

# Canon AL-1



*Quick Focus*



The Quick Focus Way  
to Sharp Pictures





## Highly Accurate Quick Focus System

-pinpoint sharpness every time-

## Clear QF Indicators

-error-proof, fuss-free-

## Bright Viewfinder

-with clear laser matte focusing screen-

## QF Functions With Any FD Lens

-wide-angle, zoom, macro, telephoto-

## Aperture-priority AE + Manual Mode

-the choice is yours-

## Simple To Use

-light and compact, too-





It should have been the perfect picture. The exposure was exact and you framed it beautifully. But when the film came back from the developer's you found that your prize shot was blurred and indistinct.

It happens even to pros, but now Canon has come up with a way to ensure you never suffer the disappointment of poorly focused pictures again. It's called the Quick Focus (QF) system and it's the star attraction of the new AL-1. Easy-to-see arrows point which way to turn the lens' focusing ring and a green spot lights when your subject is in sharpest focus. No more eye strain or guesswork trying to judge the optimum focus. And because the Quick Focus is a TTL (through-the-lens) system using three CCD line sensors, it works with any of Canon's over 50 FD interchangeable lenses.

Other features help make the AL-1 one of the easiest to use SLRs ever. Its bright viewfinder incorporates an overall laser-matte focusing screen with convenient focus frame, while microcomputer "brains" take care of ranging detection, exposure and control decisions. And it's an aperture-priority AE camera, which means that you select the aperture and the camera sets the correct shutter speed. Alternatively, you can do everything yourself, manually.

Perhaps worries over focusing have been holding you back from buying an SLR camera. Or you have one, but aren't satisfied with the so-so results you've been getting. Either way, the AL-1 offers the answer. If you don't believe us, just try it. This time, when the film comes back, you won't groan—you'll congratulate yourself.

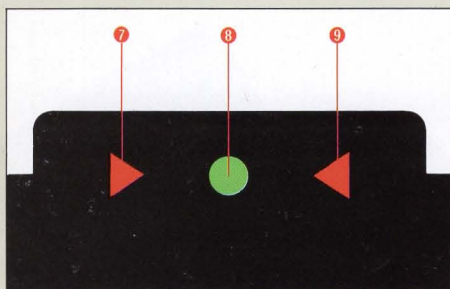






## QF Quick Focus

## Follow the Arrows for Spot-on Focusing

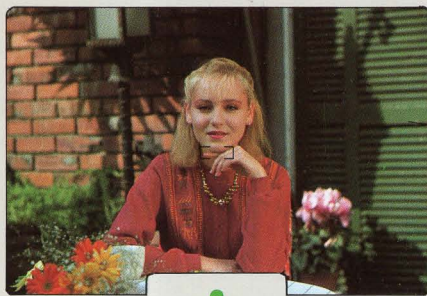


- ① Focus frame
- ② Overexposure warning mark
- ③ Meter needle
- ④ Battery check/camera shake warning index
- ⑤ Shutter speed scale
- ⑥ Under exposure warning mark
- ⑦ Out-of-focus indicator
- ⑧ In-focus indicator
- ⑨ Out-of-focus indicator

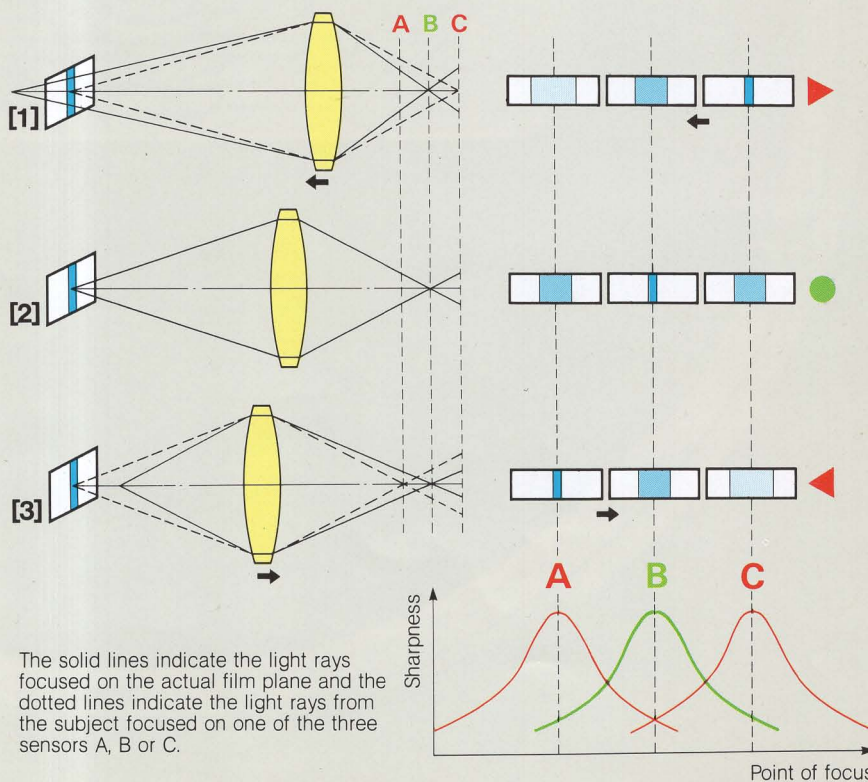
Look through the AL-1's viewfinder and you are greeted with the same bright, panoramic view as you get with any Canon SLR camera. But press the shutter button and... that's where the remarkable Quick Focus System story really begins.

A small red arrow lights up at the base of the image. It's pointing to the right, so you immediately turn the lens focusing ring in that direction. Oops! You've gone too far. An identical arrow, this time pointing left, appears. A slight adjustment in that direction and a bright green spot lights. Your subject is in perfect focus. Most likely, it's your sharpest picture ever. And you did it in about the time it took to read this sentence.





- [1] Light rays from a point behind the subject are focused on the film plane (when focused beyond the subject) while the light rays from the subject are focused on the image sensor (C), causing the out-of-focus indicator to light up.
- [2] The subject is in focus when the center line sensor (B) shows highest contrast. The green in-focus indicator lights up.
- [3] Light rays from a point before the subject are focused on the film plane (when focused in front of the subject) while the light rays from the subject are focused on the image sensor (A), causing the out-of-focus indicator to light up.



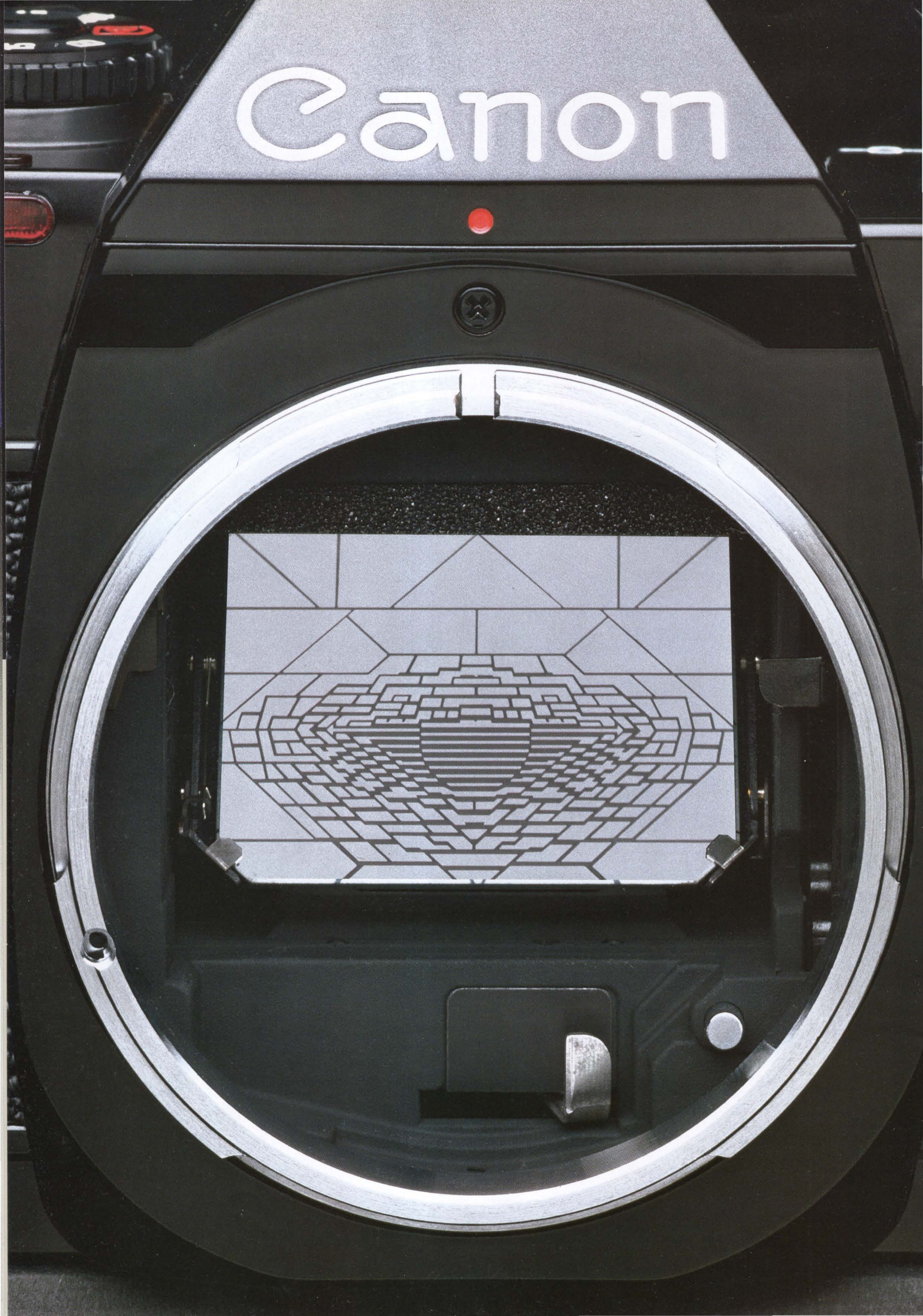
The solid lines indicate the light rays focused on the actual film plane and the dotted lines indicate the light rays from the subject focused on one of the three sensors A, B or C.

The TTL sharpness detection system uses three CCD line sensors. Focusing information is calculated by a microcomputer which then activates the LED focusing indicators in the viewfinder.

Focusing with the QF system is simple. Compose the picture so that your subject covers the focus frame in the center of the viewfinder. Press the shutter button lightly. One of the three indicators will then light. ► indicates that the point of focus is beyond the subject and that you must turn the focusing ring to the right. Similarly, ◀ informs that you are focusing too close. Rotate the ring to the left. When the green ● lights you know your subject is in sharp focus. Depress the shutter button all the way to take the picture.



Canon







## Canon's Magic Patterned Mirror

The Quick Focus system includes several technological innovations. One of them can be inspected by dismantling the lens.



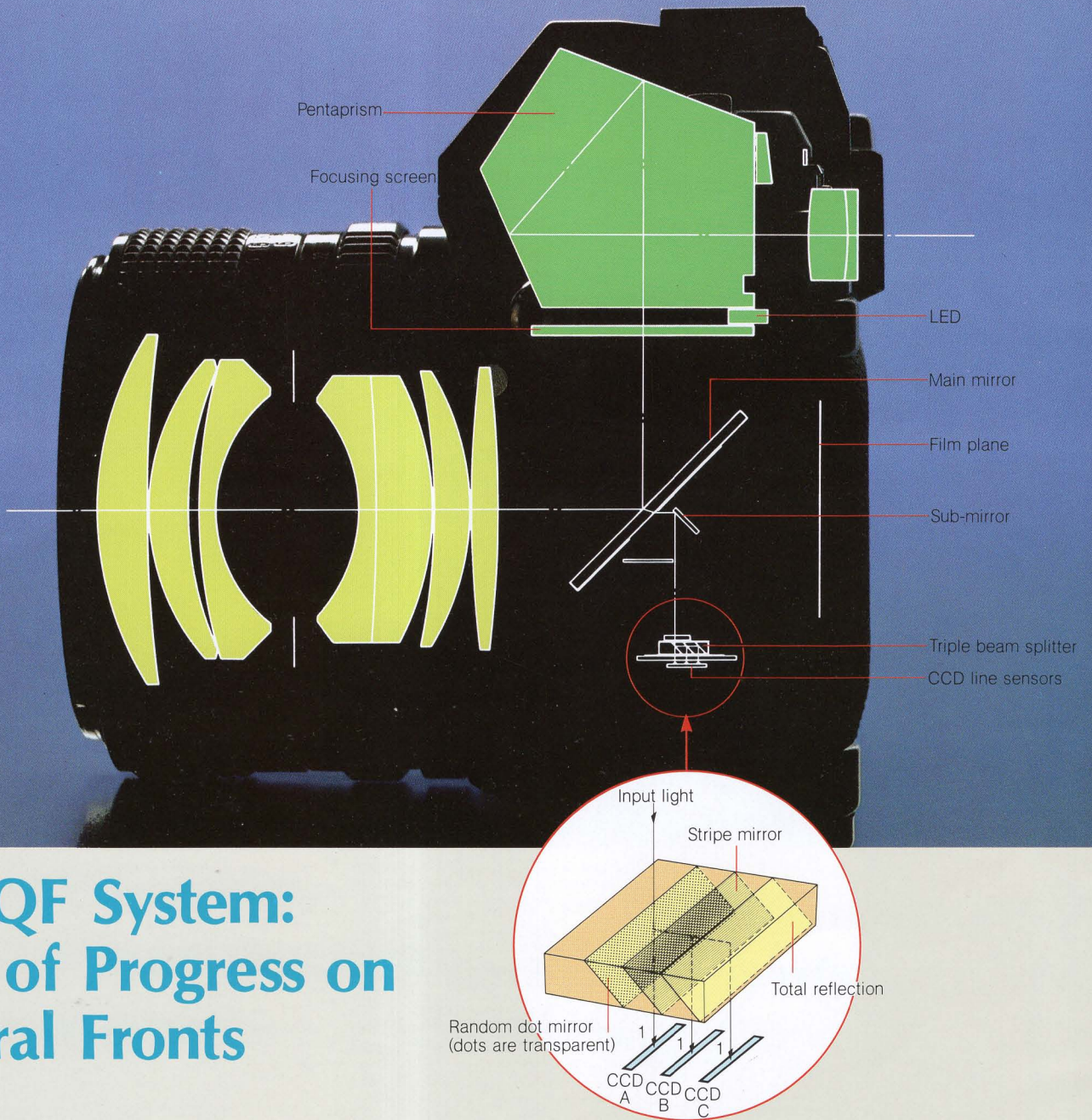
Sub-mirror

The AL-1's main mirror is inscribed with an intricate pattern of lines. These lines, instead of reflecting light up to the viewfinder, allow it to pass through to a sub-mirror located just behind. The light is, in turn, reflected down to the CCD image sensors. The central area, used for the quick focus system, has a transparency of 45%. The reflectivity increases progressively toward the periphery.

The lines aren't completely transparent, however. To increase the brightness and ensure that the pattern won't be visible in the viewfinder, they are given a thin reflective coating of aluminum. And although the pattern may look like some sort of abstract painting, its design is far from random. This configuration provides an ideal balance between the requirements of the quick focus system and the light distribution of the viewfinder.

Canon's patterned mirror provides a brighter viewfinder than the half mirror system utilizing a translucent partially reflective film. Moreover, the latter system incurs manufacturing problems in ensuring completely flat spectral characteristics and good color reproduction in the viewfinder.





## The QF System: Sum of Progress on Several Fronts

The AL-1's Quick Focus system is the product of years of intensive research and application of the most advanced optical and electronic technology.

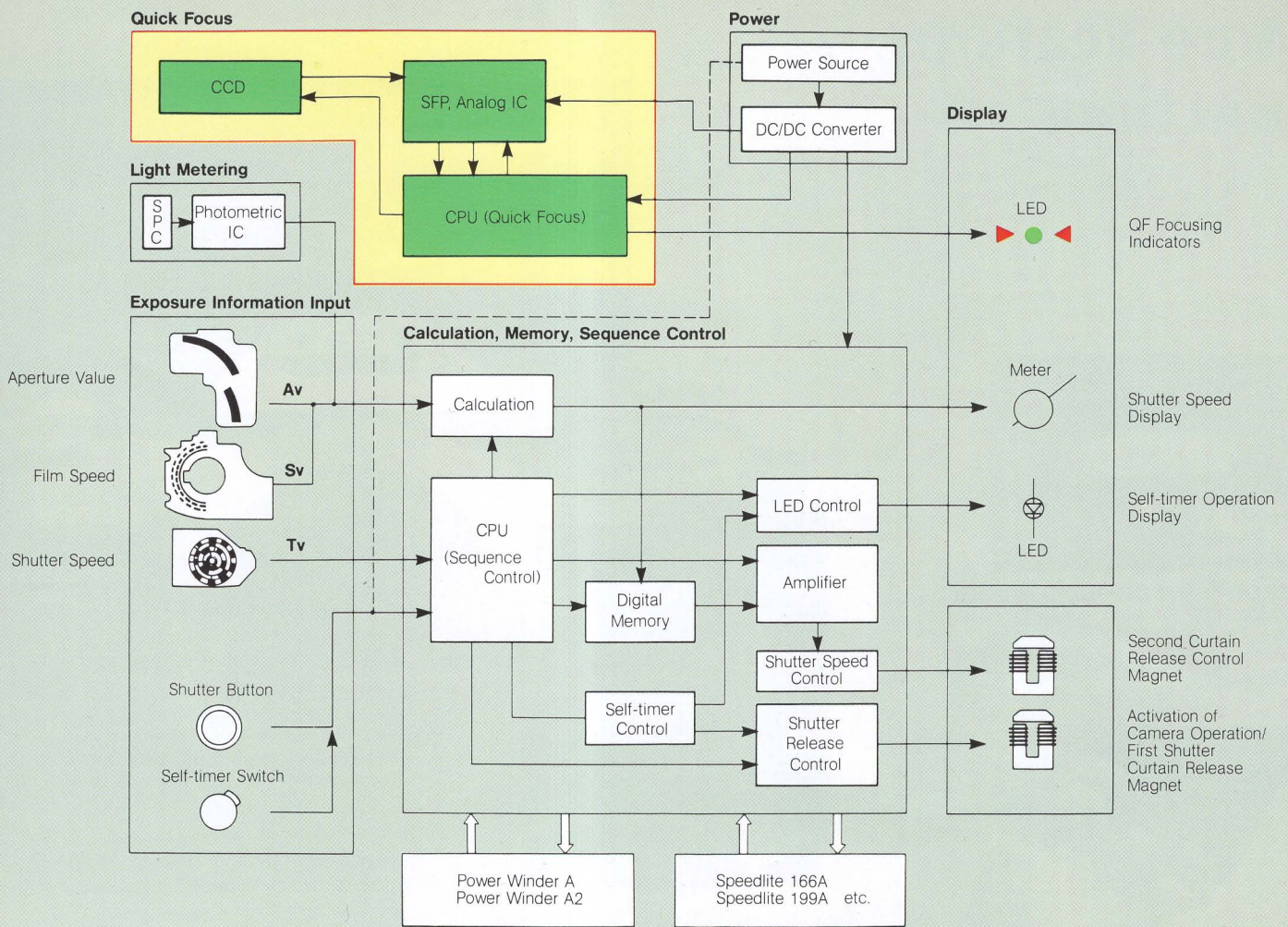
Electronic "eyes" linked to a microcomputer sense the focus and determine the point at which it is sharpest. Light entering the lens is guided to a triple beam splitter at the bottom of the camera via the patterned main mirror and a sub-mirror. As it travels through to the CCD line sensors underneath, the light beam is separated into three parts by the triple beam splitter. The center line sensor is placed so that the focus of the image formed on its surface corresponds to the one that will appear on the film. The two outer line sensors compare the image contrast with each other (the focus is sharpest when the image conditions before and behind the center line sensor are the same). The center line sensor ensures that a false signal is not generated in case the image is extremely out of focus. The microcomputer performs all image contrast calculations and transmits the data to the LED focusing indicators in the viewfinder.

### Triple Beam Splitter

The triple beam splitter is another Canon optical advance. Together with the CCD line sensors, it forms the heart of the Quick Focus system.

Composed of four microprisms with three reflective surfaces, the triple beam splitter divides the incoming light reflected by the sub-mirror into three equal parts, which then proceed to the CCD line sensors below. In so doing, it fulfills several crucial requirements. It correctly divides all types of light, ensures that the image characteristics are identical for all three CCD sensors irrespective of the image pattern, and guarantees that the degree of blur in the front and rear directions is the same when the camera is in focus and also that ghost images won't affect the performance.



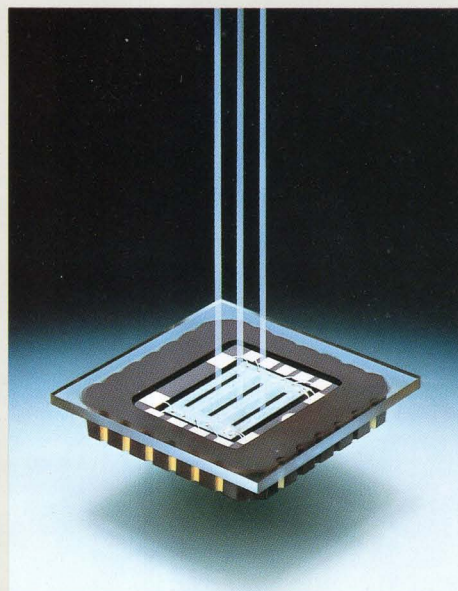


In order to ensure that the sensors' fields of view are identical, an extremely high degree of precision is required of the microprism. Canon achieved this by developing an entirely new manufacturing process.

### Three CCD Line Sensors

The extreme accuracy of the QF system is due largely to the use of three CCD (Charge Coupled Device) line sensors to detect the image.

Each CCD incorporates 112 cells which partition the subject into minute sections and convert them into electrical signals. These signals are serially transferred to the SFP (Sharpness Function Processor) for analog processing and thence to the CPU (Central Processing Unit) via various intermediate processing stages. The CPU controls the quick



focus system and generates LED information in the viewfinder.

The CCDs, with their 112 micro-eyes, are able to measure even tiny subjects. They also exhibit a wider dynamic range with high sensitivity and low dark current, permitting a ranging illumination level of EV 3.5 - 18 (ASA 100, ISO 100/21°). And due to their all-solid-state design, they are highly reliable, generating neither electrical nor mechanical noises.

The CPU performs a host of complex calculations and cross comparison of data in microseconds. It aids you in producing perfectly exposed and focused pictures.



# More Features, Functions



## Canon Breech-lock Mount

Lenses can be changed in a single motion, saving precious shooting time. The breech-lock mount also incurs less wear and can accept almost all Canon lenses.



## Battery Chamber

Conveniently located. Power for all functions is provided by two AAA batteries. Easy to load.



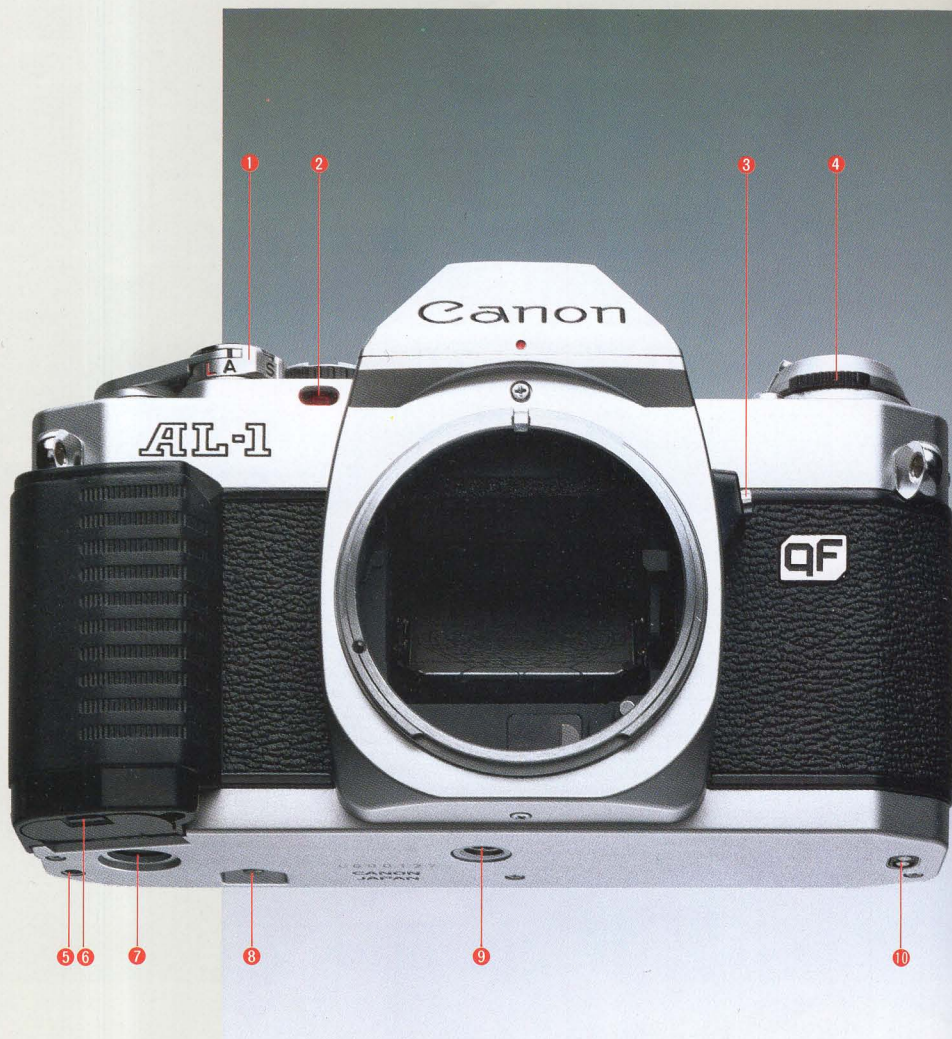
## Shutter Release/Self-timer

The electromagnetic shutter release operates smoothly and softly, and features a finger rest to reduce fatigue. Depress the button lightly for a meter reading and ranging, all the way to take the picture. And so that you can get in the picture yourself, it incorporates a 10-sec self-timer. An LED flashes to indicate its operation.



## Battery Check Button

The battery check button lets you keep tabs on the batteries' condition. The exposure meter needle in the viewfinder will rise above the camera shake warning index if power is sufficient. The button also serves to cancel the self-timer.



## AL-1 Specifications

**Type:** 35mm SLR (Single-lens Reflex) camera with aperture-priority AE and built-in "Quick Focus" system.

**Image Size:** 24 x 36mm

**Usable Lenses:** Canon FD lenses (for full aperture metering), and most FL lenses (for stopped-down metering).

**Standard Lenses:** New FD 50mm f/1.2, 50mm f/1.4 or 50mm f/1.8.

**Lens Mount:** Canon Breech-lock mount.

**Viewfinder:** Fixed eye-level pentaprism.

**Field of View:** 92% vertical and 93% horizontal coverage of the actual picture area.

**Magnification:** 0.87X at infinity with a standard 50mm lens.

**Standard Diopter:** -1.0dpt.

**Focusing Screen:** All laser matte with focus frame for ranging.

**Finder Information:** Focus frame, focusing indicators, meter needle and shutter speed scale, over/under exposure warning marks, battery check/camera shake warning index.

**Eyepiece Correction:** Ten powers (-4 to +3) provided by Dioptic Adjustment Lenses S.

**Quick Focus System:** TTL sharpness detection using 3 CCD line sensors; focusing information is calculated and displayed by microcomputer.

**Focusing Indicators:** 3 LED (Light Emitting Diode) display;

Red ◀ ... Out of focus (front)

Green ● ... In focus

Red ▶ ... Out of focus (rear)

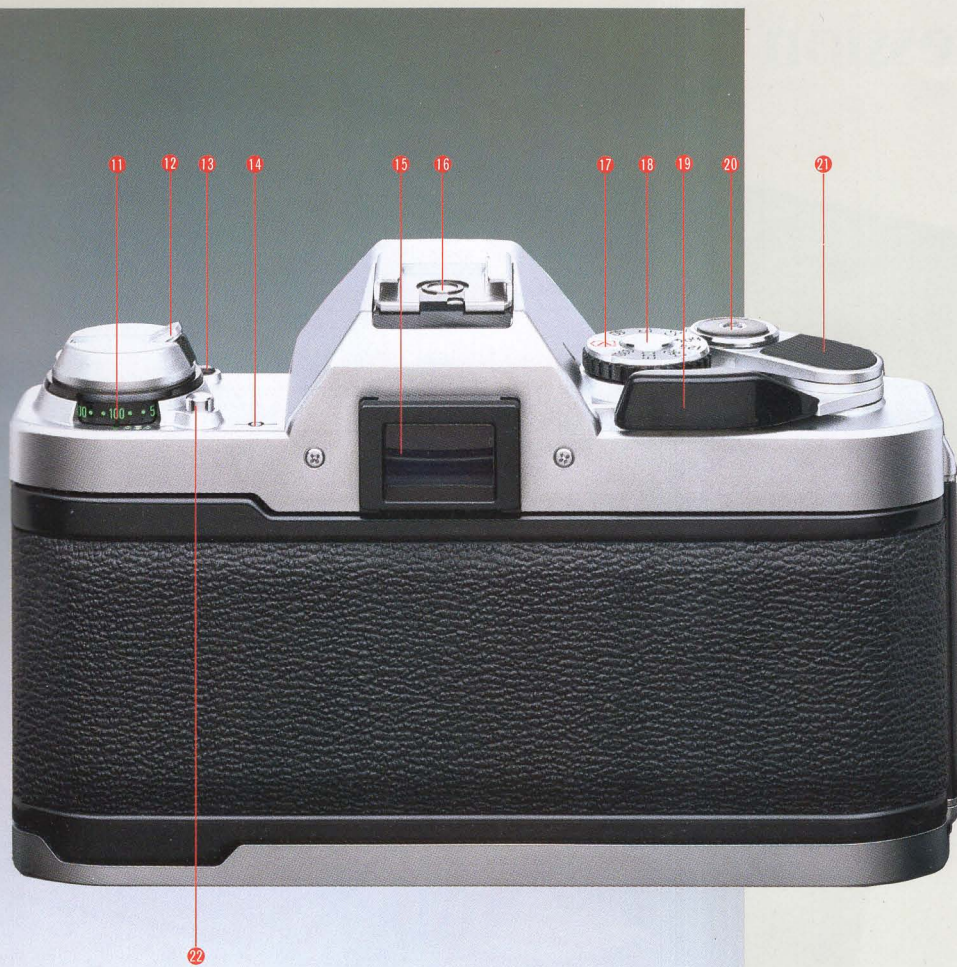
**Ranging Illumination level:** EV 3.5 to EV 18 (ASA 100, ISO 100/21°).

**Light Metering System:** Through-the-lens (TTL), center-weighted average by silicon photocell (SPC).

**Meter Coupling Range:** EV 1 (1 sec. at f/1.4) to EV 18 (1/1000 sec. at f/16) with ASA 100, ISO 100/21° film and 50mm f/1.4 lens.

**Shutter:** Cloth, focal plane shutter. Electronically controlled.





- 1 Shutter button lock/self-timer lever
- 2 Self-timer LED
- 3 Backlight control switch
- 4 Film speed dial
- 5 Winder guide hole
- 6 Battery chamber cover opening button
- 7 Winder socket
- 8 Film rewind button
- 9 Tripod socket
- 10 Winder contacts
- 11 ASA window
- 12 Rewind crank
- 13 Battery check button
- 14 Film plane indicator
- 15 Finder eyepiece
- 16 Direct coupling contacts
- 17 Selector dial
- 18 Lock release button
- 19 Film advance lever
- 20 Shutter button with cable release socket
- 21 Finger rest
- 22 Lock release button



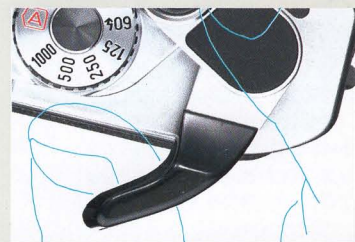
### Large Rewind Knob

Another time-saver, in this case for fast, smooth film rewinding. When the film is fully wound, raise the knob to unlock the hinged camera back.



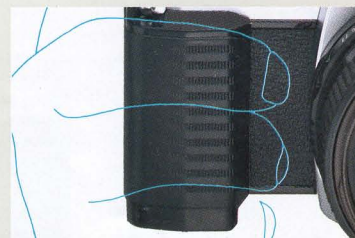
### Film Speed Dial

The wide ASA 25-1600 film speed range lets you use virtually any film available. Press the lock button and rotate the dial to the correct ASA setting.



### Quick-action Film Advance Lever

A short 120° throw and 30° stand-off angle ensure rapid film advance and allow you to keep your finger ready at all times on the shutter release. The film can also be advanced by small, repeated movements.



### Action Grip

Large and well-contoured to allow the camera's side to fit snugly and securely in your right palm. Another Canon innovation devised with you, the photographer, in mind.

**Shutter Button:** Electromagnetic, two-step button. Pressing it halfway activates the meter and quick focus system; pressing it all the way operates the shutter. With lock and cable release socket.

**Shutter Speed:** Automatically controlled, steplessly, from 2 sec. to 1/1000 sec. Manual settings for 1/1000, 1/500, 1/250, 1/125, 1/30, 1/15, "B" and X-synchronization speed of 1/60 sec. with flash units other than Canon dedicated Speedlite.

**Film Speed Dial:** ASA 25 to ASA 1600

**Exposure Correction:** Shutter speed is automatically reduced 1.5 steps to increase exposure by pressing backlight control switch.

**Mirror:** Large, shockless instant-return type with pattern.

**Self-timer:** Electronically controlled. Ten second time lag activated by pressing shutter button. Red LED flashes to indicate operation; flashing frequency increases two seconds before shutter release. Cancellation possible.

**Automatic Flash Control:** Possible with Canon dedicated Speedlites. With selector dial at A, shutter speed set to 1/60 sec. automatically. Aperture set manually on aperture ring to same aperture set on flash.

**Camera Back:** Fixed. Opened by pulling up rewind crank.

**Film Loading:** Via multi-slot take-up spool.

**Film Advance Lever:** Single-stroke 120° throw with 30° stand-off. Winding with several short strokes possible.

**Frame Counter:** Additive type. Automatically resets to "S" upon opening camera back.

**Film Rewind:** By pressing rewind button and cranking rewind knob.

**Power Source:** 2 AAA size 1.5V alkaline-manganese batteries.

**Battery Check:** Meter needle/power level index method. By pressing battery check button.

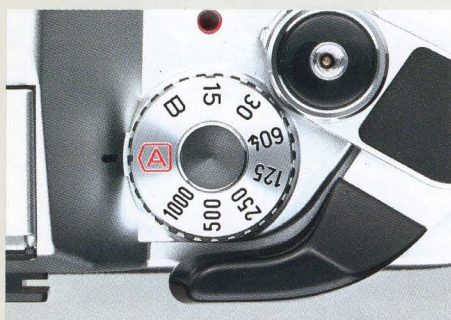
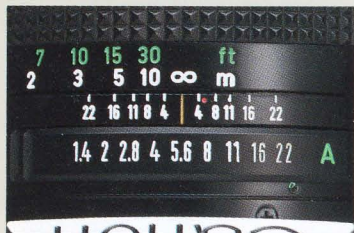
**Size:** 142.1(W) x 86.5(H) x 47.6(D)mm (5-9/16" x 3-3/8" x 1-7/8")

**Weight:** 490g (17-5/16 ozs.) body only. 684g (24-1/8 ozs.) with New FD 50mm f/1.8 and batteries.

Subject to change without notice.



# Two Exposure Modes for Creative Expression



The AL-1 offers you two alternative paths to satisfyingly creative results: Aperture-priority AE and Manual mode. With the former, you choose the aperture and the camera automatically selects the shutter speed. The exact shutter speed, we might add, since the speed is electronically and steplessly controlled from a fast 1/1000 sec. all the way down to 2 full seconds.

Aperture-priority AE gives you greater control of depth of field (the area in focus before and behind the subject) and indirect control of shutter speed. Above all, aperture-priority AE is *simple*. You select the lens aperture and the AL-1 adjusts the shutter speed for correct exposure under normal lighting conditions.




## Aperture-priority AE

### Backlight Control Switch

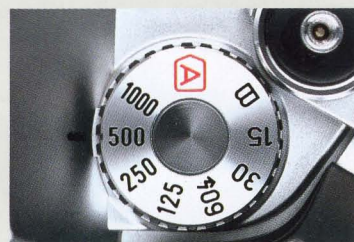
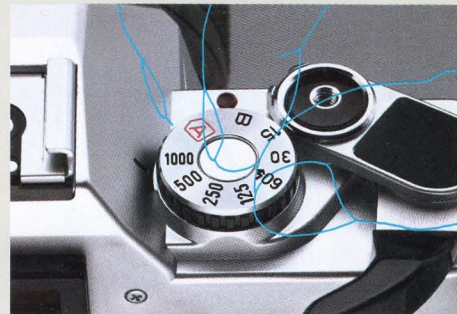
Back-lit subjects, such as when the sun is behind the subject, will come out too dark unless you compensate. This handy switch solves the problem. Press the button while taking the picture and the shutter exposure will be automatically increased 1.5 X.







# Manual Exposure Control



## Manual Exposure Control

If you want to take over from the AL-1's sophisticated computer and do everything yourself, you can. Whether it's to highlight a subject which is in deep shadow or to produce a special effect, the AL-1's manual facility gives you full room to display your creative talent.

The selector dial has a safety lock to guard against accidentally disengaging the A setting. Depress the lock release button on top and turn the dial to the desired shutter speed. Then choose an aperture. With an automatic mode for fast-moving situations and manual override to exercise your skill and imagination, the AL-1 has everything you need to produce superb images of the world around you.







# Broaden Your Photographic Horizons

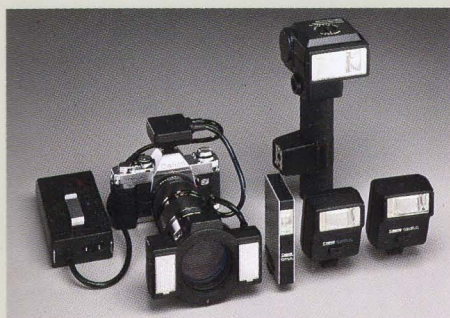


The AL-1 admits you into an exciting new world of photographic possibilities, some of which you probably never even knew existed. The Speedlite 166A and Power Winder A2, described a few pages later, are two of the more obvious means of expanding the camera's potential, but they merely represent the cornerstones of an entire system of accessories available for use with the AL-1. Whether it's to record nature's tiniest details or to explore the heavens, Canon has the equipment to accomplish the task.

## Canon Lenses: Different Ways to Change Your Image

The Canon FD lens system is like no other—an incredible array of over 50 superlative precision optics, each guaranteeing outstanding resolution and color balance. Plus those factors so essential to the photographer on the go: compactness and handling ease.

Starting with the one that provides the broadest view of all—the 7.5mm f/5.6 fisheye—the system embraces wide angle lenses, zooms and telephotos, right up to a 1200mm super telephoto that can record objects almost beyond sight. A variety of lenses is available for architectural and scientific applications.

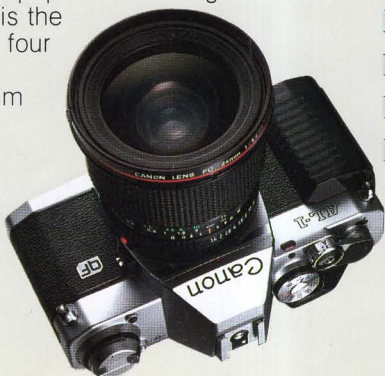




# Step into a Wider World



They give an accentuated sense of depth and perspective. Subjects in the foreground loom dramatically against limitless horizons. And because you can get more into the picture, they are often essential in confined spaces. Canon's New FD wide-angle lenses also give superior edge-to-edge sharpness and resolving power, making them ideal for everything from landscapes to group portraits. The New FD 28mm f/2.8 is possibly the most popular. Providing an approximation of human vision is the 50mm standard lens. There are four in the FD range, including the high-performance New FD 50mm f/1.2L with aspherical element.



## Wide-Angle and Standard Lenses

Lens	Angle of View	Closest Focusing Distance (m)	Filter Size (mm)	Length (mm)	Weight (gr)
New Fish-eye 7.5mm f/5.6	180°	—	Built-in	62	365
New Fish-eye FD 15mm f/2.8	180°	0.2	Built-in	60.5	460
New FD 17mm f/4	104°	0.25	72	56	360
New FD 20mm f/2.8	94°	0.25	72	58	305
New FD 24mm f/1.4 L	84°	0.3	72	68	430
New FD 24mm f/2	84°	0.3	52	50.6	285
New FD 24mm f/2.8	84°	0.3	52	43	240
New FD 28mm f/2	75°	0.3	52	47.2	265
New FD 28mm f/2.8	75°	0.3	52	40	170
New FD 35mm f/2	63°	0.3	52	46	245
New FD 35mm f/2.8	63°	0.35	52	40	165
New FD 50mm f/1.2 L	46°	0.5	52	50.5	380
New FD 50mm f/1.2	46°	0.5	52	45.6	315
New FD 50mm f/1.4	46°	0.45	52	41	235
New FD 50mm f/1.8	46°	0.6	52	35	170



# Reach Out to the Inaccessible



If the wide angle is all-embracing, the telephoto is the lens which bridges the gap between subject and photographer. Starting point of the FD telephoto series is the 85mm short telephoto. Moving up the focal scale, there are several medium telephotos, including the 135mm f/2.8 lens which is compact and fast enough for shooting in low light conditions. More powerful lenses such as the New FD 200mm f/2.8 and New FD 300mm f/4 are available for sports and nature photography. Finally, the "big guns". Super-telephotos bring even the most distant subject in close, for candid shooting opportunities of people and animals. They also compress perspective—especially effective for scenics.

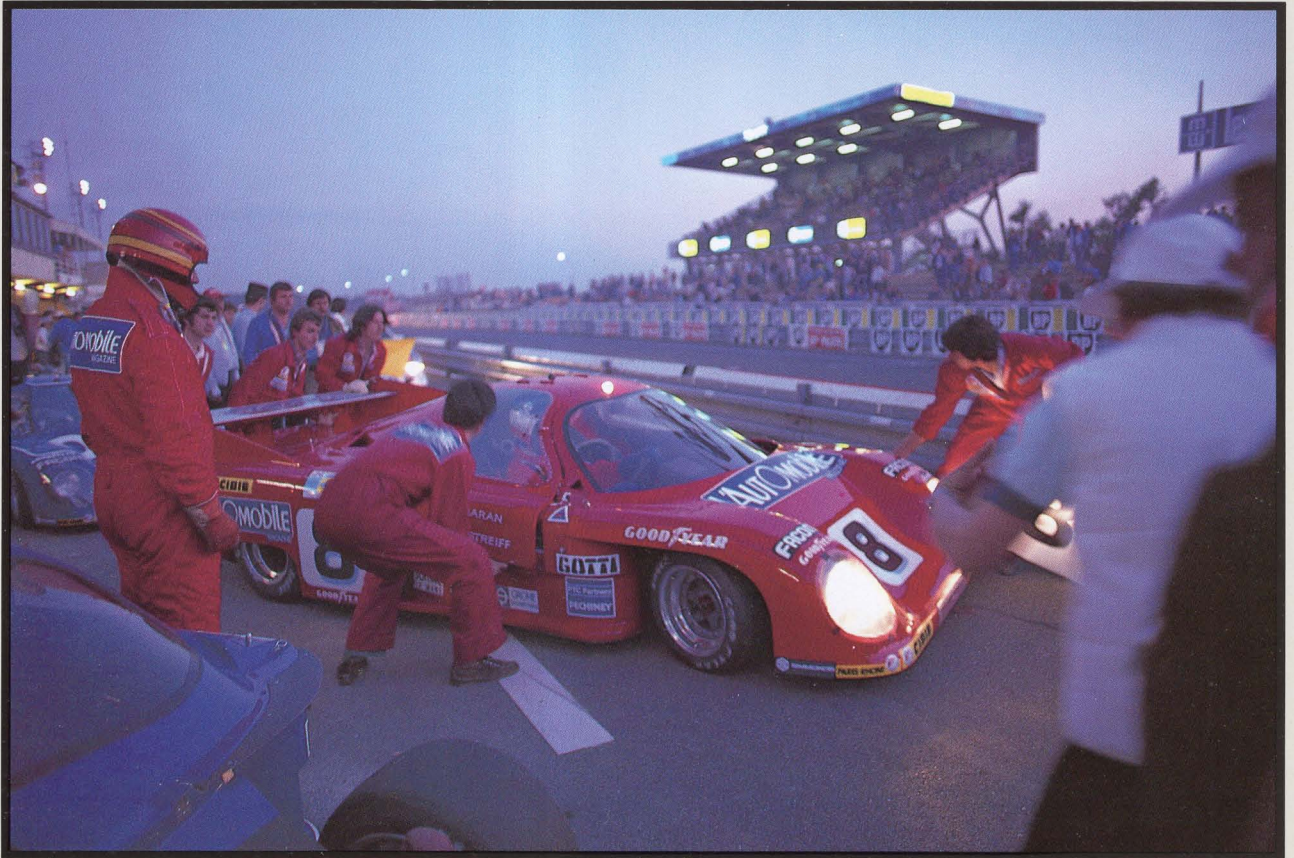


## Telephoto Lenses

Lens	Angle of View	Closest Focusing Distance (m)	Filter Size (mm)	Length (mm)	Weight (gr)
New FD 85mm f/1.2 L	28°30'	0.9	72	71	680
New FD 85mm f/1.8	28°30'	0.85	52	53.5	345
New FD 100mm f/2	24°	1	52	70	445
New FD 100mm f/2.8	24°	1	52	53.4	270
New FD 135mm f/2	18°	1.3	72	90.4	670
New FD 135mm f/2.8	18°	1.3	52	78	395
New FD 135mm f/3.5 L	18°	1.3	52	85	325
New FD 200mm f/2.8	12°	1.8	72	140.5	700
New FD 200mm f/4	12°	1.5	52	121.5	440
New FD 300mm f/2.8 L	8°15'	3	48(drop-in type)	245	2,310
New FD 300mm f/4 L	8°15'	3	34(drop-in type)	207	1,060
New FD 300mm f/4	8°15'	3	34(drop-in type)	204	945
New FD 300mm f/5.6	8°15'	3	58	198.5	635
New FD 400mm f/2.8 L	6°10'	4	48(drop-in type)	348	5,350
New FD 400mm f/4.5	6°10'	4	34(drop-in type)	287.5	1,270
New FD 500mm f/4.5 L	5°	5	48(drop-in type)	395	2,610
New Reflex 500mm f/8	5°	4	34(drop-in type)	146	705
New FD 600mm f/4.5	4°10'	8	48(drop-in type)	462	3,750
New FD 800mm f/5.6 L	3°06'	14	48(drop-in type)	577	4,230
FL 1200mm f/11 S.S.C.	2°05'	40	48(drop-in type)	853	6,200



# Several Lenses in One



The zoom lens is an exciting optical advance which lets you change magnification and composition without moving from your shooting position. It is also capable of the most stunning special effects. And because zoom lenses span several focal lengths, they save space in your gadget bag. In fact, some Canon zooms, such as the New FD 35-105mm f/3.5 cover the focal range of 3 or 4 lenses. A popular short zoom is the New FD 35-70mm f/4, which straddles both wide angle and short telephoto ranges. The f/4 aperture and compact size of the New FD 70-210mm f/4 telephoto zoom make it a practical choice for action and wildlife photography.

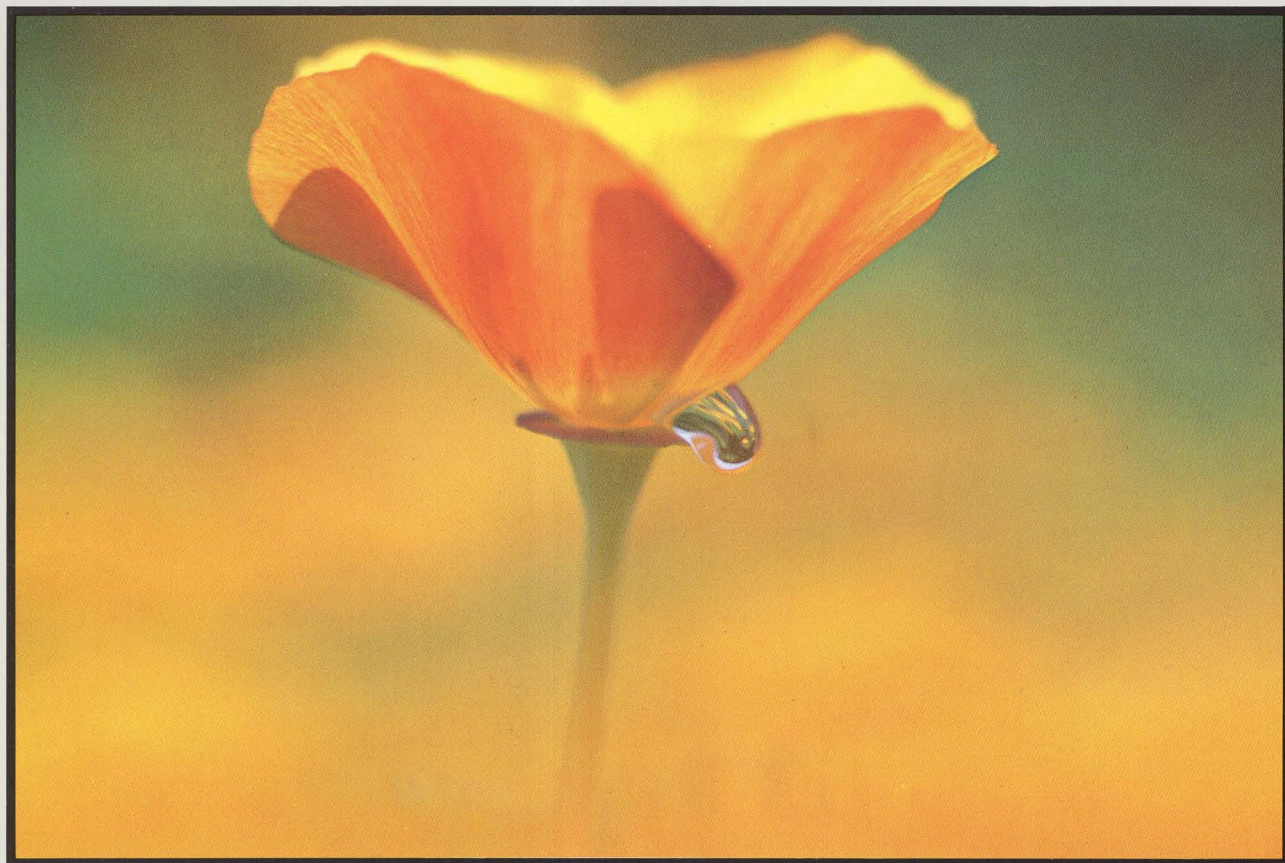


## Zoom Lenses

Lens	Angle of View	Closest Focusing Distance (m)	Filter Size (mm)	Length (mm)	Weight (gr)
New FD 24-35mm f/3.5 L	84°—63°	0.4	72	86.6	495
New FD 28-50mm f/3.5	75°—46°	1	58	99.5	470
New FD 35-70mm f/2.8-3.5	63°—34°	1	58	120	545
New FD 35-70mm f/4	63°—34°	0.5	52	84.5	315
New FD 35-70mm f/4 AF	63°—34°	(0.5)	52	84.5	604
New FD 35-105mm f/3.5	63°—23°20'	1.5	72	108.4	600
New FD 50-135mm f/3.5	46°—18°	1.5	58	125.4	720
New FD 70-150mm f/4.5	34°—16°20'	1.5	52	132	530
New FD 70-210mm f/4	34°—11°45'	1.2	58	151	705
New FD 80-200mm f/4	30°—12°	1	58	161	765
New FD 85-300mm f/4.5	28°30'—8°15'	2.5	Series No.9	246.8	1,630
New FD 100-200mm f/5.6	24°—12°	2.5	52	167	610
New FD 100-300mm f/5.6	24°—8°15'	2	58	207	835



# For a Closer or Straighter Look



Three macro lenses are available for close-up and photomacrography work. The New FD 50mm f/3.5 Macro is used by many photographers as their standard lens. Similarly, the New FD 200mm f/4 Macro can be used for usual telephoto applications or for 1X (life-size) magnification as close as 58cm (1.9ft). Another way to increase magnification is to connect extension tubes. The New FD 100mm f/4 Macro equipped with Extension Tube FD50-U provides 1X magnification. Extenders are also available to boost focal length. The TS 35mm f/2.8 (tilt and shift) lens is another great problem solver. It can correct or exaggerate perspective distortion as well as maximize depth of field. It is useful for straightening the lines of buildings or eliminating your reflection from the picture.

## Macro and TS Lenses

Lens	Angle of View	Closest Focusing Distance (m)	Filter Size (mm)	Length (mm)	Weight (gr)
New FD 50mm f/3.5 Macro	46°	23.2(cm)	52	57	235
New FD 100mm f/4 Macro	24°	0.45	52	95	455
New FD 200mm f/4 Macro	12°	0.58	58	182.4	830
TS 35mm f/2.8 S.S.C.	63° (Shift 79°)	0.3	58	74.5	550





# Light Sources for Night or Day



## Speedlite 166A

### Specifications

Type: Electronic computer flash unit with a series control system.

Contact: Clip-on type with direct contact and lock.  
Guide Number: 20 (ASA 100, ISO 100/21°, m) or 33 (ASA 25, ISO 25/15°, ft.)

Flash Coverage Angle: Covers the field of a 35mm lens in the 35mm format.

Recycling Time: About 0.5 — 7 sec. with alkaline batteries and about 0.5 — 5 sec. with Ni-Cd batteries.

Number of Flashes: About 250 — 2500 times with alkaline batteries and about 80 — 800 times with Ni-Cd batteries.

Flash Duration: 1/1000 — 1/50000 sec.

Aperture Selection Switch: Three positions. Red (f/2.8), green (f/5.6) with ASA 100, ISO 100/21° film and MANU (manual).

Auto Shooting Distance Range: 0.5 — 7m (1.6 — 22 ft).

ASA Film Speed Scale: ASA 25 — ASA 800.

Aperture Scale: f/1.4 — f/16.

Power Source: Four AA size alkaline or Ni-Cd batteries.

Size: 66 x 49.5 x 98mm (2-5/8" x 1-15/16" x 3-7/8").

Weight: 260g (9-3/16 ozs.) including batteries.

Subject to change without notice.



Automation is making flash photography steadily easier and error-free. The 166A is a dedicated Speedlite which provides automatic flash pictures by linking up with the AL-1's circuitry. Switch the flash on and the camera sets itself automatically to the 1/60 sec. flash sync. speed. The 166A has two auto apertures plus a manual setting, useful when you wish to fill in daylight shadows. The 166A is one of a complete line of Speedlites, which range from the pocket-size 011A to the powerful grip-type 577G and Macrolite ML-1 for close-up work.



- 1 Sensor
- 2 ASA film speed switch
- 3 Aperture/MANU selection switch
- 4 Main switch
- 5 Pilot lamp/flash test button



# Capturing the 'Decisive Moment'



Although the short 120° throw makes the AL-1 one of the fastest SLRs to wind manually, you can still get left behind if the action is particularly hectic. Which is why the Power Winder A2 is such an advantage. It advances the film automatically at 2 frames per second—rapid enough to keep up with fast-moving scenes. LEDs warn you when you have reached the film end or the battery power is low. The Power Winder A2 takes four AA-size alkaline, carbon-zinc or Ni-Cd batteries.

## Power Winder A2

### Specifications

- Winding Speed:** About 0.5 second.
- Operation:** Activated by the shutter button on the camera.
- Shooting Mode:** Single-frame (by releasing shutter button) and continuous power winding at approx. two frames per second.
- Frame Counting:** By the frame counter on the camera.
- Automatic Cut-off Circuit:** When the film is completely wound or if the batteries become exhausted, the winder will automatically stop and the warning lamp (LED) will light up.
- Mounting:** By using tripod socket on the camera.
- Power Source:** Four AA size 1.5V alkaline, carbon-zinc or Ni-Cd batteries.
- Size:** 140.8 x 27.5 x 53.4mm (5-9/16" x 1-1/16" x 2-1/8")
- Weight:** 275g (9-11/16 ozs.) including batteries.

Subject to change without notice.



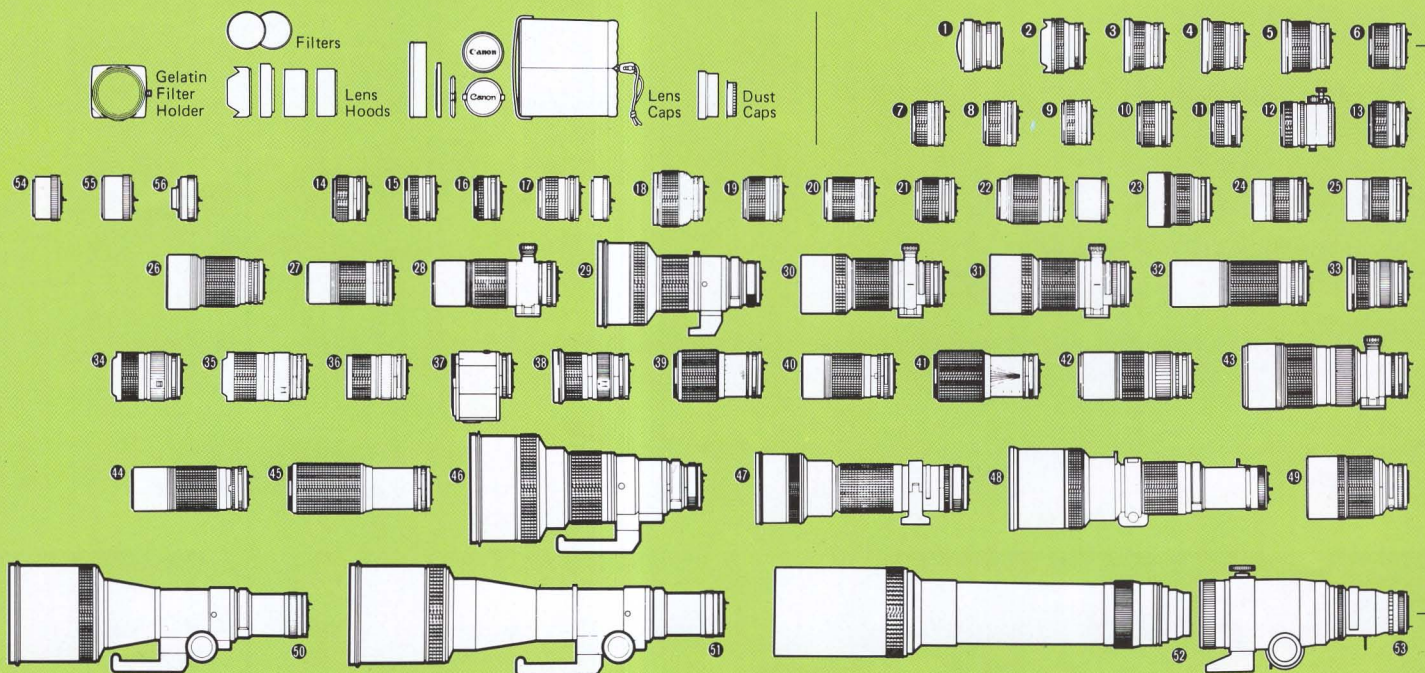


# A Treasure Trove for the Perfectionist

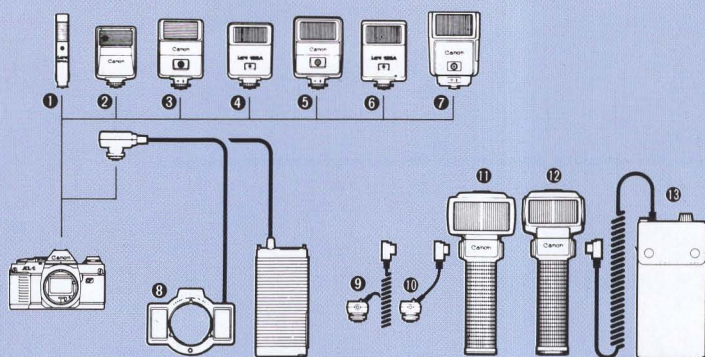
## 1. Lenses

- 1 New Fish-eye 7.5mm f/5.6
- 2 New Fish-eye FD 15mm f/2.8
- 3 New FD 17mm f/4
- 4 New FD 20mm f/2.8
- 5 New FD 24mm f/1.4 L
- 6 New FD 24mm f/2
- 7 New FD 24mm f/2.8
- 8 New FD 28mm f/2
- 9 New FD 28mm f/2.8
- 10 New FD 35mm f/2
- 11 New FD 35mm f/2.8
- 12 TS 35mm f/2.8 S.S.C.
- 13 New FD 50mm f/1.2 L
- 14 New FD 50mm f/1.2
- 15 New FD 50mm f/1.4
- 16 New FD 50mm f/1.8
- 17 New FD 50mm f/3.5 Macro w/Extension Tube FD 25-U
- 18 New FD 85mm f/1.2 L
- 19 New FD 85mm f/1.8
- 20 New FD 100mm f/2
- 21 New FD 100mm f/2.8
- 22 New FD 100mm f/4 Macro w/Extension Tube FD 50-U
- 23 New FD 135mm f/2
- 24 New FD 135mm f/2.8
- 25 New FD 135mm f/3.5

# 1



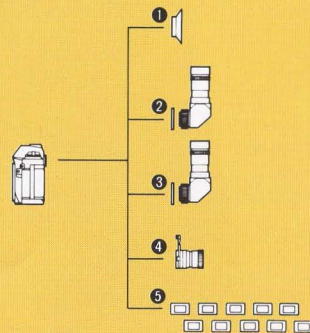
# 2



## 2. Flash Photography

- 1 Speedlite 011A
- 2 Speedlite 133A
- 3 Speedlite 155A
- 4 Speedlite 166A
- 5 Speedlite 177A
- 6 Speedlite 188A
- 7 Speedlite 199A
- 8 Macrolite ML-1
- 9 Sensor Unit G100
- 10 Sensor Unit G20
- 11 Speedlite 577G
- 12 Speedlite 533G
- 13 Transistor Pack G

# 3



## 3. Viewfinder System

- 1 Eyecup 4S
- 2 Angle Finder A2
- 3 Angle Finder B
- 4 Magnifier S
- 5 Dioptic Adjustment Lenses S



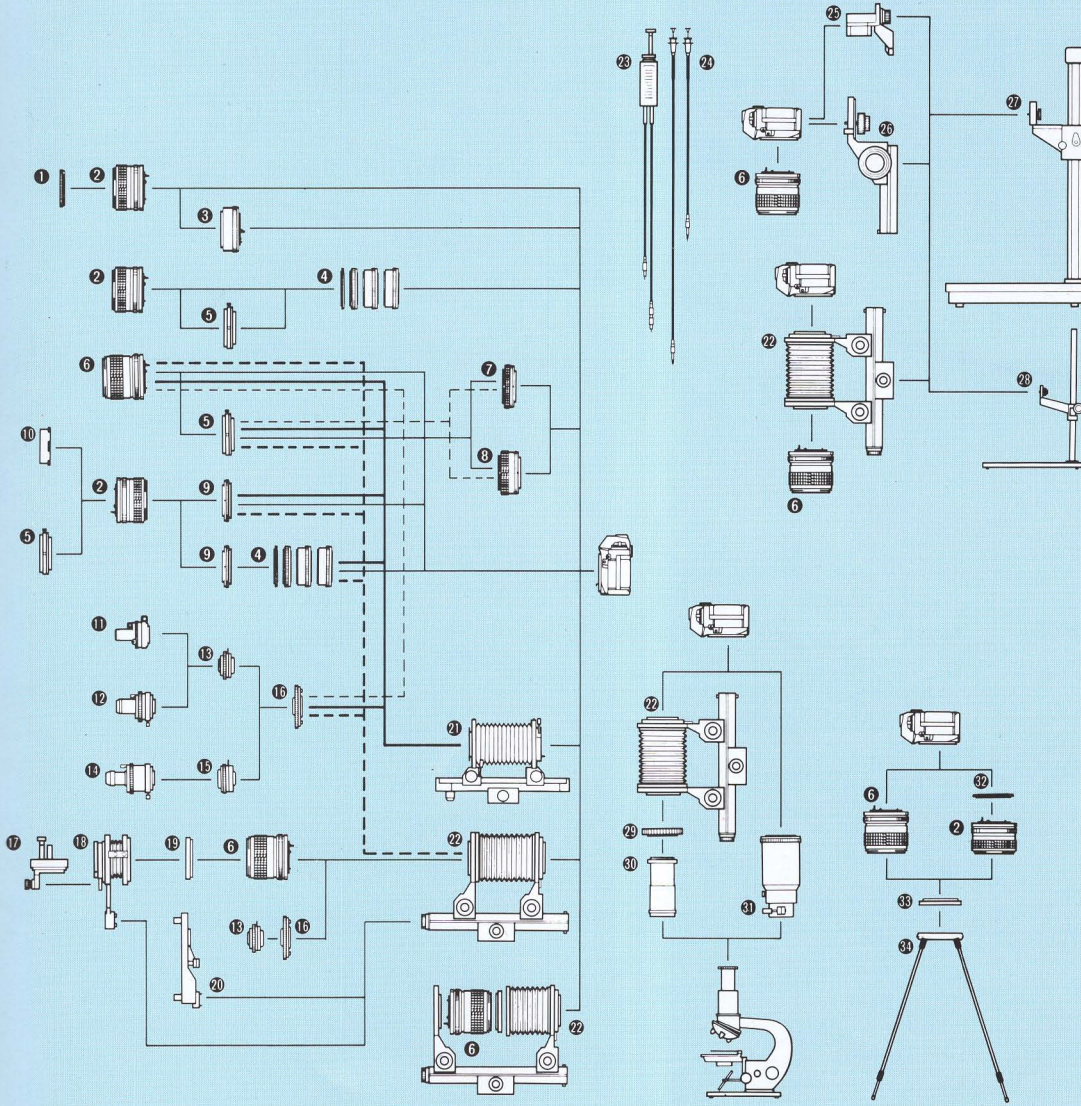
- 26 New FD 200mm f/2.8
- 27 New FD 200mm f/4
- 28 New FD 200mm f/4 Macro
- 29 New FD 300mm f/2.8 L
- 30 New FD 300mm f/4 L
- 31 New FD 300mm f/4
- 32 New FD 300mm f/5.6

- 33 New FD 24-35mm f/3.5 L
- 34 New FD 28-50mm f/3.5
- 35 New FD 35-70mm f/2.8-3.5
- 36 New FD 35-70mm f/4
- 37 New FD 35-70mm f/4 AF
- 38 New FD 35-105mm f/3.5
- 39 New FD 50-135mm f/3.5
- 40 New FD 70-150mm f/4.5
- 41 New FD 70-210mm f/4
- 42 New FD 80-200mm f/4
- 43 New FD 85-300mm f/4.5
- 44 New FD 100-200mm f/5.6
- 45 New FD 100-300mm f/5.6

- 46 New FD 400mm f/2.8 L
- 47 New FD 400mm f/4.5
- 48 New FD 500mm f/4.5 L
- 49 New Reflex 500mm f/8
- 50 New FD 600mm f/4.5
- 51 New FD 800mm f/5.6 L
- 52 FL 1200mm f/11 S.S.C.
- 53 Focusing Unit
- 54 Extender FD 2X-A
- 55 Extender FD 2X-B
- 56 Extender FD 1.4X-A

- 5. Motorized Film Drive**
- 1 Power Winder A
  - 2 Power Winder A2

# 4



\* QF system functions with magnifications of up to 5X.

**4. Close-up, Photomacrography and Photomicrography**

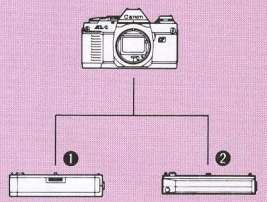
- 1 Close-up Lenses 450, 240
- 2 New FD 50mm f/1.4
- 3 Extension Tubes FD 15-U, 25-U, 50-U
- 4 Extension Tube M set
- 5 Macro Auto Ring
- 6 New FD 50mm f/3.5 Macro
- 7 Vari-Extension Tube M15-25
- 8 Vari-Extension Tube M30-55
- 9 Macrophoto Adapter MA-52
- 10 Macro Hood
- 11 Duplicator G
- 12 Duplicator 8

- 13 Macrophoto Lens 20mm f/3.5
- 14 Duplicator 16
- 15 Macrophoto Lens 35mm f/2.8
- 16 Macrophoto Lens Adapter
- 17 Roll Film Stage
- 18 Duplicator 35
- 19 Attachment Ring
- 20 Macro Stage
- 21 Bellows FL
- 22 Auto Bellows
- 23 Double Cable Release
- 24 Release 30, 50
- 25 Camera Holder F4
- 26 Focusing Rail
- 27 Copy Stand 5\*

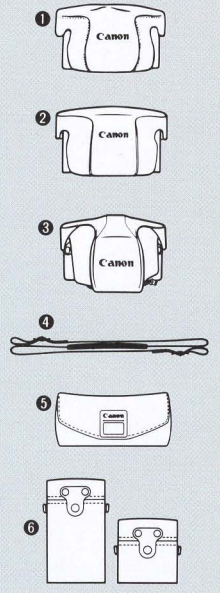
- 28 Copy Stand 4
- 29 Lens Mount Converter A
- 30 Microphoto Hood
- 31 Photomicro Unit F
- 32 Extension Tube M5
- 33 F Ring 52mm
- 34 Handy Stand F

\* Availability differs from area to area.

# 5



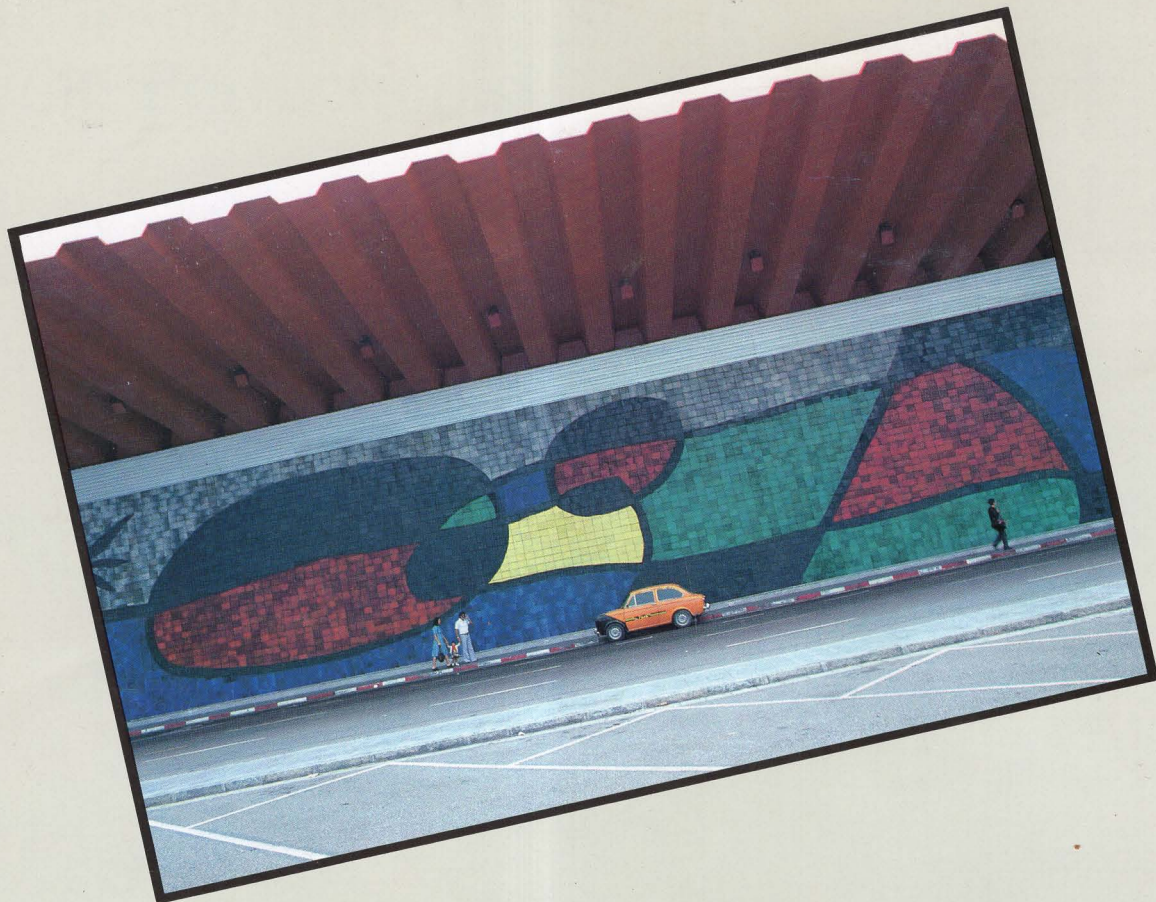
# 6



**6. Cases**

- 1 Semi-hard Case L
- 2 Semi-hard Case S
- 3 Semi-hard Case HA-2
- 4 Neck Strap 7
- 5 Lens Soft Case
- 6 Lens Hard Case





# Canon

**CANON INC.** 7-1, Nishi-Shinjuku 2-Chome, Shinjuku-ku, Tokyo 160, Japan  
**Mailing address:** P.O. Box 5050, Dai-ichi Seimei Building, Tokyo 160, Japan

- U.S.A.** — **CANON U.S.A., INC. HEADQUARTERS**  
 One Canon Plaza, Lake Success, N.Y. 11042, U.S.A.  
**CANON U.S.A., INC. MANHATTAN SERVICE CENTER**  
 600 Third Avenue, New York, N.Y. 10016, U.S.A.  
**CANON U.S.A., INC. ATLANTA BRANCH**  
 6380 Peachtree Industrial Blvd., Norcross, Georgia 30071, U.S.A.  
**CANON U.S.A., INC. CHICAGO BRANCH**  
 140 Industrial Drive, Elmhurst, Illinois 60126, U.S.A.  
**CANON U.S.A., INC. LOS ANGELES BRANCH**  
 123 Paularno Avenue East, Costa Mesa, California 92626, U.S.A.  
**CANON U.S.A., INC. LOS ANGELES SERVICE CENTER**  
 3321 Wilshire Blvd., Los Angeles, California 90010, U.S.A.  
**CANON U.S.A., INC. SAN FRANCISCO OFFICE**  
 776 Market Street, San Francisco, California 94102, U.S.A.  
**CANON U.S.A., INC. HONOLULU OFFICE**  
 Bldg. B-2, 1050 Ala Moana Blvd., Honolulu, Hawaii 96814, U.S.A.
- CANADA** — **CANON CANADA INC. HEADQUARTERS**  
 3245 American Drive, Mississauga, Ontario L4V 1N4, Canada  
**CANON CANADA INC. MONTREAL SERVICE CENTRE**  
 10652 Côte de Liesse, Lachine, Quebec H8T 1A5, Canada  
**CANON CANADA INC. CALGARY OFFICE**  
 2828, 18th Street, N.E. Calgary, Alberta T2E 7K7, Canada  
**CANON CANADA INC. EDMONTON SERVICE CENTRE**  
 5222-86 St. Edmonton, Alberta T6E 5J6, Canada
- EUROPE, AFRICA & MIDDLE EAST** — **CANON EUROPA N.V.**  
 P.O. Box 7907, 1008 AC Amsterdam, The Netherlands  
**CANON FRANCE-PHOTO CINEMA S.A.**  
 30, boulevard Vital-Bouhot, Ile de la Jatte, 92521 Neuilly-sur-Seine, France
- CANON UK LTD.**  
 Units 4 & 5, Brent Trading Centre, North Circular Road, London NW10 0JF, United Kingdom
- CENTRAL & SOUTH AMERICA** — **CANON LATIN AMERICA, INC. DEPTO. DE VENTAS**  
 Apartado 7022, Panamá 5, República de Panamá  
**CANON LATIN AMERICA, INC. CENTRO DE SERVICIO Y REPARACION**  
 Apartado 2019, Zona Libre de Colón, República de Panamá
- SOUTHEAST ASIA** — **CANON HONGKONG TRADING CO., LTD.**  
 Golden Bear Industrial Centre, 7/F., 66-82 Chai Wan Kok Street, Tsuen Wan, New Territories, Kowloon, Hong Kong  
**CANON SINGAPORE PTE. LTD.**  
 Unit 605 Delta House, 2, Alexandra Road, Singapore 0315
- OCEANIA** — **CANON AUSTRALIA PTY. LTD.**  
 22 Lambs Road, Artarmon, N.S.W. 2064, Australia
- JAPAN** — **CANON SALES CO., INC.**  
 11-28, Mita, 3-Chome, Minato-ku, Tokyo 108, Japan

