

# Canon

DESIGNED FOR THE FUTURE

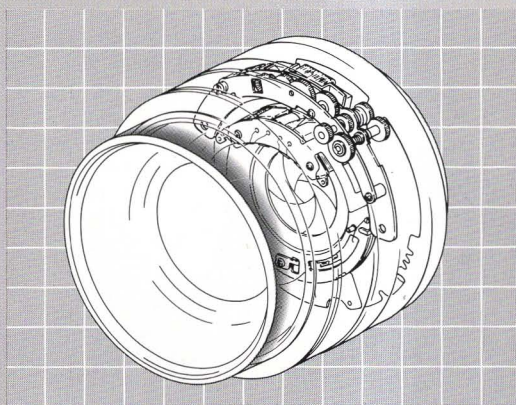
# EOS 620

**ULTRA-FAST AND PRECISE AUTOFOCUS RAISES  
YOUR EXPERTISE TO NEW CREATIVE HEIGHTS.**





# **THE CANON EOS 620 INCREASES YOUR CREATIVE EXPECTATIONS ALONG WITH YOUR CAPACITY TO FULFILL THEM.**



With photographic experience, you're able to discern the differences between technical proficiency and creative expression—and you can appreciate how these qualities influence each other.

It was with this interplay in mind that Canon developed the EOS 620. With features like Canon's lens-integral EOS autofocus system, the EOS 620 is designed to refine your technical proficiency and at the same time free you from technical chores. So you have more power to put to work with less trouble, and more time to fully explore your creative potential.





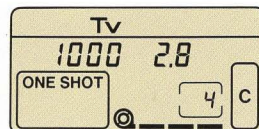


# EOS AUTOFOCUS MEASURES RE





# SPONSE IN FASTER TIMES

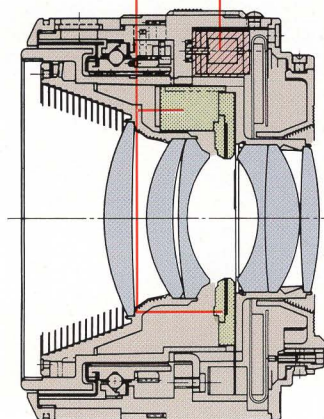


Canon's lens-integral EOS autofocus enhances both your technical expertise and creative capability by being incredibly fast. It does this by positioning the focusing motor in the most suitable place—in the lens. With this lens-integral design, focusing motor power specifications can be matched precisely with lens power requirements. Mounting each motor right where its power is utilized maximizes efficiency so you can make the most of those once-in-a-lifetime moments.

The photo at left clearly illustrates how lightning-quick autofocus can actually "create" photo opportunities. If the photographer had focused manually on this fast-moving subject or had used a slower autofocus system, the opportunity to take this picture would have never existed. EOS autofocus, on the other hand, captured the moment—in every detail—in crisp, clear focus.

Special motor for autofocusing (AFD or USM)

Special motor for aperture control (EMD)



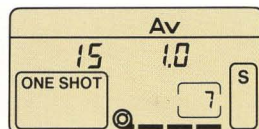
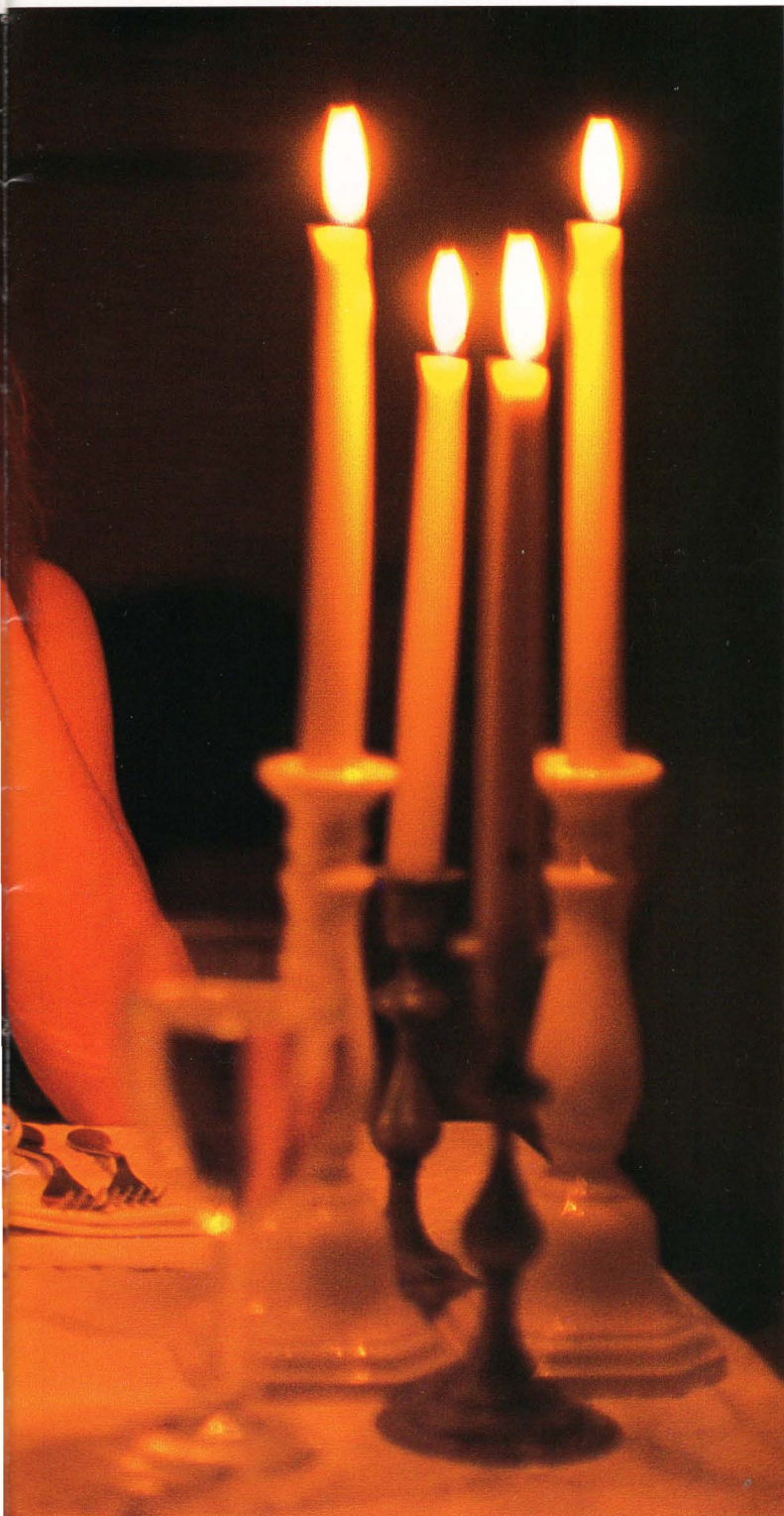


# EOS AUTOFOCUS GAUGES SENSI





# TIVITY IN HIGHER VALUES

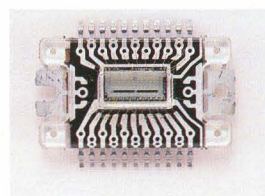


EOS autofocus is a *complete* and *creative* system in that it exhibits high sensitivity and is extremely accurate in addition to being incredibly fast.

EOS autofocus is so sensitive that it delivers high performance in low-light situations rated as low as EV1 (bright area luminance). This high sensitivity was made possible by the development of an innovative sensing device—the Canon BASIS sensor. The BASIS sensor enables the EOS 620 to make better use of a small amount of light signals and *amplifies* all of these signals before processing. Result: greater performance with less light.

The photo shown here demonstrates how technical proficiency can influence creativity. The photographer took advantage of the EOS autofocus system's high sensitivity to render a delicate, natural image in a low-light situation.

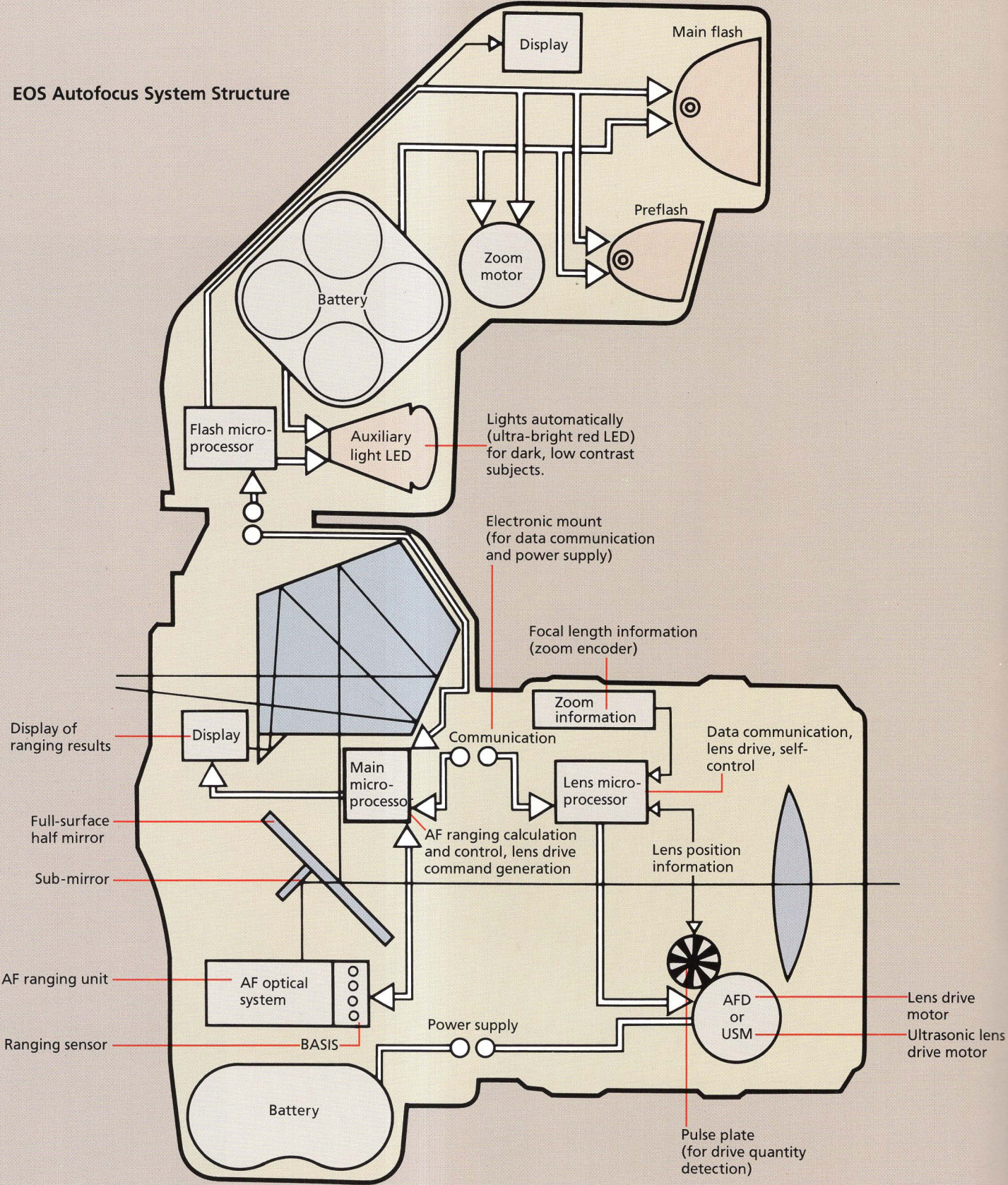
EF 50mm f/1.0 L (Ultrasonic)



BASIS sensor



EOS Autofocus System Structure





# EOS AUTOFOCUS: A TECHNOLOGICALLY SUPERIOR SYSTEM

Canon's sophisticated, new-technology developments for the lens-integral EOS autofocus system represent nothing less than the future direction of camera development. These breakthroughs produced four major lens components that make the EOS autofocus system a reality: a totally new, *fully electronic* lens mount, and three revolutionary mechanisms that handle focus and aperture control. These components make autofocus fast, precise and quiet, and make it possible to maintain the conventional round, cylindrical lens shape associated with SLR lenses (something other manufacturers claimed was impossible with a lens-integral autofocus system).

## ELECTRO-FOCUS LENS MOUNT

Canon's precision-machined Electro-Focus (EF) lens mount employs no mechanical connections whatsoever between the camera body and the lens. Gold-plated electronic contacts transmit data between the EOS 620's central computer and the lens computer, which electronically issues autofocus and aperture control commands. The new EF mount is designed to accommodate both today's state-of-the-art EOS lenses as well as anticipated advances in optical and electronic technology. In fact, the EF mount has already yielded new results by making possible Canon's incredibly fast, professional EF 50 mm f/1.0 L lens—an exciting innovation that delivers outstanding image quality.

## ARC FORM DRIVE

This special component, which provides electronic lens control within the typical cylindrical lens shape, is the main mechanism for autofocus adjustment. It employs a small-diameter rotor for extremely fast start-up/stopping response and exceptional control properties. Use of a brushless motor, which generates high torque despite its small size, ensures high reliability.

## ULTRASONIC MOTOR

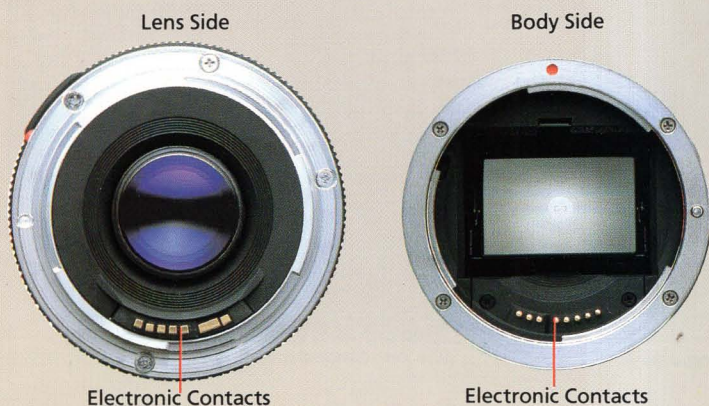
Canon's ultrasonic motor is similar to the Arc Form Drive in that it is utilized for autofocus drive and control in selected EOS lenses. This mechanism incorporates a ring-shaped motor that leaves the traditional round lens shape unchanged. Greater compactness and operational simplicity were realized by using a low rotation speed and high torque, thereby eliminating the need for a braking unit. Operation is virtually noiseless, so autofocus operation doesn't intrude on your environment.

## ELECTRO-MAGNETIC DIAPHRAGM

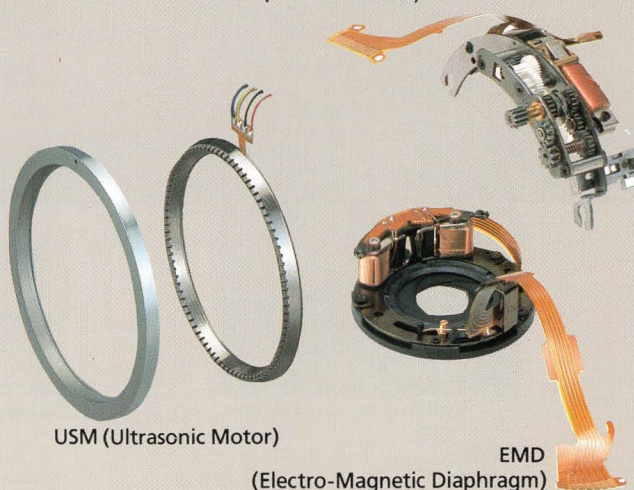
The Electro-Magnetic Diaphragm performs the EOS 620's unique one-touch depth-of-field check function. And, like other lens components, it is designed to permit electronic control while still maintaining the conventional SLR lens shape. Very fast start-up/stopping response and control stem from the employment of a special, small-diameter rotor. In addition, a relatively small number of mechanism parts reduces mounting space requirements and increases reliability and service life.

### PRECISE LENS AND APERTURE CONTROL

#### FULLY ELECTRONIC MOUNT AND DATA TRANSFER

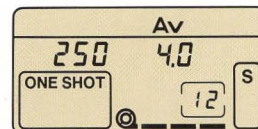


#### AFD (Arc Form Drive)





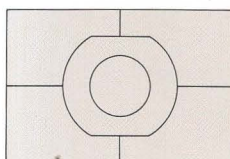
# TWO METERING SYSTEMS MAK



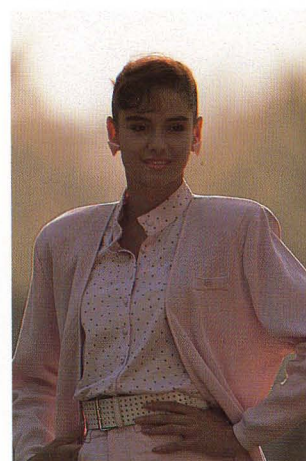
## FACTOR-SIX LIGHT ANALYSIS (Evaluative Metering)

The EOS 620's Factor-Six Light Analysis function gives you correct exposure on the main subject in backlit situations without exposure compensation. It does this by evaluating ambient lighting conditions, subject size and subject pattern. In this mode, light is measured separately in six zones, producing a more accurate rendition of your subject — another example of refining your technical expertise and eliminating disappointing results.

As the photo here shows, Factor-Six Light Analysis ensures correct exposure in backlit scenes without using exposure compensation. Without Factor-Six Light Analysis, the subject appears in a shadow.



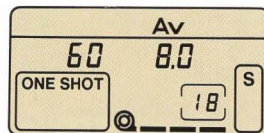
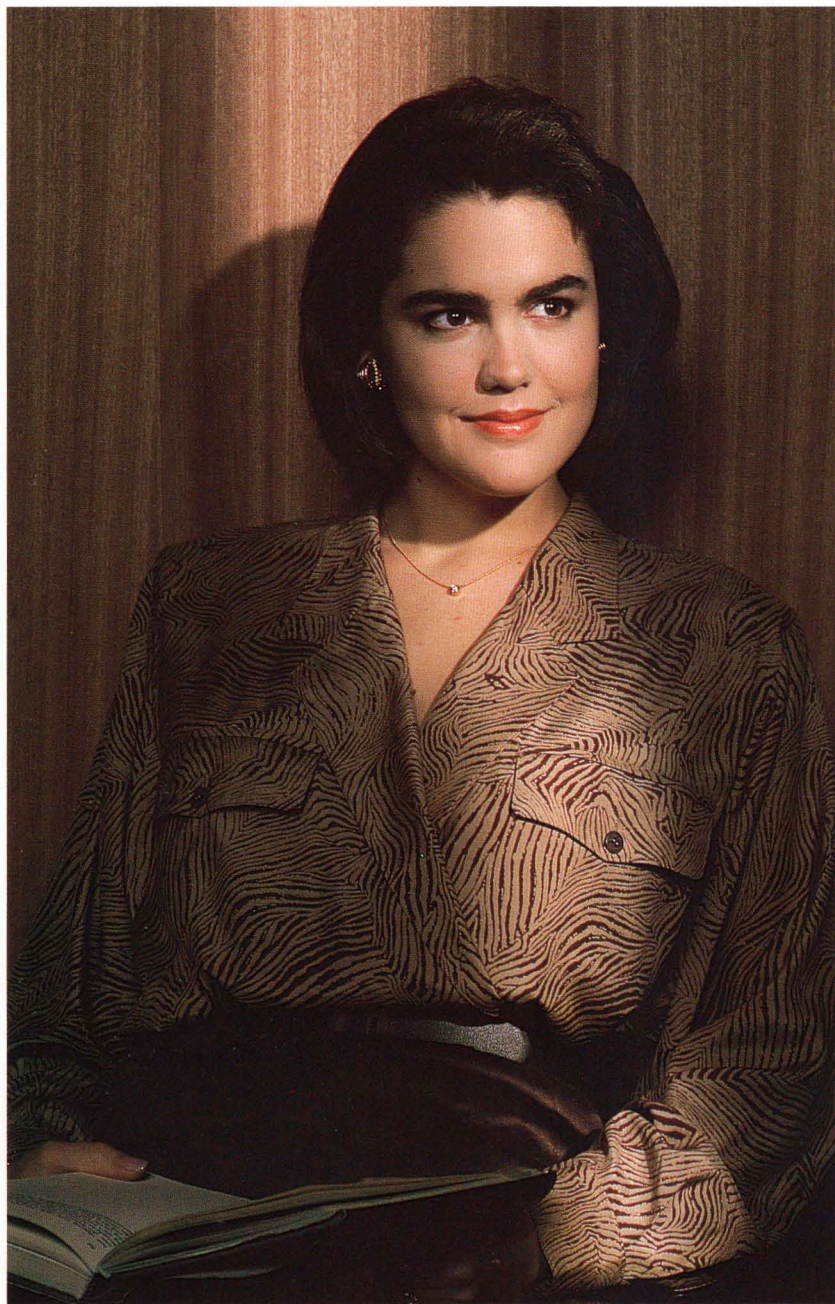
Six metering zones



With conventional metering



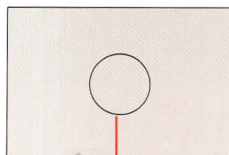
# E LIGHT WORK FOR YOU



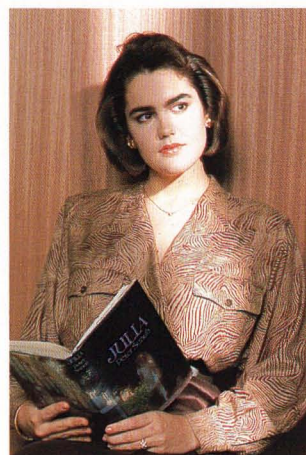
## PARTIAL METERING

Partial metering can be used to exaggerate the contrast between your subject and the rest of the scene, or to obtain correct subject exposure when you have a particularly light or dark background. It does this by restricting light measurement to that on your subject (about 6.5% of the viewfinder screen).

For example, with the photo at left, the photographer used partial metering to ensure a natural skin tone for the subject, who was surrounded by a very dark background. With conventional metering, skin color looks washed out.



Partial metering mark



With conventional metering



# ULTRA-FAST SHUTTER & DRIVE





# MEET ACTION HEAD ON



## MAXIMUM 1/4000-SECOND SHUTTER SPEED

In the realm of high-speed photography, the EOS 620 ranks well above most other SLR cameras. A maximum shutter speed of 1/4000th of a second is just what you need to freeze the fastest action without blur.

## BUILT-IN THREE-FRAMES-PER-SECOND MOTOR DRIVE

Motor drive is an invaluable feature for sports and action photography. Without it, you can be left behind when the action breaks without warning. That's why Canon gave the EOS 620 a *built-in* motor drive system. Unlike typical add-on units, this integrated system is exceptionally compact and lightweight—it won't load you down, so you can take maximum advantage of its three-frames-per-second shooting speed when shooting continuous action photos.

## CHOOSE FROM TWO DRIVE MODES

There are two drive modes to choose from depending on your shooting needs. Single frame advances the film one frame at a time, while the continuous mode advances the film continuously at about three frames/sec. for shooting action sequences.

## LONG-LIFE LITHIUM BATTERY

Power for all camera functions is provided by a compact, high-performance lithium battery, which is thoughtfully housed in the camera grip. It reduces the need for frequent battery replacement and also maximizes performance in low temperatures.



Long-Life Lithium Battery





# EOS LENSES POWER TRADITION

## LEADING-EDGE CANON QUALITY

The EOS lens lineup is composed of 13 high-performance lenses, each of which reflects Canon's precision craftsmanship and long association with professional photographers. Four of these lenses are large aperture "L" types with glass-molded aspherical elements, ultra-low dispersion (UD) glass and fluorite, all of which contribute to superb color balance, high contrast and resolution, and flare-free images.

True to Canon's total system approach, there's an EOS lens to meet every need. EOS wide-angle lenses are ideal for landscapes, while telephoto lenses take you in for a tighter shot. All EOS zoom lenses have macro capability, so you can zero in for outstanding close-ups. There's even a large aperture 50mm f/1.0L lens—a true innovation that you won't find in any other SLR autofocus lens lineup.

## INTELLIGENT PROGRAM AE WITH PROGRAM SHIFT FUNCTION

The EOS 620 "reads" the special information—including maximum and minimum aperture, lens focal length and so on—stored in the four-bit microprocessor in each lens, then selects the ideal program line to ensure correct exposure.

When the automatically set shutter speed is too slow for hand-held photography (0 to 0.5 steps below 1/lens focal length), the camera-shake warning sounds; this is because the shutter speed of 1/lens focal length is generally recognized to be the limit for hand-held shooting.

In addition, the EOS 620 lets you change automatically set shutter speed/aperture combinations in the program AE mode when you need a specific shutter speed or aperture while shooting in the program AE mode. The camera

automatically switches to the shutter-priority AE or aperture-priority AE mode through simple operation of the electronic input dial.

## TECHNOLOGY FOR TODAY AND TOMORROW

Apart from being the most advanced autofocus lens lineup around, EOS lenses have another big attraction—adaptability to the future. With electronic focusing and control mechanisms already built in, EOS lenses are geared for future developments.

Lens	Focus Drive		Angle of View	Construction	Minimum Aperture	Closest Focusing Distance		Filter Size (mm)	Length		Weight	
	AFD	USM				(m)	(ft.)		(mm)	(in.)	(g)	(oz.)
Fish-eye EF 15mm f/2.8	●		180°	7-8	22	0.2	0.7	Filter Holder	62.2	2-7/16	360	12-11/16
EF 28mm f/2.8	●		75°	5-5	22	0.3	1	52	42.5	1-5/8	185	6-1/2
EF 50mm f/1.0 L* (Ultrasonic)		●	46°	9-11	16	0.6	2	72	80.0	3-1/8	960	33-7/8
EF 50mm f/1.8	●		46°	5-6	22	0.45	1.5	52	42.5	1-5/8	190	6-11/16
Softfocus EF 135mm f/2.8*	●		18°	6-7	32	1.3	4.5	52	98.7	3-7/8	410	14-7/16
EF 300mm f/2.8 L* (Ultrasonic)		●	8°15'	7-9	32	10	3	48	243.0	9-9/16	2,850	100-9/16
EF 28-70mm f/3.5-4.5*	●		75°-34°	9-10	22-29	0.5	1.75	52	74.8	2-15/16	300	10-9/16
EF 28-80mm f/2.8-4.0 L* (Ultrasonic)		●	75°-30°	12-16	22-32	0.75	2.5	72	122.0	4-13/16	940	33-3/16
EF 35-70mm f/3.5-4.5	●		63°-34°	8-9	22-29	0.5	1.75	52	63.0	2-1/2	245	8-5/8
EF 35-105mm f/3.5-4.5	●		63°-23°30'	11-14	22-29	1.2	4	58	81.9	3-1/4	400	14-1/8
EF 70-210mm f/4.0	●		34°-11°45'	8-11	32	1.5	5	58	137.6	5-7/16	650	23
EF 100-300mm f/5.6*	●		24°-8°15'	9-15	32	2	7	58	166.8	6-9/16	720	25-3/8
EF 100-300mm f/5.6 L*	●		24°-8°15'	10-15	32	2	7	58	166.6	6-9/16	720	25-3/8
Extender EF 2X*	—	—	—	5-7	—	—	—	—	50.5	2	290	10-1/4

- Extender EF 2X is for exclusive use with EF 300mm f/2.8 L.
- All EF zoom lenses have a built-in macro mechanism.
- Asterisk (\*) indicates products that will be available soon.



# INTO THE FUTURE



Fish-eye EF 15mm f/2.8



EF 28mm f/2.8



EF 50mm f/1.8



EF 50mm f/1.0 L (Ultrasonic)



EF 28-70mm f/3.5-4.5



EF 28-80mm f/2.8-4.0 L (Ultrasonic)



Softfocus EF 135mm f/2.8



EF 35-70mm f/3.5-4.5



EF 35-105mm f/3.5-4.5



EF 100-300mm f/5.6



EF 70-210mm f/4.0



EF 100-300mm f/5.6 L



EF 300mm f/2.8 L (Ultrasonic)



Extender EF 2X







# TECHNICAL FEATURES AND MAIN FUNCTIONS

## MAIN CONTROL SYSTEM

A one-chip, eight-bit microprocessor channels all information during camera operation. Data processing speed is comparable to that of a 16-bit microprocessor.

Each lens mounts a four-bit microprocessor, which stores information reflecting unique lens characteristics.

## AUTOFOCUS SYSTEM

Fully electronic body-lens interface—autofocusing is controlled through self-contained components.

Lens-integral autofocus drive system with TTL-SIR phase detection.

Three special lens motors.

- AFD and USM for focus drive and control (each lens employs only one of these).
- EMD for aperture drive and control.

“BASIS” high-performance sensor for enhanced system sensitivity.

One-touch depth-of-field check.

## AUTOFOCUS LENS SYSTEM

Thirteen interchangeable lenses plus an extender.

- High performance and compact size.

Large aperture 50mm f/1.0L lens and 300mm f/2.8L lens with “focus preset”.

- Greater image quality and shooting possibilities.

## EXPOSURE CONTROL SYSTEM

Newly developed multi-zone metering sensor.

Metering evaluation algorithm.

- Produces good results in difficult lighting conditions.

AE control makes active use of lens information.

- Intelligent program AE with program shift function.
- Camera-shake warning.

## DATA INPUT AND DISPLAY SYSTEM

Large, bright and clear LCD display.

Uniform display panel illumination with electro-luminescence makes reading information easy in the dark.

## VIEWFINDER

New laser-matte screen for increased viewfinder brightness.



# EXPOSURE CONTROL TO SUIT E



## SHUTTER-PRIORITY AE

Select shutter-priority AE when you require total control over shutter speed. With the EOS 620, you can set the shutter speed in half-steps anywhere from 1/4000 to 30 seconds. The camera will set the aperture value automatically for correct exposure.

Of course, a high shutter speed will freeze fast action for you, while a slower one will give you a "flowing" effect. In the photo example shown here, the photographer chose a slower shutter speed and "panned" with the subject, thereby freezing the subject in mid-action and blurring the background.

## APERTURE-PRIORITY AE

This is the exposure mode to choose when you require optimum control over the aperture value, which determines your "zone of focus". Once you've set the aperture value, the camera will automatically select a shutter speed to ensure correct exposure.

Remember that a large aperture will produce a shallow zone of focus, while a small one will provide a deep focus zone. In the photo here, the photographer utilized a small aperture to ensure crisp focus from foreground to background.





# VERY SITUATION



## MANUAL OVERRIDE

Manual exposure offers you the maximum amount of creative control possible, because you select both shutter speed and aperture value in accordance with the creative effect you want to achieve.

In the photo here, the photographer chose a shutter speed/aperture combination to emphasize the moody atmosphere of dawn.



+1.0 step of compensation applied



No compensation applied



-1.0 step of compensation applied

## AUTO EXPOSURE BRACKETING

Use auto exposure bracketing when you want a choice of different exposures of the same scene. You can intentionally vary exposure up to plus or minus five steps in half-step increments.



## MULTIPLE EXPOSURE

The EOS 620 is designed to let you shoot two or more exposures on a single frame without complicated film transport manipulation. To shoot a creative multiple exposure, like the photo above, simply instruct the EOS 620 to take anywhere from two to nine exposures on the same frame.



# HELPFUL INFO WHERE AND WH

## ISO FILM SPEED/SHUTTER SPEED

During film load, DX-coded film speed is automatically set and displayed here while the film advances to the first usable frame. During shooting, the shutter speed is displayed here.

## SHOOTING MODES

You can choose between three AE modes and manual override. P: Program AE (the camera sets both the shutter speed and the aperture value for you). TV: Shutter-priority AE (you set the shutter speed, and the camera automatically sets the aperture value). AV: Aperture-priority AE (you set the aperture value, and the camera automatically sets the shutter speed). M: Manual (you set both the shutter speed and the aperture value).


## APERTURE VALUE

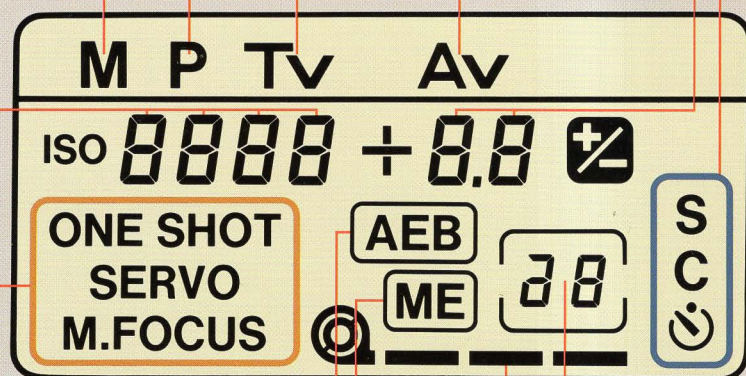
During camera operation, the aperture value is displayed here.

## EXPOSURE COMPENSATION/AUTO EXPOSURE BRACKETING

A level of exposure compensation or auto exposure bracketing (up to plus or minus five steps) is displayed here.

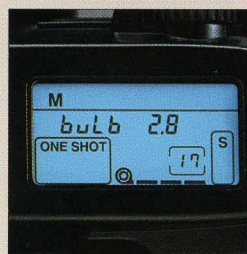
## FILM WINDING MODE

The film winding mode is displayed within this frame. S: Single frame advance (the film is advanced one frame). C: Continuous frame advance (the film is advanced continuously at a maximum speed of three frames per second).  : Self-timer (indicates that the self-timer function is engaged).



## ELECTRONIC INPUT DIAL

This dial sets the following functions: shooting mode, film winding mode, shutter speed, aperture value, exposure compensation, and manual-set ISO film speed.



## EL (ELECTRO-LUMINESCENCE) ILLUMINATION

The display panel illumination button activates a soft blue glow that makes the LCD panel clearly visible, even in total darkness.

## AF MODE

During camera operation, the focusing mode is displayed within this frame. ONE SHOT: focus locks once focus has been achieved. SERVO: focus adjusts continuously as you follow the subject; the shutter releases regardless of AF completion. M. FOCUS: you manually adjust focus.

## MULTIPLE EXPOSURE INDICATOR

Illuminates when the multiple exposure function is engaged.

## AUTO EXPOSURE BRACKETING

Illuminates when the auto exposure bracketing function is engaged.

## FILM TRANSPORT INDICATOR/BATTERY CHECK INDICATOR

Moves in sequence when you load the film and close the back cover to verify correct film loading. Bars also indicate current power supply when the battery check button is pressed.

## FRAME COUNTER

The number displayed indicates the next frame on the roll.



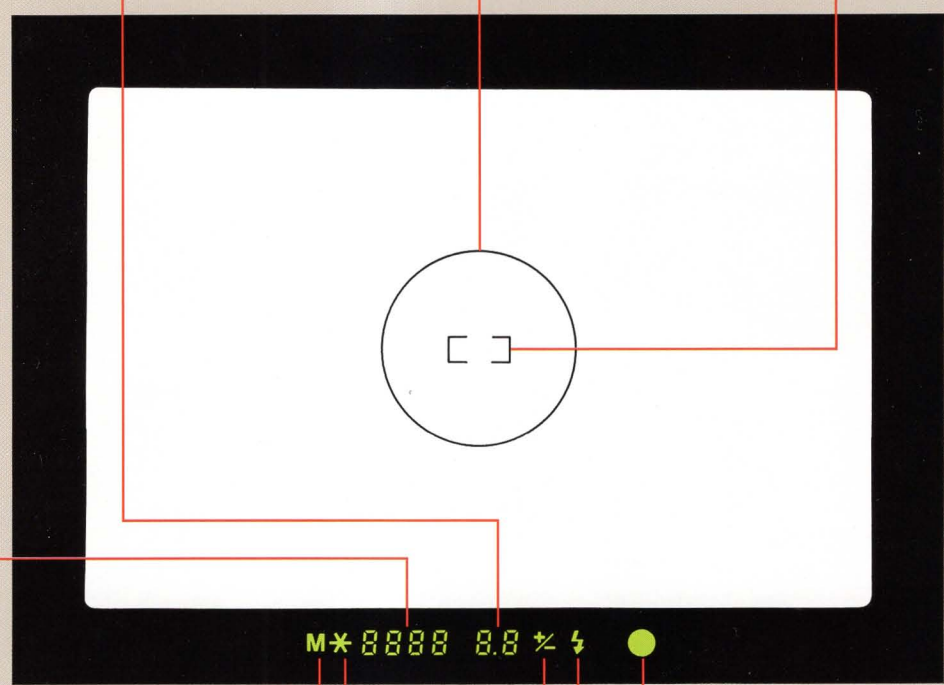
# EN YOU NEED IT

**SHUTTER SPEED**  
Shutter speed is indicated here during camera operation.

**APERTURE VALUE**  
The aperture value is displayed here during camera operation.

**PARTIAL METERING MARK**  
Center this mark on your subject when using the partial metering mode.

**AUTOFOCUS FRAME**  
Center this frame on your subject while pressing the shutter button halfway to focus.



**MANUAL EXPOSURE INDICATOR**  
Illuminates when the camera is in the manual exposure mode.

**PARTIAL METERING INDICATOR**  
Illuminates when the partial metering button is pressed.

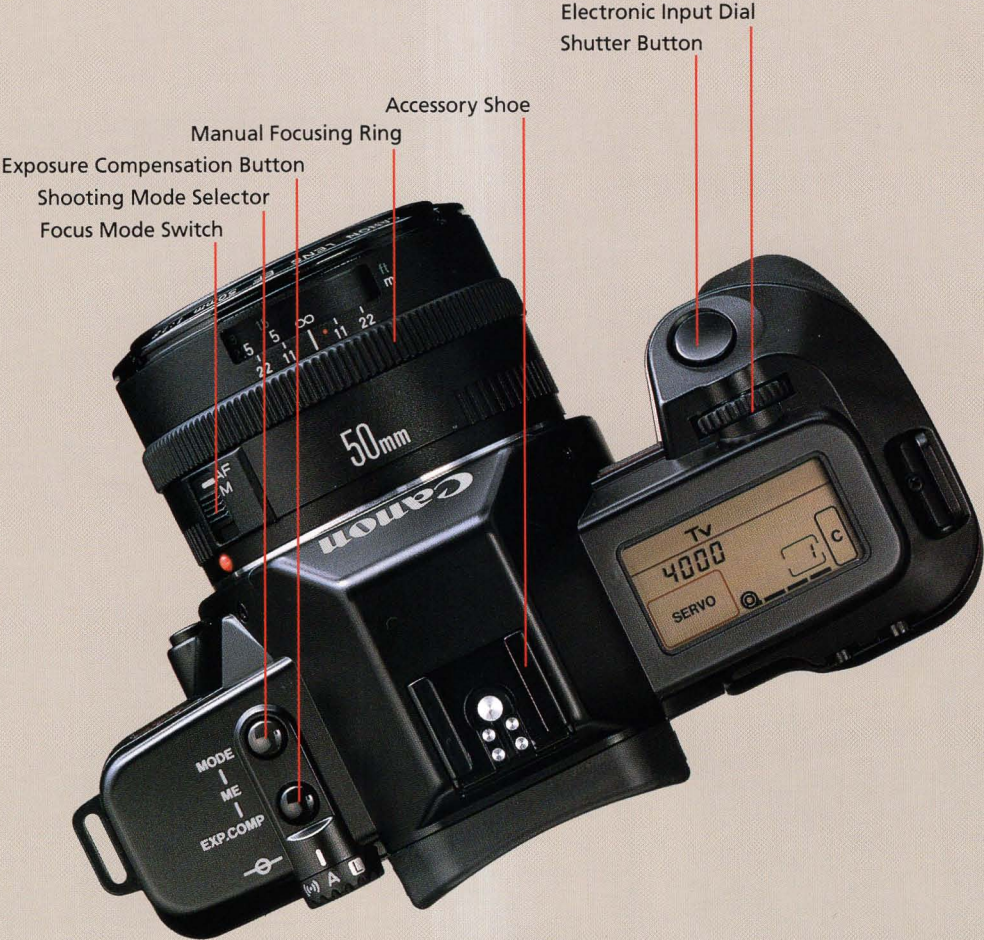
**EXPOSURE COMPENSATION**  
This symbol indicates the camera is in exposure compensation status.

**FLASH CHARGE COMPLETION**  
When illuminated, this symbol indicates that the flash charge has been completed.

**AF IN-FOCUS INDICATOR**  
When this dot illuminates continuously, it indicates that correct focus has been achieved. When it blinks on and off, correct focus can not be achieved.

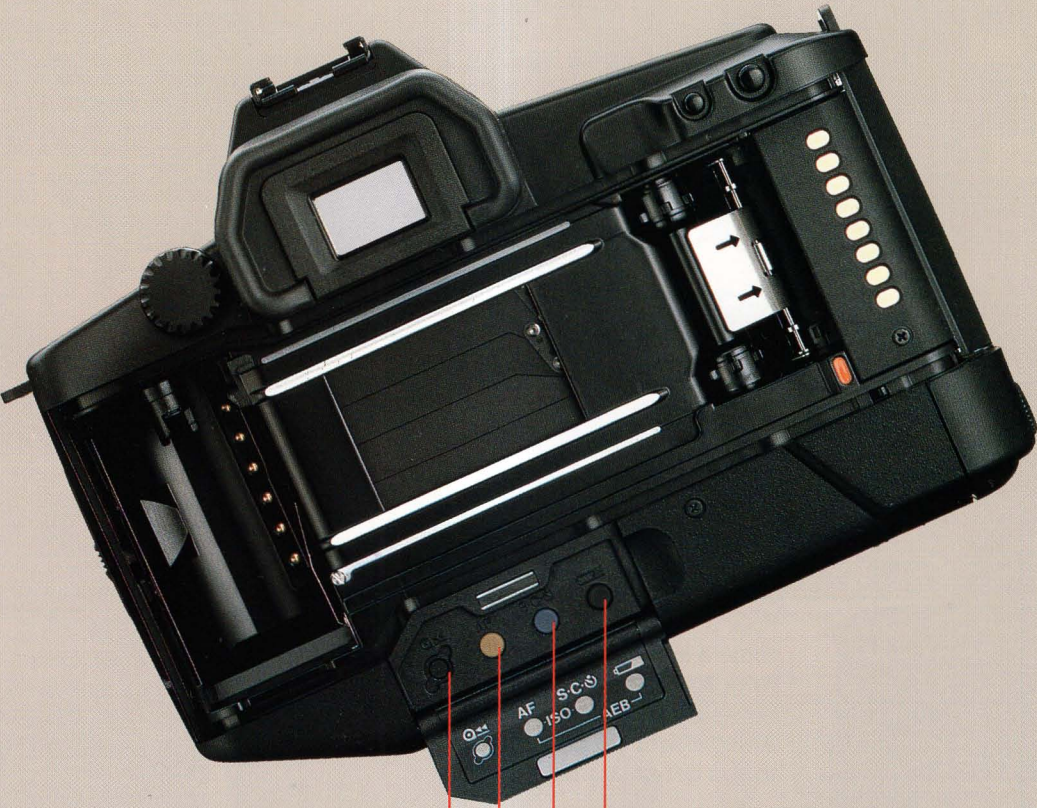
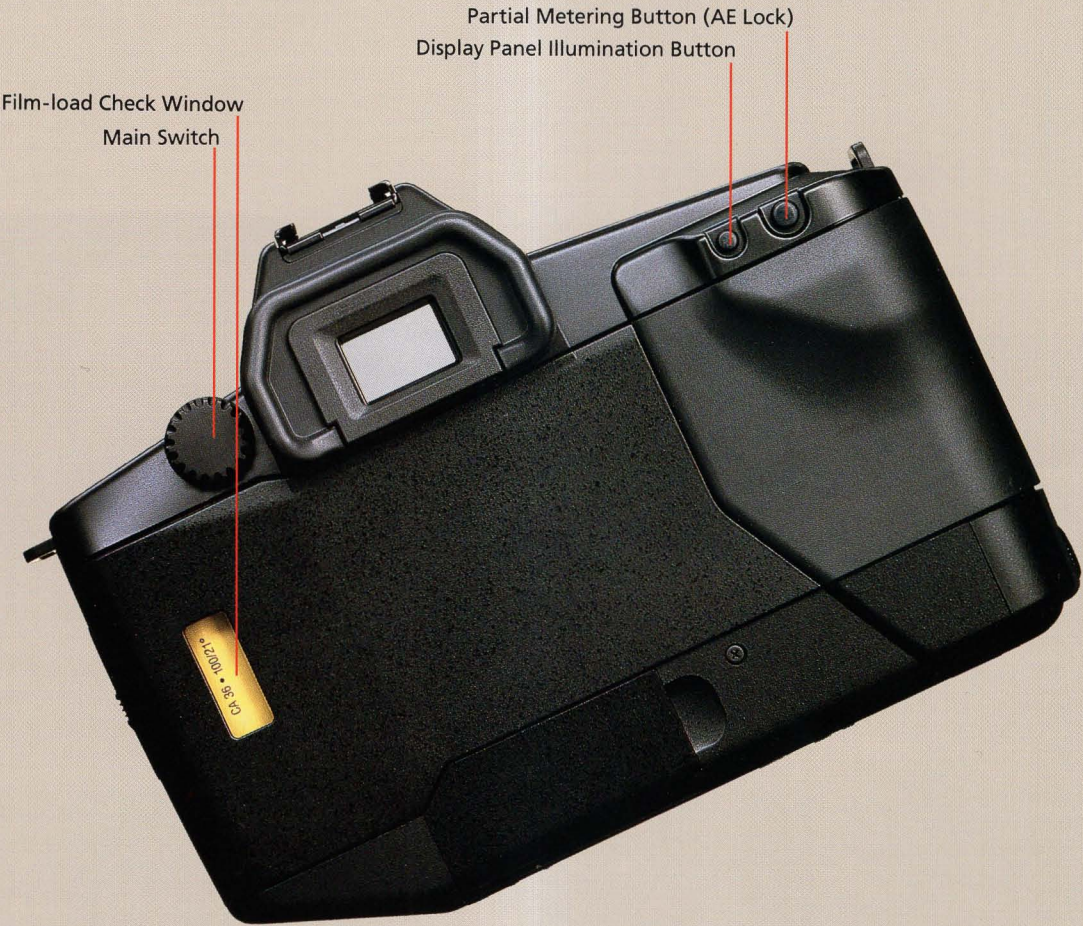


# FEWER CONTROLS LET YOU ACC





# OMPLISH MORE



Battery Check Button  
Film Winding Mode Selector  
AF Mode Selector  
Film Rewind Button (Mid-Roll Rewind)



# A FLASH OF INSPIRATION FOR

Specially designed for use with the EOS 620, multi-function Canon Speedlites 420EZ and 300EZ feature a built-in autofocus auxiliary light function that lets you utilize EOS autofocus in dark situations—or even at night. Flash recycling time is incredibly fast thanks to the newly developed “rapid-fire” system, which recharges the flash in about 1.5 seconds with the 420EZ and about 1 second with the 300EZ. With no delays, you’re always ready for that extra-special shot. The flash element itself is driven by an internal unit; as a result, no manual zoom operation is required to adjust the flash coverage angle. (Zoom coverage is 24—80mm with the 420EZ, and 28—70mm with the 300EZ.) The guide number for the 420EZ is 35 (ISO 100•m)/116 (ISO 100•ft.), and that for the 300EZ is 28 (ISO 100•m)/93 (ISO 100•ft.).



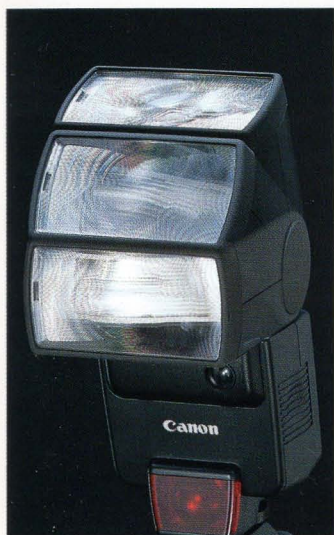
## A-TTL AUTOMATIC FLASH

A-TTL (Advanced TTL) automatic flash balances both subject and background exposure to assure good results—at any hour of the day or night. The EOS 620 camera and the 420EZ/300EZ flash unit work together to calculate the conditions for each shot. Flash exposure and ambient light are balanced accordingly, so you get great results every time.

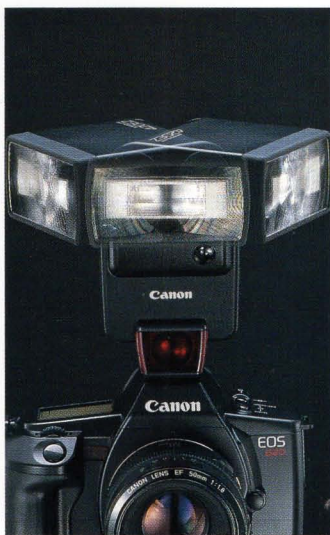




# EVERY WAKING HOUR

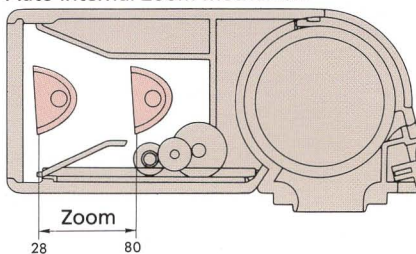


420EZ's swivel flash head



EL (Electro-Luminescence) Illumination

Auto Internal Zoom Mechanism





### **MAXIMUM 1/250-SECOND SYNC SPEED**

With the 420EZ or 300EZ attached, the EOS 620's shutter speed can be manually or automatically set anywhere from 1/250 to 30 seconds—meaning you have greater control over your subject and lighting when it comes to flash photography. With the maximum 1/250th of a second sync speed, you get more natural color and lighting.

### **SECOND-CURTAIN SYNCHRONIZATION**

Both the 420EZ and 300EZ can synchronize the flash discharge either for the first shutter curtain opening or just before the second curtain begins running. Second-curtain flash synchronization is most effective when used with slower shutter speeds, and makes obtaining truly creative flash effects exceptionally easy.

### **BOUNCE FLASH CAPABILITY**

The 420EZ's swivel flash head can be adjusted so that it's not pointed directly at your subject. This allows you to "bounce" the flash for a softer flash effect.

### **RAPID-FIRE FLASH**

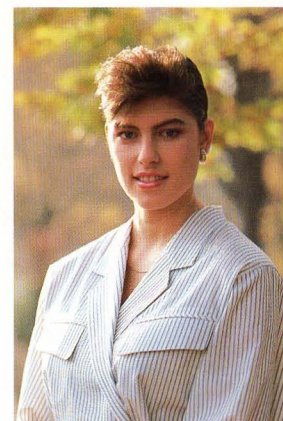
In the low-power setting, both the 420EZ and 300EZ recharge extra-fast, so you can take better advantage of the built-in motor drive in flash photo situations.

### **STROBOSCOPIC FLASH**

A special function on the 420EZ lets you set the flash rate from one to five times per second. This means you can take multiple exposure photos that "break down" subject action into a number of separate parts.



Fill-in flash



Without fill-in flash





Slow-sync flash



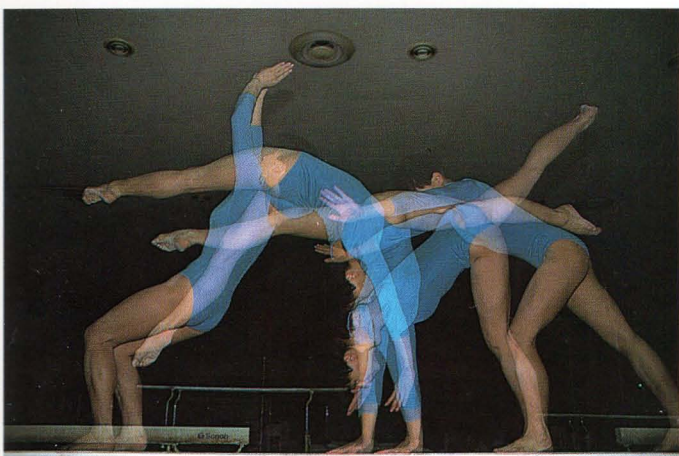
Conventional flash



Second-curtain sync flash



First-curtain sync flash (The flow of light is unnatural for the subject's movement.)



Stroboscopic flash



# SPECIAL ACCESSORIES FOR YOU

## QUARTZ DATE BACK E

This easy-to-interchange back enables simple data recording. There are five modes to choose from.

- Auto date (month/day/year, day/month/year or year/month/day)
- Day/hour/minute
- Arbitrary six-digit number
- Frame counter number
- Off

The calendar is programmed from 1987 up through the year 2029, and clock precision is within  $\pm 30$  seconds a month. The Quartz Date Back E also offers a film loading date check function, which you can use to confirm the date the film was loaded. A press of a button is all it takes.



Quartz Date Back E

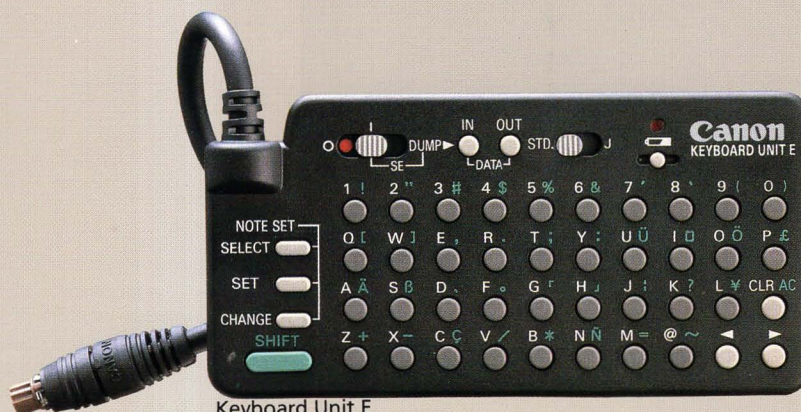
## TECHNICAL BACK E

The Canon Technical Back E is a super, multi-function back that can be used to work with all kinds of technical data. In addition to imprinting data and arbitrary comments (up to 30 digits) on the film, it can also memorize shooting data such as shutter speed, aperture value, lens focal length and film speed. With the accessory Interface Unit TB, you can connect the Technical Back E to a personal computer and issue commands to your EOS 620 via the personal computer's keyboard. Another accessory, Keyboard Unit E, imprints comments on the film in English, French, German and Spanish.

Note: Interface Unit TB is sold in both MSX and IBM-compatible types; product availability may vary from area to area.



Technical Back E



Keyboard Unit E



# R EOS 620

## INTERCHANGEABLE FOCUSING SCREENS

The EOS 620 comes with the overall New Laser-Matte/AF Frame screen as standard equipment. Depending on specific focusing needs, you can interchange the focusing screen with any of six different focusing screens optionally available.

## INTERCHANGEABLE GRIPS

In addition to the standard EOS 620 grip (GR20 with remote control terminal), Canon makes two additional grips optionally available to meet different hand-sizes and application requirements.

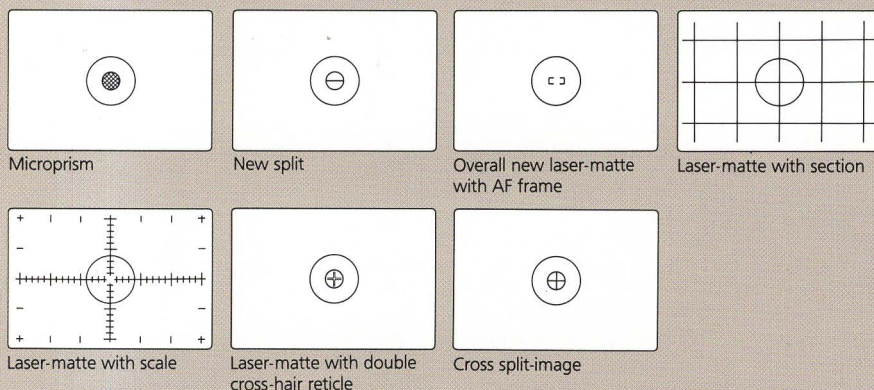
## DIOPTRIC ADJUSTMENT LENSES

Ten eyesight correction lenses are optionally available in powers of +3, +2, +1.5, +1, +0.5, 0, -0.5, -2, -3 and -4 diopters. These correction lenses make viewing and focusing easier if you are near or farsighted.

## CIRCULAR POLARIZING FILTERS (PL-C)

Autofocus photography is possible with Canon's special screw-in circular polarizing filters. Three thread diameters are available: 52 mm, 58 mm and 72 mm.

### Interchangeable focusing screens



Interchangeable grip



Circular polarizing filters



# SPECIFICATIONS

## EOS 620 CAMERA

### Type:

35 mm autofocus, single-lens reflex camera with electronically controlled automatic exposure, focal plane shutter, and built-in motor drive.

### Format:

24 × 36 mm

### Usable Lenses:

Canon EF lenses (full aperture metering only)

### Standard Lens:

EF 50 mm f/1.8

### Lens Mount:

Canon EF Mount (electronic signal transfer system)

### Viewfinder:

Fixed eye-level pentaprism. Gives 94% vertical and horizontal coverage of actual picture area, and 0.8X magnification at infinity with a standard 50 mm lens.

### Dioptric Adjustment:

Built-in eyepiece is adjusted to standard — 1 diopter (eyepoint: 19.3 mm).

### Focusing Screen:

New laser-matte with AF frame. Six interchangeable screen types are available optionally.

### Mirror:

Quick-return half-mirror with shock and noise absorber.

### Viewfinder Information:

Displayed at the bottom of the viewing area

(1) Seven-segment LCD digit and character display

- Shutter speed—flashes at 2 Hz to give out-of-metering range warning
- Aperture value—flashes at 2 Hz to give out-of-metering range warning
- Metered manual exposure level (OP, oo, CL)

(2) LCD mask character display

- \* —AE lock indicator in partial metering mode
- M—manual exposure indicator
- 1/2 —flash charge completion indicator
- +/— —exposure compensation indicator
- ● —AF in-focus indicator (flashes at 8 Hz when AF is not possible)

### Light Metering System:

TTL full aperture metering using SPC. Two selectable metering patterns: evaluative metering and partial metering (approximately 6.5% of the picture area). Stopped-down metering is not possible.

### Exposure Modes:

- Shutter-priority AE
- Aperture-priority AE
- Intelligent program AE with shift function
- Manual
- Flash AE (A-TTL program flash AE and TTL program flash AE with specified Canon Speedlites)

### Camera-Shake Warning:

Operates for program AE and aperture-priority AE modes. When automatically set shutter speed falls 0 to 0.5 steps below 1/focal length of the lens in use, the electronic beeper sounds. Beeper can also be turned on and off.

### Metering Coupling Range:

EV 1—20 (EV — 1 to 20 in normal temperatures) with 50 mm f/1.4 at ISO 100 or equivalent.

### Film Speed:

ISO 25—5000 is automatically set in 1/3-step increments according to DX code standard. ISO 6—6400 can also be set manually.

### Exposure Compensation:

± 5 steps in 1/2-step increments

### Automatic Exposure Bracketing:

± 5 steps in 1/2-step increments. Three continuous exposures are automatically taken in sequence of underexposure, correct exposure and overexposure.

### AF Control System:

TTL-SIR (TTL secondary imaged, registration) phase-detection type using BASIS (base stored image sensor). AF operation starts when the shutter button is pressed halfway. AF in-focus indicator lights upon ranging completion. Audible indicator (electronic beeper) can be turned on and off.

### Three Selectable Modes:

- ONE SHOT: AF operation ends and focus is locked once ranging is completed. Shutter does not release until ranging is completed.
- SERVO: Focus continuously adjusts to follow subject movement. Shutter can be released at any time regardless of ranging completion.
- Manual: By rotating the manual focusing ring after focus mode switch is set to "M".

### AF Working Range:

EV 1—18 at ISO 100

### AF Auxiliary Light:

The ultra-bright red LED (peak sensitivity: 700 nm) is automatically projected with specified Canon Speedlites.

### Shutter:

Vertical-travel focal plane shutter with soft-touch electromagnetic release. All speeds electronically controlled. Curtain speed is 3.3 msec/24 mm.

### Shutter Speed:

1/4000—30 seconds and bulb. Can be set in 1/2 steps. X-sync is 1/250 second.

### Self-Timer:

Electronically controlled with a delay of approximately 10 seconds; indicated by blinking LED operation confirmation lamp.

### Film Loading:

After film positioning and back cover closure, the film automatically advances to the first usable frame and then stops (approximately 1.5 seconds).

### Film Wind:

Automatic using a built-in miniature motor. Confirmation indicated by the film transport bar marks in the display panel.

### Film Winding Mode:

Two selectable modes: S (single exposure) and C (continuous exposure at the maximum speed of approx. three frames per second).

### Film Rewind:

Automatic using the built-in miniature motor. Starts when film end is reached and then stops (approximately seven seconds with 24-exposure film). Mid-roll rewind performed by pressing the film rewind button.

### Flash Contact:

Coupled directly to the camera by X-sync contact on the accessory shoe.

### Automatic Flash (using Speedlite

#### 420EZ/300EZ with the camera set at "P"):

A-TTL flash auto—The correct aperture value is automatically set, using the camera's A-TTL program and the flash's near-infrared preflash. X-sync speed is also automatically set between 1/60 and 1/250 second upon flash charge completion. TTL control system meters the light reflected from the film surface. Automatic fill-in flash is possible.

### Grip:

Interchangeable. Grip GR20 (with remote control terminal) is standard. Grip GR30 (without remote

control terminal) and large-size Grip GR10 are available optionally. Also serves as battery chamber cover.

### Remote Control:

Remote Switch 60T3 is required.

### Multiple Exposure:

Presetting up to nine exposures is possible. Automatically cleared upon completion.

### Depth of Field Check:

By pressing the depth-of-field check button.

### LCD Display Panel:

Displays only the information required at any one time, e.g. shooting mode, film winding mode, AF mode, shutter speed, aperture value, film speed, or battery check. Timer function for eight seconds is provided; the display is held on for eight seconds after the switch (i.e., shutter button) is pressed. Can be illuminated by electro-luminescence.

### Power Source:

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

### Battery Check:

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

### Back Cover:

Interchangeable. Opened by sliding the latch with safety lock. Quartz Date Back E and Technical Back E can be attached.

### Dimensions:

148(W) × 108.3(H) × 67.5(D) mm  
(5-13/16" × 4-1/4" × 2-5/8")

### Weight:

700 g (24-11/16 oz.) body only  
740 g (26-1/8 oz.) with battery pack



SPEEDLIGHT 420EZ

**Type:**  
Energy-saving, automatic, electronic flash unit using A-TTL metering system to measure light reflected from the film surface. Clip-on type with directly coupled contacts. For exclusive use with EOS cameras.

Guide Number Table (at ISO 100):

Zoom position (mm)		24	28	35	50	70	80
Normal flash		25 (83)	27 (90)	30 (100)	35 (116)	40 (133)	42 (140)
Rapid-fire flash		1/2 to 1/16 of that for normal flash					
Manual flash	1/1	25 (83)	27 (90)	30 (100)	35 (116)	40 (133)	42 (140)
	1/2	17.7 (59)	19.1 (63)	21.2 (70)	24.7 (82)	28.3 (94)	29.7 (99)
	1/4	12.5 (41)	13.5 (45)	15 (50)	17.5 (58)	20 (66)	21 (70)
	1/8	8.8 (29)	9.5 (31)	10.6 (35)	12.4 (41)	14.1 (47)	14.8 (49)
	1/16	6.3 (21)	6.8 (22)	7.5 (25)	8.8 (29)	10 (33)	10.5 (35)
	1/32	4.4 (14)	4.8 (16)	5.3 (17)	6.2 (20)	7.1 (23)	7.4 (24)

(The above figures in parentheses indicate the guide numbers in feet at ISO 100.)  
**Flash Coverage Angle:**  
Covers more than the fields of view of 24 mm, 28 mm, 35 mm, 50 mm, 70 mm and 80 mm using auto internal zoom mechanism. Manual switchover possible.  
**Recycling Time:**

	Alkaline	Ni-Cd
Normal flash	approx. 0.2 to 13 secs	approx. 0.2 to 6.5 secs
Rapid-fire flash	approx. 0.2 to 1.5 secs	approx. 0.2 to 1.5 secs

Based on the interval between flash firing and pilot lamp relighting with new alkaline or fully charged Ni-Cd batteries. (Figures on the left in each column show recycling time for A-TTL mode, and on the right for Manual 1/1 mode.)

Number of Flashes:

	Alkaline	Ni-Cd
Normal flash	approx. 100 to 2000	approx. 45 to 300

Based on flash firing at 30 sec intervals with new alkaline or fully charged Ni-Cd batteries. (The figures on the left in each column show flashes for Manual 1/1 mode, and on the right for A-TTL mode.)

Flash Duration:

1.5 msec or less

X-sync Shutter Speed:

	EOS 620	Setting
P	1/60-1/250 sec	Automatic
TV	30-1/250 sec	Manual
Av	30-1/250 sec	Automatic
M	30-1/250 sec	Manual

Flash Control System:

TTL series control system with preflash function.

Flash Exposure Level Control:

A maximum of 1.5 BV steps in the A-TTL mode when subject brightness is more than BV5 according to the camera's metering system.

Film Speed Setting:

Automatically set by the camera.

Automatic Shooting Distance Range:

A-TTL normal flash	approx. 0.7 to 21 m (2.3 to 68.8 ft.)
A-TTL rapid-fire flash (min.)	approx. 0.7 to 5 m (2.3 to 16.4 ft.)
A-TTL rapid-fire flash (max.)	approx. 0.7 to 16 m (2.3 to 52.4 ft.)

Based on EF 50 mm f/1.8 lens at ISO 100.  
(The automatic shooting distance range extends according to film speed.)

Out-of-Coupling Range Warning:

If subject is too far away, the shutter speed and the aperture value blink in the viewfinder at the first stroke of the shutter button. If subject is too close, the distance display blinks.

Bounce Angle:

Upward—0-90° (click-stop positions at 0, 60, 75, 90)  
Left—0-180° (click-stop positions at 0, 60, 75, 90, 120, 150, 180)  
Right—0-90° (click-stop positions at 0, 60, 75, 90)

AF Auxiliary Light:

Ultra-bright red LED (peak sensitivity: 700 nm). Projected at subject for AF flash photography. The effective distance is approx. 0.9-8 m (3-26.2 ft.)

Save-Energy Function:

Power automatically turns off after five minutes of non-use when the main switch is left on.

Ready Lamp:

As soon as it glows, the camera automatically switches to flash mode. Yellow-green in the rapid-fire flash status; when sufficiently charged, the color turns to red. Test firing is possible by pressing the ready lamp after flash charge completion.

Power Source:

Four size-AA (LR6) alkaline or Ni-Cd batteries. Carbon-zinc batteries may also be used.

Dimensions:

75 (W) × 122 (H) × 106 (D) mm  
(2-15/16" × 4-13/16" × 4-3/16")

Weight:

350g (12-3/8 oz.) without batteries  
450g (15-7/8 oz.) with batteries

SPEEDLIGHT 300EZ

Type:

Energy-saving, automatic, electronic flash unit using A-TTL metering system to measure light reflected from the film surface. Clip-on type with directly coupled contacts. For exclusive use with EOS cameras.

Guide Number Table (at ISO 100):

Zoom position (mm)	28	35	50	70
Normal flash	22 (73)	25 (83)	28 (93)	30 (100)
Rapid-fire flash	5.5-15.5 (18-51)	6.2-17.7 (20-59)	7-19.8 (23-66)	7.5-21.2 (25-70)

(The above figures in parentheses indicate the guide numbers in feet at ISO 100.)

Flash Coverage Angle:

Covers more than the fields of view of 28 mm, 35 mm, 50 mm and 70 mm using auto internal zoom mechanism.

Recycling Time:

	Alkaline	Ni-Cd
Normal flash	approx. 0.3 to 8 secs	approx. 0.3 to 6 secs
Rapid-fire flash	approx. 0.3 to 1 sec	approx. 0.3 to 1 sec

Number of Flashes:

	Alkaline	Ni-Cd
Normal flash	approx. 200 to 2000	approx. 65 to 650

Based on flash firing at 30 sec intervals with new alkaline or fully charged Ni-Cd batteries.

Flash Duration:

1 msec or less

X-sync Shutter Speed:

	EOS 620	Setting
P	1/60-1/250 sec	Automatic
TV	30-1/250 sec	Manual
Av	30-1/250 sec	Automatic
M	30-1/250 sec	Manual

Flash Control System:

TTL series control system with preflash function.

Flash Exposure Level Control:

A maximum of 1.5 BV steps in the A-TTL mode when subject brightness is more than BV5 according to the camera's metering system.

Film Speed Setting:

Automatically set by the camera.

Automatic Shooting Distance Range:

A-TTL normal flash	approx. 0.7 to 17 m (approx. 2.3 to 55.8 ft.)
A-TTL rapid-fire flash (min.)	approx. 0.7 to 3.9 m (approx. 2.3 to 12.8 ft.)
A-TTL rapid-fire flash (max.)	approx. 0.7 to 12 m (approx. 2.3 to 39.4 ft.)

Based on EF 50 mm f/1.8 lens at ISO 100.  
(The automatic shooting distance range extends according to film speed.)

Out-of-Coupling Range Warning:

If a subject is too far away, the shutter speed and the aperture value blink in the viewfinder at the first stroke of the shutter button.

AF Auxiliary Light:

Ultra-bright red LED (peak sensitivity: 700 nm). Projected at subject for AF flash photography. The effective distance is approx. 0.9-6 m (3-19.7 ft.)

Save-Energy Function:

Power automatically turns off after five minutes of non-use when the main switch is left on.

Ready Lamp:

As soon as it glows, the camera automatically switches to flash mode. Yellow-green in the rapid-fire flash status; when sufficiently charged, the color turns to red. Test firing is possible by pressing the ready lamp after flash charge completion.

Power Source:

Four size-AA (LR6) alkaline or Ni-Cd batteries. Carbon-zinc batteries may also be used.

Dimensions:

66 (W) × 89 (H) × 100.5 (D) mm  
(2-5/8" × 3-1/2" × 3-15/16")

Weight:

215g (7-9/16 oz.) without batteries  
315g (11-1/8 oz.) with batteries

(All data based on Canon' Standard Test Method.)

Subject to change without notice.





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