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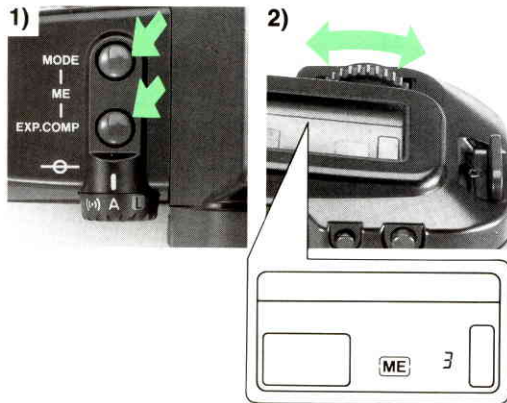


[back to my "Orphancameras" manuals /flash and light meter site](#)

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

The large manuals are split only for easy download size.

4) Multiple Exposures



The EOS 630's multiple exposure function allows you to take two or more exposures on the same frame for a creative effect. A maximum of nine exposures on the same frame can be done with the simple operation of the electronic input dial.

- 1) Press both the shooting mode selector and the exposure compensation button simultaneously. The "ME" mark indicating multiple exposure status will then appear in the display panel and the frame counter will become "1".
- 2) While pressing both, turn the electronic input dial to the desired number of exposures. For example, set "3" on the frame counter if you want to make three exposures on the same frame.

• After the preset number of exposures have been completed, the film automatically advances to the next frame.

Clearing Preset Exposures

1. Before shooting

Follow steps #1 and #2 on p. 53 and turn the electronic input dial to return the frame counter to "1".

2. While shooting

The operating procedures are basically the same as mentioned above, but turn the electronic input dial until the frame counter is blank.

- It is necessary to correct the exposure depending on the situation because the same frame is exposed several times. Use the exposure compensation function on p. 44.

Number of exposures	Exposure Compensation Setting
Double	- 1.0
Triple	- 1.5
Quadruple	- 2.0

Notes

1. The preceding table is a general guideline. The actual amount of exposure compensation varies according to the situation. Your technique will benefit greatly from practice.
2. It is not advisable to make multiple exposures on the first or last several frames due to possible film curl which may adversely affect image registration.
3. Generally, the first exposure of a series should be a relatively dark subject so that the image in the next exposure will show up clearly.
4. When using print film, please inform the developer that you have taken multiple exposures, or your photos may be processed incorrectly.

5) Dedicated Flash Photography



Speedlite 420EZ



Speedlite 300EZ

- 1) Use the Canon Speedlites 420EZ and 300EZ as fill-in flash in outdoor settings as well as for normal flash when shooting at night or in a dimly-lit room. These units feature a built-in AF auxiliary light function for dark situations, so you can perform AF flash photography.

Fill-in flash:

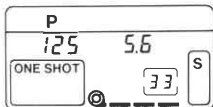
This technique utilizes a flash unit as an auxiliary light to prevent subject underexposure in backlit situations. Generally, the exposure level between the main subject illuminated by the flash and the background in ambient light must be balanced to avoid unnatural effects. With the Canon Speedlites 420EZ and 300EZ there is no need to balance this exposure level because it is automatically controlled.

EF 35-70 mm f/3.5-4.5



- [E] X-sync shutter speed
- [F] Vitesse d'obturation de synchronisation X
- [S] Velocidad de obturador X-sync

- [E] Aperture value
- [F] Valeur d'ouverture
- [S] Valor de abertura



- [E] Flash-charge completion mark
- [F] Témoin de charge du flash
- [S] Marca de flash cargado

Upon flash charge completion in the Program AE mode, the aperture value and the X-sync shutter speed are automatically set. X-sync shutter speed is set between 1/60 and 1/125 sec.

Please consult the Speedlite's instruction book for further details.

(2) Other Canon Speedlites

Follow the steps below for automatic flash photography:

- 1) Set the camera's shooting mode to "M".
- 2) Set the desired X-sync shutter speed between 30 and 1/125 sec.
 - If the shutter speed is faster than 1/125 sec, it is automatically set to 1/125 sec.
- 3) Set the aperture on the flash.
- 4) Set the same flash aperture on the camera.
 - When using the 300TL, set the flash mode set button to A-TTL or FEL for TTL automatic flash photography.
 - Do not use the 277T and 299T in the "PROGRAM" mode. Be sure to set the flash to "F. NO. SET" mode.
 - The 244T cannot be used.

(3) Other Manufacturers' Flashes

The X-sync speed can be set to 1/125 or slower.

(1/60 sec or slower with a large, studio-type flash), but please confirm correct synchronization before use as flash duration may vary.

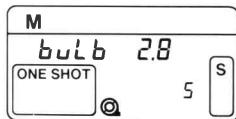
- Use a Canon Speedlite with this camera. using a flash (usually with more than two contacts) or flash accessory of another manufacturer may cause malfunction, or damage.

6) Bulb (Long Exposure)

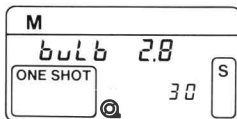


- [E] 2 hours/Full aperture
- [F] 2 heures/Ouverture maximum
- [S] 2 horas/Abertura máxima

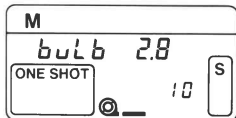
EF 50-200 mm 1/3.5-4.5



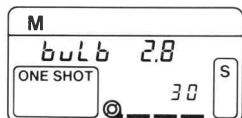
- [E] 5 sec display
- [F] Affichage 5 s
- [S] 5 seg.



- [E] 30 sec display
- [F] Affichage 30 s
- [S] 30 seg.



- [E] 40 sec display
- [F] Affichage 40 s
- [S] 40 seg.



- [E] 120 sec display
- [F] Affichage 120s
- [S] 120 seg.

Use the bulb mode for exposures longer than 30 seconds like astro or night photography.

- 1) Set the shooting mode to "M" following the steps on p. 15.
- 2) Turn the electronic input dial until "bulb" (next to "30") displays.
- 3) Set the aperture value by turning the electronic input dial while pressing the manual aperture set button or display panel illumination button.

- The camera requires relatively little power in the bulb mode saving battery usage.
- Bulb operation time displays by a series of three bars and numbers from 1 to 30. Each bar mark indicates 30 seconds. Maximum exposure time display is 120 seconds. (three bars and 30).
- Bulb cannot be used with auto exposure bracketing.
- Use the Technical Back E to control the exposure time within a period of 23 hrs. 59 mins. 59 secs. (available optionally)
- Use a tripod, Remote Switch 60T3 and Grip GR20 when taking long exposures (available optionally).
- There is no exposure warning in the bulb mode.

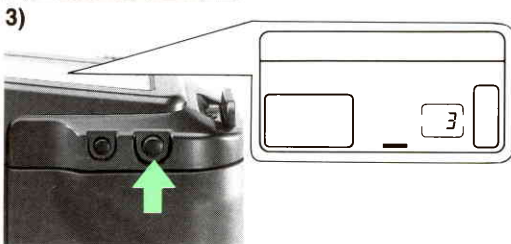
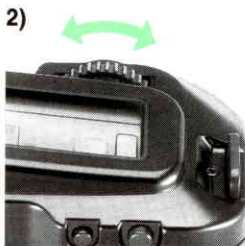
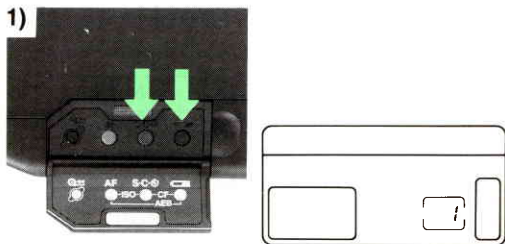
7) Shooting with Infrared Film



When using black-and-white infrared film, make a slight adjustment in focus with the red infrared index. For example, focus the subject first, then, if the lens is focused at 3 m on the distance scale, turn the manual focusing ring to align the 3 m mark with the red dot and release the shutter.

For zoom lenses, use the small red lines to align with the number as shown.

- When using infrared film, use a deep red filter as specified by the manufacturer.
- The infrared index mark position has been computed for infrared film usage with peak sensitivity at 800 nm.
- Read the manufacturer's instructions when using color infrared film.



This versatile, new control lets you program seven functions to your individual preference.

Set the main switch to "A" or "(••)". At the green mark, "□" controls #4, 5, and 7 cannot be used.






- 1) Press the film winding mode selector and battery check button at the same time. The control number appears in the frame counter.
- 2) Turn the electronic input dial in either direction to set the desired control number.
- 3) Press the partial metering button to finish. A bar mark appears to confirm setting.


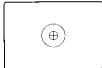
Custom Function Control Chart

Control	User-selected Operation	Normal Operation
1 Film rewind cancellation	Cancels automatic film rewind operation.	Film rewind starts automatically at end of roll.
2 Film leader out	Leaves the film leader outside the cartridge.	Film leader completely rewound into cartridge.
3 Film speed set	Allows film speed setting of DX-coded film.	Film speed set by camera according to DX-code.
4 Autofocus start	Initiates autofocus by pressing partial metering button, suitable for focus lock function.	Autofocus starts when shutter button pressed halfway.

Control	User-selected Operation	Normal Operation	
5 Manual exposure	Aperture	Set by electronic input dial operation only.	Set by manual aperture set button or display panel illumination button + input dial.
	Shutter speed	Set by manual aperture set button or display panel illumination button + electronic input dial	Set by electronic input dial operation only.
6 Camera shake warning tone cancellation	Turns off camera-shake warning tone.	Tone sounds automatically with main switch at "((•))" or " " .	
7 Manual focus operation with USM lenses	Allows manual focus adjustment after autofocus without prior setting	Manual focus adjustment possible by setting focus mode switch.	

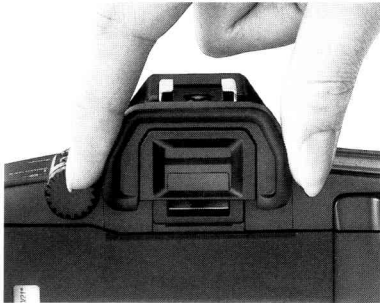
The Overall New Laser-Matte/AF Frame screen comes with your camera. You can change the focusing screen according to specific focusing needs with six different focusing screens available optionally.

Type	Application
A. Microprism 	Matte field with microprism rangefinder spot in the center of the screen. Usable with all lenses. Especially suited for general photography using an aperture of $f/5.6$ or larger.
B. New Split 	Matte field with split-image rangefinder spot in the center of the screen. Suitable for all lenses.
C. Overall New Laser Matte/AF Frame 	Matte field with AF frame in the center of the screen. This screen enables the entire field of view to be seen without distraction. Usable with all lenses.
D. Laser Matte/Section 	Matte field with vertical and horizontal reference lines. It is best for architectural photography, etc. where accurate image placement is essential.
H. Laser Matte/Scale 	Matte field with vertical and horizontal scale in millimeters. Recommended for close-ups, etc. where it is useful to know the size of the subject or the magnification involved.

Type	Application
I. Laser Matte/Double Cross-hair Reticule 	Matte field with clear center spot containing double cross-hair reticle. While focusing, move your eye from left to right. If cross-hairs stay in the same position on the subject, the subject is in focus. Recommended for astrophotography or other high magnification.
L. Cross Split-image 	Matte field with cross split-image in the center of the screen which divides the subject in half both vertically and horizontally. The subject is in focus when the four quarters merge to become one unbroken image. Suitable for general photography using an aperture of $f/5.6$ or larger.

- **NEVER** change the focusing screen with your fingers. A specially provided tool accompanies each screen for replacement.
- These focusing screens are exclusively designed for EOS 620, 630 and 650. Do not use them in any other cameras.

2) Dioptic Adjustment Lenses



Ten eyesight correction lenses are 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 far-sighted. Choose the one which is closest to your eyeglass prescription, and make a practical test if possible.

- The dioptic adjustment lens consists of a correction lens and removable rubber frame (eyecup). With the frame removed, the correction lens can also be attached to the A-series and T-series cameras.

1. Liquid Crystal Display

The display panel uses a liquid crystal to display exposure information. After about five years, the display may become hard to read.

The liquid crystal may respond relatively slow in low temperatures about 0°C/32°F and the display may become dark in high temperatures about 60°C/140°F. Regular functioning resumes in temperatures about 20°C/68°F.

Take your camera to the nearest Canon Service Facility for the replacement of the liquid crystal. (Replacement will be at owner's expense).

2. Blinking “bc” Display

A “bc” appearing with battery check bar marks may blink in the display panel to warn you of battery replacement or camera malfunction. Perform the following operations:

- 1) Check the battery first.
- 2) If battery voltage is insufficient, replace the battery.

- 3) If battery voltage is sufficient, remove the battery from the battery chamber and reinstall it.
- 4) Release the shutter button once.
If the blinking "bc" disappears, the camera has returned to normal condition and you can keep shooting. If it does not disappear after repeating these operations several times, the camera needs repair. Take it to the nearest Canon Service Facility.

3. Lithium Battery Pack (1)

This camera uses one, six-volt lithium battery pack (2CR5). Try to make a habit of checking the battery at the following times:

- After loading a new battery
 - After prolonged storage
 - If the shutter will not release
 - Shooting in low temperatures
 - Before shooting important events
- 1) Wipe the battery terminals and the camera contacts with a clean, dry cloth before loading to ensure proper contact.

- 2) Remove the battery if you do not expect to use the camera for about three weeks or longer.
- 3) Battery performance deteriorates slightly in temperatures below 0°C/32°F. Keep the camera and a spare battery pack close to your body or in a pocket to keep them warm until you are ready.
 - Battery may explode or cause burns if disassembled, recharged, shorted, or exposed to high temperature or disposed in fire. Be sure to observe all precautions indicated on the battery package.

4. Lithium Battery Pack (2)

Even if one blinking bar mark or no bar mark appears in the display panel during battery check, exposure will be correct as long as the shutter releases. Automatic wind and rewind, however, may not be possible because of insufficient battery power.

Also, if the camera stops during wind or rewind, all the film transport bars start blinking to warn you. Automatic rewind re-starts after new battery pack replacement and pressing the film re-wind button.

5. When using the Quartz Date Back E

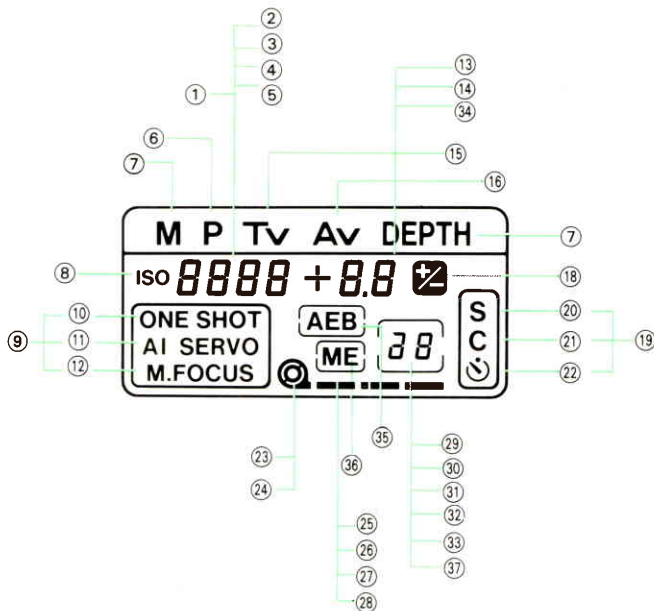
The continuous film winding speed decreases when the Quartz Date Back E is in use.

6. When Using the Technical Back E

Correct data imprinting may be impossible in some conditions. Please contact a Canon Service Facility for details.

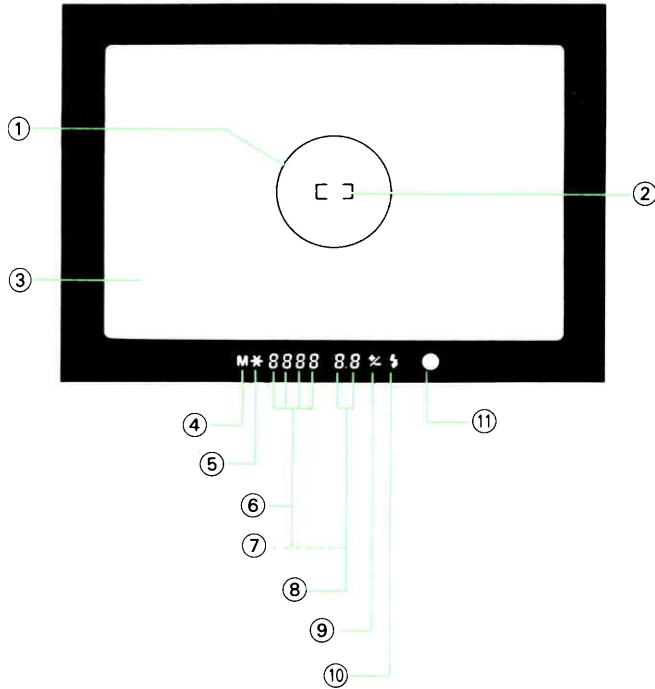
1. LCD Display Panel

This camera uses a liquid crystal to display shooting information. The diagram shows all the information for explanation purposes only.



- | | |
|---------------------------------|----------------------------------|
| ① Battery check | ⑳ Single exposure |
| ② Depth of field AE | ㉑ Continuous exposure |
| ③ ISO film speed | ㉒ Self-timer |
| ④ Shutter speed | ㉓ Film-load check |
| ⑤ Metered manual exposure level | ㉔ Film rewind completion |
| ⑥ Program AE | ㉕ Film transport (wind/rewind) |
| ⑦ Manual | ㉖ Film wind completion |
| ⑧ ISO indicator | ㉗ Battery check |
| ⑨ AF mode | ㉘ Custom function control |
| ⑩ One-shot AF | ㉙ Frame counter |
| ⑪ AI Servo AF | ㉚ P.I.C. number |
| ⑫ Manual focusing | ㉛ Custom function control number |
| ⑬ Aperture value | ㉜ Self-timer countdown |
| ⑭ Exposure compensation value | ㉝ Bulb exposure time |
| ⑮ Shutter-priority AE | ㉞ Auto exposure bracketing value |
| ⑯ Aperture-priority AE | ㉟ Auto exposure bracketing |
| ⑰ Depth of field AE | ㊱ Multiple exposures |
| ⑱ Exposure compensation | ㊲ Number of multiple exposures |
| ⑲ Film winding mode | |

2. Viewfinder Information Display



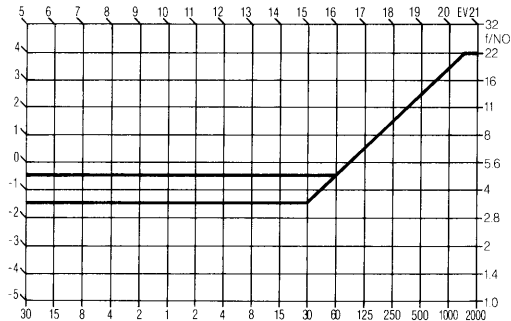
The bright and easy-to-read viewfinder displays only necessary information at the bottom. The diagram here shows all the information for explanation.

- ① Partial metering mark
(approx. 6.5 % of the picture area)
- ② AF frame
- ③ New laser-matte focusing screen
- ④ Manual mode indicator
- ⑤ Partial metering indicator (AE lock)
- ⑥ Shutter speed
- ⑦ Depth of field AE mode indicator
(dEP 1, dEP 2)
- ⑧ Aperture value
- ⑨ Exposure compensation indicator
- ⑩ Flash charge completion indicator
- ⑪ AF symbol
(Lights when AF completes.
Blinks when AF is impossible).

This camera is equipped with the advanced “Intelligent Program AE” which chooses the best shutter speed/aperture combinations, taking the lens focal length into account. When the automatically-set shutter speed becomes 0 to 0.5 steps below 1/focal length of the lens in use, the camera-shake warning sounds. The shutter speed of 1/focal length of the lens is generally said to be the limit for hand-held shooting.

a. Program shift characteristics

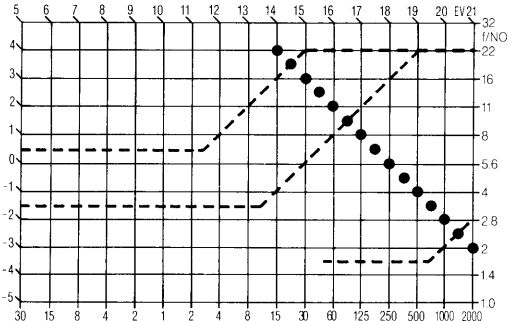
(EF 50 mm f/1.8,—example with shift at EV 13)



a) SHUTTER SPEED

Green: When using the EF 50 mm f/1.8

Black: When using the EF 35-70 mm f/3.5-4.5



b) SHUTTER SPEED

• indicates the shutter/aperture combinations in program shift function.

Based on a new 2CR5 lithium battery pack using the EF 50 mm f/1.8 and 24-exp. film.

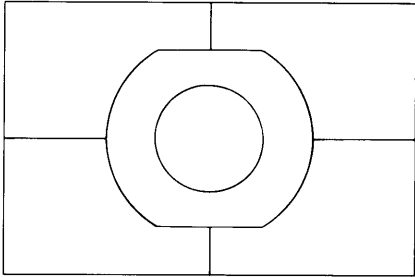
Temperature	Test method I	Test method II
Normal (20°C/68°F)	75 rolls	150 rolls
Low (-20°C/-4°F)	8 rolls	15 rolls
Test condition	Battery is checked after each roll is shot and rewound.	
Test interval	20 seconds at normal temperature and 3 minutes at low temperature.	

Test method I: Shutter is released just before the 6 second metering function stops after AF focusing.

Test method II: Shutter is released after AF focusing.

At normal temperatures, (20°C/68°F) the battery will expose between approximately 75 and 150 rolls of 24-exposure film, depending on the lens in use and how the camera is operated. For example, if you push the shutter button halfway many times without actually taking pictures, the battery will not last nearly as long as if you release the shutter immediately after autofocus is complete. In low temperatures (–20°C/–4°F), about 8 to 15 rolls of 24-exposure film can be exposed.

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



This camera's evaluative metering system measures light in six different areas of the picture frame while analyzing subject size, pattern and ambient light. An emphasis is placed on the center of the picture frame for two reasons. One, most people have a tendency to compose as such, and two, most autofocus cameras obtain focus with the subject in the center of the picture frame. Evaluative metering performance may vary with small subjects. See p. for partial metering information.

AF mode Film Winding mode	ONE SHOT The shutter releases only after AF completion.	AI SERVO
S: single	AF lock and AE lock in the evaluative metering mode take place simultaneously when AF completes.	AF follows a subject and the exposure is determined at the moment of shutter release. The shutter releases even if AF has not been completed.
C: continuous	AF lock and AE lock in the evaluative metering mode take place simultaneously when AF completes, then continuous exposure is made. (Approx. 5 frames/sec at the maximum).	AF follows a subject and the exposure is determined at the moment of shutter release. AF is adjusted to follow the subject during exposure. (Approx. 2.5 frames/sec at the maximum). The shutter releases even if AF has not been completed for the first frame

CONTINUOUS + ONE SHOT = The aperture remains stopped down.

CONTINUOUS + AI SERVO = The aperture always restores to full-aperture before each exposure.

1)



2)



a) Semi-hard case EH-1 S



b) Semi-hard case EH-1 L



c) Semi-hard case EH-1 LL

- 1) Thread the ends of the neckstrap through the rings on the camera as shown. When carrying the camera on your shoulder, keep the lens facing your body to minimize the risk of damage.
- 2) Keep the camera in a case (available optionally) to protect it while carrying.

Camera Cases

Canon offers three semi-hard cases.

1. Semi-hard case EH-1 S stores the camera with the EF 50 mm f/1.8 lens.
2. Semi-hard case EH-1 L stores the camera with the EF 35-70 mm f/3.5-4.5 lens.
3. Semi-hard case EH-1 LL stores the camera with the EF 35-105 mm f/3.5-4.5 lens.

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 Lenses: EF 50 mm f/1.8

EF 35-70 mm f/3.5-4.5

Lens Mount:

Canon EF Mount (full electronic signal transfer system)

Viewfinder:

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

Dioptric Adjustment:

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

Focusing Screen:

Overall new laser-matte/AF frame (type C). Six types of interchangeable screens are available optionally.

Mirror:

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

Viewfinder Information:

Displayed at the bottom of the viewing area.

(1) 7-segment LCD digit and character display

1. Shutter speed—flashes at 2Hz to give out-of-coupling range warning.
2. Aperture value—flashes at 2Hz to give out-of-coupling range warning.
3. Metered manual exposure level—OP, oo, CL
4. Depth of field AE—dEP 1, dEP 2

(2) LCD mask character display

1. * —AE lock indicator in partial metering mode.
2. M—Manual exposure indicator
3. ⚡ —flash charge completion indicator
4. +/- —exposure compensation indicator
5. —AF in-focus indicator (flashes at 6Hz when AF is not possible.)

Light Metering System:

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

Shooting Modes:

1. Green mark standard shooting mode with P.I.C. (Programmed Image Control)
2. Shutter-Priority AE
3. Aperture-Priority AE
4. Intelligent Program AE with variable shift function
5. Depth of Field AE
6. Manual
7. Flash AE (A-TTL program flash AE and TTL program flash AE with P.I.C. #7 or 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. Beeper can also be canceled.

Metering Range:

EV 1-20 (EV -1 to 20 in normal temperature)

Conversion with 50 mm f/1.4 at ISO 100.

Film speed:

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

Exposure Compensation:

±5 steps by 1/2-step increment

Auto Exposure Bracketing:

±5 steps in 1/2-step increment. Three continuous exposures are taken in sequence of underexposure, correct exposure according to camera's meter and overexposure.

Multiple Exposures:

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

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.

Three selectable modes:

1. ONE SHOT: AF operation ends and focus is locked once ranging is completed. Shutter does not release until ranging is completed.
2. AI SERVO: Focus continuously adjusts to follow the subject movement. Shutter can be released at any time regardless of ranging completion. Equipped with focus prediction.

3. 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 near infrared light (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.

Shutter Speed:

1/2000-30 secs and bulb. X-sync is 1/125 sec. Can be set in 1/2-step increments.

Self-timer:

Electronically controlled with a delay of approx. 10 secs 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 (approx. 1.0 sec)

Film Wind:

Automatic using the built-in miniature motor. Confirmation 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. 5 frames/sec. with ONE SHOT AF mode and approx 2.5 frames/sec. with AI SERVO AF mode).

Film Rewind:

Automatic using the built-in miniature motor. Starts when the film end is reached and then stops (with 24-exp. film, approx. 4 secs.). 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 the Speedlite 420EZ/300EZ with the camera set to "P"):

A-TTL flash auto—Using the camera's A-TTL program and the flash's near-infrared preflash, the correct aperture value is automatically set. X-sync speed is also automatically set between 1/60 and 1/125 sec. upon flash charge completion. TTL control system which meters the light reflected from the film surface. Automatic fill-in flash is possible.

Grip:

Interchangeable

The GR30 (without remote control terminal): standard.

The GR20 with remote control terminal: available optionally.

The large-size, Grip GR10 is available optionally.

Depth-of-Field Check:

By pressing the depth-of-field check button.

LCD Display Panel:

Displays only the information required at the time, e.g. shooting mode, film winding mode, AF mode, shutter speed, aperture value, film speed, or battery check. Timer function for 6 secs is provided; the display is held on for 6 secs; after the switch i.e., shutter button is pressed. Can be illuminated by electro luminance. Custom Functions: Built-in, seven kinds.

Power Source:

One, six-volt lithium battery pack (2CR5). Battery replaced by removing the 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 can be attached.

Dimensions: 148 (W) × 108.3 (H) × 67.5 (D) mm

(5-13/16" × 4-1/4" × 2-5/8")

Weight:

670g (23.4 oz.) body only.

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

Subject to change without notice.