

# Canon

DESIGNED FOR THE FUTURE

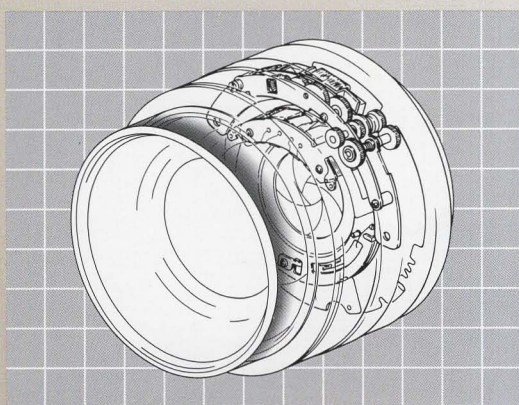
# EOS 650

**FAST-ACTION AUTOFOCUS AND GENUINE CREATIVE  
POWER KEEP YOU IN CONTROL AT ALL TIMES.**





# FAST AND PRECISE AUTOFOCUS LEAVES YOU FREE TO HANDLE ANY PHOTO SITUATION WITH CONFIDENCE



With Canon's new EOS 650, you're one step ahead of the game from the very beginning. Because the EOS 650 features a *super-fast autofocus system*...a system so fast that you capture those once-in-a-lifetime images, and so accurate that you make the most of every opportunity.

The lens has two precision motors that control lens action. You *know* you're in focus, so you can spend all your time concentrating on what you want to accomplish.

## **EASY ACCESS TO CREATIVE POWER: THE GUIDING PHILOSOPHY OF THE EOS CONCEPT**

This new lens-integral autofocus system is the most obvious result of Canon's own EOS (Electro-Optical System) concept, a thoughtful, two-tiered approach to camera development. First of all, this concept involves finding the best way to integrate creative power into the camera. And second, it involves making it easy for you to put that power to work. So, like its namesake, the Greek Goddess of Dawn, the EOS concept marks a new beginning, in this case in making technological advances and genuine creative power easily accessible to you.

## **OTHER CREATIVITY-ORIENTED FEATURES YOU CAN PUT TO WORK RIGHT AWAY**

The EOS 650's extraordinary autofocus system is just one of the many features designed to make 35mm SLR photography a truly exciting experience. Briefly, here are a few other features that embody Canon's EOS concept, the most innovative approach ever to camera design.

### **PRECISE DEPTH OF FIELD CONTROL**

The EOS 650's depth of field AE feature utilizes the EOS autofocus system to let you designate the area you want in focus. For explanation purposes, let's say you have two contrasting subjects in a city square that you'd like to emphasize—a modern, abstract sculpture and an ornate, classical fountain. You can set a "zone of focus" so that each is in crisp and clear focus, thereby dramatizing the differences in your subjects.

### **HIGHLY ACCURATE LIGHT ANALYSIS**

Canon has dubbed the EOS 650's evaluative metering system the "Factor-Six Light Analysis System" because it measures the amount of light in six separate zones in addition to emphasizing your subject. In application, this feature functions as a precise exposure system for difficult lighting conditions. An algorithm based on Canon research and development studies covering thousands of pictures determines the best possible exposure for each lighting situation.

### **HIGH-SPEED SHUTTER AND BUILT-IN MOTOR DRIVE**

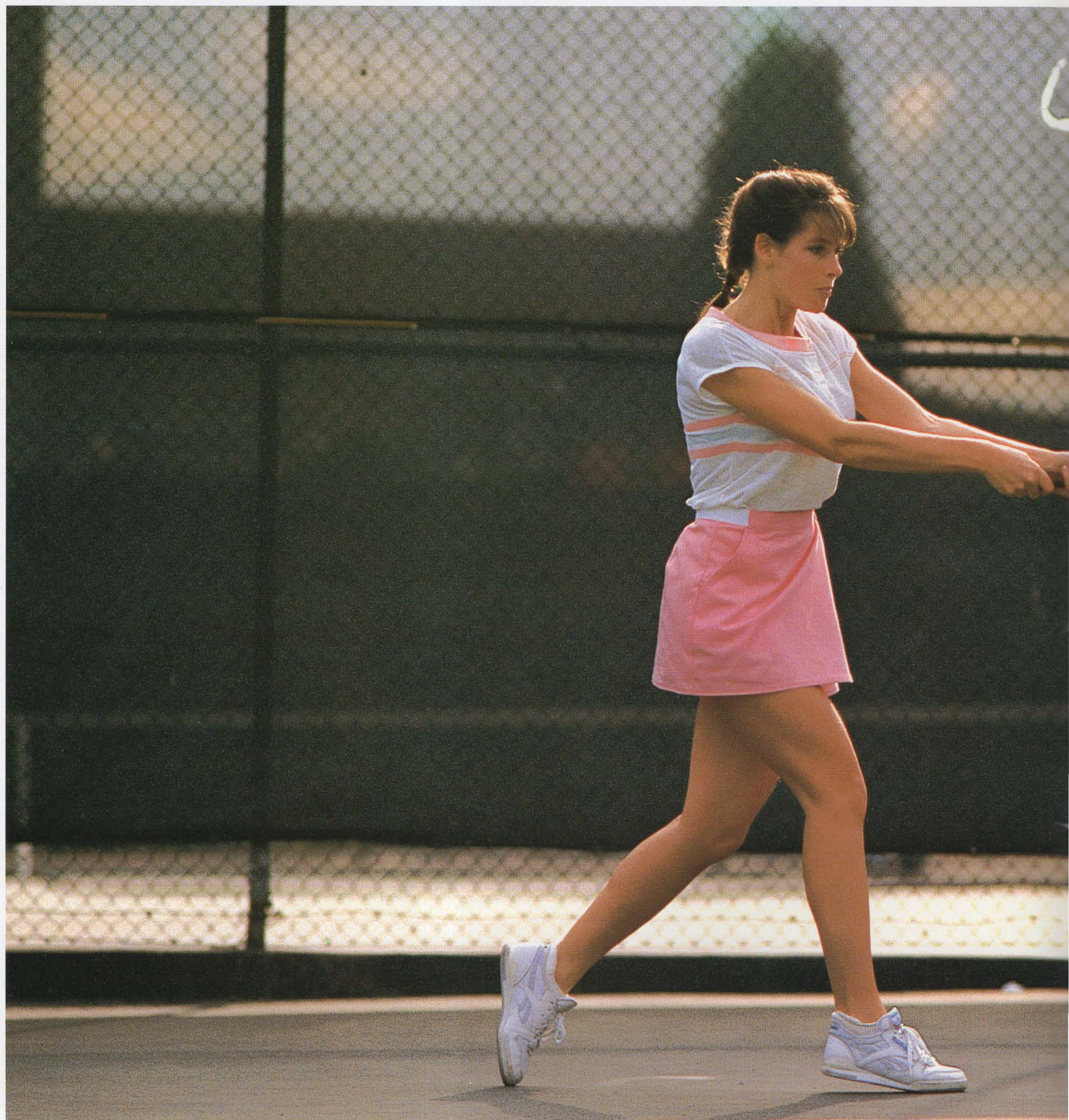
The combination of the EOS 650's 1/2000th second shutter speed, built-in three-frames-per-second (maximum) motor drive and autofocus system lets you freeze high-speed action with ease. You can record exciting images singly or in revealing sequence.





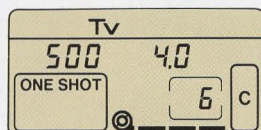
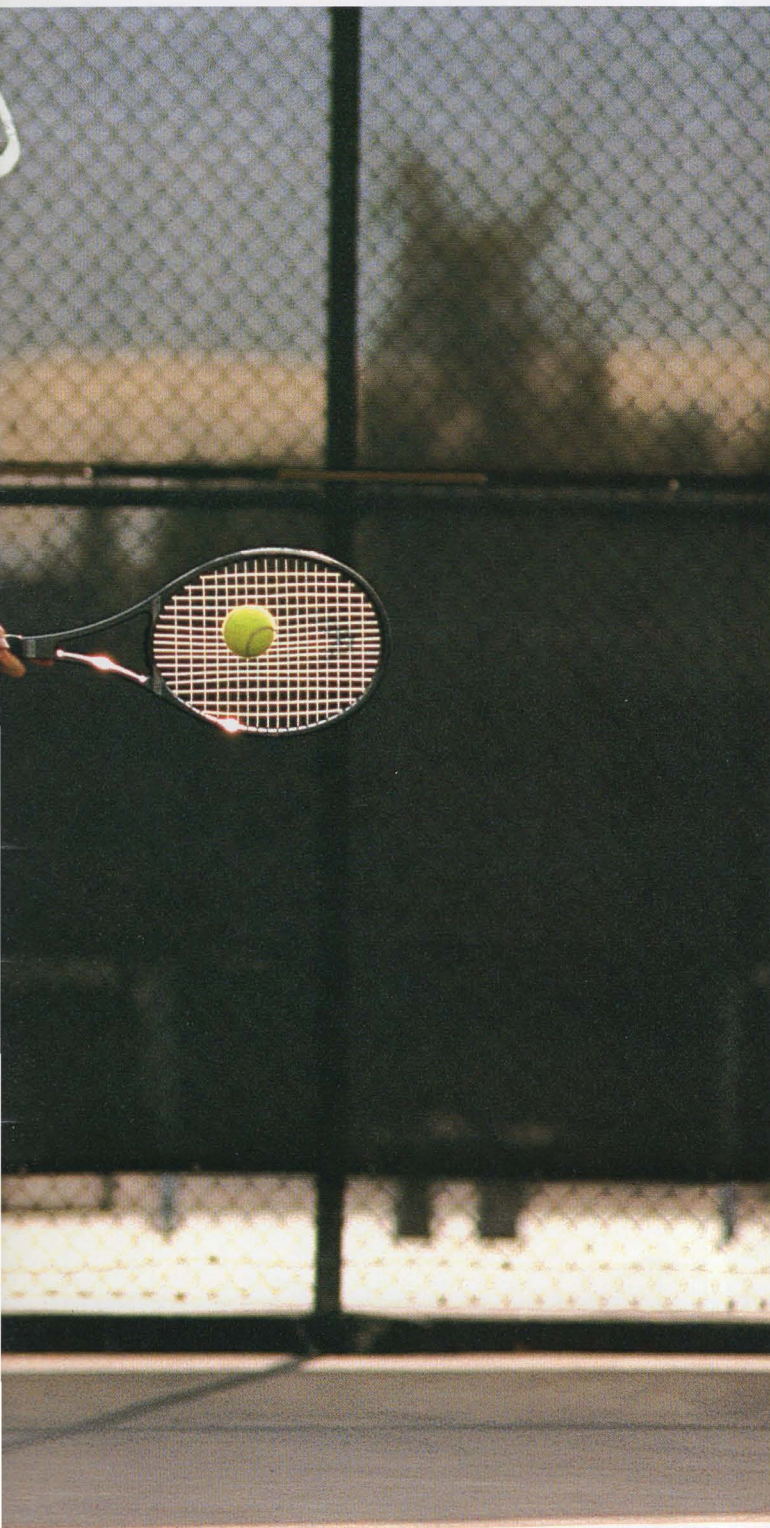


# EOS AUTOFOCUS AS A CREA






# TOR OF OPPORTUNITY



Canon's ultra-fast lens-integral EOS autofocus system is based on a simple premise: the faster you can respond to each photo opportunity, the more opportunities you can take advantage of. For example, the photo shown at left just wouldn't be possible with a slower system—the split-second response of EOS autofocus actually “created” the opportunity to take it.

Low-light conditions that make manual focusing difficult or impossible don't present a problem for EOS autofocus. Because this system's high sensitivity will give you precise results even in dark conditions—the kind of conditions that might make reading a book or newspaper a problem.

EOS autofocus is exceptionally quiet, too, since Canon engineers made a conscious effort to create a system that won't intrude on your environment. With Canon's new-technology design, each autofocus lens employs a special motor that adjusts focus quickly and quietly. Signal transfer between the lens and the camera body is fully electronic for high accuracy and unlimited future development potential. Which means you get top performance *no matter which of the many EOS lenses you use*—available lenses range from 15mm to 300mm. (All EOS lenses permit manual focusing, if desired, with the touch of a button.)

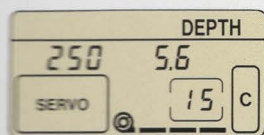
Operation is incredibly easy: a press of the shutter button activates autofocus, exposure and film advance. The LCD panel on the top of the camera indicates which autofocus mode the camera's in, either one-shot (focus locks once focus is achieved) or servo (focus adjusts continuously as you follow your subject). For extra convenience, turn the main switch to the full auto (green ) position, and all you have to operate is the shutter button.







# DEPTH OF FIELD AE SETS YOUR PRIORITIES



The ability to determine focus—to decide what part or parts of an image will be sharp—is one of photography's most important creative aspects. And the EOS 650's depth of field AE feature lets you do just that: you simply decide what you

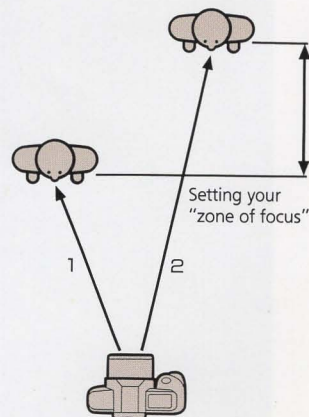
want in focus (what will fall within the depth of field), and the camera will automatically set the required exposure.

Take two subject points—two people located at different distances from your position (please refer to the illustration at far right). With the EOS 650 in the depth of field AE mode, you aim the lens at the subject nearest you, press the shutter button halfway, and the autofocus system sets the distance. You then use the autofocus function to determine the distance to the second subject; all information is relayed to the camera's computer. The computer then

selects a shutter speed and aperture value that will put both subjects in focus (provide the depth of field you desire).

The large photo at left illustrates another use of depth of field AE—photographing a fast-moving subject. With fast action you often have to anticipate the area in which the subject will pass. Depth of field AE lets you establish your focus zone—the beginning and ending of the action—and then shoot when the subject enters that zone. The result? An exciting, sharp image on film.

In addition, you'll find depth of field AE particularly useful in situations like the photo shown above, where you control depth of field for overall sharpness from foreground to background. It's also great for telephoto portraits, because you can render a poor background out of focus.





# EVALUATIVE METERING MIR





# RORS THE MOMENT

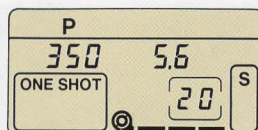


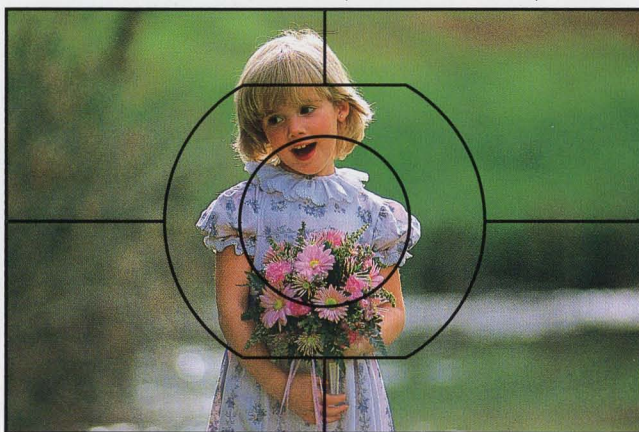
Photo enthusiasts love the many ways that light can affect a subject. As the day progresses, light

can detail a subject in sharp relief, emphasize or change the way it looks, and create drama or a sense of mystery. However, changing light also means coping with some pretty tricky exposure problems.

Most light metering systems work fine under so-called normal lighting conditions (when light, usually the sun, is falling directly on your subject). But when it comes to more unusual situations, as with the backlit subject at left, most systems can't cope—they can't recognize unusual conditions because they can't think.

The Canon EOS 650's evaluative metering (or Factor-Six Light Analysis) system, on the other hand, *can think*—by way of two-way communication between the EOS 650's computer and various other camera/lens components. This system first takes readings on six different areas; these readings then go into a computer that decides the best exposure in accordance with research based on thousands of actual photographic samples. Consequently, the image you get on film mirrors the one you saw the moment you took the picture.

Light is measured in six separate zones to ensure optimum results



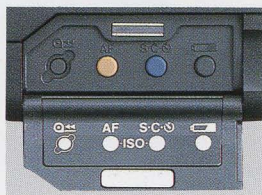
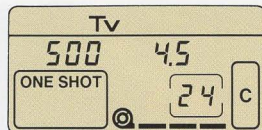


# FAST SHUTTER SPEED AND D





# RIVE THRIVE ON ACTION



With a top shutter speed of 1/2000th of a second, you can literally stop action cold for ultra-sharp film images. Combine this fast shutter speed with a built-in motor drive capable of delivering up to three frames per second, and you can shoot action

sequences that show tremendous detail. And because the motor drive is built right into the camera body, you get great handling and maneuverability along with action-stopping shooting power. In addition to the continuous mode, the motor drive offers a single frame mode for the convenience of automatic film advance.

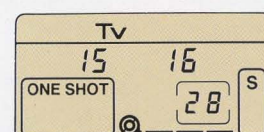




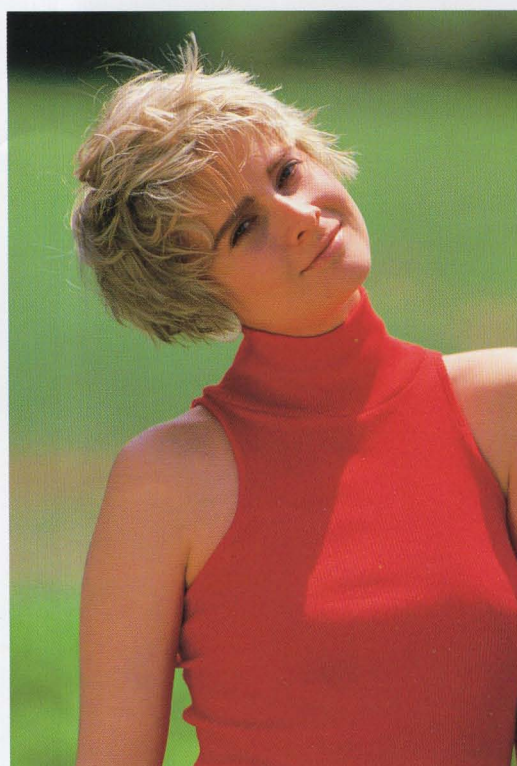
# CREATIVE ALTERNATIVES TO



## SHUTTER-PRIORITY AE



With the EOS 650's shutter-priority AE mode you can set the shutter speed in half-steps anywhere from 1/2000 to 30 seconds. The camera automatically chooses the best lens aperture for good exposure. Shutter speed control lets you record images that originate in your imagination. With the photo shown here, for example, the photographer chose a slower shutter speed to blur the background and achieve a "flowing" effect.



## APERTURE-PRIORITY AE



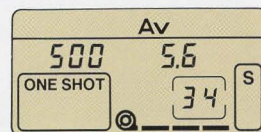
In the aperture-priority AE mode, you select the lens opening and the EOS 650's computer automatically sets the best shutter speed for correct exposure. Control over lens aperture gives you control over depth of field or the "zone of focus". In taking this portrait, the photographer utilized a larger aperture value for a shallow depth of field, which emphasizes the subject and renders the background out of focus.



# EXPLORE AT WILL



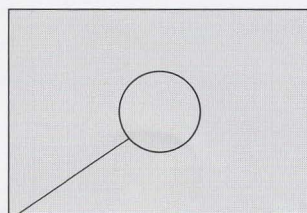
## PARTIAL METERING



Partial metering reads only about 6.5% of the viewfinder. You can use this metering mode to emphasize one part of the image for absolute color or black and white control. In taking the photo shown at left, the photographer used partial metering to measure the light falling on the child's face and thereby ensure correct exposure. With conventional metering, the subject ends up in a shadow.



With conventional metering



Partial metering mark

## INTELLIGENT PROGRAM AE

This innovative function automatically shifts the exposure program when you change lenses or increase/decrease lens focal length when using a zoom lens. As a result, the EOS 650 *always* draws on the most appropriate information for correct exposure.

## MANUAL OVERRIDE

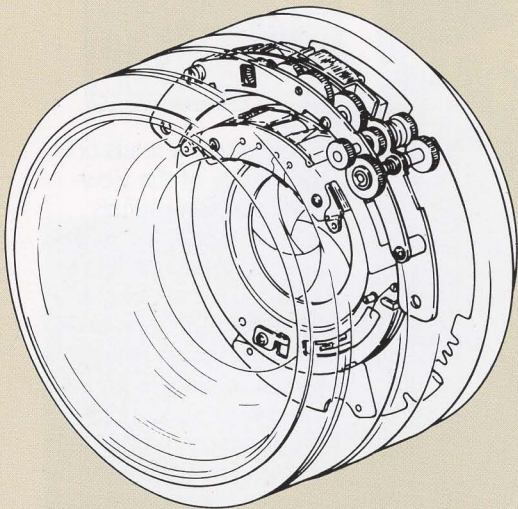
Choose full manual exposure operation and you control the two chief elements in photography—shutter speed and aperture. The EOS 650 will indicate whether the exposure value you've chosen will provide adequate results... the rest is up to you. Vary shutter speed

or aperture—or both—to create a special effect that gives an image a highly personal rendition.



# EOS LENSES BLEND TRADITION

CANON'S UNIQUE LENS-INTEGRAL DESIGN



FULLY ELECTRONIC MOUNT AND DATA TRANSFER



LENS SIDE



BODY SIDE

THE CANON EOS LENS LINEUP

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*		●	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*		●	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*		●	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/2.8L.  
• All EF zoom lenses have a built-in macro mechanism.  
• Asterisk (\*) indicates products that will be available soon.



# ON WITH THE FUTURE

The ability to use an extensive range of interchangeable lenses is perhaps the greatest advantage there is with a 35 mm SLR camera. They provide the flexibility you need to photograph a wide range of subjects under a variety of conditions.

You get all that with the EOS lens lineup, of course, plus a lot more. Because each EOS lens is a shining example of advanced Canon technology, high-precision craftsmanship and superior optical performance. The EOS lens system, quite simply, defines the leading edge of lens design and performance.

## A FASTER AND MORE EFFICIENT SYSTEM

In designing this lens system, Canon placed primary importance on ensuring optimum focusing speed and efficiency, because anything less falls short of the photographer's needs. So while other 35 mm SLR autofocus camera makers took the easy way out and mounted their focusing motors in the camera body, Canon discarded this idea from the very beginning—simply because it's just not the best way to go. First of all, if the focusing motor is located in the camera body, one motor with one set of specifications must handle the widely differing power requirements of different lenses. Canon's system, on the other hand, matches a high-precision motor to the unique power requirements of each individual lens. Body-integral designs also require an inherently inefficient, mechanical body-lens coupling, whereas the Canon EOS system is *all-electronic* for greater data transmission efficiency—you can *depend* on it to give you better results.

## NEW EF LENS MOUNT

Canon's totally new, precision-machined EF (Electro-Focus) mount system features no mechanical connections whatsoever between the camera body and the lens. Gold-plated electronic contacts transmit data between the central computer in the camera and the on-

board computer (which controls autofocus and aperture control functions electronically) in the lens. This 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 that may be incorporated into the EOS system in the future. In fact, this mount has already yielded incredible results by making possible Canon's ultra-fast, professional EF 50 mm f/1.0L lens—a true innovation that delivers incredible image quality.

## CANON QUALITY FIRST AND FOREMOST

The Canon EOS lens lineup is composed of 13 high-performance lenses, plus an extender designed exclusively for use with the EF 300 mm f/2.8L lens. 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.



Fish-eye EF 15 mm f/2.8



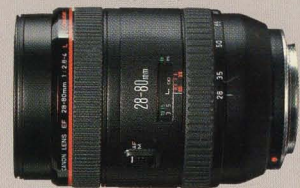
EF 28 mm f/2.8 EF 50 mm f/1.8



EF 50 mm f/1.0 L (Ultrasonic)



Softfocus EF 135 mm f/2.8



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



EF 35-70 mm f/3.5-4.5 EF 28-70 mm f/3.5-4.5



EF 70-210 mm f/4.0



EF 100-300 mm f/5.6



EF 35-105 mm f/3.5-4.5



EF 100-300 mm f/5.6 L



EF 300 mm f/2.8 L (Ultrasonic)



Extender EF 2X



# WHERE YOU WANT TO GO A

## ELECTRONIC INPUT DIAL

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

## ISO FILM SPEED/SHUTTER SPEED

When using DX-coded film, the film speed is automatically set and displayed here while the film is being advanced to the first usable frame during film load. During shooting, the shutter speed is displayed here.

## SHOOTING MODES

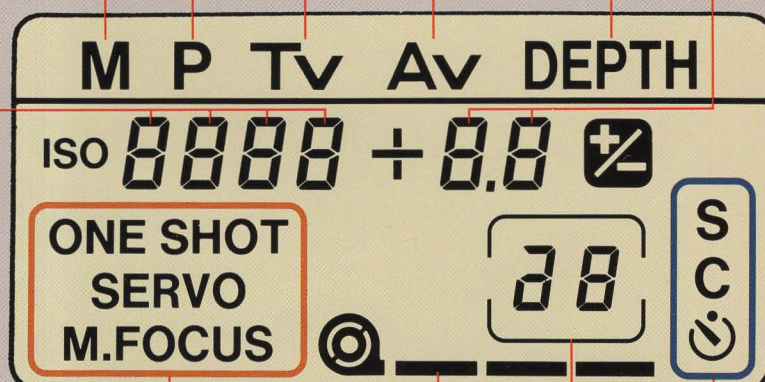
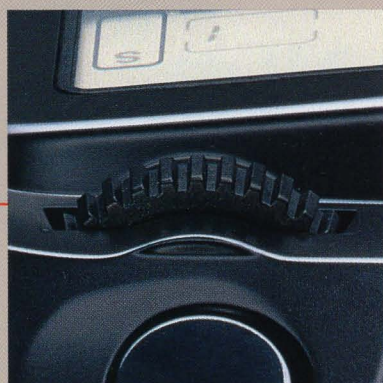
You can choose between four AE modes and manual override. P: Program AE (the camera sets both the shutter speed and the aperture value for you). TV: Shutter-priority AE (you set the shutter speed, and the camera automatically sets the aperture value). AV: Aperture-priority AE (you set the aperture value, and the camera automatically sets the shutter speed). DEPTH: Depth of field AE (you set your "zone of focus", and the camera will automatically set the shutter speed and aperture value). 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

The level of exposure compensation (up to plus or minus five steps) set on the camera is displayed here.



## 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.

## FILM TRANSPORT INDICATOR/BATTERY CHECK INDICATOR

Moves in sequence during film advance and rewind. Bars also indicate current power supply when the battery check button is pressed.

## FRAME COUNTER

The numeral displayed indicates the number of the next frame on the roll.

## FILM WINDING MODE

The film winding mode is displayed within this frame. S: Single frame advance (the film is advanced only 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).



# ND HOW TO GET THERE

## SHUTTER SPEED

Shutter speed is indicated here during camera operation.

## APERTURE VALUE

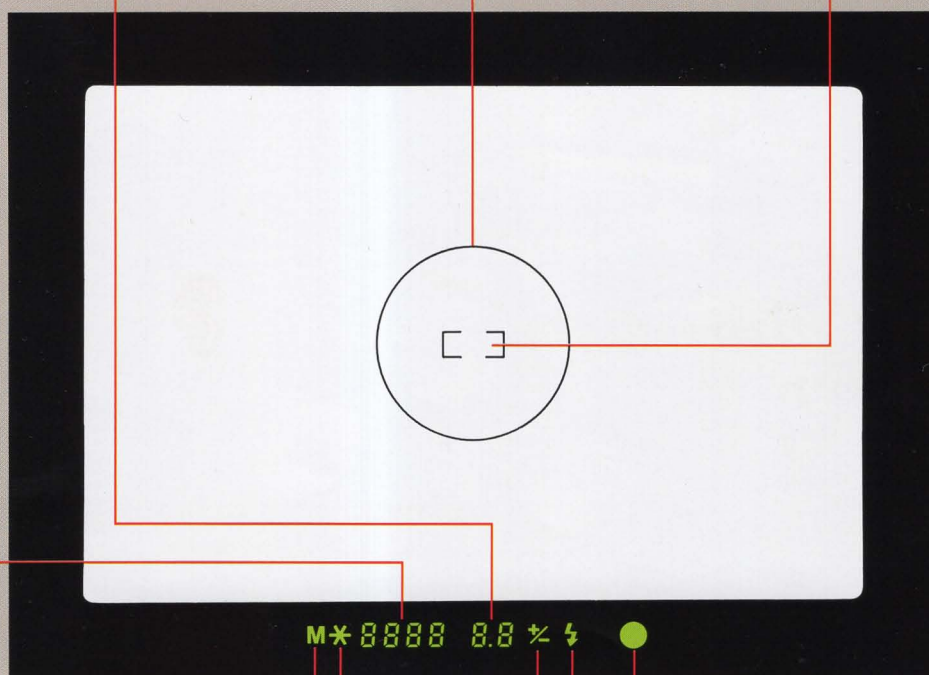
The aperture value is indicated here during camera operation.

## 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 that the camera is in exposure compensation status.

## FLASH CHARGE COMPLETION

When illuminated, this symbol indicates that the charging of the flash 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, it indicates that correct focus can not be achieved.



# WHEN FEWER CONTROLS M

## SHUTTER BUTTON

When the shutter button is pressed halfway, metering and AF ranging are carried out.

## ELECTRONIC INPUT DIAL

Used together with other controls to set various functions. A hybrid control that combines the advantages of a mechanical dial with electronic pushbuttons, this Canon innovation helps keep the overall number of controls to a minimum.

## MANUAL FOCUSING RING

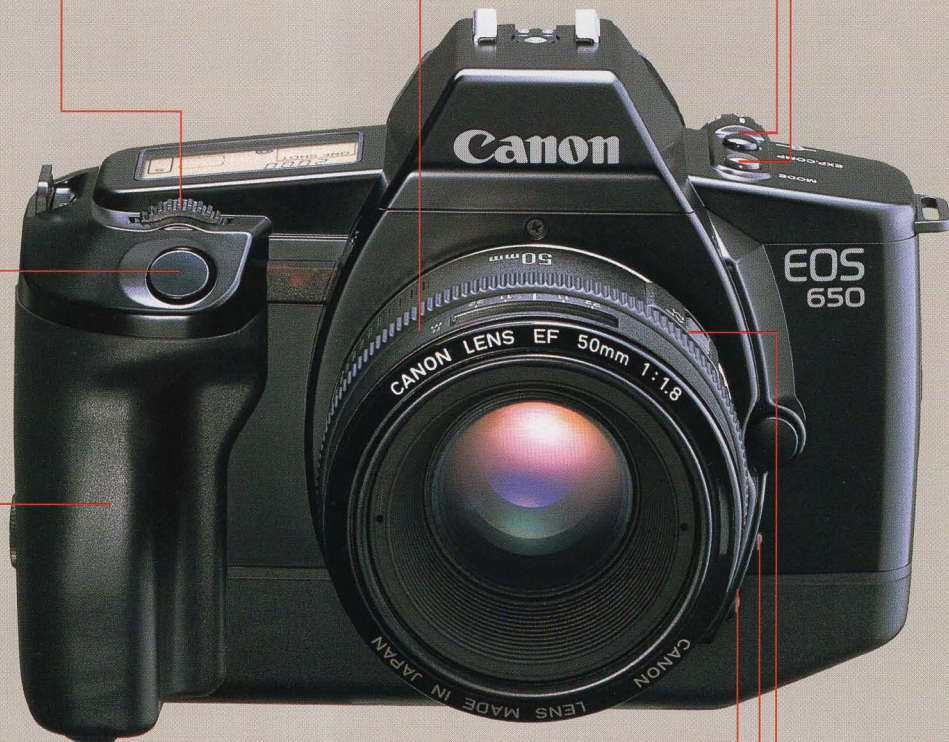
This ring rotates for manual focusing.

## EXPOSURE COMPENSATION BUTTON

To set an exposure compensation value, depress this button and rotate the electronic input dial.

## SHOOTING MODE SELECTOR

The shooting mode can be set by pressing this button and turning the electronic input dial.



## COMFORTABLE GRIP

The EOS 650's interchangeable rubber grip forms to the hand for optimum comfort.

## MANUAL APERTURE SET BUTTON

When the camera is in the manual mode, this button is pressed before the electronic input dial is turned to set the aperture value.

## DEPTH-OF-FIELD CHECK BUTTON

When this button is pressed, the aperture will close to the manual set or calculated value.

## FOCUS MODE SWITCH

Used to set the focus mode to either automatic or manual.



# EAN GREATER CONTROL

## MAIN SWITCH

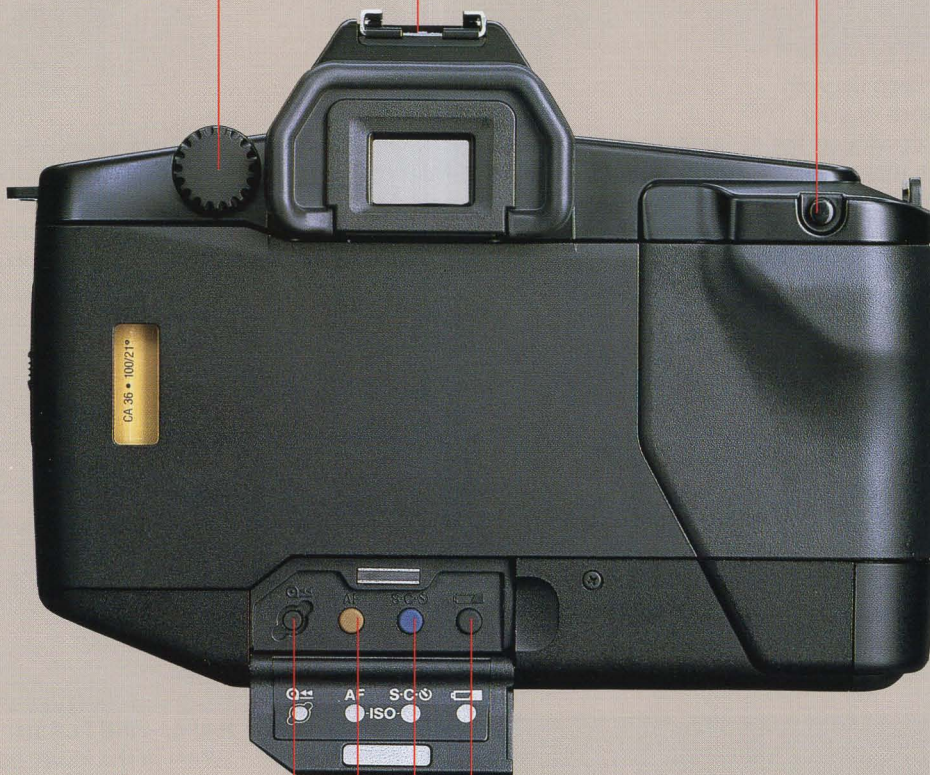
There are four settings. L: Lock (power is off). A: Advance (power is on and camera is ready for operation). (L): same as "A" with the addition of a beeper whenever correct focus is achieved (short beeper) or when the camera-shake warning (long beeper) is activated. Green  $\square$ : "Full Auto" position (one-shot AF, program AE, and single frame advance mode are automatically set).

## ACCESSORY SHOE

Used to attach special Canon EOS flash units.

## PARTIAL METERING BUTTON (AE LOCK)

Partial metering is activated when this button is pressed; automatic exposure locks simultaneously.



## FILM REWIND BUTTON (MID-ROLL REWIND)

Press this button to start rewinding the film from any point on the roll.

## AF MODE SELECTOR

Press this button and turn the electronic input dial to select the autofocus mode (either one-shot or servo).

## FILM WINDING MODE SELECTOR

This button is used together with the electronic input dial to select one of three film winding modes. S: Single. C: Continuous.  $\odot$ : Self-timer.

## BATTERY CHECK BUTTON

Remaining battery power can be checked by pressing this button.



# EOS FLASH UNITS MAKE PO

When you have a powerfully creative camera in hand, it just makes good sense to have an equally powerful flash system. Enter Canon Speedlites 420EZ and 300EZ, two multi-function dedicated flash units that expand the limits of your creative freedom into some thoroughly exciting areas.

Both of these flash units feature a built-in AF auxiliary light for dark situations, so you can use the EOS auto-focus system at night! And to ensure that both flash units can keep up with the high-speed performance of your EOS 650 camera, Canon developed the "rapid-fire" system, which makes flash recycling time exceptionally fast—there are no delays whatsoever. The flash element itself is driven by an internal unit for flash coverage angle adjustment (the 420EZ has a zoom coverage of 24~80mm, while that of the 300EZ is 28~70mm). The guide numbers are 35 (ISO 100•m)/116 (ISO 100•ft.) with the 420EZ and 28 (ISO 100•m)/93 (ISO 100•ft.) with the 300EZ.

## A-TTL AUTOMATIC FLASH

Canon's A-TTL (Advanced TTL) automatic flash system balances subject and background exposure to ensure good results—whether you're shooting in daylight or at night. Camera and flash



unit work in concert to calculate the conditions for each shot. Flash exposure and ambient light are delicately balanced accordingly, so you get the kind of results you've always wanted.

## MAXIMUM 1/125 SECOND SYNC SPEED

With an EOS flash unit attached, the EOS 650's shutter speed can be set manually or automatically anywhere from 1/125 to 30 seconds—meaning you have greater control over your subject and lighting when it comes to flash photography. With the maximum 1/125th of a second sync speed, you get more natural color and lighting effects than you ever thought possible.



## SECOND-CURTAIN SYNCHRONIZATION

Both the 420EZ and 300EZ make it possible to synchronize the flash discharge either for the first shutter curtain opening, or just before the second curtain begins running. This second-curtain flash synchronization, which makes it exceptionally easy to obtain truly creative flash effects, is best used when a slower shutter speed is set on the camera.

## BOUNCE FLASH CAPABILITY

The 420EZ has a swivel flash head, which means you can "bounce" the flash (adjust it so that it is not pointed directly at your subject) for a softer lighting effect.

## RAPID-FIRE FLASH

When in the lower power setting, the 420EZ and 300EZ recharge extra-fast, so you can make more effective use of the EOS 650's built-in motor drive when taking flash photos.

## STROBOSCOPIC FLASH

The 420EZ has a function that lets you set the flash rate from one to five times per second. As a result, you can take flash photos that "break down" subject action into a number of separate parts.





# WERFUL COMPANIONS



Fill-in flash



Without fill-in flash



Slow-sync flash



Conventional flash



Second-curtain flash



# SPECIAL ACCESSORIES



Quartz Date Back E



Technical Back E



Interchangeable grip



Circular polarizing filters

## QUARTZ DATE BACK E

This handy accessory, which provides for simple data recording, interchanges easily with the standard EOS 650 back. 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 2029, and clock precision is within  $\pm 30$  seconds a month. The back also offers a film loading date check function; you can confirm the date the film was loaded by simply pressing a button.

## TECHNICAL BACK E

As its name implies, the Technical Back E can be used to work with all kinds of technical data. For example, 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. This makes it possible to issue function commands to your EOS 650 from a personal computer. Another accessory, Keyboard Unit E, makes it possible to imprint 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.

## INTERCHANGEABLE FOCUSING SCREENS

The overall New Laser-Matte/AF Frame screen is included as standard equipment with your EOS 650. 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 palm grip that comes standard with the EOS 650, Canon makes two additional grips optionally available to meet various hand-size and application requirements.

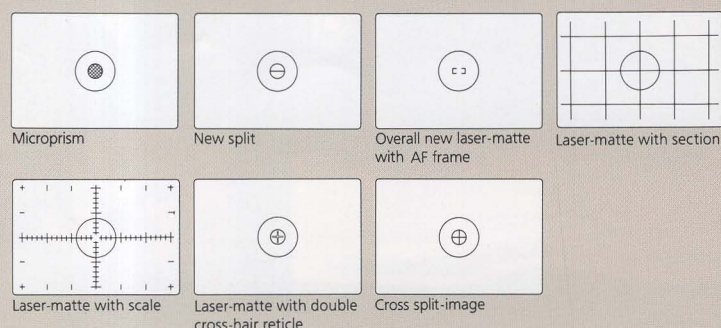
## DIOPTRIC ADJUSTMENT LENSES

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. They 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. There are three thread diameters available: 52 mm, 58 mm and 72 mm.

Interchangeable focusing screens





# CAMERA SPECIFICATIONS

**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)
- Depth of field AE (dEP 1, dEP 2)

(2) LCD mask character display

- \* —AE lock indicator in partial metering mode
- M—manual exposure indicator
- $\frac{1}{2}$  —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
- Depth of field AE
- Manual
- Flash AE (A-TTL program flash AE and TTL program flash AE with specified Canon Speedlites)

**Camera-Shake Warning:**

Operates for program AE, aperture-priority AE, and depth of field 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. 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

**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 6.2 msec/24 mm.

**Shutter Speed:**

1/2000—30 seconds and bulb. Can be set in 1/2 steps. X-sync is 1/125 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 10 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 1/125 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 GR30 (without remote control terminal) is standard. Grip GR20 (with remote control terminal) and large-size Grip GR10 are available optionally. Also serves as battery chamber cover.

**Remote Control:**

Remote Switch 60T3 and Grip GR20 are required.

**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.

**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:**

660 g (23-5/16 oz.) body only  
700 g (24-11/16 oz.) with battery pack

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

Subject to change without notice.





**CANON INC.** 7-1, Nishi-Shinjuku 2-Chome, Shinjuku-ku, Tokyo 163, Japan  
Mailing address: P.O. Box 5050, Dai-ichi Seimei Building, Tokyo 163, 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 OFFICE**  
5625 Oakbrook Parkway Norcross, Georgia 30093, U.S.A.  
**CANON U.S.A., INC. CHICAGO OFFICE**  
100 Park Blvd Itasca, IL 60143-2693, U.S.A.  
**CANON U.S.A., INC. LOS ANGELES OFFICE**  
123 Paulanne Avenue East, Costa Mesa, California 92626, U.S.A.  
**CANON U.S.A., INC. SANTA CLARA BRANCH**  
4000 Burton Drive, Santa Clara, California 95054, U.S.A.  
**CANON U.S.A., INC. DALLAS OFFICE**  
3200, Regent Blvd., Irving, Texas 75063-3145, U.S.A.  
**CANON U.S.A., INC. HONOLULU BRANCH**  
Bldg. B-2, 1050 Ala Moana Blvd., Honolulu, Hawaii 96814, U.S.A.  
**CANON U.S.A., INC. WASHINGTON D.C. BRANCH**  
5701 General Washington Drive Alexandria, VA 22312, U.S.A.

CANADA **CANON CANADA INC. HEADQUARTERS**  
6390 Dixie Road, Mississauga, Ontario L5T 1P7, Canada  
**CANON CANADA INC. MONTREAL SERVICE CENTRE**  
10652 Côte de Liesse, Lachine, Quebec H8T 1A5, Canada  
**CANON CANADA INC. CALGARY OFFICE**  
2828, 16th Street, N.E. Calgary, Alberta T2E 7K7, 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  
**CANON EURO-PHOTO G.m.b.H**  
Linsellesstraße 142-156, D-4156 Willich 3, West Germany

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 HONG KONG TRADING CO., LTD.**  
Room 1101-3 & 1121-2, Peninsula Centre, 67 Mody Road, Tsimshatsui East, Kowloon, Hong Kong  
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95 South Bridge Road #13-01/15, South Bridge Centre, Singapore 0105

OCEANIA **CANON AUSTRALIA PTY. LTD.**  
Unit 1/37, Waterloo Road, North Ryde (Macquarie Park), N.S.W. 2113, Australia

JAPAN **CANON SALES CO., INC.**  
11-28, Mita, 3-Chome, Minato-ku, Tokyo 108, Japan