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The large manuals are split only for easy download size.

4. Selecting the AF Mode on the AC Lenses

The following AF (autofocus) modes are selectable according to your purpose and the shooting conditions.

Select:

- “ONE SHOT” for normal use, and for focus-lock photography.
(For more information about focus-lock see page 45.)

In this mode the lens stops rotating once focus has been obtained. As long as you continue to press the shutter button halfway down, even if the camera is pointed at another subject at a different focusing distance, the original focus will remain locked.

- “SERVO” when you want to freeze subject motion at a certain moment while following a moving subject.

When following a moving subject in the Servo mode, the lens continues to rotate, refocusing every time the focusing distance changes.

- When taking continuous exposures, the original focus will remain locked for all the shots, even if the focusing distance changes.



- The autofocusing system's response speed changes depending on such shooting conditions as brightness. Response speed becomes slower as it gets dark. In low temperatures battery power becomes lower so response speed is slower.

- “MANUAL” for manual focusing.
In this mode the subject is focused by rotating the manual focusing ring. When autofocusing is impossible, select the manual mode by sliding the AF mode selector to the “MANUAL” mark.

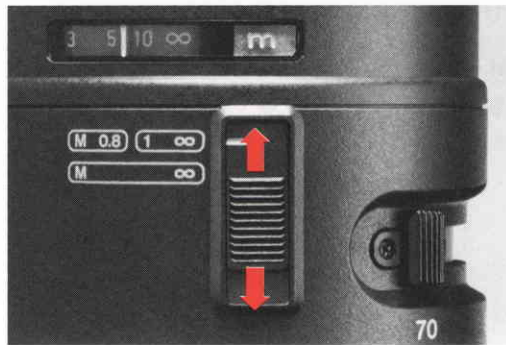
5. Canon AC 35—70mm f/3.5—4.5 Lens



The following explanations refer to the Canon AC 35—70mm f/3.5—4.5 lens. If you have the T80 with the Canon AC 50mm f/1.8, proceed to page 43.

Zooming

The focal length of the AC 35—70mm f/3.5—4.5 lens can be varied using the zooming function. By changing the focal length you can adjust image size to obtain the desired composition. Zoom by rotating the zooming lever which is located on the underside of the lens.



Selecting the autofocus range

You can select three autofocusing ranges according to your purpose. To set the focusing range, first rotate the focusing ring until it is set in the desired range and then slide the focus range selector until it is aligned with the same range.

The following ranges are selectable:

Select:

Macro— ∞ : for normal use and when you cannot estimate the distance from the lens to your subject.

Macro—0.8m or 1m— ∞ : when you know in advance in which range your subject is. When the lens is set to either of these two modes, focusing time will be shorter. For close-up photography, set the focus range selector to Macro—0.8m, and for normal shooting set it to 1m— ∞ . If you set the focus range selector to the Macro—0.8m range, the lens will stop rotating when it reaches the 0.8m extremity and start to rotate in the opposite direction. Likewise, if the lens is set to the 1m— ∞ range it will not rotate beyond 1m.

- If you want to take a picture of a subject in the 0.8m—1m range, set the focus range selector to the Macro— ∞ range.

Macro Mechanism

This lens is equipped with a macro mechanism for low magnification close-up photography.

To set the lens for close-up photography, rotate the focusing ring into the macro range first, and then slide the focus range selector to the Macro—0.8m range. If you want to take a picture with maximum magnification and minimum field of view coverage in the macro range, set the AF mode to “MANUAL”, turn the focusing ring to the minimum focusing distance in the macro range and set the focal length to the telephoto end. Then gently press the shutter button halfway down to check the exposure and while looking through the viewfinder, move the camera (or your body) back and forth slowly until the image becomes clear.



6. Manual Focusing



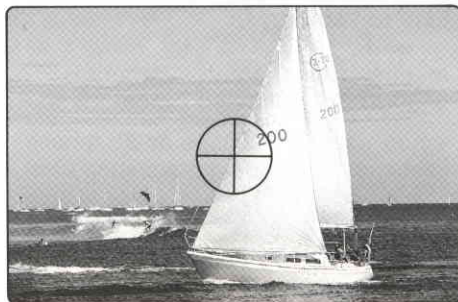
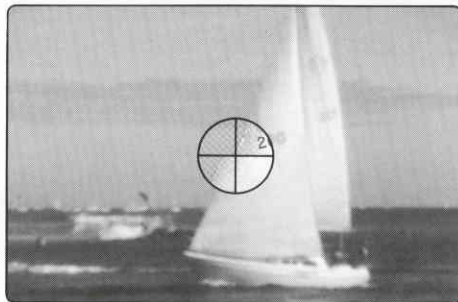
1) Slide the AF mode selector on the AC lens to "MANUAL".

- Manual focus should generally be used in the following cases:
 - a) When using FD lenses or FL lenses.
 - b) When using a linear polarization filter.

2) Turn the manual focusing ring and focus your subject using the cross-split prism.

The subject is in focus when the image is not fuzzy and the four quarters merge to become one unbroken image.

- It is not recommended to rely upon the focus tone to report correct focus when manually focusing. This is because it is not usually possible to stop motion immediately when the beeper sounds, so focus generally goes beyond the sharpest point.
- When focusing manually on a subject at infinity with AC lenses, the cross-split prism must be used to obtain accurate focus. (Simply turning the ring as far as it will go toward infinity will result in a blurred picture.)

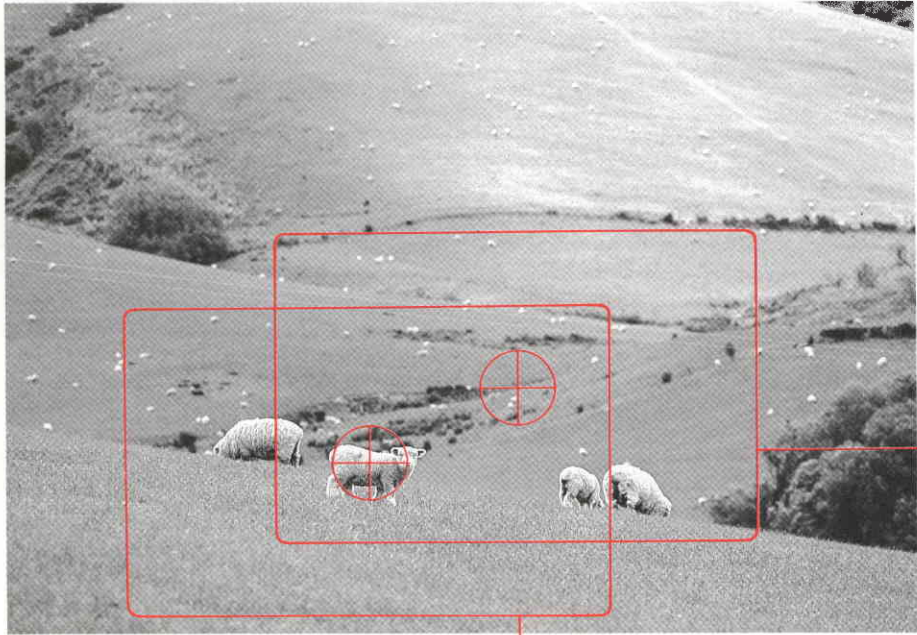


7. Shooting when your main subject is not centered (AF Lock Shooting)

If you compose the picture so that your main subject is not in the center, (as shown in the next page, illus. A), when using normal AF the background will end up being in focus and the subject will be out of focus. Use AF lock as follows in this case.

- 1) Slide the AF mode selector on the AC lens to "ONE SHOT".
- 2) Compose the picture so that your main subject is in the center (as shown in illus. B). Then gently press the shutter button halfway. The camera will find the point of focus and memorize the distance between you and the subject.
- 3) Recompose the picture as you like and without taking your finger off of the shutter button, press it all the way down.
 - The above shooting method is called AF lock shooting.
 - AF lock can also be used when shooting subjects difficult for autofocus. (See page 47.)





(A)

(B)

8. Difficult Subjects for Autofocus

The Canon T80 uses CCD line sensors to detect sharpness. This AF system is very accurate, but not perfect. The following subjects are difficult for autofocus:

Cross-split rangefinder

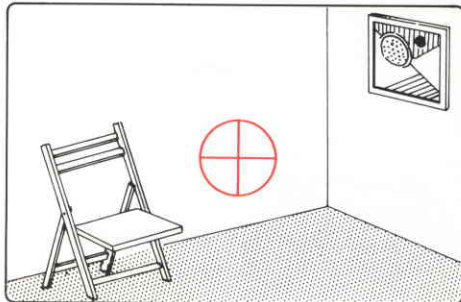
AF coverage area



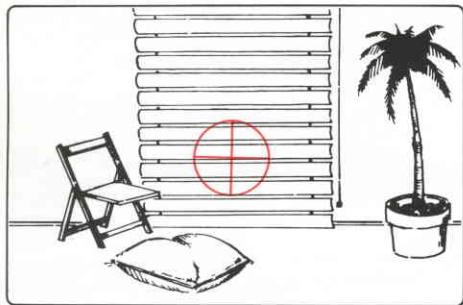
- 1) Subjects impossible to autofocus.
 - A. Subjects in low-light situations (a dark room, night scenes).



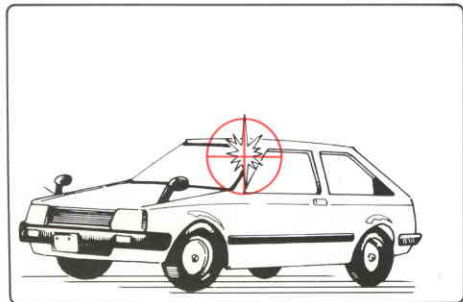
- B. Low contrast subjects (misty scenes, light-colored or white objects).



C. Subjects having generally horizontal patterns (window blinds).

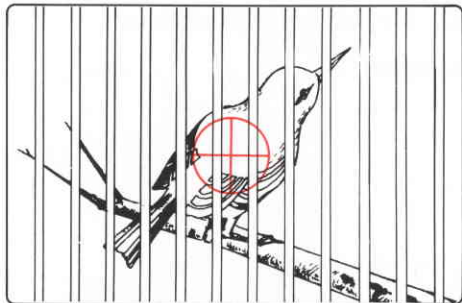


D. Subjects with strong reflections.

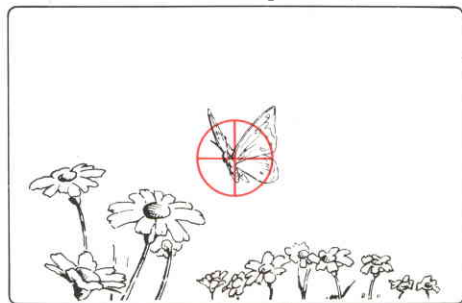


2) Subjects with which autofocus works incorrectly

A. Subjects with an object in front of them (zoo animals in a cage).



B. Moving subjects (that are difficult to keep within the AF coverage area).



The above subjects can be focused as follows:

1. Autofocus a substitute subject at the same distance from the camera as your main subject, and then recompose the picture as you like (AF lock shooting).
2. Focus the subject manually using the cross-split prism.
3. Hold the camera vertically and focus the subject using autofocus, then recompose the picture as you like (AF lock shooting).

Focusing Tips

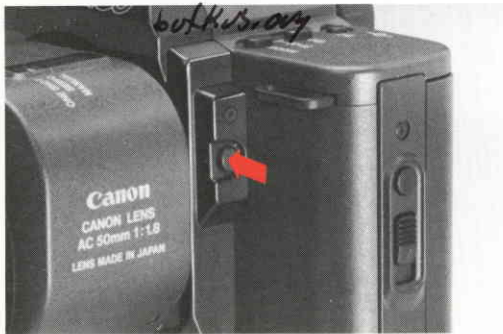
The T80's AF system works by judging subject contrast. It is therefore desirable to center the AF coverage area over the part of the subject with the highest contrast. For example, if your subject is a human face, the nose has more contrast than a cheek and an eye is even better than the nose. This is effective under bad shooting conditions such as in low-light situations.

In dark places where autofocus is not possible, one method is to autofocus the flame of a lighter or a match at the same distance as your subject. Then you can take your subject using a flash.

- When you are absorbed in shooting, you may occasionally take a picture without noticing that your main subject is not within the AF coverage area. We recommend checking the focus with your own eyes as well as the beeper.

9. Exposure Compensation

The T80's meter measures the entire viewing area, putting special emphasis on the central portion where the subject is most likely to be. But when there is a bright light, such as the sun or a bright window, behind your subject, the T80's meter may be over influenced by that light and your subject will come out too dark. In such cases, press the exposure compensation button while releasing the shutter. (The shutter speed is then automatically reduced 1-1/2 steps to increase exposure.)



10. Stopped-down AE Mode (“” mark)

It is necessary to use the stopped-down mode when using close-up accessories which have no FD signal pins, such as extension tubes, bellows, the Canon reflex lens or FL lenses.

The process for setting this mode is the same as that for other AE modes but manual focus is necessary. (See page 43.)



- Exposure warnings are the same as those listed on page 36.
- Lenses and accessories with FD signal pins cannot be set in this mode.
- AC lenses cannot be used with bellows or extension tubes.

11. Long Exposure (Bulb) Shooting

With non-AC lenses, it is possible to make an exposure longer than 2 seconds when doing such types of photography as astro or night photography.

1. Disengage the aperture ring from the “A” position and manually set an aperture.
2. While pressing the AE mode selector, operate the slide switch until the flowing mode appears on the LCD panel. Then operate only the slide switch to choose “B” (bulb).
3. The shutter will remain open as long as you press the shutter button.

- Bulb operation time is displayed on the frame counter of the display panel. Exposure time up to 60 seconds is possible.
- It is possible to control the exposure time within a range of 23 hours 59 minutes 59 seconds by using the Command Back 80 (optionally available).



- Use of a tripod and the Remote Switch 60T3 is recommended when making long exposures. (See page 56.)
- AC lenses do not have an aperture ring so apertures cannot be set manually. It is therefore impossible to set the camera to bulb when an AC lens is mounted.

12. Flash Photography with Other Flash Units

When using Canon Speedlites, such as the A-series, 577G or 533G:

- 1) The shutter speed switches automatically to 1/90 sec.
- 2) Manually set the auto-flash aperture on the speedlite.
- 3) When the "P" and "⚡" marks light up in the viewfinder, the camera is ready for flash photography.

When using other makers' flashes

- 1) While pressing the AE mode selector, operate the slide switch until the flowing mode appears on the LCD panel. Then pick the 1/60 sec. shutter speed.
 - 2) Manually set the auto-flash f/stop on the lens and the flash.
 - 3) When the pilot lamp lights up, the camera is ready for flash photography.
- AC lenses cannot be used with other makers' flashes.

13. Remote Control Photography

When using remote control, attach the appropriate accessories directly to the remote control socket on the side of the camera body. The accessories are the Wireless Controller LC-1 and the Remote Switch 60T3. (See pages 56 and 58).

The Remote Switch 60T3 can be used when the camera is mounted on a tripod for close-up shooting or when using a telephoto lens with which camera-shake is a particular problem. With the optional Extension Cord 1000 T3 (approximately 10m or 30 ft. long), you can shoot from even further away.

Liquid Crystal Display

The T80's display panel uses liquid crystal to indicate exposure information. After about 5 years of normal use, the display may become hard to read.

The liquid crystal may respond relatively slowly in low temperatures and the display may become dark at high temperatures (about 60°C/140°F). Normal functioning will return when the temperature returns to normal.

Back-up Battery

If the camera is not used for a long time, you may want to remove the size AAA batteries for storage. In that case, a built-in lithium back-up battery powers the camera's memory of display items such as ISO value and frame counter number. Battery life is about 5 years. If, when the AAA batteries are replaced after prolonged storage, "ISO 100" starts to blink on the display panel, the back-up battery has run out and memory has been erased. In this case, reset the film speed. As long as AAA battery voltage is sufficient, normal camera operations are possible. If you remove the AAA batteries before the back-up battery is replaced, however, memory will be erased again. Please have the back-up battery replaced as soon as possible.

Take your camera to the nearest Canon Service facility for the replacement of the liquid crystal or the back-up battery. (Replacement will be at the owner's expense.)



14. Accessories

Canon Speedlite 277T



The 277T can be used as a fill-in flash for outdoor shooting as well as a normal flash when shooting at night or in a dimly lit room. For example, when you use the 277T to take a picture of a person backlit by the sun, your subject will not be too dark and the background will not be overexposed. 8 f/stops can be selected from f/2 to f/22 allowing you to consider the depth of field even in flash photography.

Remote Switch 60T3



The Remote Switch 60T3 is a cable release switch which is attached to the remote control socket of the camera body. When the remote switch release button is gently pressed halfway down, AF will operate and focus will be obtained. When the release button is pressed down all the way, the shutter will be released. For continuous shooting or long exposure (bulb) shooting, slide the release button to the running lock position.

Command Back 80



The Command Back 80 is an interchangeable camera back designed for exclusive use with the T80. As the name "Command" suggests, it not only records data but also controls the T80 for various types of timed photography.

The following operations are possible using the quartz controlled Command Back 80:

DATA FUNCTION

1. Printing of the auto date up through the year 2029 (automatic compensation for leap years and long and short months).
2. Printing of the Day/Hour/Minute in a 24 hour format.
3. Printing of an arbitrary 6-digit number plus the letters A through F.
4. Printing of a frame counter number up to 4 digits.

TIMER FUNCTION

1. Self-timer (the shutter is released after a fixed period of time).
2. Interval timer (the shutter is released at fixed intervals).
3. Long release timer (the shutter is released and held open for a fixed period of time when the T80 is set to "B" (This mode can only be used with non-AC lenses).
4. Frame counter setting (the camera stops automatically after the set number of exposures has been made).

- The timer settings can be set to any value from one second to 23 hours, 59 minutes, 59 seconds.
- It is possible to use both the data and timer functions at the same time.
- It is possible to program the camera completely by combining modes 1—4 in the timer function.

Wireless Controller LC-1



This accessory is a remote control photography device which uses infrared rays to control the camera from a distance. The LC-1 is particularly useful in such areas as sports photography, wildlife photography, and news coverage. The Wireless Controller LC-1 consists of a transmitter and a receiver. Use of the Remote Switch Adapter T3 is also required. Up to three cameras can be operated in series when the receivers are set to different channels.

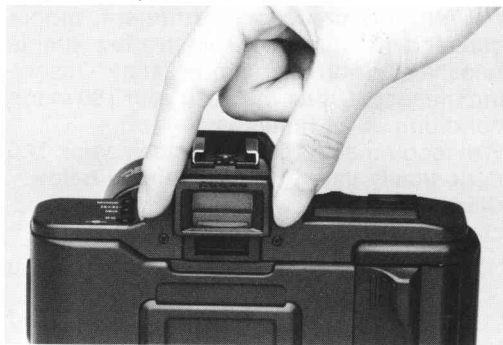
- Autofocus cannot be used.

Lens Hood



We strongly recommend the use of a lens hood to keep out side light which may cause flare and ghost images to form on the image. Use only a hood which is specified for your particular lens. The AC 50mm f/1.8 and AC 35—70mm f/3.5—4.5 lenses use the BW-66 hood. Most Canon hoods fit into the bayonet mount and are fixed by turning.

Dioptric Adjustment Lenses S



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 may make viewing and focusing easier if you are near or farsighted. Slide the Eyecup T up to remove it before you attach the dioptric adjustment lens to the camera. Choose the one which is closest to your eyeglass prescription, and make a practical test if possible.

- Attaching the dioptric adjustment lens with the Eyecup T is not possible.

15. Caring for Your Camera

As with any precision instrument, proper care and maintenance involve a few simple rules in addition to common sense. Observing these few rules will keep your T80 in top condition at all times.

We recommend that you clean your T80 periodically using the tools listed below.

Cleaning tools: blower brush, cleaning fluid, cleaning tissue, silicone cloth.

(1) To clean the lens surface and the viewfinder:

Blow off dust with the blower brush and then gently wipe the lens surface with a lens cleaning tissue which has been moistened with a few drops of lens cleaner.

(2) To clean the reflecting mirror and the focusing screen:

Use only a blower brush. If more cleaning is necessary, NEVER attempt to do it yourself but take it to an authorized Canon service facility.

(3) To clean the film chamber:

The film compartment also requires occasional cleaning with a blower brush to remove accumulated film dust particles which might scratch the film.

(4) To clean the film pressure plate and the film guide rails:

Lightly wipe the surface with a cleaning tissue moistened with cleaning fluid.

PRECAUTIONS

- Be careful NEVER to touch the shutter curtain.
- After using the camera on a beach, clean it thoroughly. Salt and sand are your T80's worst enemies.
- Aerosol spray dust removers are not recommended for the shutter curtain area. If used, hold the can at least 20 cm (8 inches) away from the curtain.
- Film passing through X-ray examinations at airports, even when loaded in a camera, may be exposed and ruined. To avoid accidental exposure, tell the inspector you want your camera and film hand checked.

Storage of your T80

The best thing you can do for your T80 is to use it regularly. In the event that you must store it for quite a while, however, first remove it from its case or camera bag. Remove the batteries. Wrap the camera in a clean, soft cloth and place it in a cool, dry, dust-free place. If you store the body and lens separately, attach both the body and rear lens caps.

Avoid storing your T80 in the following places:

- “Hot Spots” such as the trunk, rear window shelf or glove compartment of a car.
- Laboratories or other such areas where chemicals may cause corrosion.
- In direct sunlight.

Before using the T80 after it has been stored for a long time or before using the camera for important events, carefully check the operation of each part.

Specifications

Type: 35mm single lens reflex (SLR), focal-plane shutter, fully automatic autofocus camera.

Format: 24 × 36mm

Usable lenses: Canon AC and FD lenses (full aperture metering) and Non-AC or FD lenses (stopped-down metering).

Lens mount: Canon mount (signal transmission mechanism: AC system).

Viewfinder: Fixed eye-level pentaprism without condenser. Gives 92% vertical and 93% horizontal coverage of actual picture area and 0.83× magnification at infinity with a standard 50mm lens.

Finder information: Displayed to the right of viewing area. 4-point LED:

- M (red) - Manual indicator (stopped-down, bulb, manual flash), flashes at 4Hz.
- P (green) - AE (program) indicator, when shining steadily. Flashes for camera-shake, over/underexposure warnings.
1/90—1/30 sec, flashes at 1Hz.
1/30—2 sec, flashes at 2Hz.
Over/underexposure, flashes at 8Hz.
- ◇ (red) - Mode warning indicator, shines steadily.

- ♪ (green) - Flash charge completion indicator, shines steadily.

Light metering system: Through-the-lens (TTL) full aperture (for AC and FD lenses), using silicon photocell (SPC), center-weighted average metering.

AE control system:

- Multiprogram AE using the picture selector system
 - (1) Standard program
 - (2) Deep focus (deep depth of field)
 - (3) Stop action (stop subject motion)
 - (4) Shallow focus (shallow depth of field)
 - (5) Flowing (shutter speeds of 1/15, 1/30, 1/60, 1/125 sec.)
- Manual
- Stopped-down AE (only for lenses without FD signal pins)

Meter coupling range: With ISO 100 film and a 50mm f/1.4 lens: EV1—19.

Film speed: ISO 12 — ISO 1600 (in 1/3 steps). Displayed on the LCD panel when pressing the ISO button.

Exposure compensation: Correction of +1.5 step by pressing exposure compensation button.

AF system:

- **Type:**
TTL sharpness detection system using CCD elements.
- **AF operation:**
Activated by pressing shutter button halfway down when using AC lenses.
- **AF modes:**
One shot, Servo, manual
(During continuous shooting in Servo, the camera maintains the original focus for all the shots even if the subject distance changes.)
- **AF focus signal:**
Electronic beeper tone. Can be turned OFF by simultaneously pressing film speed setting button and AE mode selector.
- **AF ranging brightness range:**
EV4—18 when using the AC 50 mm f/1.8 lens, EV5—19 when using the AC 35—70 mm f/3.5—4.5 and the AC 75—200 mm f/4.5 (ISO 100).

Shutter speeds: Automatic: 1/1000 sec—2 sec.
Manual: 1/60 sec and Bulb.
X-sync: 1/90 sec.

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

Film loading and first frame positioning: Automatic. After the film has been positioned and the back cover closed, the film is automatically advanced to the 1st usable frame and then automatically stopped. Three blank frames are advanced. The frame counter display then reads "1".

Film wind: Automatic using built-in motor, enabling continuous shooting. Confirmation by floating bar marks on LCD panel. When the end of the film is reached, the film-load indicator and the frame counter number on the LCD panel start blinking. A beeping sound is also emitted.

Film rewind: Automatic using built-in motor. Automatic stop after film has been rewound into the cartridge. Rewind completion is indicated on LCD panel.

Power source: Main power source: Four AAA size batteries. Alkaline batteries are standard but carbon-zinc may also be used. Memory back-up: Built-in lithium battery (BR-1225 or CR-1220), battery life is approx. 5 years.

Battery check: By pressing the battery check (BC) button. Three energy levels are shown by bar marks on the LCD.

Flash contact: Coupled directly to the camera by means of the X-contact on the accessory shoe.

Automatic flash:

1. Program flash AE: With the Speedlite 277T or 244T. After sending out an infrared pre-flash to judge the distance and the reflectivity of the subject, the 277T or 244T sets the aperture and 1/90 sec shutter speed automatically. When out of shooting distance range (too far away), a warning is given, indicated by the "P" flashing in the viewfinder.

2. Electronic flash AE: With the 277T in "F.NO.SET" mode, or with other Canon Speedlites, shutter speed is set automatically to X-sync and aperture to the f/stop that has been set on the flash.

Remote control: Possible. With three-terminal contact for remote control. Remote Switch 60T3 is required.

Back cover: Removable, with memo holder. Opened by sliding latch with safety lock.

Dimensions: 141 (W) × 102 (H) × 54.7 (D) mm
(5-9/16" × 4" × 2-1/8")

Weight: 555 g (19—9/16 oz) body only.

Subject to change without notice.

	AC 50mm f/1.8	AC 35—70mm f/3.5—4.5
Format	24 × 36mm	
Focal Length	50mm	35—70mm
Maximum Aperture	f/1.8	f/3.5—4.5 (Varies according to the focal length)
Lens Construction	6 elements in 4 groups.	9 elements in 8 groups.
Angle of View: Horizontal Vertical Diagonal	40° 27° 46°	54°—29° 38°—19°30' 63°—34°
Focusing Mechanism	Automatic or manual. Straight helicoid type.	Automatic or manual. Rotation of front lens group.
Automatic Focusing Range	0.6—∞ (m)	MACRO 0.5—∞ (m) Focus range selector: Three settings; Macro—∞, Macro—0.8m and 1m—∞.
Zooming	—	Rotation of zooming lever
Zooming Scale	—	35 50 70 (All dark yellow)
Macro Mechanism	—	Helical front group movement, full range macro. (Closest focusing distance in macro range is 39cm from the film plane.)
Macro Magnification		35mm—0.11X (218 × 327mm) 70mm—0.2X (120 × 180mm)
Mount	Canon mount	
Filter Diameter	52mm	
Hood	BW-66	
Dimensions	74.2W × 66H × 47.5D mm (2-15/16" × 2-5/8" × 1-7/8")	76W × 68H × 68D mm (3" × 2-11/16" × 2-11/16")
Weight	210g (7-7/16 ozs)	285g (10-1/16 ozs)

Subject to change without notice.