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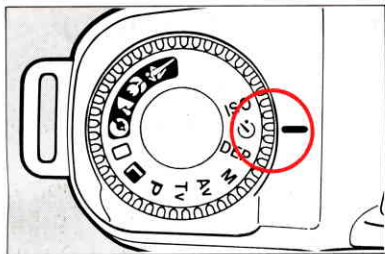


[back to my "Orphancameras" manuals /flash and light meter site](#)

Only one "donation" needed per manual, not per multiple section of a manual !

The large manuals are split only for easy download size.


2. : Self-timer



 : **Self-timer** Settings: One-shot AF/Evaluative metering

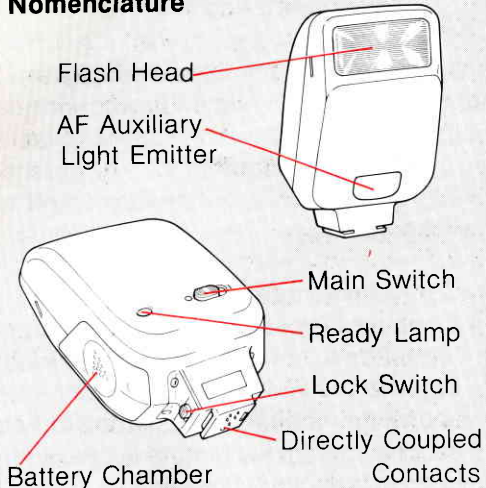
Use the self-timer function to delay shutter release for 10 seconds and include yourself in the picture. Place the camera on a tripod, table, or other steady surface.

- Shooting mode is automatically set to Program AE.

- 1) Set the command dial to “  ”.
- 2) Compose the picture and press the shutter button to start the timer **while looking into the viewfinder**. A beeper tone sounds to monitor the countdown. Two seconds before the picture is taken, the beeper tone sounds rapidly.
 - Be careful **not to stand in front of the camera** when you press the shutter button.
 - To cancel the self-timer, turn the command dial to another position.

3. Flash Photography with the Speedlite 200E (may be optionally available in some areas)

Nomenclature



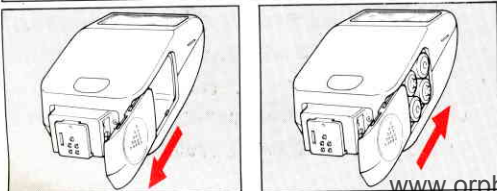
When the “ ⚡ ” mark blinks in the viewfinder, attach the Speedlite 200E before taking the picture.

- “ ⚡ ” will not blink in the “Creative Zone.”
- The “ ⚡ ” mark lights steadily in the viewfinder when the flash is charged.

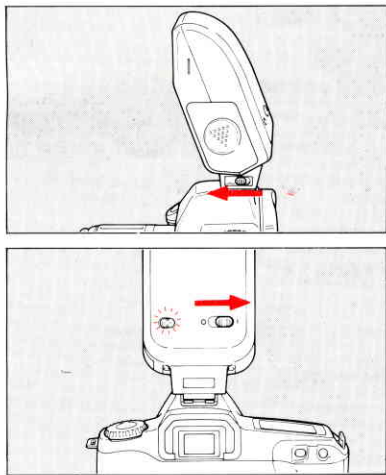
1. Loading the Batteries

This flash uses four AA-size alkaline (LR6) or Ni-Cd batteries. (Carbon-zinc batteries may also be used but their life is shorter). Wipe the battery terminals with a clean, dry cloth to ensure proper contact.

- 1) Slide the battery chamber cover off.
 - 2) Load the batteries so that their terminals face in the directions indicated by the diagram.
 - 3) Replace the battery chamber cover.
- Remove the batteries when storing for long periods.



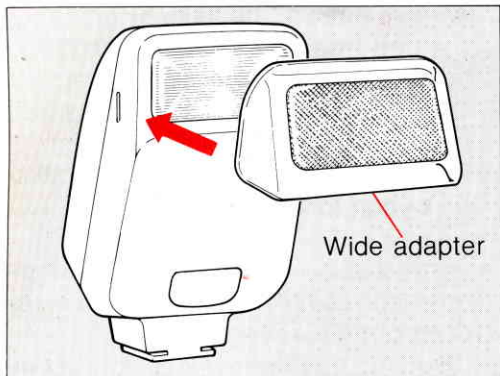
2. Mounting the Flash and Taking Pictures



- 1) Insert the flash onto the accessory shoe. For proper electrical contact, make sure it is pushed in completely.
- 2) Slide the lock switch in the direction of the arrow.

Always remove the flash by grasping the unit from the bottom after sliding the lock switch in the opposite direction.

- 3) Turn the main switch to “ I ” and wait until the ready lamp lights up.
 - 4) Compose the picture and press the shutter button to take the picture.
- For flash pictures, do not press the shutter button completely until the red ready lamp of the flash lights up.
 - When the ready lamp does not light up approx. 30sec. after the main switch is turned to “ I ”, replace **all four batteries at the same time with the same brand.**
 - In low light conditions, the built-in AF auxiliary light is emitted when the shutter button is pressed halfway.
 - **Do not attempt to disassemble the flash yourself.** Always take it to an authorized Canon Service Facility for repair.



- The flash covers an angle equivalent to a 35 mm lens. For a focal length of 28 mm, attach the wide adapter (optionally available) to the flash head.
- The flash is **not** resistant to water, and should not be used outdoors if snowing. Keep the flash out of salt spray and excessive humidity. If used at the beach, clean it thoroughly afterward with a dry cloth.
- **USE THE 200E ONLY WITH EOS CAMERAS.**

Flash Coupling Distance Range

- **Be sure to keep within the range for proper coverage.**

(When using the EF 35-80 mm f/4-5.6)

[m/ft]

ISO	WIDE (35 mm)		TELE (80 mm)	
	Color print film	Slide film	Color print film	Slide film
100	0.7-7 m 2.3-23 ft	1.0-5 m 3.3-16.4 ft	0.7-5 m 2.3-16.4 ft	0.7-3.6 m 2.3-11.8 ft
400	0.7-14 m 2.3-45.9 ft	1.5-10 m 4.9-33 ft	0.7-10 m 2.3-33 ft	1.5-7 m 4.9-23 ft

Viewfinder Information When Using the Flash

Shooting mode	Warning display	Condition	Note
(P) Program AE	During daylight fill-in flash photography, the lens' minimum aperture value blinks.	The background is overexposed.	The subject is correctly exposed.
(Tv) Shutter-priority AE	The lens' minimum aperture value blinks.	The background is overexposed.	The subject is correctly exposed. Blinking may stop if a faster shutter speed is set.
	The lens' maximum aperture value blinks.	The background is underexposed.	The subject is correctly exposed. Blinking may stop if a slower shutter speed is set.
(Av) Aperture-priority	The fastest possible x-sync shutter speed 90 (1/90 sec.) blinks.	The background is overexposed.	The subject is correctly exposed. Blinking may stop if a smaller aperture is set.
	The slowest shutter speed 30" (30 sec.) blinks.	The background is underexposed.	The subject is correctly exposed. Blinking may stop if a larger aperture is set.

X-sync Shutter Speed and Aperture Value

Shooting mode	X-sync shutter speed	Aperture value
Program AE	Automatically set to 1/60 - 1/90 sec.	Flash aperture value automatically set according to existing lighting and TTL program.
Shutter-priority AE	Manually set to any desired shutter speed of 1/90 sec. or slower*.	Aperture value automatically set according to the set shutter speed and existing lighting.
Aperture-priority AE	Automatically set between 30'' and 1/90 sec. according to the set aperture value and existing lighting.	Manually set to any desired aperture value.
Manual	Manually set to any desired shutter speed of 1/90 sec. or slower*.	Manually set to any desired aperture value.

* If the shutter speed is set to a value faster than 1/90 sec., the camera will automatically lower it to 1/90 sec.

III. APPLICATIONS

With these functions you can expand your creativity by tailoring the operation of your camera to match shooting conditions or your photographic objectives.

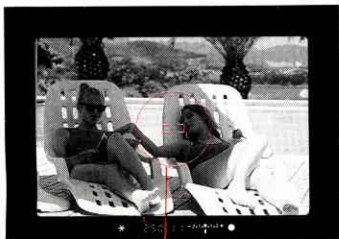
The functions described in the Applications section cannot be set in Green Zone or any of the P.I.C. modes.

1. Partial Metering

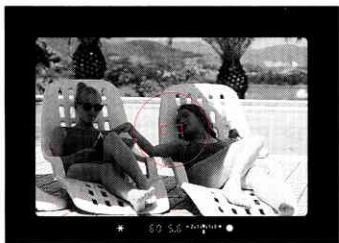
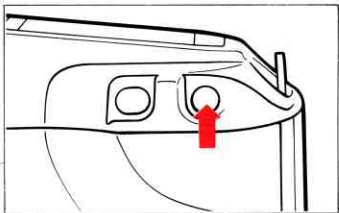


The main light metering system used in this camera is called “evaluative metering.” It evaluates the entire picture area by dividing it into three zones to determine the best exposure taking into consideration differences in brightness between the subject and background and the size of the subject. With a backlit subject, for example, the camera automatically compensates to obtain correct exposure for the main subject.

Partial metering, on the other hand, reads only **9.5%** of the center of the picture area. This is particularly suited for photography in theaters and other situations when there is a significant difference in brightness between the main subject and background. The exposure setting is automatically locked in partial metering mode, allowing you to freely recompose the picture after metering.

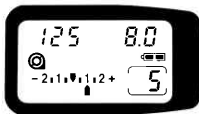
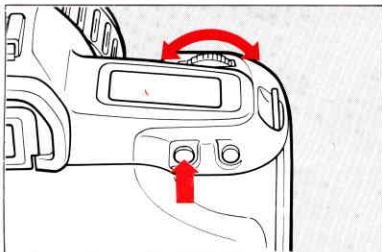


Partial Metering Area Mark



- 1) Compose the picture and focus the subject.
- 2) Keeping the shutter button pressed half-way, place the partial metering area mark on the subject you want metered and press the partial metering button. The partial metering mark “ * ” appears in the viewfinder. After “ * ” lights up, you may remove your finger from the partial metering button. The exposure is locked.
- 3) Continue pressing the shutter button halfway, recompose the picture if desired and press the shutter button completely.

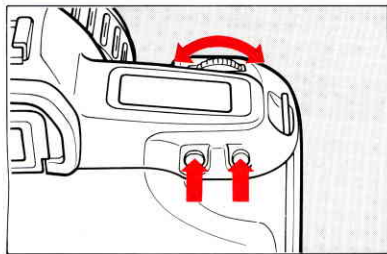
2. Exposure Compensation



Use exposure compensation for intentionally underexposed or overexposed pictures. The compensation range is up to $+/- 2$ stops in half-stop increments. While pressing the exposure compensation button, turn the electronic input dial until the exposure level mark is set to the desired exposure compensation amount.

- *Exposure compensation remains active until canceled.*
- *To cancel* exposure compensation, repeat the above procedure to return the value to 0, or set the command dial to the green zone or to any of the P.I.C. modes.
- When used in the manual exposure mode, the metered standard value is also compensated.

3. Multiple Exposures



Try this function for creative and dramatic effects. Up to nine exposures can be made on the same frame with minimal operation.

- 1) Press the exposure compensation button and the partial metering button together to display "**ME**" in the LCD panel.
 - 2) Turn the electronic input dial to set the desired number of exposures.
 - 3) Press the shutter button to start.
- "**ME**" blinks in the LCD panel during multiple exposure operation.
 - The film winds to the next frame after the set number of exposures have been taken.
 - To clear preset exposures, repeat steps #1 and 2 to set the number of exposures to 1.

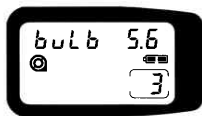
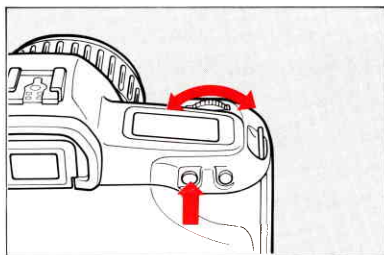
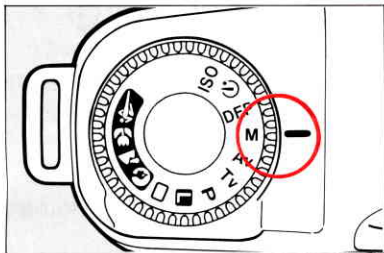
Shooting Hint

For best results, we recommend setting exposure compensation depending on the number of exposures.

Number of exposures	Exposure compensation amount
Two	-1.0
Three	-1.5
Four	-2.0

- This table is a general guideline. The actual exposure compensation amount varies according to the subject and desired effect. This kind of photo requires experimentation for best results.

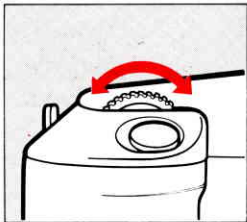
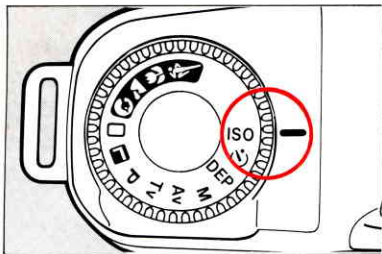
4. Bulb (Long Exposure)



Use bulb for exposures longer than 30 seconds, such as for fireworks or night scenes. **The exposure continues as long as the shutter button is held down.** Make sure the camera does not move during exposure by placing it on a tripod or other steady surface.

- 1) Set the command dial to “M”.
 - 2) Turn the electronic input dial until “buLb” (after 30”) is displayed.
 - 3) Set the aperture value by turning the electronic input dial while pressing the exposure compensation button.
 - 4) Press the shutter button completely to take the picture.
- Bulb can be combined with the multiple exposure function.

5. Manual Film Speed Setting



When using non DX-coded film or when you want to set the effective speed of a film determined from your own tests, you can manually set the film speed to any value from ISO 6-6400 in 1/3-step increments. The setting is canceled after the film is removed and replaced with another DX-coded film.

- 1) Set the command dial to ISO. "ISO" and a film speed appear in the LCD panel.
- 2) Turn the electronic input dial to set the desired film speed.

IV. REFERENCE

1. Comparisons Between AF Mode and Film Wind Mode

Film wind mode	One-shot	AI Servo
Single	AF lock and AE lock in the evaluative metering mode take place simultaneously on AF completion. The shutter releases only after AF completion.	AF follows the subject and the exposure is determined at the moment of shutter release. The shutter releases only after AF completion.
Continuous	AF lock and AE lock in the evaluative metering mode take place simultaneously on AF completion, then continuous exposure is activated. (Approx. 1 fps maximum.)	AF follows the subject and the exposure is determined at the moment of shutter release. AF is adjusted to follow the subject during the series of exposure. (Approx. 1 fps maximum.) The shutter releases only after AF completion.

2. Film Shooting Capacity

The battery's shooting capacity varies depending on the temperature of the environment. Refer to the table below.

Temperature	
Normal (68°F/20°C)	75 rolls
Low (-4°F/-20°C)	45 rolls

- * Based on a new 2CR5 lithium battery using the EF 35-80 mm f/4-5.6 lens and 24-exp. film.
- * The data are based on Canon's Standard Test Method.

3. Program Lines (Program Characteristics)

This camera is equipped with advanced "Intelligent Program AE" which chooses the best shutter speed/aperture combinations, taking the lens' focal length into account (for green zone mode and Program AE mode).

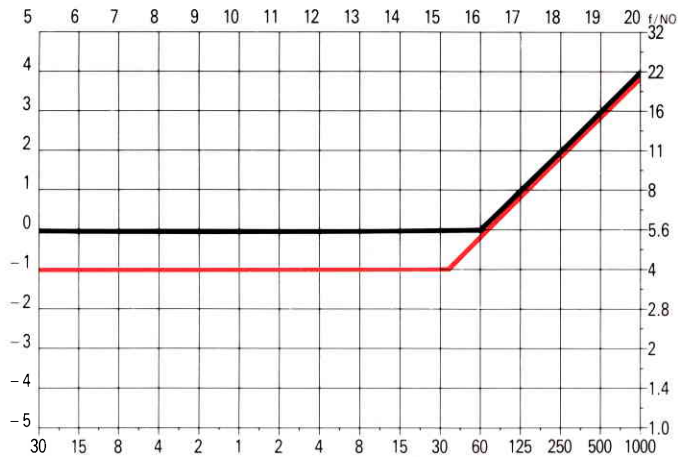
In green zone mode, the automatically set

shutter speed blinks when it becomes **0 to 0.5 steps slower than "1/focal length of the lens in use"**. This shutter speed (1/focal length of the lens in use) is generally said to be the limit for hand-held shooting.

- When using the EF 35-80mm f/4-5.6.

Red : WIDE

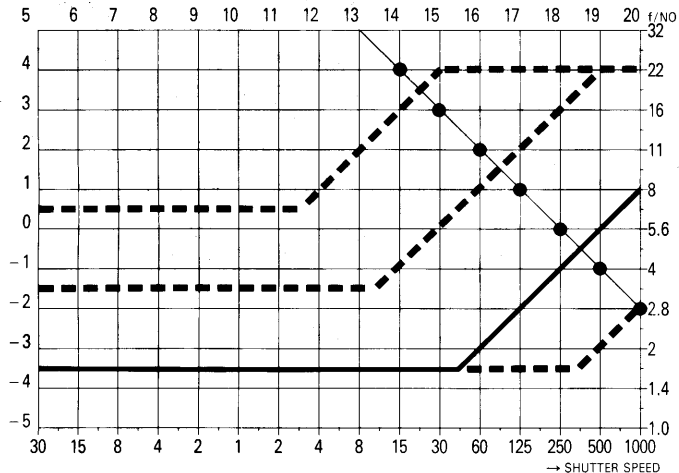
Black : TELE



Program Shift Characteristics

(EF 50 mm f/1.8 - example with shift at EV 13)

- Indicates the shutter speed/aperture combinations with program shift.



V. ACCESSORIES

The accessories described in this section are sold separately.



1. Dedicated Canon Speedlites

In addition to the **200E**, the powerful **430EZ** zoom flash with the maximum guide number of 141 ft/43 m, and the **300EZ** with the maximum guide number of 98 ft/30 m are available. With the 430EZ in particular, advanced functions such as flash output level compensation, stroboscopic flash, second-curtain sync, bounce flash, and slow synchronization are possible in addition to large output. An external battery pack is also available for the 430EZ.

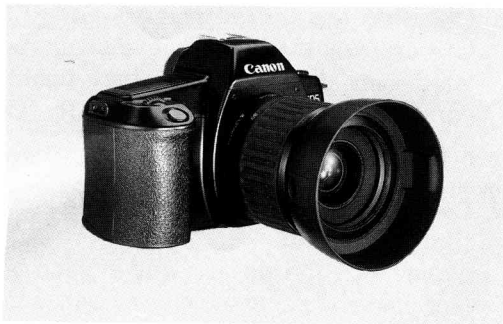


2. Grip Extension GR-70

The grip extension increases the size of the grip to provide a more comfortable and secure hold for large hands. An adjustable padded strap is included for easier handling. Fastens into the tripod socket with a lock nut screw.

3. Dioptic Adjustment Lenses

For eyeglass wearers, there are 10 correction lenses available from +3 to -4 dpt. Conduct a test before purchase for the best match to your prescription and make viewing more comfortable.



4. Lens Hoods and Filters

Use lens hoods and filters to keep unwanted light from entering the lens and provide special effects. Select the right hood size to match your lens and select filters according to your photographic objectives.

- When attaching the hood to the EF 35-80 mm f/4-5.6 Power Zoom, EF 35-80 mm f/4-5.6 or EF 80-200 mm f/4.5-5.6, first screw the hood adapter into the lens and attach the hood to the adapter.
- When attaching both the hood and filter to the EF 35-80 mm f/4-5.6, screw the filter into the hood adapter.

VI. CAMERA CARE

Keep your camera in top condition by following these suggestions for periodic cleaning. See the precautions on p. 5 for other important information.

1. Cleaning the lens surface—

Blow off dust with a blower brush and gently wipe the lens surface with a piece of lens cleaning paper moistened with lens cleaner. Clean in a spiral motion from the center outwards.

2. Cleaning mirror and focusing screen—

Use a blower brush reserved for this purpose only. If more cleaning is necessary, NEVER attempt to do it yourself. Take the camera to an authorized Canon service facility.

3. Cleaning the film chamber—

Use a blower brush to remove accumulated film dust particles that might scratch the film. Be careful NOT TO TOUCH the shutter curtain.

4. Cleaning the film pressure plate and film guide rails—

Lightly wipe the surface with a piece of lens cleaning paper moistened with lens cleaning. Be careful NOT TO TOUCH the shutter curtain.

- Use of aerosol spray dust removers is not recommended.

Liquid Crystal Display/Battery Notes

The LCD panel uses liquid crystal to show exposure information. After about five years, the display may become difficult to read. If this occurs, have it replaced at an authorized Canon service facility. Replacement is at the owner's expense.

Liquid crystal may also respond relatively slowly in temperatures below 32°F/0°C. It may also darken in temperatures around 140°F/60°C. The LCD panel will return when the temperature returns to normal.

Battery Information

Lithium Battery Check

Always check the battery at the following times:

1. When loading a new battery
2. After lengthy storage
3. Before an important shooting assignment
4. In cold weather
5. If the shutter will not release


Battery Use Information



1. Wipe the battery terminals with a clean, dry cloth to ensure proper connection.
2. Remove the battery if you do not expect to use the camera for more than three weeks.
3. Battery performance deteriorates slightly in temperatures below 32°F/0°C. Keep the camera and especially a spare battery close to your body or in an inside pocket to keep it warm until use.


4. The battery may explode or cause burns if disassembled, recharged, shorted, exposed to high temperatures, or disposed of in fire. Be sure to observe all precautions indicated on the battery package. Always keep it out of the reach of children.

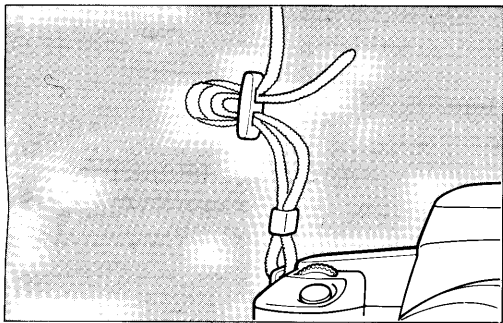
5. If the battery check symbol blinks or does not appear in the LCD panel during battery check, exposure will be okay as long as the shutter releases. Film advance and rewind will be impaired by insufficient battery power. If wind or rewind stops due to the exhausted battery, the film cartridge symbol will blink. Film transport resumes after a new battery is loaded.

Blinking “” Display

There are two conditions when the blinking “” will appear in the LCD panel.

1. If the battery is nearly exhausted, the blinking “” will appear when the shutter button is pressed halfway or when the battery is checked.
2. If the remaining battery power does not show a replacement condition, but the camera's self-test process detects an internal malfunction, the blinking “” will appear when the shutter button is pressed halfway.*

* In this case, remove the battery once. Wipe the battery terminals and reload it. Check the battery again. If the blinking “” still appears, the camera needs to be examined by an authorized Canon service facility.



Attaching the Strap

Thread the ends of the neckstrap through the fixtures as shown.

VII. SPECIFICATIONS

TYPE AND MAJOR COMPONENTS

Type: 35 mm focal plane shutter SLR (single-lens reflex) autofocus/auto exposure camera, with built-in motor drive.

Lens Mount: Canon EF mount (electronic signal transfer system)

Usable Lenses: Canon EF lenses

Viewfinder: Fixed eye-level pentaprism. Gives 90% vertical and horizontal coverage of actual picture area and 0.75X magnification with 50 mm lens at infinity.

Standard Diopter: Adjusted to -1.

Focusing Screen: Fixed, new laser-matte screen with focus mark and partial metering mark.

Shutter: Vertical-travel, focal plane shutter with all speeds electronically controlled.

Shutter Speed: 1/1000 - 30 sec. and bulb.

Set in 1/2-stop increments. X-sync is 1/90 sec.

AUTOFOCUS

AF Control System: TTL-SIR (Secondary Image Registration) phase detection type using BASIS (Base-Stored Image Sensor). Two modes available: One-shot and AI Focus that automatically switches to One-shot or AI Servo according to subject.

Manual focusing also possible.

AF Working Range: EV 1 - 18 at ISO 100.

AF Auxiliary Light: Automatically projected when necessary by the specified Speedlite.

EXPOSURE CONTROL

Light Metering: TTL full-aperture metering using an SPC (Silicon Photocell).

Three metering patterns available:

3-zone evaluative metering, partial metering which covers approx. 9.5% of the central picture area and center-weighted average metering (only when selecting the manual exposure mode).

Metering Range: EV 2-20 with 50 mm f/1.4 lens at ISO 100.

Shooting Modes:

1. Green Zone (Intelligent Program AE)
2. Programmed Image Control (Portrait, Landscape, Close-up, Sports)
3. Intelligent Program AE
4. Shutter-priority AE
5. Aperture-priority AE
6. Metered Manual
7. Depth-of-Field AE
8. Flash AE (A-TTL or TTL program flash AE with the flash)

Camera Shake Warning: Operates in Green Zone and Programmed Image Control modes. Shutter speed blinks when automatically-set shutter speed is 0 to 0.5 steps slower than "1/focal length of the lens in use."

Multiple Exposures: Up to nine exposures can be preset. Automatically clears upon completion.

Exposure Compensation: + /- 2 stops in 1/2-stop increments.

FILM TRANSPORT

Film Speed Setting: Automatically set according to DX code (ISO 25-5000) or set by user (ISO 6-6400).

Film Loading: Automatic prewind system. After film positioning and back cover closure, the film automatically winds to the end of the roll and stops.

Film Wind: Automatic. One of two modes is automatically set: Single Frame and Continuous (1 fps maximum).

Film Rewind: Automatic rewind at end of roll.

POWER SOURCE

Battery: One six-volt lithium battery (2CR5).

OTHER

Self-timer: Electronically controlled with a 10-sec. delay.

DIMENSIONS

Size: 5-7/8" (W) × 3-13/16" (H) × 2-11/16" (D)

148 (W) × 99.8 (H) × 68 (D) mm

Weight: 14.1 oz. (400 g) without battery
15.5 oz (440 g) with battery

LENSES

		EF 35-80 mm f/4-5.6	EF 80-200 mm f/4.5-5.6
Angle of View	Diagonal	63° - 30°	30° - 12°
	Vertical	30° - 17°	17° - 7°
	Horizontal	54° - 25°	25° - 10°
Optical Construction	8 elements in 8 groups	10 elements in 7 groups	
Minimum Aperture	22-32	22-27	
Shooting Distance	1.2 ft/0.37 m-infinity	4.9 ft/1.5 m- infinity	
Maximum Magnification and Field of View	35 mm 0.12X (200×300mm) 7-7/8"×11-13/16" 80 mm 0.25X (96×144mm) 3-3/4"×5-11/16"	80 mm 0.065X (368×578mm) 14-1/2"×21-9/16" 200 mm 0.156X (152×225mm) 5-15/16"×8-7/8"	
Filter Size	52 mm	52 mm	
Hood	EW-62	ET-62 II	
Case (hard/snap)	LH-C13/ES-C9	LH-C13/ES-C13	
Length × Max. Diameter	2-3/8" × 2-11/16" 61 × 68.6 mm	3-1/16" × 2-13/16" 77.8 × 71.2 mm	
Weight	6.3 oz. (180 g)	9.7 oz. (275 g)	

FLASH

Speedlite 200E

Type: Clip-on type TTL automatic flash with directly coupled contacts. Series control system.

Guide Number (ISO 100): 65 ft/20 m

Flash Coverage Angle: Covers the angle of view of a 35 mm lens (covers 28 mm lens' angle of view with the optional wide adapter attached).

Number of Flashes: 400-4000 with new alkaline batteries.

Recycling Time: Approx. 0.5 to 4 sec.

Flash Duration: 1 ms or less

Sync Timing: First curtain sync only.

Flash Control System: TTL automatic control by metering light reflected from the film plane.

Shooting Distance Range: 2.3-23 ft/0.7-7 m (Based on ISO 100 film. The shooting distance range changes according to film speed.)

AF Auxiliary Light: Automatically emitted when the shutter button is pressed half-way if necessary. Effective distance range: 3.3-16.4 ft/1.0-5.0 m

Power Source: Four AA-size batteries

Dimensions: 2-1/8" (W) × 4-1/16" (H) × 1-5/8" (D) /

64 (W) × 104 (H) × 41 (D) mm

Weight: 4.6 oz. (130 gr) without batteries
8.1 oz (230 g) with batteries

All data are based on Canon's Standard Test Method.

Subject to change without notice.

