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Canon T80

AUTO FOCUS SYSTEM
 PICTURE SELECTOR





Imagine...a totally automatic 35mm SLR camera capable of responding to your photographic sense.

We've all seen and appreciated photographs with a certain discernible quality that truly made them something special. Exceptional images that made us stop and think, or smile and laugh spontaneously. There is, of course, more to these extraordinary pictures than merely the photographer being in the right place at the right time. He or she has interpreted a photographic situation in an optimum manner, with a technique ideally suited to the moment recorded on film. How many times have you yourself thought that, yes, you too are capable of capturing the remarkable image? More than a few? Ironically enough, you've probably also felt that the only thing standing in your way is your camera—it won't let you do it.

Now, take a good, close look at the new Canon T80. The first thing you'll probably notice is its clean, uncluttered layout...a flush surface design with an interesting lens contour, and without confusing dials and numbers. Why does the new T80 look the way it does? Simply stated, Canon designed the T80 to let the photographer focus solely on ex-

pressing his or her photographic sense. Its full range of automatic functions makes 35mm SLR photography a simple two-step operation—yet you still have all the freedom to capture an image in the way that suits a given photographic situation best.



**The Canon T80
lets you concentrate on
what you want done
—not on how to do it.**



Five-program Picture Selector System depicts subjects typically encountered by the photographer.

The Canon T80's revolutionary new Picture Selector System for automatic exposure is so easy to use for one simple reason: it communicates information in *visual* terms, in a way that you can readily understand. Using LCD pictographs to symbolize the most widely employed photographic techniques—deep field of focus, shallow field of focus, stop action, flowing technique, and the standard approach—this system clearly presents to the photographer all of the options for a particular photo situation. You simply choose the pictograph that most closely resembles the actual image at hand and the way you want to capture that image—the Canon T80 then handles all the details.

Autofocus system with three interchangeable lenses to handle a whole spectrum of situations.

The Canon T80 features a totally new Autofocus system—it automatically gauges subject contrast in order to calculate the distance to the subject, then sends out control signals to the lens-mounted micromotor, which adjusts focus for you. *You never have to touch the lens to focus!* And what's more, this system works with any of *three* specially designed, dedicated autofocus lenses. So, in addition to the convenience of Autofocus, you also get the image flexibility afforded by interchangeable lenses. To activate the system, you simply press the shutter button down halfway... the T80 will do the rest.



A comprehensive design philosophy lets you take captivating 35mm SLR photos in just two steps.



Particularly impressive is how all Canon T80 design elements, each a superb convenience in its own right, work in concert to eliminate the complexities of 35mm SLR photography. From the moment you start out, everything is automatic...Auto Film Load, Auto Wind and Auto Rewind, for instance, are handled by a built-in motor. And when your intuition tells you it's time to take a photo, you need only complete a simple two-step procedure. Here's what you do: first, select one of the five styles of image expression offered by the Picture Selector System. To do this, you press down the AE mode selector on the top of the camera and, at the same time, move the slide switch to select the mode that best suits the situation at hand. Second, raise the camera to your eye, get your subject in the viewfinder, and press the shutter button down halfway to focus. When focus is correct (an electronic beeper will verify this), push the shutter button down the rest of the way to take the picture.





Deep Focus



A deep field of focus to embrace many aspects.

"Field of focus" refers to the area in a photo that is in focus before and behind a subject—you can think of it as a "zone of sharpness". When you select the T80's Deep Focus mode, your field of focus is expanded to maximum, so you can have a lot more elements in the picture in focus. You'll find this mode quite advantageous for expansive landscape

shots, "bird's-eye view" photos, and for when you want to photograph people or objects that are spread out or lined up in a row. Rows of buildings, street lamps—or a great gathering of people—are just some of the very interesting possibilities you can capture with this mode.





Shallow Focus



A shallow field of focus to isolate and accentuate your subject.

Generally speaking, making the subject in the photo smaller gives you more field of focus, while making it larger gives you less field of focus. When you choose the T80's Shallow Focus mode, the background and foreground will be pleasingly out of focus, and your chosen subject will be emphasized. You should find this mode particularly well suited to taking personal portraits—when focusing,

get relatively close to your subject and locate the person's face approximately in the center of the viewfinder (a photo of this type is usually referred to as a "head and shoulders" shot). Also, try to use a pleasant-looking background, such as leafy green bushes. You should find that even though it will be out of focus, this type of simple background will give a better effect. Slightly backlit situations can be captured very effectively with this mode, too.





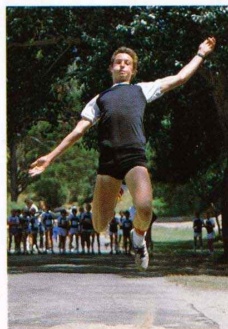
Stop Action



Stop action to freeze interesting movement.

Freezing fascinating or exciting action for all time in crisp focus...this photographic technique is called, appropriately enough, stop action. The most obvious use for the T80's Stop Action mode is in the realm of sports: a long jumper in mid-air, people competing or playing in the pool, and so on. You can stop action that is too fast to catch up with by first determining exactly where a subject is going to pass and then focusing on that spot beforehand. Subjects in

the sports world are just the beginning, however, because you can also use this mode to turn an everyday occurrence—children playing in the park, a bird landing on the edge of a birdbath—into a striking photographic image.





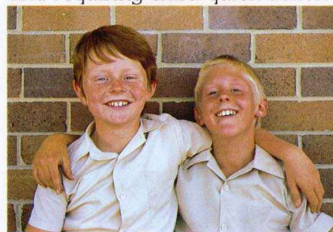
Standard



A standard approach to approximate the human eye.

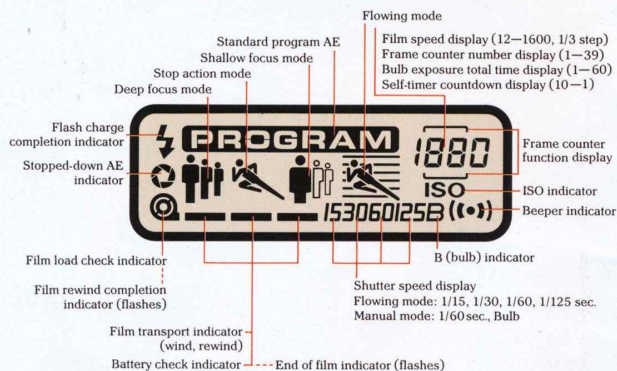
Perhaps underestimated at times by the beginning photographer, who may understandably get caught up in the excitement of discovering special photographic effects, the standard approach to capturing an image offers a very desirable quality that no other technique has to offer: naturalness. Think of the photographs you've seen in the past that have touched or affected you in a special way...many

were probably taken with a standard approach, so that you yourself felt like you were actually there, viewing the subject from a private vantage point. This mode is also ideal for capturing fleeting photographic moments, instances presenting numerous variables—regarding light or a person's expression—and requiring extra-quick action on your part.



The technologies that shape the Canon T80 are world class.

LCD Display Panel and Display Information



Liquid crystal display panel

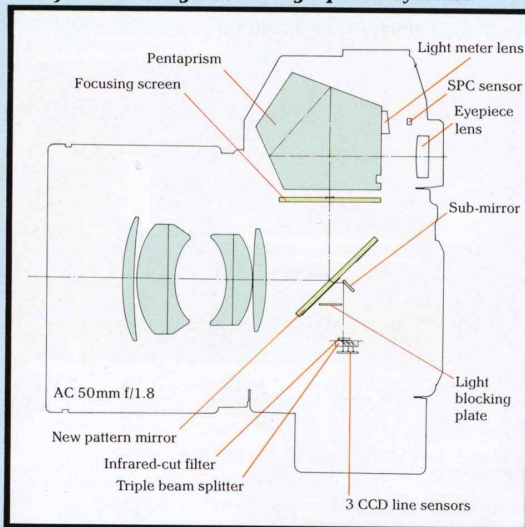
The Canon T80's liquid crystal display panel is maintained on "active" status in all camera states. The pictographs for the five programmed AE modes remain in the display at all times in a semi-darkened condition, with only the pictograph for the selected mode being completely dark. Numerical information includes film speed, the four shutter speeds of the Flowing AE mode, while a beeper indicator appears to reconfirm that correct focus has been achieved.

Note: all of the indicators are shown above, but normally only the information needed at a particular time is displayed.

Light metering

For measuring light, the Canon T80 utilizes the center-weighted average metering system. What this means is that sensitivity is concentrated on the central picture area—the normal subject position—and diminishes toward the edges.

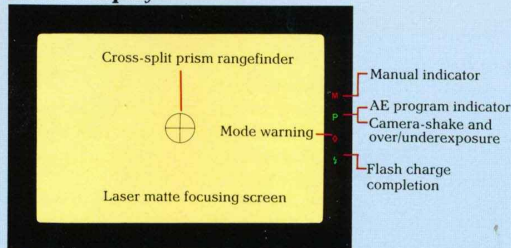
Autofocus and Light Metering Optical Systems



Autofocus system

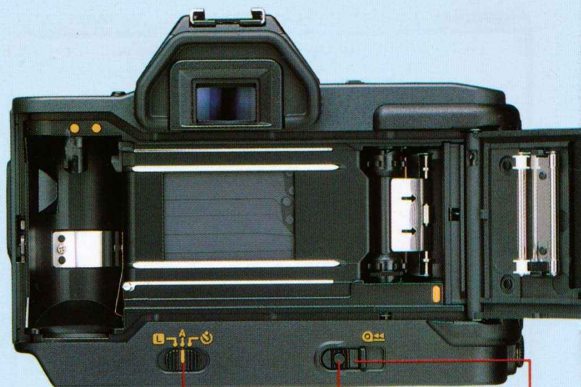
Light from the subject passes through the lens, with a portion of it split off at the main mirror and passed down to the ranging sensor unit in the bottom of the mirror box. Three CCD line sensors, which can be thought of as the "eyes" of the system, detect focus sharpness and send that information on to the T80's microprocessor. The microprocessor in turn compares the sharpness value received from each of the three sensors and produces command signals that automatically adjust the lens accordingly.

Finder Display



New finder

The Canon T80 employs a laser matte focusing screen to provide you with a bright and clear view of your subject. For extra convenience, an information display is provided to the right and outside of the viewing field. With the exception of the Standard Program mode, all program modes give a viewfinder mode warning—the \diamond symbol—if the desired photographic effect can not be achieved (in this case, exposure will still be correct). Other information includes AE program indicator, camera-shake and over/underexposure warnings, and flash charge completion indication.



Main switch (L, A, SELF)

Rewind switch
safety lock button

Rewind switch

Auto film load

To load the film, simply place the film cartridge in the film chamber, draw the film leader across and align it with the orange mark—ensuring that the sprocket teeth are properly engaged in the film sprocket holes. As soon as you close the back cover, the T80's built-in motor will automatically fire off several blank frames to advance the film to the first usable frame.

Auto film wind

The built-in motor also ensures that you're always ready for spur-of-the-moment picture-taking, because it winds the film on to the next frame after each shot. When holding the shutter button down to take continuous exposures, the T80 will average approximately 1.2 frames per second. Winding automatically stops when the end of the roll is reached (this will be reported to you by an electronic beeper and the flashing of the frame counter digits and bars in the LCD display).

Auto film rewind

To rewind the film back into the film cartridge, you simply depress the rewind switch safety lock button and, at the same time, slide the rewind switch to the right. When film rewinding is complete, the cartridge symbol in the LCD display will begin to flash.



Lens mount

The T80's high-technology lens mount incorporates a signal transmission system to pass signals between the camera and the mounted lens. When you mount one of the three dedicated Autofocus lenses, every electrical contact on the mount matches perfectly with its counterpart on the lens.

Dedicated Autofocus lenses

The T80's three specially designed Autofocus lenses incorporate Canon's state-of-the-art optical know-how to ensure that your pictures are crisply and cleanly focused. Viewed from the front, each of these lenses has its built-in micromotor and gear-train located on the right side. This design layout was adopted for two very important reasons: handling characteristics are much better with this design, and visual checks are easier, too.



Command Back 80

This slimline, optional command center offers a complete range of quartz-controlled data imprinting and timer functions, including time/date recording, alphanumeric coding, frame counter, self-timed shutter release, fixed interval shooting, and programmable number of exposures. An LCD readout and pushbuttons located behind a flip-down panel are used to input instructions.

Imprinted data simulated.

Canon Speedlite 277T

After attaching the optional Speedlite 277T and turning it on, you simply press the shutter button down halfway—the flash unit will automatically gauge the need for light in that particular instance and relay the details to the T80.



Every design element emphasizes ease of operation and overall convenience.



Soft-touch shutter release button

This electromagnetic button responds precisely to what you want to do. Metering, focusing and the viewfinder display are activated when the button is pressed down half-way, and depressing it fully releases the shutter.



Slide switch

Use this sliding switch to select an AE program mode (while simultaneously depressing the AE mode selector), to set the film speed on the camera (while simultaneously depressing the ISO button), or to select a shutter speed in the Flowing AE mode.



Remote control terminal

By plugging Canon's Remote Switch 60T3 cable into the remote control terminal, you can control the T80's shutter release from a remote location.



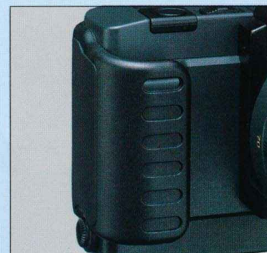
Battery chamber

The battery chamber on the bottom of the T80 holds four AAAA-size batteries, which drive all circuits within the camera body and also the lens motor.



Mode/ISO/BC buttons

Conveniently located on the top of the T80 on the left side are three buttons—the AE mode selector is used for selecting any one of the five AE program modes, the ISO button is used for setting the film speed on the camera (from ISO 12–1600), and the BC button is used for checking the battery energy level.



Comfortable grip

The T80's large, non-slip contoured grip is right in line with Canon's design concept of ensuring easy operation and handling; you can maintain a stable, secure hold on the camera in all kinds of shooting situations.



Main switch

To turn the T80 on, move the main switch from the "L" position (where the shutter release is locked) to the "A" position. Move it to the "SELF" position to use the self-timer function.

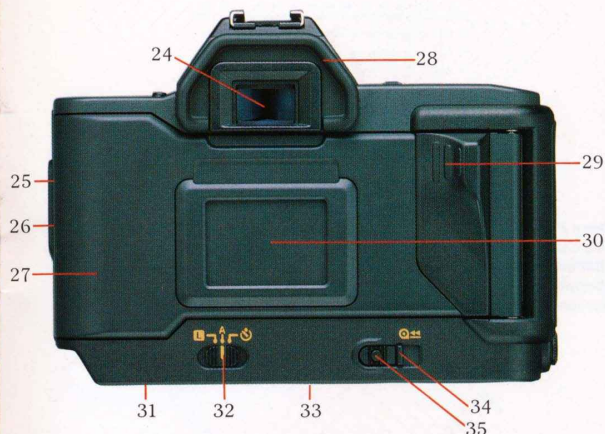


Exposure compensation button

If you want to maintain your camera position (because of an interesting landmark behind your subject, for example) but find the background somewhat bright, you can use this button to ensure better exposure for the subject area.

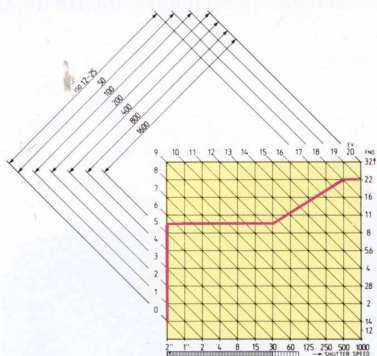
Nomenclature

(with AC 35—70mm f/3.5—4.5 lens)



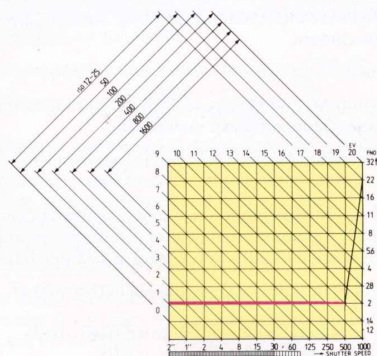
1. Neckstrap bracket
2. AF signal pins
3. Grip
4. Remote control terminal
5. Neckstrap bracket
6. Exposure compensation button
7. New pattern mirror
8. Battery chamber
9. AF mode selector
10. Lens release button
11. AE mode selector
12. Film speed setting button (ISO button)
13. Battery check button
14. Manual focusing ring
15. Distance scale window/index
16. Focus range selector (Macro/normal range)
17. Zooming lever
18. Slide switch
19. Shutter button
20. Film plane indicator
21. X-sync contact
22. Accessory shoe
23. LCD panel
24. Finder eyepiece
25. Back cover latch safety lock button
26. Back cover latch
27. Back cover
28. Eyecup T
29. Thumb rest
30. Memo holder
31. Battery chamber cover
32. Main switch
33. Tripod socket
34. Rewind switch
35. Rewind switch safety lock button

Picture Selector System EV Tables



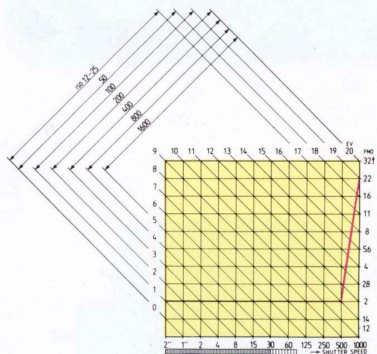
Deep Focus

The chart shown above, called an EV (exposure value) table, illustrates the characteristics—the programmed combinations of shutter speed and aperture—of the Deep Focus mode. Basically, what this table tells you is that this mode favors small apertures to give you maximum field of focus.



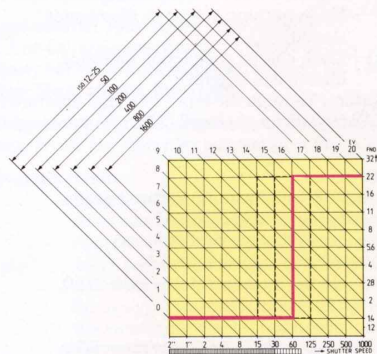
Shallow Focus

As you know, the Canon T80 works to give you a shallow “zone of sharpness” when you choose the Shallow Focus mode. As shown in the EV table, it does this by favoring large apertures.



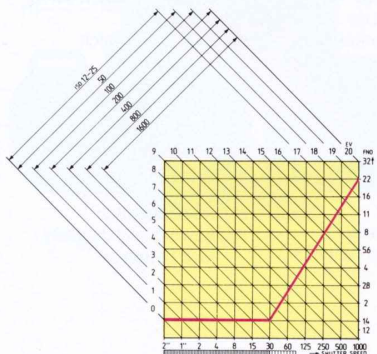
Stop Action

The EV table for the Canon T80's Stop Action mode tells us that it has characteristics that favor fast shutter speeds—shutter speeds fast enough to freeze action.



Flowing

This mode differs from the Canon T80's four other programmed modes in that it has four selectable shutter speeds—1/15th, 1/30th, 1/60th, and 1/125th of a second. The mode characteristics for each speed are shown in the EV table.



Standard Program

The characteristics of the Picture Selector System's Standard Program show that it takes the middle road in its approach to an image to assure a natural effect.

(with FD 50mm f/1.4 lens)

Canon T80 Camera Body Specifications

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

Format: 24×36 mm

Usable lenses: Canon AC and FD lenses (full aperture metering); non-AC and 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 $0.83\times$ magnification at infinity with a standard 50mm lens.

Finder information: Four-point LED; displayed to the right of viewing area.

- **M** (red) — Manual indicator (stopped-down, bulb, manual flash); flashes at 4 Hz.
- **P** (green) — AE (program) indicator when steadily illuminated. Flashes for camera-shake and over/underexposure warnings (at 1 Hz for 1/90-1/30 sec., at 2 Hz for 1/30-2 sec., and at 8 Hz for over/underexposure).
- **◇** (red) — Mode warning indicator; illuminates steadily.
- **↗** (green) — Flash charge completion indicator; illuminates 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 with Picture Selector System
 - (1) Deep focus (deep field of focus)
 - (2) Shallow focus (shallow field of focus)
 - (3) Stop action (stop subject motion)
 - (4) Flowing (shutter speeds of 1/15, 1/30, 1/60, 1/125 sec.)
 - (5) Standard program
- Stopped-down AE (only for lenses without FD signal pins)

Metering coupling range: EV 1-19 (with ISO 100 film and FD 50mm f/1.4 lens).

Film speed: ISO 12-ISO 1600 (in 1/3 steps). Displayed in the LCD panel when pressing the film speed setting 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 shots, even if the distance to the subject changes.)
- AF focus signal—Electronic beeper tone. Can be turned off by simultaneously pressing the film speed setting button and AE mode selector.
- AF ranging brightness range—EV 4-18 when using the AC 50mm f/1.8 lens; EV 5-19 when using the AC 35-70mm f/3.5-4.5 and the AC 75-200mm f/4.5 lenses (ISO 100).

Shutter: Vertical travel focal plane shutter with full electronic control (Canon EMAS-II).

Shutter speeds: Automatic—1/1000 sec.-2 sec., continuously variable.
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 first 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 in LCD panel. When the end of the film is reached, the film-load indicator and the frame counter number in the LCD panel start flashing. A beeping sound is also emitted.

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

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

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

Automatic flash:

- Program flash AE—With the Speedlite 277T or 244T. After sending out an infrared pre-flash to calculate the distance and 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 (indicated by the "P" flashing in the viewfinder display) is given.
- 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) \times 102 (H) \times 54.7 (D) mm
(5-9/16" \times 4" \times 2-1/8")

Weight: 555 g (19-9/16 oz.) body only.

Subject to change without notice.

Dedicated Autofocus Lens Specifications

	AC 50mm f/1.8	AC 35-70mm f/3.5-4.5	AC 75-200mm f/4.5*
Format	24 × 36mm		
Focal Length	50mm	35-70mm	75-200mm
Minimum Aperture	f/22	f/22	f/32
Lens Construction	6 elements in 4 groups.	9 elements in 8 groups.	11 elements in 8 groups.
Coating	Spectra coating (S.C.)	Super spectra coating (S.S.C.)	Super spectra coating (S.S.C.)
Angle of View:			
Horizontal	40°	54°—29°	27°—10°
Vertical	27°	38°—19°30'	18°11'—7°
Diagonal	46°	63°—34°	32°11'—12°
Focusing Mechanism	Automatic or manual. Straight helicoid type.	Automatic or manual. Rotation of front lens group.	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—∞.	1.8—∞ (m)
Zooming	—	Rotation of zooming lever.	Push/pull of single ring.
Zooming Scale	—	35, 50, 70 (All dark yellow)	75, 100, 135, 200 (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 at wide-angle end (75mm). Entered by pressing the macro conversion button. (Closest macro focusing distance is 55.3cm from the film plane.)
Macro Magnification	—	35mm—0.11X (218 × 327mm) 70mm—0.2X (120 × 180mm)	75mm—0.2X (120 × 180mm)
Mount	Canon mount		
Filter Diameter	52mm		58mm
Hood	BW-66		BT-58
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")	82.5W × 72H × 125.7D mm (3-1/4" × 2-13/16" × 4-15/16")
Weight	210g (7-16/16 oz)	285g (10-1/16 oz)	585g (20-5/8 oz)

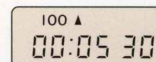
Subject to change without notice.

* It is not possible to set the aperture manually since AC lenses are designed exclusively for automatic exposure.

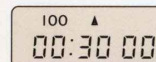
* The AC 75-200mm f/4.5 lens will be available soon.

Command Back 80 Functions

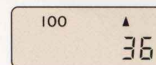
Command Modes



Self-timed shutter release—You can program the Command Back 80 to automatically release the shutter at the end of any time period lapse ranging from one second to 23 hours, 59 minutes, 59 seconds.

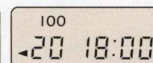
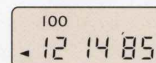


Fixed interval shooting—The T80 can be set to take pictures at predetermined intervals for a specific number of frames.

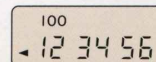


Programmable number of exposures—The frame counter function can be used to program the T80 to take a specified number of pictures automatically.

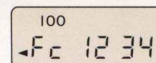
Data Recording



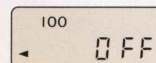
Time/date recording—A built-in calendar is programmed up to the year 2029, keeping track of both leap years and different month lengths. The month/day/year can be recorded on the film in any order, while for an up-to-the-minute record, the day/hour/minute can be imprinted.



Alphanumeric coding—This mode lets you assign a six-character/digit code to any picture for efficient filing and retrieval.



Frame counter—The sequential numbering of frames up to 9999 is possible in the frame counter mode.



Data imprinting function off

Note: Some of the photos in this catalog were taken by prefocusing on the subject or by focusing the lens manually.