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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!

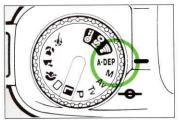
The large manuals are split only for easy download size.

### Depth-of-field AE Settings (A-DEP)

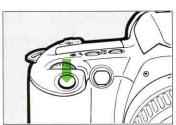


This setting allows you to take photographs automatically with everything from the foreground to background in sharp focus, such as a souvenir photograph where you want both the group in the foreground and the background to be in focus.

Everything will be placed in focus from the subject within the AF frame to objects in the far distance.



1 Set the command dial to A-DEP.



- Press the shutter button halfway to focus on the subject.
  - The shutter speed and aperture will be indicated on the LCD panel and in the viewfinder.



Check the shutter speed and the aperture and take the photograph.



- If the aperture value flashes, the exposure level is correct but the desired depth of focus can not be obtained. Use a wide-angle lens or move back from the subject.
- Not all changes in combination of shutter speed and aperture value are possible. This setting is designed to select a slower shutter speed, so it is important to hold the camera steady when taking the photograph or use a tripod.
- Using the flash with the command dial set to P will achieve the same results.

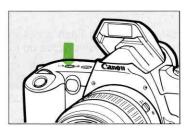
   If the focus mode switch of the lens is set to M, photographs can not be taken on the A-DEP setting.

### Flash Photography with the Built-in Flash (Rebel X S only) ( \$ )

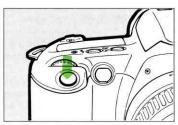


The built-in flash can be used at any time in the creative zone.

Use the flash when the subject is heavily shaded or when you wish to highlight people's faces. Using the built-in flash you can obtain photographs where both the subject and the background have a natural feel. When the flash is used, the shutter speed will be at or below 1/90 sec.



- 1. Press the flash button to raise the flash.
  - · Push the flash gently down to retract.



- 2. Press the shutter button halfway to focus on the subject.
- 3. Check that the \$\frac{1}{2}\$ symbol in the viewfinder is on before taking the photograph.

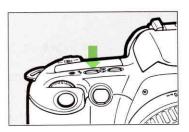




- If the built-in flash is used when a lens hood is attached, the hood can cause shading of the flash light. The lens hood must be removed before using the built-in flash.
- •An external flash cannot be used together with the built-in flash.
- •Light from the built-in flash may be blocked when using the following lenses. When using such a lens we recommend using a dedicated external flash unit.
- Large aperture lenses such as the EF 20~35mm f/2.8L and EF28~70mm f/2.8L.
- Super-telephoto lenses such as the EF 300mm f/2.8L and EF 600mm f/4L.
- The built-in flash cannot be used when a special flash or the accessory shoe cover is attached to the accessory shoe.
- •When using an external flash, push the built-in flash down to retract.

#### Setting the Red-eye Reduction Function

When the red-eye reduction function is set when taking flash shots in conditions where red-eye is likely, the red-eye reduction lamp lights up to reduce the chances of the phenomena from occurring.



- When the flash is raised, press the flash button (the red-eye reduction mode button) one more time.
  - The LCD panel will display the mark to indicate that the red-eye reduction has been set.
- To switch the red-eye reduction function off, press the flash button one more time.
  - The mark on the LCD panel will go out, indicating that the red-eye reduction function has been switched off.



If the red-eye reduction function is cancelled in the creative zone, the red-eye reduction function set in the image zone will also be cancelled.

### Taking Night-time Shots of People



When taking shots of sunsets or nighttime shots of people against a background, set the command dial to **Av** (Aperture-priority AE). When taking flash pictures with the aperture value on a lower setting, the flash illuminates the subjects, while the background is also captured clearly because of the slow shutter speed. This is called Slow Syncro Photography.

With the Rebel X, the same type of flash photography is possible with an external flash.



When taking a slow syncro shot, please use a tripod to avoid camera shake.

## Built-in Flash Shooting Distance Range (when using the EF 35-80 mm f/4-5.6 II)

	35	mm	80 mm		
ISO	Negative Film	Slide Film	Negative Film	Slide Film	
100	0.5 - 4.2 m	0.7 - 3 m	0.5 - 3 m	0.5 - 2.1 m	
	1.6 - 13.8 ft.	2.3 - 9.8 ft.	1.6 - 9.8 ft.	1.6 - 6.9 ft.	
400	1 - 8.4 m	1.5 - 6 m	0.7 - 6 m	1 - 4.2 m	
	3.3 - 27.5 ft.	4.9 - 19.7 ft.	2.3 - 19.7 ft.	3.3 - 13.8 ft.	

#### Checking exposure display information when using flash

Shooting Mode	Warning Display	Condition	Note	
Tv	The maximum aperture value for the lens being used blinks.	The background is overexposed.	The subject is correctly	
(Shutter-priority AE)	The minimum aperture value for the lens being used blinks.	The background is underexposed.	exposed.	
Av (Aportus priority AE)	The 1/90 sec shutter speed blinks.	The background is overexposed.	The subject is cor- rectly exposed. If the aperture value is changed, the shutter	
(Aperture-priority AE)	The 30" shutter speed blinks.	The background is underexposed.	speed may light up.	

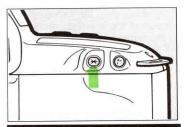
### Checking the shutter speed and aperture value when using the flash

Shooting mode	Shutter speed	Aperture value
P (Program AE)	Automatically set to 1/90 sec.	Flash aperture value automatically set according to existing lighting and TTL program.
Tv (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.
Av (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.
<b>M</b> (Manual)	Manually set to any desired shutter speed of 1/90 sec. or slower (*).	

<sup>(\*)</sup> If the shutter speed is set to a value faster that 1/90 sec., the camera will automatically lower it to 1/90 sec.

### Partial Metering (AE Lock • Center-weighted Metering)

In a scene with high contrast between the subject and background, switch to partial metering to limit the metering area to the center of the frame. This allows accurate metering of the subject without influence from the background. Partial metering operation locks in the exposure (AE lock) and focuses the subject using the center focusing point.





Partial metering mark ②

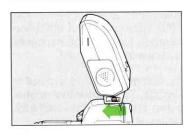


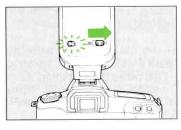
- Set the command dial to a creative zone mode. Compose the scene, press the shutter button halfway, then let up on the shutter button.
  - If you do not remove your finger from the shutter button once, the \* button will not function even if pressed.
- Cover the main subject with the viewfinder's central partial metering mark, then press the \* button.
  - "\*" appears in the viewfinder display and the exposure is locked by the AE lock function (→¹).
  - Keep the \* button pressed until you take the picture.
- While holding the \* button pressed, press the shutter button halfway to focus the subject.
  - "●" appears in the viewfinder display and the subject is focused with the central focusing point (→②).
- 4) Recompose the scene as desired and take the picture.

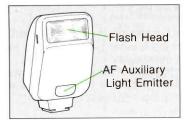
A

Press the partial metering button and/or the shutter button within six seconds after the exposure is displayed in the viewfinder. If more than 6 seconds elapse, start the procedure again from step 1.

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





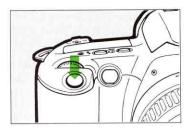


When the " 4 " indicator blinks in the viewfinder, attach the Speedlite 200E to the accessory shoe before taking pictures.

- After attaching the Speedlite 200E to the accessory shoe, slide the lock switch in the direction of the arrow to secure the flash to the camera.
- The " \* " indicator does not blink in creative zone modes.
- Set the Speedlite 200E's main switch to "l". The ready lamp lights up when flash charging is completed.
  - The viewfinder's " \* " indicator also lights up when flash charging is completed.
- 2. Compose the picture and press the shutter button to take the picture.
  - For flash pictures, do not press the shutter button completely until the flash unit's ready lamp lights up.
- \* For details, refer to the instructions provided with the Speedlite 200E.

### **Exposure Compensation**

Deliberately changing the exposure when taking a photograph is called exposure compensation. The compensation range is up to  $\pm -2$  steps in half-step increments.



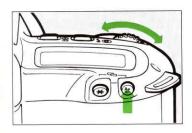
- Set the command dial to the creative zone.
- 2. Press the shutter button halfway to focus on the subject.
  - The shutter speed and aperture will be indicated on the LCD panel and in the viewfinder.





3. While pressing the exposure compensation button, turn the electronic input dial until the exposure level mark is set to the desired exposure compensation amount.

- "+" will increase the exposure level, "-" will reduce it.
- To cancel exposure compensation, set the exposure level mark on the exposure level mark scale to ①.
- 4. Take the photograph.





If the command dial is set to the image zone, the exposure compensation will be canceled.

#### III. TAKING DIFFERENT KINDS OF SHOTS

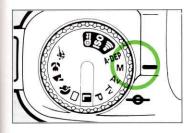


When using a shutter speed of 1/125 sec., and an aperture value of 5.6, compensating the exposure level scale by one increment will change the value of the exposure reading on the display as follows.

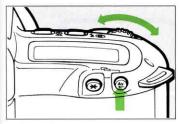
	-1	<b>←</b>	0		+1
Shutter Speed	250	-	125	-	60
Aperture Value	8.0	-	5.6	-	4.0

### **Bulb (Long Exposure) Photography**

In bulb photography, the shutter remains open as long as the shutter button is held down. When you release the shutter button, the shutter will close. Use this function when long exposures are required, such as when shooting night shots or fireworks. Make sure the camera does not move during exposure by using a tripod or placing it on some other steady surface. Bulb photography can be made easier by using the release lock function on the remote switch RS-60E3.

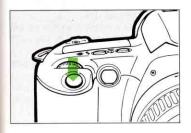


- 1. Set the command dial to M.
- 2. Turn the electronic input dial until the shutter speed is set to bulb (after 30").



 Set the desired aperture value by turning the electronic input dial while pressing the exposure compensation button.

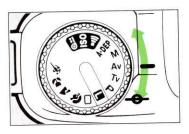




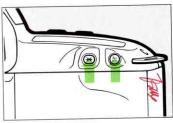
- Compose the photograph and take the picture. The shutter will remain open as long as the shutter button is held down.
  - The bulb indicator on the display will blik while the bulb photograph is being taken.
  - When using new batteries, about six hours of bulb photography can be carried out.
  - Bulb photography can be combined with the multiple-exposure function.

### Multiple-exposure Photography

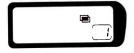
With multiple-exposure photography you can release the shutter to expose the same frame of film two or more times to obtain special effects.

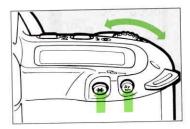


Set the command dial to the creative zone.



Press the partial metering and the exposure compensation buttons at the same time. The symbol will appear on the display.





- While holding down both the partial metering and the exposure compensation buttons, set the number of multiple-exposures required using the electronic input dial.
  - The number of multiple-exposures will appear on the film counter of the LCD panel.
  - The number of multiple-exposures can be set up to 9.
  - To cancel the multiple-exposure function, reset the number of multipleexposures to 1.

- 4. Compose the photograph and take the picture.
  - If you press the shutter button halfway after taking the first frame, the symbol will blink on the display panel to confirm that multiple-exposure photography is in progress.
  - When the pre-set number of multipleexposures have been taken, the film will automatically wind on to the next frame and the multiple-exposure function will be cancelled.
  - To cancel the multiple-exposure function in the middle of shooting, reset the number of remaining frames on the display as above.



When superimposing multiple exposures on a single frame, it is necessary to compensate for the exposure value from the very beginning. Read the section on "Exposure Compensation" on page 41.

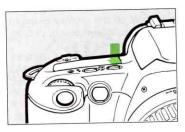
The following table will also serve as a guideline for determining the required compensating level.

Number of multiple-exposures	2	3	4
Compensation level	-1.0	-1.5	-2.0

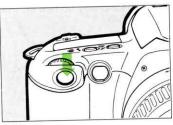
•The compensation values given here are intended as a rough guideline. As the required compensation values can change according to actual conditions, obtain the required photographic data beforehand.

### Taking Pictures Using the Self-timer

The self-timer can be used in the image zone and the creative zone. Please use a tripod when taking self-timer shots.



- 1. Press the self-timer button.
  - The so mark will appear in the LCD panel.
  - If the self-timer button is pressed again, the self-timer will be cancelled.



Press the shutter button down halfway to set the focus and check the shutter speed and aperture value.





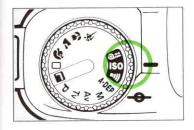
- •Standing in front of the camera when pressing the shutter button can result in out-of-focus pictures.
- To cancel the self-timer halfway, press the self-timer button again.
- Compose the picture and press the shutter button down fully while looking through the viewfinder. A beeper tone sounds to monitor the 10-second countdown.

For the first eight seconds, the beeper sounds slowly at a rate of twice per second. When only two seconds are left, the rate increases to eight times per second.

- When using the self-timer, the count-down is displayed on the LCD panel in seconds to the moment the shutter is released.
- S When using the self-timer with a flash shot, if the red-eye reduction function is set, the red-eye reduction lamp will come on two seconds before the shutter is released.

### Changing the Film Speed Setting

When using non-DX coded film, or when you wish to set the film speed (ISO number) yourself, the film speed can be selected manually in the following way. The range of possible settings is from ISO 6-6400.





 The letter iso and the film speed number will appear on the display panel.



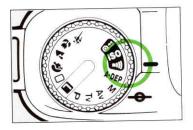
- 2. Turn the electronic input dial to set the desired film speed.
- Reset the command dial back to the desired photographic mode.



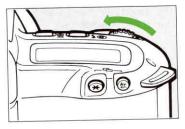
The film speed setting will remain at the previous set value until a DX coded film is loaded into the camera or until the film speed is reset.

### Shutting off the Beeper after Focussing

In certain circumstances, the electronic beeper could be undesirable, depending on where you are taking photographs. Therefore, when taking pictures in the creative zone, the beeper can be switched off.



1. Set the command dial to •1).



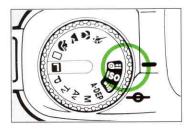
- Turn the electronic input dial to the left until the film counter displays "0".
  - The =1) symbol on the display panel will go off. When focussing, the beeper will not sound.
  - To reset the beeper to the original setting, repeat the above steps and set the film counter to "1".



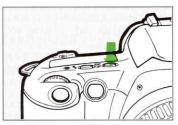
3. Reset the command dial back to the desired photographic mode.

### Removing Film before the End of the Roll

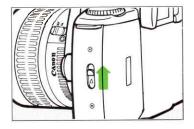
If you want to remove the film from the camera before the end of the roll, rewind the film and remove it in the following way.



Set the command dial to <sup>Q±</sup> .



- Press the film rewind button (the self-timer button) and keep it held down for at least one second.
  - The film will begin to rewind, and as soon as winding is completed, you will hear a sound like that of the shutter release. The film-load mark only will appear on the display panel.



3. Open the back cover and remove the film.



If you remove a film before the end of the roll without using the film rewind function, the next film loaded will continue to wind back into the film cartridge. To prevent this, close the back cover once and press the shutter button down fully before loading the new film.

### IV. OTHER INFORMATION

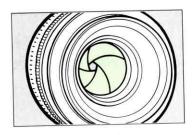
The following section contains data designed to help you get the best from you camera. It contains an explanation of the basic terms used in photography, some tips on how to use the camera's various functions when taking pictures, and an introduction to some of the accessories available.

### **Basic Photographic Terms**

#### Shutter Speed

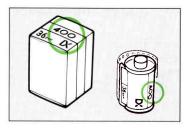
The shutter integrated in the camera body regulates the length of time that the film is exposed to light. The length of time that the shutter remains open is called the shutter speed. The camera displays the shutter speed on the LCD panel and in the viewfinder, in a range from 2000 (1/2000th of a second) to 30" (30 seconds), and bulb.

#### Aperture Value



Integrated into the lens, the aperture is an opening which can be widened and narrowed to regulate the amount of light allowed to enter the camera. The size of the opening is called the aperture value. The camera displays the aperture value on the LCD panel and in the viewfinder in a range from 1.0 to 32, although this may vary depending on the lens used.

#### Film Speed (ISO Number)



The film speed is a value which indicates the level of the film's sensitivity to light, as set by the ISO (International Standardization Organization). The camera displays the film speed on the display panel in a range from 6-6400.

The higher the ISO number, the higher the film's sensitivity to light. While film with a higher sensitivity is more suitable for low-light situations. The higher the film speed film, the lower the level of light required for photography, and so pictures can even be taken in dark places.

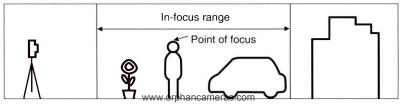
#### Depth-of-field

Depth-of-field is the area that is in focus in front of and behind the subject which is also in focus. When the aperture is smaller (i.e. when the aperture value is larger), the area in focus is more extensive, and this is called a deep depth-of-field.

Conversely, when the aperture is larger (i.e. when the aperture value is smaller), the depth-of-field becomes shallower.

Depth-of-field has the following properties.

- (1) The larger the aperture value, the deeper the depth-of-field. ...increase the aperture value to create a feeling of depth.
- (2) With the same aperture value, a greater depth-of-field will be obtained using a lens with a shorter focal length.
  - ...using a wide-angle lens or the wide angle setting on your zoom lens will create a feeling of expansiveness and depth.
- (3) With the same aperture value, a greater depth-of-field can be achieved the further away the main subject in focus is.
- (4) If the subject in focus is in the center field, the depth-of-field will be shallower.



Before you start thinking that there might be something wrong with your camera, please check the points on the following checklist. If this doesn't solve the problem, please take the camera to your nearest Canon service facility (these are listed at the back).

Problem	Cause	Solution	See page
	Are the batteries exhausted?	Replace the batteries.	11
No display on panel	Are the batteries the wrong way round?	Reload the batteries correctly.	11
P	Is the film loaded correctly? (Is the film counter on the display blank?)	Reload the film correctly.	15
The shutter doesn't release.	Check that there is no rewound film in the camera. (Have you checked that the film counter on the display is blank?)	Replace the film.	15
	Is the camera focussed? (Is the focus lamp in the viewfinder blinking?)	Press the shutter button halfway again. If it still does not focus, set the focus mode switch to M (manual) and focus manually.	61
3. Photographs	Is the focus mode switch on M (manual)?	Reset the focus mode switch to AF (Autofocus).	13
come out blurred.	Did you move your hands when shooting?	Press the shutter button steadily, without shaking the camera.	14
9	The batteries are very low.	Replace the batteries. You can continue taking photographs when the bc indicator goes off and the battery lamp comes on.	12
4. The bc indicator on the display panel is lit.	There may be some other reason to consider as to why the camera is not operating correctly.	pressed halfway, the bc indica-	12 See back page

# What to Do If the Exposure Meter on the LCD Panel Blinks

Command dial mark	Warning display (Flashing)	Meaning	Notes
P	Shutter speed 30" and minimum aperture value of the lens in use.	Subject is too dark.	Use flash.
	Shutter speed 2000 and maximum aperture value of the lens in use.	Subject is too bright.	Use an ND filter.
Tv	Minimum aperture value of the lens in use.	Subject will be underex- posed.	Turn the electronic inpu dial to a slower shutter speed.
	Maximum aperture value of the lens in use.	Subject will be overexposed.	Turn the electronic inpu dial to a faster shutter speed.
	300 5.5 	Subject will be underex- posed.	Turn the electronic inpudial to a smaller aperture value.
Av	Shutter speed 30"  2000 5.6  227, 9.1, 22	Subject will be overexposed.	Turn the electronic inpudial to a larger aperture value.
	Calculated aperture value.	Desired depth-of-field cannot be obtained.	<ol> <li>Move farther away from the subject and try again.</li> <li>When using a zoom lens, set to the wide angle position.</li> </ol>
A-DEP	Shutter speed 30" and minimum aperture value of the lens in use.	Subject is too dark.	Use flash.
	Shutter speed 2000 and maximum aperture value of the lens in use.	Subject is too bright.	Use an ND filter.

### List of Functions that can be Used Together

	Auto	focus	Film	winding	Met	ering meth	nod	Built-in	flash
Command dial	One-shot	Al Focus	Single frame	Continuous	Evaluative metering	Center- weighted average metering	Partial metering	Automatic	Manua
0		•	•		•	17		•	
A)	•			•	•			•	
*	•		•		•				
	•		•		•			•	
襖		•		•	•				
P		•		•	•		(●)*		•
Tv		•		•	•		(●)*		•
Av		•		•	•		(●)*		•
М		•		•		•	(●)*_		•
A-DEP	•		•		•				•

(\*) Partial metering is only possible when the partial metering button is pressed.

- One-shot: The exposure is set at the same time as the camera focusses on the subject. The shutter can not be released until focussing is complete.
- Al Focus: When a subject taken using the One-shot autofocus continues to move, the movement of the subject is determined and the Al Servo autofocus automatically adjusts.
- Al Servo: This allow you to focus continuously on a moving subject. The exposure will be set immediately before the shutter is released.
- Continuous shooting: When the shutter is held down, one frame per second will be taken continuously.
- Evaluative metering: This sets a suitable exposure for shots where there is a large difference between the light level of the subject and that of the background.
- Partial metering: This ensures correct exposure of the area within the partial metering range mark in the viewfinder.
- Center-weighted average metering: This provides metering based on values of the center of the viewfinder averaged out for the entire photograph.

### AF Mode and Film Winding

Film winding	One-shot	Al Servo
Single frame	The picture can not be taken until the focussing is complete. Setting are made at the same time as the focus.  Exposure is determined by evaluative metering. (The exposure value is calculated in advance).	This allows the camera to continuously focus on a moving object. The exposure is set when the shutter is released.
Continuous shots are taken unde the same conditions as above.  (About 1 frame per second).		The same conditions as above apply to continuous shots. Focussing is carried out during continuous photography (at the rate of about one frame per second).

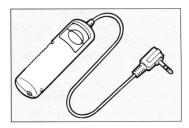


# Canon Speedlite Flashes (Sold Separately)

Speedlite flashes include the powerful 430EZ zoom flash, which clips on to the accessory shoe and has a maximum guide number of 43/141 (m/ft) at ISO 100, the 300EZ, which has a maximum guide number of 30/98 (m/ft) at ISO 100, and the 200E, which has a maximum guide number of 20/66 (m/ft) at ISO 100.

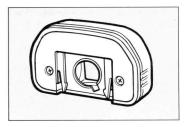


It is recommended that you use Canon Speedlite flashes with your EOS camera. Particular care must be taken with flash units designed for use with cameras of other manufacturers (such as those with a hot shoe connection) and with high-current flashes and auxiliary flash units, etc. which could cause damage to your camera.



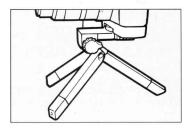
#### Domoto Switch DS-60E2

The remote switch RS-60E3 is attached to the camera's remote control jack and is intended for use when taking macro or long exposure shots (such as bulb shots) using a tripod. The special cable release avoids shaking the camera.



#### Eve-piece Extender EP-EX15

The eye-piece extender EP-EX15 extends the EOS viewfinder by 15 mm. Attaching the extender increases the magnification of the viewfinder by about 0.5.



#### Grip GR-80TP

The grip GR-80TP, which has a hand strap attached to it, greatly increases the size of grip making the camera easier to hold. The grip is also equipped with a simple tripod for micro photography and self-timer shots.



#### Camera Case EH8-L (LL)

The special camera case can hold the camera with the lens left on, ensuring that your camera is well protected.

• Case L: EF 35-80 mm f/4-5.6 II, FF 35-105 mm f/4-5-5.6 USM

Case LL: EF 28-80 mm f/3.5-5.6 II USM.

EF 80-200 mm f/4.5-5.6 USM



#### Dioptric Adjustment Lenses

The dioptric adjustment lenses E allow near or long-sighted people to take photographs without having to use their eyeglasses. While the camera itself has a -1 diopter, there are 10 interchangeable correction lenses available. Select the correct one for yourself by trying it out on the viewfinder.

 The numerical values printed on the dioptric lenses indicate the dioptric value when attached to the camera. This number does not indicate the dioptric value of the dioptric adjustment lens itself. Keep your camera in top condition by following these suggestions for periodic cleaning. See the precautions on page 4 for other important information.

- 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.
- Cleaning mirror and focusing screen—
   Use a blower brush reserved for this purpose only. If more cleaning is necessary do not 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 fluid. Be careful not to touch the shutter curtain.
  - Use of aerosol spray dust removers is not recommended.

#### 1) LCD Information

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 0°C. It may also darken in temperatures of around 60°C. The LCD panel will return when the temperature returns to normal.

#### 2) When be Indicator Appears in LCD Panel

There are two situations in which the bc indicator will appear in the LCD panel: (1) when the batteries are nearly exhausted or (2) when the camera's self-test process detects an internal malfunction. If the bc indicator appears, perform the following operations:

- 1. Remove the batteries, wipe the battery terminals and reload them. Check the batteries again. If the bc indicator still appears, replace the batteries with new ones.
- 2. Release the shutter once.

If the bc indicator goes out, the problem is corrected and you can continue using the camera normally. If the bc indicator does not stop, the camera needs to be examined by an authorized Canon service facility.

#### 3) Lithium Battery Information

Always check the batteries at the following times:

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

#### **Battery Use Information**

- Wipe the battery terminals with a clean, dry cloth to ensure proper contact.
- The batteries 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.
- Battery performance deteriorates slightly in temperatures below 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.
- Remove the batteries if you do not expect to use the camera for more than three weeks

#### 4) Camera Operation with Low Batteries

Even if the bc indicator appears 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. Please replace the batteries with new ones.

### Table of Main Specifications

Туре	35 mm focal plane shutter AF/AE single-lens reflex camera with built-in auto film winder (built-in flash provided on Rebel X S only).
Usable lenses	Canon EF lens series
Lens mount	Canon EF mount (electronic signal transfer system)
Viewfinder	90% vertical and horizontal coverage.
Magnification	× 0.7 (50 mm lens on infinity)
Standard diopter	-1 diopter (eyebond 18.5 mm)
Focussing screen	Complete matte screen with fixed, AF frame, partial metering mark.
Shooting modes	<ul> <li>Manual</li> <li>Automatic depth-of-field AE</li> <li>Aperture-priority AE</li> <li>Shutter-priority AE</li> <li>Program AE (with program shift)</li> <li>Full auto</li> <li>Programmed Image Control (four types)</li> <li>Flash AE (A-TTL with the built-in flash or A-TTL or TTL program flash AE with a Speedlite)</li> </ul>
Camera shake warning	Operates in full auto and in image zones. Shutter speed blinks as a warning when automatically-set shutter speed becomes 0~0.5 stops slower than "1/focal length of the lens in use".
Metering range	EV 2-20 (at normal temperature, 50mm f/1.4 lens at ISO 100)
Film speed setting	ISO 6-6400, automatically set according to DX code. (ISO 25-5000)
Exposure compensation	Manual setting +/- two stops in 1/2-stop increments. (Cannot also be used in image zone).
Multiple-exposures	Up to nine exposure can be preset. Automatically clears on completion.

AF control system	<ol> <li>One-shot autofocus/stops on completion or release on completion possible.</li> <li>Al Focus/One-shot autofocus, switches automatically to Al Servo.</li> <li>Manual/with the focus mode switch on M, manual focussing is possible.</li> </ol>
AF working range	EV 1.5-18 (at ISO 100 standard chart)
AF auxiliary light	Automatically emitted.
Shutter	Vertical-travel, focal plane shutter with all speeds electronically controlled.
Shutter speed	1/2000-30 sec. and bulb. X-synchro on 1/90 sec. (1/2 increment settings possible).
Self-timer	Electronically controlled. (with about 10 second delay)
Film Loading	Automatic. After film loading and back cover closure, the film automatically winds to the end of the roll and stops.
Film Wind	Automatic film wind:  ① Single shot. ② Continuous shooting (up to a maximum of about one frame per second).
Rewind	Automatic rewind. Rewind in mid roll possible.
<b>S</b> Built-in flash	Retractable type TTL automatic flash housed in pentaprism. Bypass control system.  ① Guide number /12 (ISO 100 m)  ② Recycling time approx. 2 sec.  ③ Flash coverage angle: cover the angle of view of a 28mm lens.
Flash contacts	X-sync contact, which connects directly to the accessory shoe.
Batteries	2 lithium CR123A/DL123A batteries
Battery capacity check	Can be checked by setting the command dial to any setting outside the special mode zones.
Size	145 (W) x 92 (H) x 61.9 (D) mm
Weight	About 315 g, or 350 g with the built-in flash. (Body only and excluding two CR123A/DL123A lithium batteries).

Lens		EF35 - 80 f/4 - 5.6 II	EF80 - 200 f/4.5 - 5.6 USM
Angle of View Diagonal		63° - 30°	30° - 12°
	Vertical -	38° - 17°	17° - 7°
	Horizontal	54° - 25°	25° - 10°
Optical Constru	uction	8 elements in 8 groups	10 elements in 7 groups
Minimum aperl	ture	22 - 32	22 - 27
Shooting distance		0.38 m - ∞	1.5 m - ∞
Maximum magnification		35 mm	80 mm
		0.12 (212 × 328 mm)	0.065 (366 × 546 mm)
		80 mm	200 mm
		0.25 (97 × 144 mm)	0.156 (153 × 226 mm)
Diameter and number of filters usable		52 mm, 1	52 mm, 1
Length × maxin	num diameter	61 × 65 mm	78.5 × 69 mm
Weight		170 g	260 g

The specifications of this product as well as some external features are subject to change without notice. (All data based on Canon's Standard Test Method)