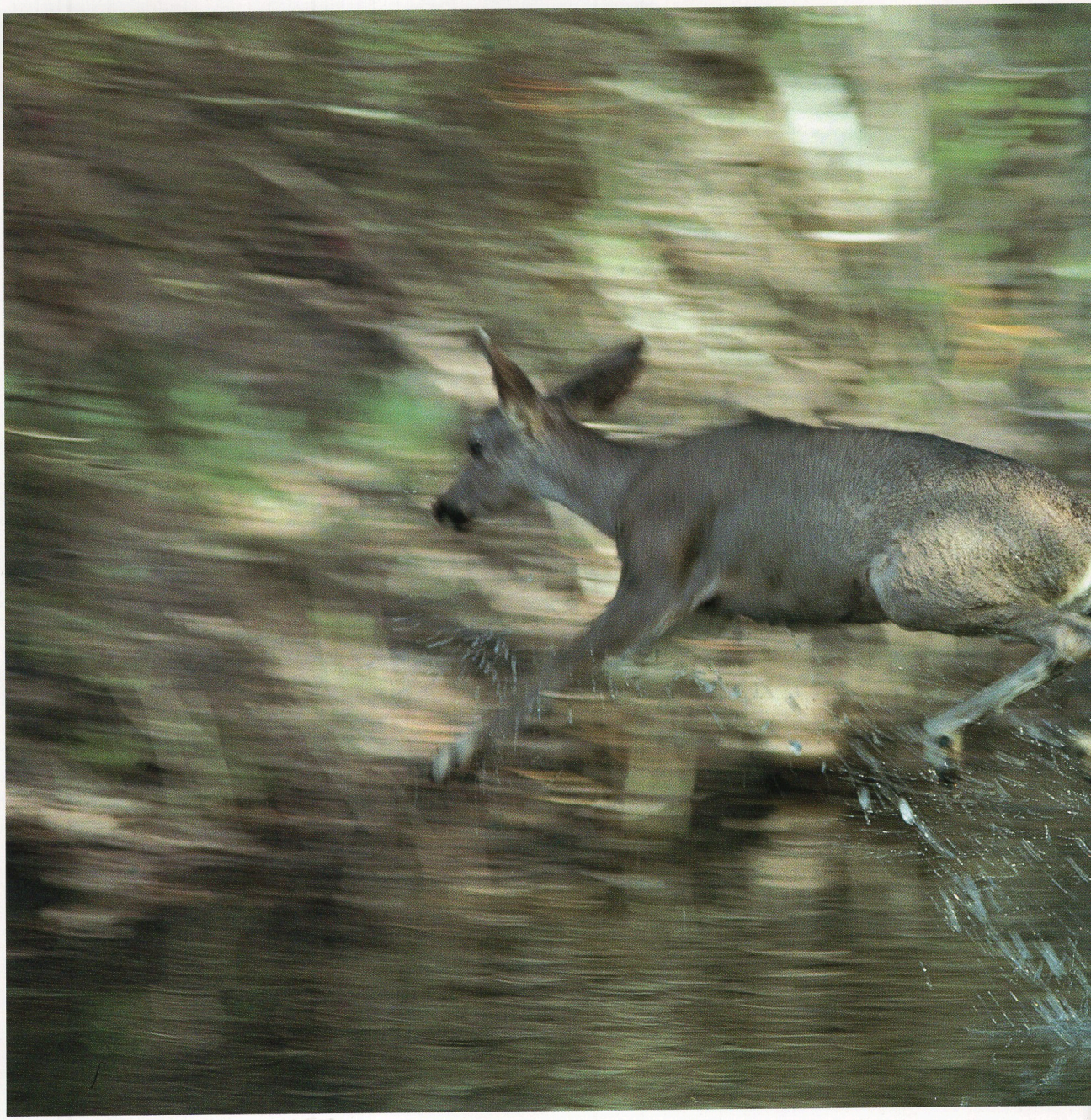
These new L series lenses use aspherical elements manufactured with Canon's high-level polishing technology in order to achieve an image quality that is virtually free of the spherical aberrations that can cause distortion in large aperture lenses. The optical system employs a floating element construction to compensate aberration alterations during focusing and ensure high image quality at all shooting distances. Good color balance is attained through the use of a new, exclusively-developed multi-layer coating for the high-refractive index glass. Designed for full-aperture photography, Canon's new L Series lenses offer superlative image quality, brightness and blur effect, plus great wide-angle coverage with the EF 20-35mm f/2.8L.



The EF 80-200mm f/2.8L

The large aperture EF 80-200mm f/2.8L features an outstanding zoom range for high image quality and superior operability to meet the needs of professionals. During zooming the aperture does not change, making it ideal for a variety of applications — from outdoor photos to studio shots that require flexibility. The optical system consists of three elements of UD glass that maintain high image quality and compensate for the chromatic aberrations which often occur with large-aperture telephoto lenses.

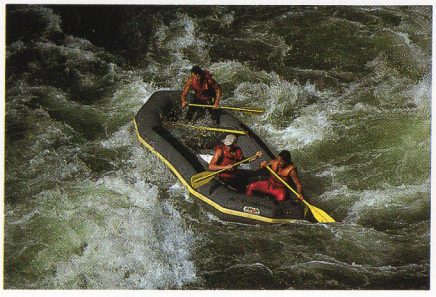


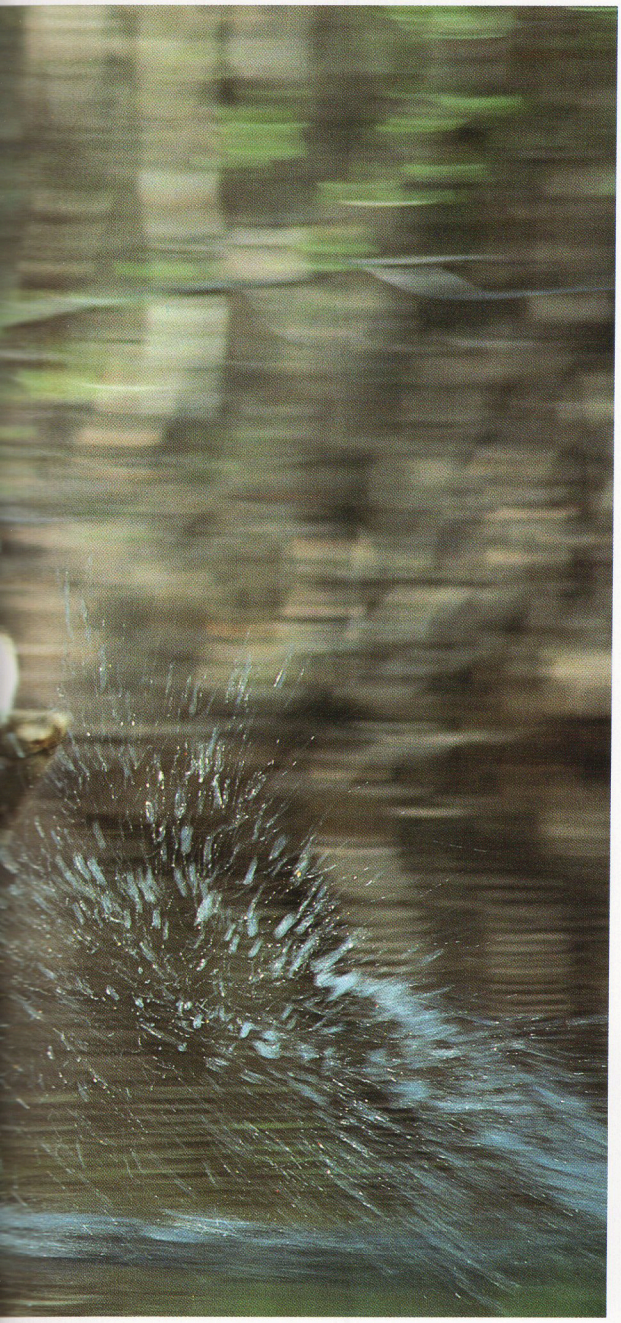


EF 200mm f/1.8L

Focus preset

Selected large-aperture telephoto lenses — the EF 200mm f/1.8L, the EF 300mm f/2.8L, and the EF 600mm f/4L — have a focus preset function that lets you "lock in" a focus setting. You can focus on other shots, then when necessary return immediately to the preset focus at the touch of a button.



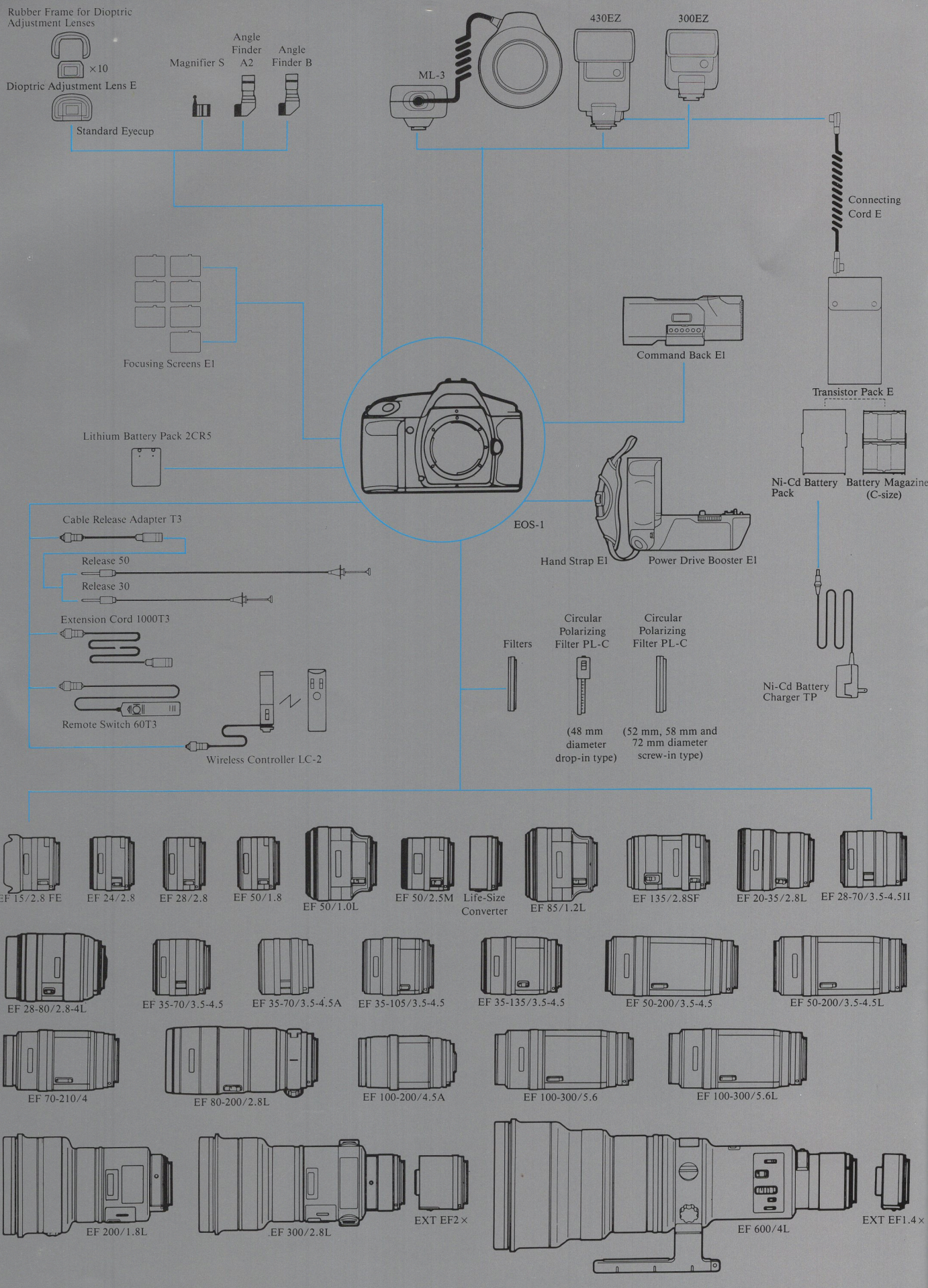


Electronic ring manual control

Some L series lenses feature electronic focusing rings together with the AF mechanism that take advantage of the superior operational capabilities of ultrasonic motors. With electronic focusing rings, the focusing motor is driven according to the electrically-detected rotation of the focusing ring. It's a system of power-assisted focus, since as the ring is turned, pulse signals are generated by an encoder that instructs the microprocessor in the lens to drive the USM accordingly. With the EF 200mm f/1.8L, the EF 300mm f/2.8L, and the EF 600mm f/4L, there's a 3-step variable focusing rate, making it possible to focus rapidly for quick-moving subjects or to select high-precision focusing control as the situation warrants.



The EOS-1 System



EF LENS LINEUP

Lens	Focus Drive		Angle of View	Construction	Minimum Aperture	Closest Focusing Distance		Filter Size (mm)	Length		Weight	
	AFD	USM				(ft.)	(m)		(in.)	(mm)	(oz.)	(g)
Fish-eye EF 15mm f/2.8	●		180°	7-8	22	0.7	0.2	Filter Holder	2-7/16	62.2	11.6	330
EF 24mm f/2.8	●		84°	10-10	22	0.8	0.25	58	1-15/16	48.5	9.5	270
EF 28mm f/2.8	●		75°	5-5	22	1	0.3	52	1-11/16	42.5	6.5	185
EF 50mm f/1.8	●		46°	5-6	22	1.5	0.45	52	1-11/16	42.5	6.7	190
EF 50mm f/1.0L (Ultrasonic)		●	46°	9-11	16	2	0.6	72	3-3/16	81.5	2.2 lb.	985
Compact-Macro EF 50mm f/2.5	●		46°	8-9	32	0.748	0.228	52	2-1/2	63	9.9	280
EF 85mm f/1.2L (Ultrasonic)		●	28°30′	7-8	16	3.1	0.95	72	3-5/16	84	2.3 lb.	1,025
Softfocus EF 135mm f/2.8	●		18°	6-7	32	4.3	1.3	52	3-7/8	98.4	13.8	390
EF 200mm f/1.8L (Ultrasonic)		●	12°	10-12	22	8.2	2.5	48 (drop-in type)	8-3/16	208	6.6 lb.	3,000
EF 300mm f/2.8L (Ultrasonic)		●	8°15′	7-9	32	9.8	3	48 (drop-in type)	9-9/16	253	6.3 lb.	2,855
EF 600mm f/4L (Ultrasonic)		●	4°10′	8-9	32	19.7	6	48 (drop-in type)	17-15/16	456	13.2 lb.	6,000
EF 20-35mm f/2.8L	●		94°-63°	12-15	22	1.6	0.5	72	3-1/2	89	19.1	540
EF 28-70mm f/3.5-4.5II	●		75°-34°	9-10	22-29	1.3	0.39	52	3	75.6	10.1	285
EF 28-80mm f/2.8-4L (Ultrasonic)		●	75°-30°	11-15	22	1.6	0.5	72	4-11/16	119.5	2.1 lb.	945
EF 35-70mm f/3.5-4.5	●		63°-34°	8-9	22-29	1.3	0.39	52	2-1/2	63	8.6	245
EF 35-70mm f/3.5-4.5A	●		63°-34°	8-9	22-29	1.3	0.39	52	2-1/2	63	8.1	230
EF 35-105mm f/3.5-4.5	●		63°-23°20′	11-14	22-29	3.1	0.95	58	3-1/4	81.9	14.1	400
EF 35-135mm f/3.5-4.5	●		63°-18°	12-16	22-29	3.1	0.95	58	3-3/4	94.5	16.8	475
EF 50-200mm f/3.5-4.5	●		46°-12°	13-16	22-29	3.9	1.2	58	5-3/4	146.4	24.4	690
EF 50-200mm f/3.5-4.5L	●		46°-12°	14-16	22-29	3.9	1.2	58	5-3/4	145.8	24.5	695
EF 70-210mm f/4	●		34°-11°20′	8-11	32	3.9	1.2	58	5-7/16	137.6	21.4	605
EF 80-200mm f/2.8L	●		30°-12°	13-16	32	5.9	1.8	72	7-5/16	185.7	2.9 lb.	1,330
EF 100-200mm f/4.5A	●		24°-12°	7-10	32	6.2	1.9	58	5-1/8	130.5	18.4	520
EF 100-300mm f/5.6	●		24°-8°15′	9-15	32	4.9	1.5	58	6-9/16	166.8	24.2	685
EF 100-300mm f/5.6L	●		24°-8°15′	10-15	32	4.9	1.5	58	6-9/16	166.6	24.5	695
Extender EF 2X	—	—	—	5-7	—	—	—	—	2	50.5	8.5	240
Extender EF 1.4X	—	—	—	4-5	—	—	—	—	1-1/16	27.3	7.1	200
Life-Size Converter EF	—	—	—	3-4	—	—	—	—	1-3/8	34.9	5.6	160

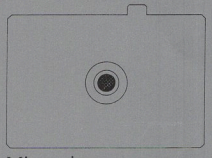
•Extender EF 2X is for exclusive use with EF 200mm f/1.8L and EF 300mm f/2.8L. •Extender EF 1.4X is for exclusive use with EF 200mm f/1.8L, EF 300mm f/2.8L and EF 600mm f/4L. •Life-Size Converter EF is for exclusive use with Compact-Macro EF 50mm f/2.5. •"A" series lenses are autofocus only.

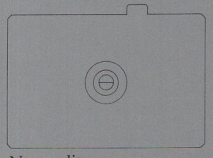
Canon's EOS began as a camera system built around a series of innovations that were designed to make photography easier and more reliable. It has grown into a complete, professional-quality photographic system that offers everything needed for any photographic task. The EOS-1 is the crowning achievement in this system. But it is not alone. The complete selection of professional-quality EF lenses and other accessories are what ensure that this is a system you can rely on. Year after hard-working year.

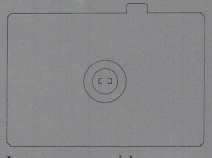
The EOS system is also specifically designed to be open to improvements. The electronic lens/camera-body interface is a good example, since this flexible design will adapt easily to new technologies that are still on Canon's drawing board. Your investment in EOS will never become obsolete.

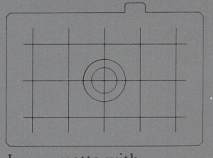
The combination of superior Canon optics and innovative lens design, high-speed professional-quality autofocus, advanced electronics, and now Custom Function Control and total flexibility of the EOS-1 make the EOS system the single finest complete photographic system available today.

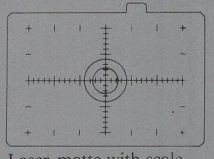
Interchangeable focusing screens

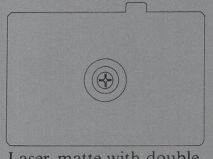

Microprism

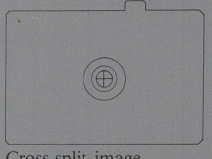

New split


Laser-matte with AF frame


Laser-matte with section

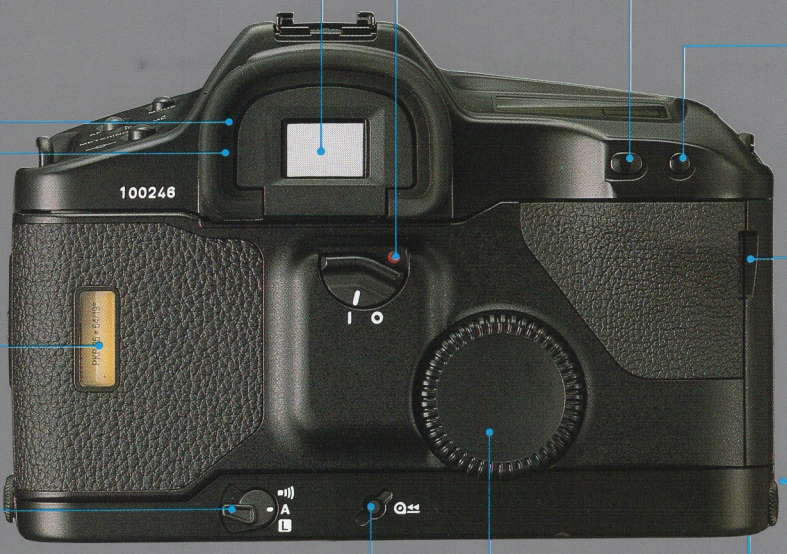

Laser-matte with scale


Laser-matte with double cross-hair reticle

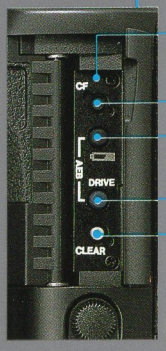

Cross split-image



Self-timer Operation Indicator
Accessory Shoe
Shutter Button
Grip
Depth-of-Field Check Button
Back Cover Lock Button
Back Cover Latch
Lens Release Button
PC Socket (with cap)



Quick Control Dial ON/OFF Switch
Viewfinder Eyepiece
Eyecup
Diopter Adjustment Knob (below Eyecup)
Film-load Check Window
Main Switch
Film Rewind Button
AE Lock Button/ AF Start Button (with CF-No. 4)
Exposure Compensation Button (Manual Aperture Set Button)
Palm Door
Remote Control Socket (with cap)



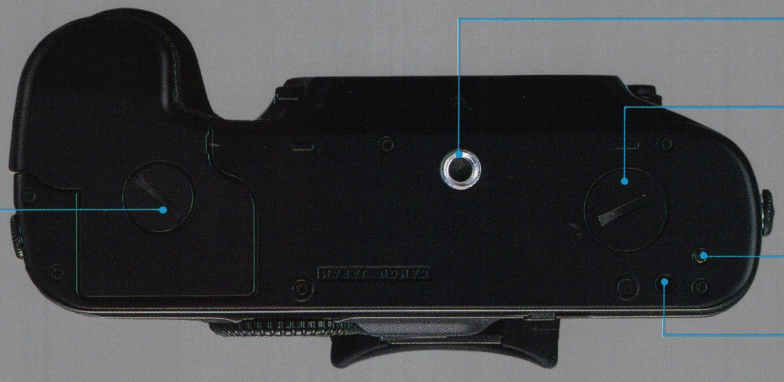
Inside Palm Door
Custom Function Set Button
Battery Check Button
Film Winding Speed Selector
Clear Button

Quick Control Dial
- In AE modes: Selects exposure compensation value
- In Manual: Selects aperture value/or shutter speed (with CF-No. 5)

Main Electronic Input Dial
- Selects exposure control, AF operation, metering pattern, film winding, Custom Function Control No. and exposure compensation value with each selector pressed.
- Selects multiple exposure preset numbers, film speed and auto exposure bracketing value with two specified selectors pressed.
- Selects each value according to the exposure mode.
  - In Manual: Shutter speed/Aperture value (with CF-No. 5)
  - In Shutter-priority AE: Shutter speed
  - In Aperture-priority AE: Aperture value
  - In Program AE: Program shift

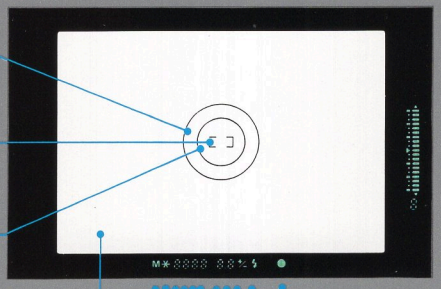


Exposure Control Selector
AF Operation Selector
Metering Pattern Selector
Display Panel Illumination Button
LCD Display Panel
Neckstrap Ring



Tripod Socket
Motor Drive Winding Coupler (with cover)
Grip Screw
Motor Drive Coupling Pin
Motor Drive Positioning Hole

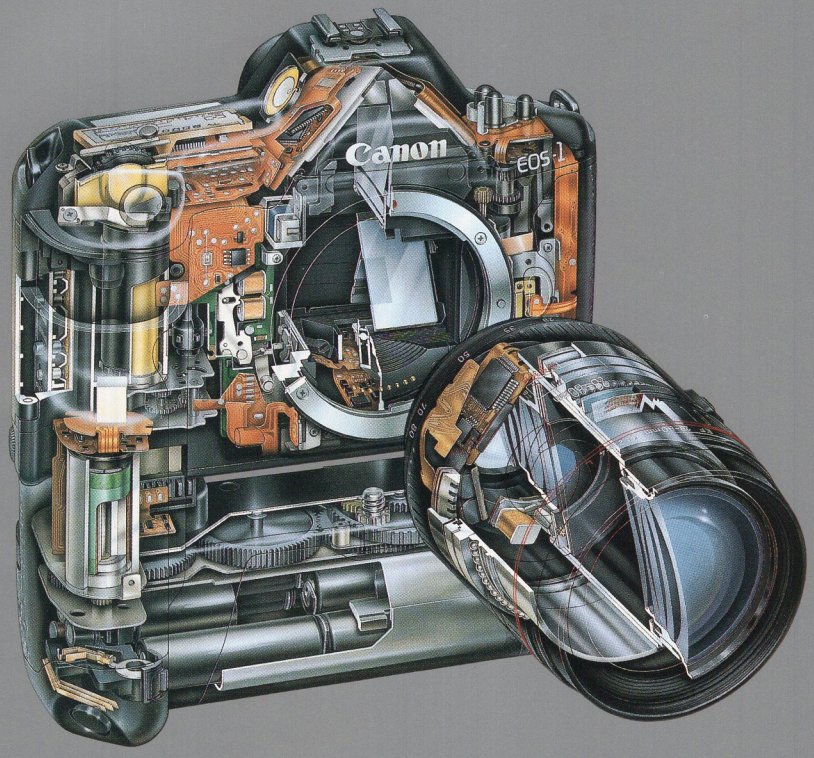
Viewfinder Information Display



Partial metering area mark (8 mm diameter/5.8%)
AF frame
Spot metering area mark (5 mm diameter/2.8%)
Correct exposure position mark
Exposure level scale (□: 1 step; □: 1/3 step)
Overexposure indicator
Exposure level indicator
Underexposure indicator
Remaining frame counter (F, 9—0)
Laser-matte screen
Manual exposure indicator
■ AE lock indicator
■ Shutter speed digital display
Depth-of-Field AE indicator
■ Aperture value digital display
■ AF in-focus mark
•Lights up when focus is obtained.
•Blinks at 8 Hz when AF is not possible. (During manual focusing: Lights when subject is in focus, and remains off when subject is not in focus.)
Flash charge completion
Exposure compensation indicator

No mark: Lights up; ■ mark: Lights up or blinks, depending on condition. Out of exposure coupling range warning: Blinks at 2 Hz

Canon designed the EOS-1 knowing that it was going to appeal to people like you.
Photographers who demand a lot from their cameras.
That's why the EOS-1 was built rock-solid. And ready to go to work.



Unconditional reliability

Rugged construction protects the sophisticated electronics of the EOS-1, making this a camera that is ready for work — no matter where it is, no matter how rough it gets. The body is composed of extra-tough, glass fiber-reinforced polycarbonate. Thick sections of non-slip rubber make holding secure. Like Canon's New F-1, the EOS-1 is also highly dust- and water-resistant, thanks to a cover sealing mechanism and the elimination of conventional external slide switches. Shutter blades are coated with a water-repellent lubricant, too. And all important electrical contacts have dual terminals to ensure proper operation. Performance is reliable from −4°F (−20°C) up to 113°F (45°C) at 85% humidity. In addition, sequence control operations are monitored by the main microprocessor for dependability.

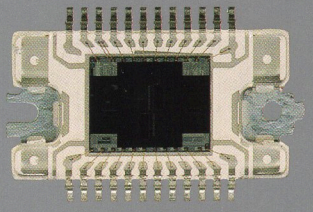
There's no problem with power, either. Pressing the battery check button under the palm door gives an instant readout of battery power on the display panel. The display panel also presents a row of blinking dashes as a warning if the film is not loaded properly. A row of dashes coming out of the cartridge symbol indicates correct film advance and film rewind, too.

TTL-CT-SIR ranging system

The TTL-CT-SIR (TTL Cross-Type Secondary Image Registration) phase detection system determines focus by driving the lens after completing a sophisticated process of signal detection and calculations. The system splits light rays into four beams — two horizontal and two vertical — that form images on the surfaces of four sensors. Focus is determined first by comparing the differences in the data received by the two pairs of images, then by deciding which is the more reliable. Once this has been determined — a matter of microseconds — the lens motor focuses the lens.

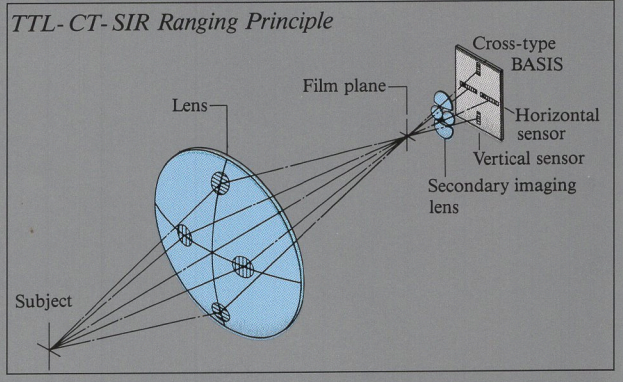
Cross ranging sensor BASIS

In order to develop an AF system accurate enough and reliable enough to meet the standards professional photographers insist on, Canon had to develop a new cross ranging sensor to replace the conventional sensor used in the past. This new BASIS (Base-Stored Image Sensor) was the result of extensive research, and consists of two 47-bit horizontal line sensors and two 29-bit vertical line sensors, plus associated amplifier circuitry that is housed in a clear-molded package. By integrating an amplifier with each individual element of the sensor instead of just having an amplifier section at the output stage as CCDs do, BASIS preserves



signal integrity by amplifying the electrical signals before they are read out through switching. Signal purity is thus maintained, with minimum noise and minimum loss of information. In addition, the new BASIS is equipped with

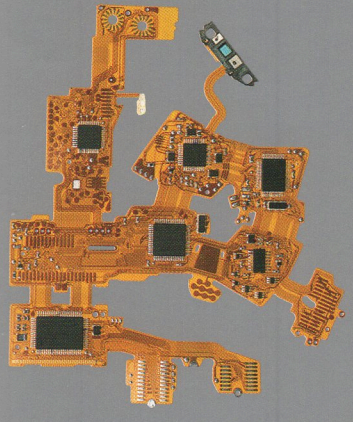
TTL-CT-SIR Ranging Principle



an extra circuit that amplifies the signal ten times in order to improve sensitivity and S/N ratio. The sensor pitch is also 10% finer than that of previous BASIS sensors, providing improved narrow-line detection ability. Also, an anti-reflection film coats the sensor in order to stabilize signal detection. This innovative cross ranging sensor BASIS results in improved accuracy and better efficiency, making possible reliable low-light level operation down to −1 EV, light dimmer than most people can see clearly.

Two microprocessors

The EOS-1 employs an information processing system composed of two microprocessors. One is a high-speed super-microprocessor that is dedicated to AF operation only. The other microprocessor is in charge of AE and sequence controls. The two microprocessors can handle data independently and simultaneously. As a result, overall electronic operation is highly reliable, and AF operation speed and accuracy is obviously superior.



6-zone Evaluative Metering

In order to provide the superior reliability hard-working photographers require, it was necessary to develop a truly superior light metering system. Canon's evaluative metering system divides the frame into six zones — an improvement over conventional systems that rely on center-weighted average metering with emphasis on brightness at the scene's center. The EOS system's main microprocessor uses an algorithm which evaluates luminance in each of the six sections to determine the correct exposure. This algorithm compares differences in brightness between the various metered areas, comparing center to immediate and immediate to peripheral. This comparison estimates subject size and the conditions in which the subject is situated, considerations which are factored-in to make the final exposure decision. The system also detects variations in subject reflective luminance level. When the luminance level is high, it compensates to obtain high-lighted depiction, and when the luminance is low, it compensates to obtain shadow depiction. Since the camera automatically focuses on the object to be photographed, AE is calculated and locked automatically as soon as focusing is completed.

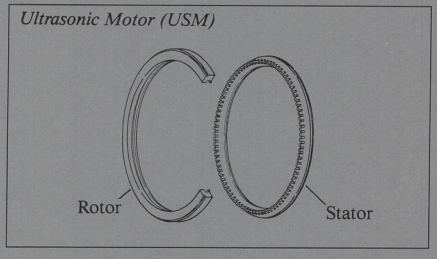
Electronic mount

The EOS system's fully electronic EF mount lens combines the speed and reliability that are essential for high-quality AF operation. In terms of accuracy and dependability, the electronic mount far out-performs the systems used by other autofocus SLRs. Communications between lens and camera body can be transferred at high speed. Moreover, essential information about the lens in use is sent to the camera's microprocessor as soon as the lens is mounted, allowing all basic preparations to be completed immediately. With the lens' focal length, maximum aperture, AF/manual mode entered, as well as information on shooting modes, whether or not a flash is mounted, etc., the camera's microprocessor can perform all relevant calculations, make the necessary decisions, and send instructions to the lens, which then instantly activates AF and aperture-setting operations.

Moreover, the fully electronic mount offers the advantage of providing compatibility with the more intelligent systems of the future.

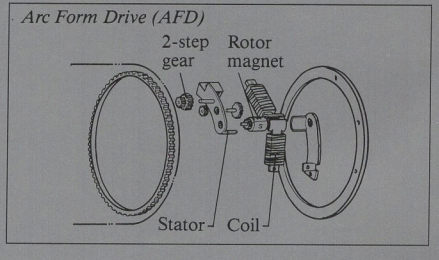
USM

Some L series lenses employ an ultrasonic motor similar to the AFD in that it handles AF operation within the lens. USM incorporates a ring-shaped motor. As it is a direct-drive system with no gearing units, operation is fast and reliable. Added to the fact that there are no mechanical couplings between the lens and camera body, this technologically-advanced lens focusing system allows astonishingly quick, precise operation. Greater compactness and operational simplicity are realized by using low rotational speed and high torque, thereby eliminating the need for a braking unit. Beyond being quick, focusing operation is also virtually noiseless.



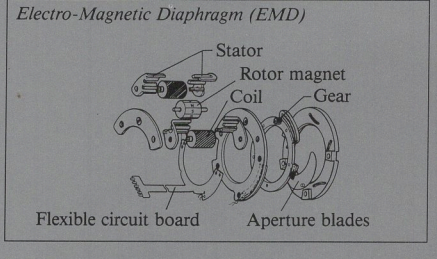
Arc Form Drive

In order to provide electronic lens control while maintaining the conventional lens shape, Canon devised a special component called the Arc Form Drive. AFD employs a small-diameter rotor for the extremely fast start-up and stopping response and precise control needed for superior AF operation. The system is highly reliable, due to the use of a brushless motor which generates high torque despite its small size.



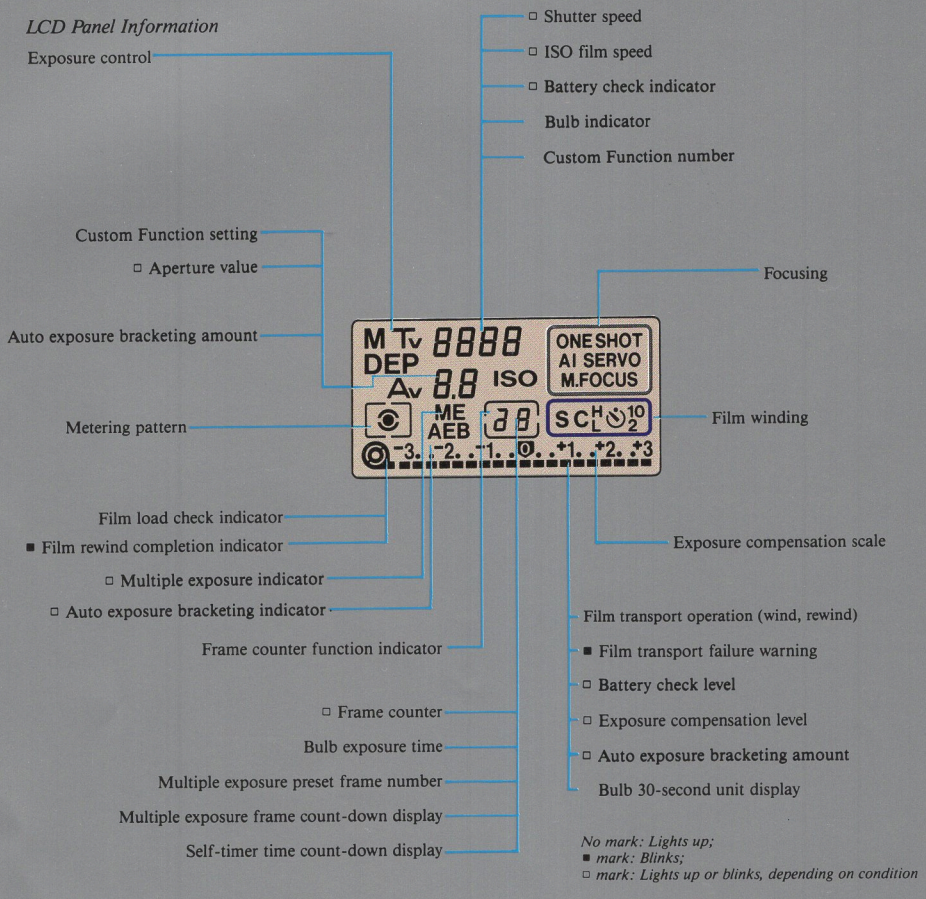
Electro-Magnetic Diaphragm

In order to maintain fully electronic operation, an Electro-Magnetic Diaphragm is employed. EMD consists of an integrated aperture unit and stepping motor with a small diameter rotor for superior stopping and starting operations. The EMD system is much more precise than conventional mechanical diaphragms, and it enables simplified one-touch electronic depth-of-field preview.



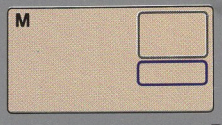
The Display Panel

Camera status can be quickly adjusted and instantly confirmed with relevant information clearly displayed. Electro Luminescence emits a soft blue light, making the display panel easy to read in low light.



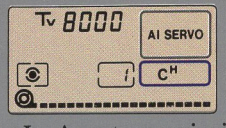
(1) Exposure

M . . . Manual
Tv . . . Shutter-priority AE
buLb . . . Bulb
P . . . Program AE
Av . . . Aperture-priority AE
DEP . . . Depth-of-Field AE

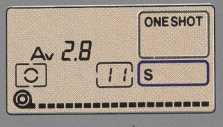


■ Shutter/Aperture Display

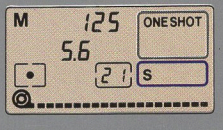
•In Shutter-priority AE
1/8000–30 sec. . . Shutter speed



•In Aperture-priority AE
1.0–91 . . . Aperture value



•In Manual



Specifications

Type and Major Components

Type: 35mm focal plane shutter SLR (Single-Lens Reflex) camera with autofocus, auto exposure and built-in motor drive.
Lens Mount: Canon EF Mount (electronic signal transfer system).
Usable Lenses: Canon EF lenses.
Viewfinder: Fixed eye-level pentaprism. Gives approx. 100% vertical and horizontal coverage of actual picture area and 0.72X magnification with 50mm lens at infinity.
Focusing Screen: Laser-matte screen with AF frame. Six optional interchangeable screens are available.
Dioptric Adjustment: Adjustable (−3dpt — +1dpt) by turning knob
Eyepoint: 20mm
Shutter: Vertical-travel metal type focal plane shutter; all speeds electronically controlled.
Shutter Speed: 1/8000-30 sec. and bulb. X-sync is 1/250 sec. Can be set in 1/3-step increments.
Mirror: Quick return type half-mirror

Autofocus

AF Control System: TTL-CT-SIR (Cross Type-Secondary Image Registration) phase-detection type. Two modes available: One-shot and Servo AF with Focus Prediction. Manual focusing possible.
AF Working Range: EV-1 — 18 at ISO 100.
AF Auxiliary Light: Specified Canon Speedlites automatically project light through an ultra-bright LED (peak sensitivity: 700nm) when required.

Exposure Control

Light Metering: TTL full aperture metering using SPC (Silicon Photocell).
Four metering patterns available:

1. 6-zone evaluative metering
2. Center-weighted average metering
3. Partial metering (approx. 5.8% of the picture area)
4. Spot metering (approx. 2.3% of the picture area)

Metering Range:
Spot metering: EV 2—20 at ISO 100
Other meterings: EV 0—20 with f/1.4 lens at ISO 100 or equivalent
Exposure Modes:

1. Shutter-Priority AE
2. Aperture-Priority AE
3. Depth-of-Field AE
4. Program AE with Variable Shift
5. Manual
6. Flash AE (A-TTL and TTL program flash AE with specified Canon Speedlites)

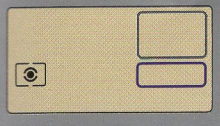
Exposure Compensation: ±3 steps in 1/3-step increments.
Auto Exposure Bracketing: ±3 steps

(2) Metering

[⊙] . . . Six-zone Evaluative Metering/Center-weighted Average Metering (with CF-No. 8)

[○] . . . Partial Metering 5.8% of viewfinder

[·] . . . Spot Metering 2.3% of viewfinder

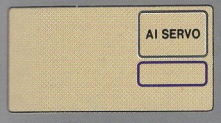


(3) Focus

ONE SHOT . . . One shot

AI SERVO . . . with Predictive focus for fast subjects

M. FOCUS . . . manual focus



(4) Film-winding

S . . . Single frame

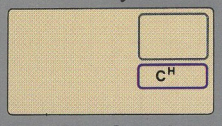
C . . . Continuous 2.5 fps

C^H . . . Continuous high speed 5.5 fps with Power Drive Booster E1

C_L . . . Continuous low speed 3 fps with Power Drive Booster E1

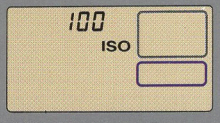
. . . Self-timer with 10-second delay

. . . Self-timer with two-second delay



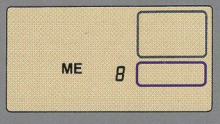
(5) Film Speed

6-6400 . . . ISO film speed



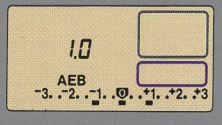
(6) Multiple Exposure

1-9 . . . Multiple exposure preset number



(7) Auto Exposure Bracketing

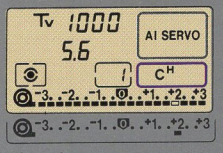
−3 to +3



(8) Exposure Compensation

−3 to +3

(Set by quick control dial)



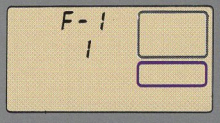
(Set by exposure compensation button & main dial)

(9) Custom Function Control

F-1 through F-8 . . . Function number

0 — Function not activated

1 — Function activated



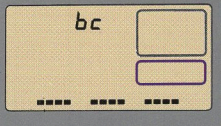
(10) Battery Check

Power represented by number of bar marks

— — —: Full power

— —: Sufficient

—: (Blinking) Insufficient



in 1/3-step increments.

Depth-of-Field Preview: With Depth-of-Field check button

Film Transport

Film Speed Setting: ISO 25-5000; automatically set in 1/3-step increments according to DX code. ISO 6-6400 can also be set manually.

Film Loading: Automatic

Film Wind: Automatic. Two modes available: S (Single Frame) and C (Continuous at up to 2.5 frames per second).

Film Rewind: Automatic (approx. 8 sec. with 24-exp. film). Mid-roll rewind possible.

Power Source

Battery: One, six-volt lithium battery pack (2CR5). Replaced by removing grip.

For memory backup: One CR1220

Battery Check: By pressing the battery check button. Three energy levels are shown by the bar marks in the display panel.

Shooting Capacity: (with 24-exp. film)

Normal (68°F/20°C): 75 rolls

Low (−4°F/−20°C): 12 rolls

Other

Custom Function Control: 8 functions selectable

Flash Contact: Direct contact at accessory shoe and PC socket (JIS-B type)

Remote Control: By using Remote Switch 60T3.

Data Display: In the viewfinder and LCD display panel.

Multiple Exposures: Up to nine exposures can be preset.

Self-Timer: Electronically controlled with a 2 or 10-sec. delay.

Dimensions

Size: 6-5/16″ (W) × 4-3/16″ (H) × 2-13/16″ (D) (161 × 106.6 × 71.8mm)

Weight: 1.9 lb. (850 g) without battery.

2 lb. (890 g) with battery.

■ The following specifications change when mounting the Power Drive Booster.

Film Wind: Three modes; S (Single Frame), CH (Continuous at up to 5.5 fps) and CL (Continuous at up to 3 fps).

Shooting Capacity: (with 24-exp. film)

Temperature	Alkaline	Ni-Cd
Normal (68°F/20°C)	100 rolls	45 rolls
Low (−4°F/−20°C)	6 rolls	30 rolls

Power Source: Eight AA-size alkaline-manganese (LR6) or Ni-Cd (KR15/51) batteries

Dimensions (EOS-1 + Power Drive Booster)

Size: 6-5/16″ (W) × 5-15/16″ (H) × 3-1/16″ (D) (160.5 × 150.4 × 78mm)

Weight: 3.3 lb. (1490 g) with battery

All data are based on Canon's Standard Test Method.
Subject to change without notice.

Canon

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