# Canon

# EOS REBEL **EOS** 350D DIGITAL

















# Thank you for purchasing a Canon product.

The EOS DIGITAL REBEL XT/EOS 350D DIGITAL is a high-performance, digital AF SLR camera enabling highly versatile and speedy shooting. The camera has an 8-megapixel, high-resolution CMOS sensor, and it is compatible with all Canon EF lenses (including the EF-S lenses). The camera features quick shooting at anytime, shooting modes for all types of photography from fully automatic shooting to manual shooting, direct printing, and more.

Before using the camera, read this Instruction Manual to familiarize yourself with the camera.

To prevent botched pictures and accidents, read the Safety Warnings (p.6,7) and Handling Precautions (p.8,9).

#### Test the Camera Before Using

Before using the camera, take a few test shots and check that the images are being properly recorded onto the memory card. If the camera or memory card is faulty and the images cannot be recorded on the card or be read by a personal computer, Canon cannot be held liable for any data loss.

#### Copyrights

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- \* This digital camera supports Design rule for Camera File System 2.0 and Exif 2.21 (also called "Exif Print"). Exif Print is a standard that enhances compatibility between digital cameras and printers. By connecting to an Exif Print-compliant printer, the shooting information is incorporated to optimize the print output.

lte	em Check List
	eck that all the following items have been included with your camera. anything is missing, contact your dealer.
	EOS DIGITAL REBEL XT/EOS 350D DIGITAL / Camera body (with eyecup,
	body cap and lithium backup battery for the date and time)
	EF-S18-55mm f/3.5-5.6 II / Lens (with lens cap and dust cap) * Lens kit only.
	Battery Pack NB-2LH (with protective cover)
	Battery Charger CB-2LW/CB-2LWE *CB-2LW or CB-2LWE is included.
	Power cord for battery charger *For CB-2LWE.
	Interface Cable IFC-400PCU
	Video Cable VC-100
	Wide Strap EW-100DBII (with eyepiece cover)
	EOS DIGITAL Solution Disk (CD-ROM)
	ArcSoft PhotoStudio Disk (CD-ROM)
	Software Instruction Manual (CD-ROM, PDF)
	Pocket Guide
	Quick start guide to shooting.
	EOS DIGITAL REBEL XT/EOS 350D DIGITAL INSTRUCTION
	MANUAL (this booklet)
	Software Guide
	Gives an overview of the bundled software and explains the software installation procedure.
	Battery Pack NB-2LH Instructions

Lens Instructions \*Lens Kit only.

☐ Camera warranty card☐ Lens warranty card \*Lens Kit only.

<sup>\*</sup> Be careful not to lose any of the above items.

<sup>\*</sup> No CF card (for recording images) is included. Please purchase it separately. CF cards made by Canon are recommended.

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### Safety Warnings

Follow these safeguards and use the equipment properly to prevent injury, death, and material damage.

#### **Preventing Serious Injury or Death**

- To prevent fire, excessive heat, chemical leakage, and explosions, follow the safeguards below:
  - Do not use any batteries, power sources, and accessories not specified in this booklet. Do not use any home-made or modified batteries.
  - Do not short-circuit, disassemble, or modify the battery pack or back-up battery. Do not apply heat or apply solder to the battery pack or back-up battery. Do not expose the battery pack or back-up battery to fire or water. And do not subject the battery pack or back-up battery to strong physical shock.
  - Do not install the battery pack or back-up battery in reversed polarity (+ -). Do not mix new and old or different types of batteries.
  - Do not recharge the battery pack outside the allowable ambient temperature range of 0°C - 40°C (32°F - 104°F). Also, do not exceed the recharging time.
  - Do not insert any foreign metallic objects into the electrical contacts of the camera, accessories, connecting cables, etc.
- Keep the back-up battery away from children. If a child swallows the battery, consult a
  physician immediately. (Battery chemicals may harm the stomach and intestines.)
- When disposing of a battery pack or back-up battery, insulate the electrical contacts with tape to prevent contact with other metallic objects or batteries. This is to prevent fire or an explosion.
- If excessive heat, smoke, or fumes are emitted during battery pack recharging, immediately unplug the battery charger from the power outlet to stop the recharging and prevent a fire.
- If the battery pack or back-up battery leaks, changes color, deforms, or emits smoke
  or fumes, remove it immediately. Be careful not to get burned in the process.
- Prevent any battery leakage from contacting your eyes, skin, and clothing. It can
  cause blindness or skin problems. If the battery leakage contacts your eyes, skin, or
  clothing, flush the affected area with lots of clean water without rubbing it. See a
  physician immediately.
- During the recharging, keep the equipment away from the reach of children. The cord can accidentally choke the child or give an electrical shock.
- Do not leave any cords near a heat source. It can deform the cord or melt the insulation and cause a fire or electrical shock.
- . Do not fire the flash at someone driving a car. It may cause an accident.
- Do not fire the flash near a person's eyes. It may impair the person's vision. When using flash to photograph an infant, keep at least 1 meter away.
- Before storing the camera or accessory when not in use, remove the battery pack and disconnect the power plug. This is to prevent electrical shock, heat generation, and fire.
- Do not use the equipment where there is flammable gas. This is to prevent an
  explosion or fire.

- If you drop the equipment and the casing breaks open to expose the internal parts, do not touch the internal parts due to the possibility of electrical shock.
- Do not disassemble or modify the equipment. High-voltage internal parts can cause electrical shock.
- Do not look at the sun or an extremely bright light source through the camera or lens.
   Doing so may damage your vision.
- Keep the camera from the reach of small children. The neck strap can accidentally choke the child.
- Do not store the equipment in dusty or humid places. This is to prevent fire and electrical shock.
- Before using the camera inside an airplane or hospital, check if it is allowed.
   Electromagnetic waves emitted by the camera may interfere with the plane's instruments or the hospital's medical equipment.
- To prevent fire and electrical shock, follow the safeguards below:
- Always insert the power plug all the way in.
  - Do not handle a power plug with wet hands.
  - When unplugging a power plug, grasp and pull the plug instead of the cord.
- Do not scratch, cut, or excessively bend the cord or put a heavy object on the cord.
   Also do not twist or tie the cords.
- Do not connect too many power plugs to the same power outlet.
- Do not use a cord whose insulation has been damaged.
- Occasionally unplug the power plug and use a dry cloth to clean off the dust around the power outlet. If the surrounding is dusty, humid, or oily, the dust on the power outlet may become moist and short-circuit the outlet to cause a fire.

#### Preventing Injury or Equipment Damage

- Do not leave equipment inside a car under the hot sun or near a heat source. The
  equipment may become hot and cause skin burns.
- Do not carry the camera around while it is attached to a tripod. Doing so may cause injury. Also make sure the tripod is sturdy enough to support the camera and lens.
- Do not leave a lens or lens-attached camera under the sun without the lens cap attached. Otherwise, the lens may concentrate the sun's rays and cause a fire.
- Do not cover or wrap the battery-recharging apparatus with a cloth. Doing so may trap heat within and cause the casing to deform or catch fire.
- If you drop the camera in water or if water or metal fragments enter inside the camera, promptly remove the battery pack and back-up battery. This is to prevent fire and electrical shock.
- Do not use or leave the battery pack or back-up battery in a hot environment. Doing so
  may cause battery leakage or a shorter battery life. The battery pack or back-up
  battery can also become hot and cause skin burns.
- Do not use paint thinner, benzene, or other organic solvents to clean the equipment.
   Doing so may cause fire or a health hazard.

If the product does not work properly or requires repair, contact your dealer or your nearest Canon Service Center.

# **Handling Precautions**

#### Camera Care

- This camera is a precision instrument. Do not drop it or subject it to physical shock.
- The camera is not waterproof and cannot be used underwater. If you accidentally drop the camera into water, promptly consult your nearest Canon Service Center. Wipe off any water droplets with a dry cloth. If the camera has been exposed to salty air, wipe with a well-wrung wet cloth.
- Never leave the camera near anything having a strong magnetic field such as a magnet or electric motor. Also avoid using or leaving the camera near anything emitting strong radio waves such as a large antenna. Strong magnetic fields can cause camera misoperation or destroy image data.
- Do not leave the camera in excessive heat such as in a car in direct sunlight. High temperatures can cause the camera to malfunction.
- The camera contains precision electronic circuitry. Never attempt to disassemble the camera yourself.
- Use a blower to blow away dust on the lens, viewfinder, mirror, and focusing screen. Do not use cleaners that contain organic solvents to clean the camera body or lens. For stubborn dirt, take the camera to a Canon Service Center.
- Do not touch the camera's electrical contacts with your fingers. This is to prevent the contacts from corroding. Corroded contacts can cause camera misoperation.
- If the camera is suddenly brought in from the cold into a warm room, condensation may form on the camera and internal parts. To prevent condensation, first put the camera in a sealed plastic bag and let it adjust to the warmer temperature before taking it out of the bag.
- If condensation forms on the camera, do not use the camera. This is to avoid damaging the camera. If this occurs, remove the lens, CF card and battery from the camera, then wait until the condensation has evaporated before using the camera.
- If the camera will not be used for an extended period, remove the battery and store the camera in a cool, dry, well-ventilated location. Even while the camera is in storage, press the shutter button a few times once in a while to check that the camera is still working.
- Avoid storing the camera where there are corrosive chemicals such as in a darkroom or chemical lab.
- If the camera has not been used for an extended period, test all its functions before using the camera. If you have not used the camera for some time or if there is an important shoot coming up, have the camera checked by your Canon dealer or check the camera yourself and make sure it is working properly.

#### LCD Panel and LCD Monitor

- Although the LCD monitor is manufactured with very high precision technology with over 99.99% active pixels, there might be a few dead pixels among the remaining 0.01% or less pixels. Dead pixels displaying only black or red, etc., are not a malfunction. They do not affect the images recorded.
- At low temperatures, the liquid-crystal display response may become slower. And at high temperatures, the display may blacken. In either case, the display will return to normal at room temperature.

#### CF Card

- The CF card is a precision device. Do not drop the memory card or subject it to vibration. Doing so could damage the images recorded on them.
- Do not store or use a memory card near anything having a strong magnetic field such as a TV set, speakers, or magnet. Also avoid places prone to having static electricity. Otherwise, the images recorded on the CF card might be lost.
- Do not leave memory cards in direct sunlight or near a heat source. Doing so can warp the cards and make them unusable.
- Do not spill any liquid onto the CF card.
- Always store your CF cards in a case to protect the data stored on them.
- Non-Canon CF cards may not be able to record and playback images. Using Canon CF cards is recommended.
- Do not bend the card or subject it to any excessive force or physical shock.
- Do not store CF cards in hot, dusty, or humid locations.

#### Lens Electrical Contacts

After detaching the lens from the camera, attach the lens caps or put down the lens with the rear end up to avoid scratching the lens surface and electrical contacts.



# **Quick Start Guide**







## Insert the battery. (p.22)

To recharge the battery, see page 20.

na<sub>l</sub>





## Attach the lens. (p.25)

When attaching an EF-S lens, align it with the white dot on the camera. For other lenses, align it with the red dot.



Set the lens focus mode switch to <AF>. (p.25)



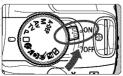




# Open the CF card slot cover and insert a CF card. (p.26)

Face the label side toward you and insert the end with the small holes into the camera.

5



Set the power switch to <0N>. (p.28)



# Set the Mode Dial to $\langle \Box \rangle$ (Full Auto). (p.44)

All the necessary camera settings will be set automatically.





#### Focus the subject. (p.28)

Aim the AF point over the subject and press the shutter button halfway to autofocus.





# Take the picture. (p.28)

Press the shutter button fully to take the picture.





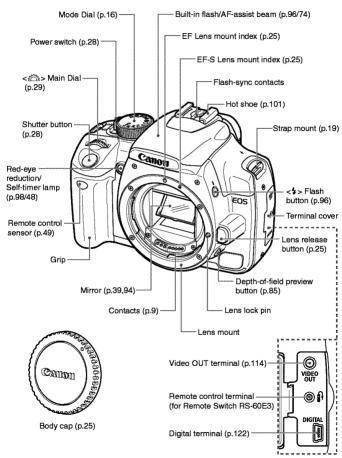
# Review the picture on the LCD monitor. (p.104)

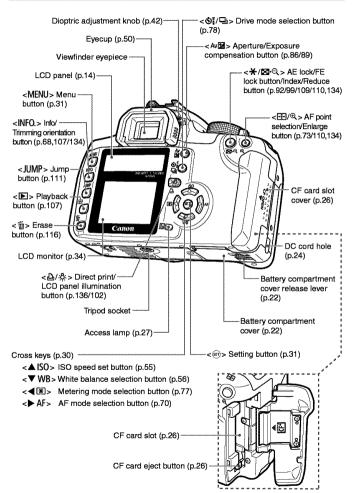
The captured image will be displayed for about 2 sec. on the LCD monitor.

- To view images captured so far, see "Image Playback" (p.107).
- To delete an image, see "Erasing Images" (p.116).

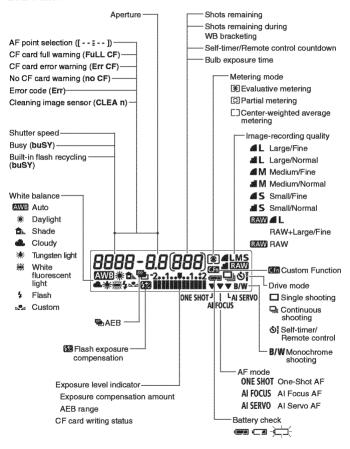
# Nomenclature

For detailed information, reference page numbers are provided in parentheses (p.\*\*).



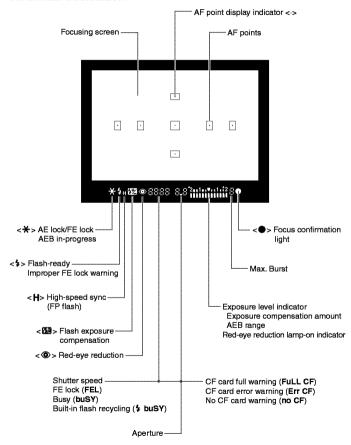


#### **LCD Panel**



The actual display will show only the applicable items.

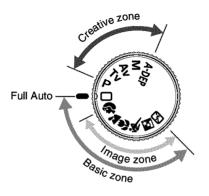
#### Viewfinder Information



The actual display will show only the applicable items.

#### Mode Dial

The Mode Dial is divided into two function zones.



#### (1) Basic Zone

All you do is press the shutter button.

: **Full Auto** (p.44) For fully automatic shooting.

#### Image Zone

Fully automatic shooting for specific subjects.

4 : Portrait (p.46) : Landscape (p.46) \* : Close-up (p.46)

: Sports (p.47)

: Night Portrait (p.47)

**F**3 : Flash Off (p.47)

#### (2) Creative Zone

Set the camera as you wish.

Р : Program AE (p.80) Tν : Shutter-priority AE

(p.82)Αv : Aperture-priority AE

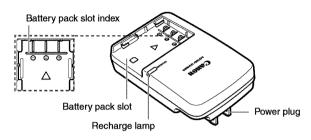
(p.84)

М : Manual exposure (p.86)

A-DEP: Automatic Depth-offield AE (p.88)

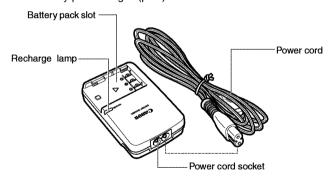
#### **Battery Charger CB-2LW**

This is a battery pack charger. (p.20)



#### **Battery Charger CB-2LWE**

This is a battery pack charger. (p.20)



# **Conventions Used in this Manual**



■ The < ☼ > icon indicates the Main Dial.



The < ♣>, < ▲▼>, and < ◀▶> icons indicate the cross keys. The < ▲>, < ▼>, < ◀>, and < ▶> icons indicate the up, down, left, and right cross keys respectively.

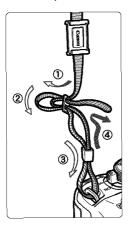


- In the text, the <m> icon indicates the SET button. It is used for menu functions and Custom Functions.
- In this manual, the icons and markings indicating the camera's buttons, dials, and settings correspond to the icons and markings on the camera.
- For detailed information, reference page numbers are provided in parentheses (p.\*\*).
- The asterisk ★ on the right of the page title indicates that the respective feature is available only in Creative Zone modes (P, Tv, Av, M, A-DEP).
- All operations explained in this Instruction Manual assume that the power switch is already set to <ON>.
- The Canon EF-S18-55mm f/3.5-5.6 II lens is used as the sample lens in this Instruction Manual.
- The procedures assume that the menu settings and Custom Functions are set to the default settings.
- The MENU icon indicates that the setting can be changed with the menu.
- (∅4), (७6) or (७16) indicates that the respective function remains active for 4 sec., 6 sec., or 16 sec. respectively after you let go of the button.
- This manual uses the following alert symbols:
  - ( ): The Caution symbol indicates a warning to prevent shooting problems.
  - The Note symbol gives supplemental information.



# **Getting Started**

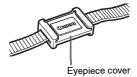
This chapter explains a few preliminary steps and basic camera operations.



#### Attaching the Strap

Pass the end of the strap through the camera's strap mount from the bottom. Then pass it through the strap's buckle as shown in the illustration. Pull the strap to take up any slack and make sure the strap will not loosen from the buckle.

The eyepiece cover is also attached to the strap. (p.50)



# Recharging the Battery

For details on the battery, refer to the instructions for Battery Pack NB-2LH.



#### Remove the cover.

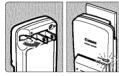


Battery pack slot index

# Attach the battery.

- Align the battery's front edge with the battery charger's index line. While pressing down the battery, slide it in the direction of the arrow.
- To detach the battery, follow the above procedure in reverse.

#### CB-2LW

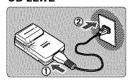


For CB-2LW

# Flip out the prongs and recharge the battery.

- As shown by the arrow, flip out the battery charger's prongs.
- Insert the prongs into a power outlet.

CB-2LWE



#### For CB-2LWE

# Connect the power cord and recharge the battery.

- Connect the power cord to the charger and insert the plug into the power outlet.
- Recharging starts automatically and the recharge lamp turns orange.
- When the battery is fully recharged, the recharge lamp will turn green.
- It takes about 90 minutes to fully recharge a completely exhausted battery.



- Do not use the battery charger to recharge any battery other than Battery Pack NB-2LH.
- To prevent the battery performance from degrading, avoid recharging the battery pack for 24 consecutive hours or longer.
- If the battery is left in the camera for a prolonged period without the camera being used, a low electrical current may be discharged excessively and the battery's service life may be affected. When not using the camera, remove the battery and attach the protective cover to prevent shorting. Before using the camera again, be sure to recharge the battery.



You can attach the protective cover to the battery and set the direction of the cover marking to indicate whether the battery has been recharged or not.



- After recharging the battery, detach it and unplug the power cord from the power outlet.
- The time required to recharge the battery depends on the ambient temperature and the battery's recharge level.
- The battery pack can operate in temperatures from 0°C to 40°C (32°F to 104°F). However, for full operating performance, using it between 10°C (50°F) and 30°C (86°F) is recommended. In cold locations such as ski areas, battery performance temporarily decreases and the effective time may be shorter.
- If effective time is sharply reduced even after normal recharging, the battery pack may have reached its service life. Replace it with a new battery.

# **Installing and Removing the Battery**

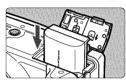
#### Installing the Battery

Load a fully-charged Battery Pack NB-2LH into the camera.



# Open the battery compartment cover.

Slide the lever as shown by the arrow and open the cover.



# Insert the battery.

- Point the battery contacts downward.
- Insert the battery until it locks into place.



#### Close the cover.

Press the cover until it snaps shut.

#### Checking the Battery Level

When the power switch is set to <0N> (p.28), the battery level will be indicated in one of three levels:



: Battery level OK.

: Battery level is low.

: Battery must be recharged.

#### **Battery Life**

#### [Number of shots]

Temperature	Shooting (	Conditions
remperature	No Flash	50% Flash Use
At 20°C / 68°F	Approx. 600	Approx. 400
At 0°C / 32°F	Approx. 450	Approx. 350

The figures above are based on a fully-charged NB-2LH and CIPA (Camera & Imaging Products Association) testing criteria.



- The actual number of shots may be fewer than indicated above depending on the shooting conditions.
  - The number of possible shots will decrease with more frequent use of the LCD monitor.
  - Pressing the shutter button halfway for long periods or operating only the autofocus can also reduce the number of possible shots.
  - The lens operation is powered by the camera's battery. Using certain lenses can reduce the number of possible shots.

#### Removing the Battery





#### Open the battery compartment cover.

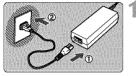
Slide the lever as shown by the arrow and open the cover.

#### Remove the battery.

- Slide the battery lock lever as shown by the arrow and remove the battery.
- To prevent shorting, be sure to attach the protective cover to the battery.

# **Using a Household Power Outlet**

With AC Adapter Kit ACK-DC20 (optional), you can connect the camera to a household power outlet and not worry about the battery level.



# Connect the power cord.

- Connect the power cord to the compact power adapter.
- Insert the plug into a power outlet.
- When you are finished, disconnect the plug from the power outlet.



## Connect the DC Coupler DR-700.

- Insert the compact power adapter's DC plug to the DC Coupler DR-700's socket.
- DC Coupler DR-20 is cannot be used with this camera.



## Insert the DC Coupler.

Open the cover and insert the DC Coupler until it locks in place.



#### Push in the DC cord.

- Flip down the DC cord notch cover and push the cord into the notch.
- Close the cover.



Do not connect or disconnect the power cord while the camera's power switch is set to  $<\!0N\!>$ .

# Mounting and Detaching a Lens

#### Mounting a Lens





Remove the caps.

Remove the rear lens cap and the body cap by turning them as shown by the arrow.

#### EF-S lens mount index



EF lens mount index

#### Attach the lens.

- Align the EF-S lens with the camera's white EF-S lens mount index and turn the lens as shown by the arrow until it clicks in place.
- When attaching a lens other than an EF-S lens, align the lens with the red EF lens index mark.

# On the lens, set the focus mode switch to <AF>.

If it is set to <MF>, autofocus will not be possible.



# 0200

#### **Detaching the Lens**



# While pressing the lens release button, turn the lens as shown by the arrow.

Turn the lens until it stops, then detach it.

4)

When attaching or detaching the lens, take care to prevent dust from entering the camera through the lens mount.

# Installing and Removing the CF Card

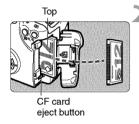
The captured image will be recorded onto the CF card (optional). Although the thickness is different, a Type I or Type II CF card can be inserted into the camera. The camera is also compatible with Microdrive and CF cards with 2 GB or higher capacity.

## Installing the Card



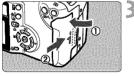
## Open the cover.

Slide the cover as shown by the arrow to open it.



#### Insert the CF card.

- Using Canon CF cards is recommended
- If the CF card is inserted in the wrong way, it may damage the camera. As shown in the illustration, face the label side toward you and insert the end with the small holes into the camera.
- The CF card eject button pops up.



# Shots remaining

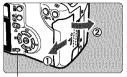
#### Close the cover.

- Close the cover and slide it in the direction shown by the arrow until it snaps shut.
- When you set the Power switch to <0N>, the number of remaining shots will be displayed on the LCD panel.



The shots remaining depends on the remaining capacity of the CF card and the ISO speed setting.

#### Removing the Card



Access lamp

# Open the cover.

- Set the Power switch to <OFF>.
- Check that the "buSY" message is not displayed on the LCD panel.
- Make sure the access lamp is off. then open the cover.



#### Remove the CF card.

- Press the Eject button.
  - The CF card will be ejected.
- Close the cover.



- A blinking access lamp indicates that data is being transferred or read, written, or erased on the CF card. Never do the following while the access lamp is lit or blinking. Such actions may destroy the image data. It may also damage the CF card or camera.
  - Shaking or banging the camera around.
  - Opening the CF card slot cover.
  - Removing the battery.
- If you use a CF card already containing recorded images, the images recorded thereafter by the camera might be appended with a file number that continues on from the images already recorded on the CF card. If you want to start the file numbering from 0001, set [Auto reset] for the file numbering (p.67), then use a newly formatted CF card.
- If "Err CF" (Error CF) is displayed on the LCD panel, see page 118.
- If you use a low-capacity CF card, it might not be able to record large images.
- Compared to CF cards. Microdrive cards are more vulnerable to vibration and physical shock. If you use a Microdrive, be careful not to subject the camera to vibration or physical shock especially while recording or displaying images.



On the menu, if you set the [ft 1 Shoot w/o card] to [Off], it will prevent you from shooting without a CF card, (p.41)

# **Basic Operation**

#### Power Switch

The camera can operate only after the power switch is turned on.



<0N>: The camera operates.

<OFF>: The camera is turned off and does not operate. Set to this position when not using the camera.



- To save battery power, the camera turns off automatically after 1 minute of non-operation. To turn on the camera again, just press the shutter button.
- You can change the auto power-off time with the menu's [111 Auto power off] setting. (p.41)
- If you turn the power switch to <OFF> while the captured images are being recorded onto the CF card, the remaining number of captured images to be recorded will be indicated on the top LCD panel with the number of <1> symbols displayed. When all the images are finished recording, the display will turn off and the camera will turn off.

#### **Shutter Button**

The shutter button has two steps. You can press the shutter button halfway. Then you can further press the shutter button completely.



#### Pressing halfway

This activates autofocusing (AF) and automatic exposure (AE) that sets the shutter speed and aperture.

The exposure setting (shutter speed and aperture) is displayed on the top LCD panel and in the viewfinder. (54)



#### Pressing completely

This releases the shutter and takes the picture.



- If you press the shutter button halfway and (②4) elapse, you must press it halfway again and wait a moment before pressing it completely to take a picture. If you press the shutter button completely without pressing it halfway first or if you press the shutter button halfway and then press it completely immediately, the camera will take a moment before it takes the picture.
- No matter what state the camera is in (image playback, menu operation, image recording, etc.), you can return to shooting instantly just by pressing the shutter button halfway (except during direct printing).
- Camera movement during the moment of exposure is called camera shake. To prevent camera shake, note the advice below. Also see "Holding the Camera" (p.42).
  - Hold the camera steady.
  - Put your finger tip on the shutter button, hold the camera with your right hand, then press the shutter button gently.

# Operating the < > Dial

The < > dial is mainly used for shooting-related settings.



## 

When you press a button, its function remains on for 6 seconds (�6). While turning the <a>> dial, look at the setting in the viewfinder or on the top LCD panel. When the timer ends or if you press the shutter button down halfway, the camera will be ready to shoot.

- Use it to select the AF point.
  - After pressing the < MENU> button, turn the < All Shapes of the desired menu item.</p>



# (2) Turn the < > dial only.

While looking at the LCD panel or viewfinder, turn the < > dial to set the desired setting.

In this way, you can set the shutter speed, aperture, etc.

#### Operating the <♦> Cross Keys

The  $< \diamondsuit >$  key is mainly used for shooting-related settings and selecting LCD monitor menu items.



# (1) Press the <♦> key independently.

With the camera ready to shoot, you can press any <♦> key to quickly use the kev's respective menu function.

- < ▲ ISO > ISO speed
- < WB> White balance
- <◀③> Metering mode
- <▶ AF> AF mode

Press the <♦ > key to select the desired setting, then press <(□)>.



# Press a button, then press the <♦> key.

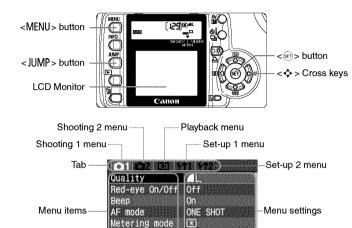
When the camera is ready to shoot and you press a button, the button's function remains on for 6 seconds (6). While the function remains on, press the < +> key while looking in the viewfinder or at the LCD panel.

When the function timer ends or if you press the shutter button halfway, the camera will be ready to shoot.

- Use it to select the AF point.
- When using the LCD monitor (which has no display timer), you can select menu items or select images for playback.

# Menu Operations

With the menus, you can set various settings such as the image recording quality, processing parameters, the date/time, and Custom Functions. While looking at the LCD monitor, you use the <MENU> button. <♦> Cross kevs. and <
> button on the camera back.



Icon	Color	Category	Description
<b>1</b> /1/12/2	Red	Shooting menu	Shooting-related menu.
<b>▶</b>	Blue	Playback menu	Image playback-related menu.
fT1/fT2	Yellow	Set-up menu	Camera's basic settings.



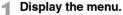
To change the menu tab, press the < JUMP> button.

ISO speed

When a Basic Zone mode is set, there are menu items which will not be displayed, (p.33)

- You can also use the < ( > dial to select menu items or playback images.
- Even while the menu is displayed, you can instantly go back to shooting by pressing the shutter button halfway.

#### Menu Setting Procedure



Press the <MENU> button to display the menu. To turn off the menu, press the button again.



#### Select a tab.

- Press the < IIJMP > button to select a menu tab.
- If the five tabs are highlighted, you can also press the < ▼ > keys to select a tab.



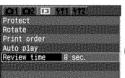
#### Select a menu item.

- Press the <▲▼> key to select the menu item, then press <(FT)>.
- If you press the < JUMP > button now, another tab will be selected



# Select the menu setting.

Press the < ▲▼ > or < ◀► > key to select the setting. (Some settings require you to press either the < ▲▼ > or < ◀► > key to select it.)



#### Set the desired setting.

#### Exit the menu.

Press the <MENU> button to exit the menu display.



- The explanation of menu functions hereinafter assumes that you have pressed the <MENU> button to display the menu screen.
- Menu operation will also work after the picture is taken while the image is being recorded to the CF card (access lamp blinks).

#### Menu Settings (1)

#### < 1 > Shooting 1 menu (Red)

Reference pages

Quality	<b>■</b> L/ <b>■</b> L/ <b>■</b> M/ <b>■</b> M/ <b>■</b> S/ <b>■</b> S/RAW+ <b>■</b> L/RAW	52
Red-eye On/Off	Off / On	98
Веер	On / Off	50
AF mode	ONE SHOT / AI FOCUS / AI SERVO	70
Metering mode		77
ISO speed	100 / 200 / 400 / 800 / 1600	55

#### < 12> Shooting 2 menu (Red)

AEB	1/3-stop increments, ±2 stops	90
Flash exp comp	1/3-stop increments, ±2 stops	100
White balance	AWB / 業 / ♠ / ☀ / 崇 / 柒 / ⊷	56
WB SHIFT/BKT	WB correction: B/A/M/G bias, 9 levels each	59
WD SHIFI/DKI	WB-BKT: B/A and M/G bias 1 level, ±3 levels	60
Custom WB	Manual setting of white balance	57
Color space	sRGB / Adobe RGB	62
Parameters	Parameter 1, 2 / Set 1, 2, 3 / B/W	63
raiailleleis	raiameter 1, 2/ 3et 1, 2, 3/ b/vv	64

#### < ►> Playback menu (Blue)

Protect	Erase-protect image	115
Rotate	Rotate vertical image	113
Print order	Specifies images to be printed (DPOF).	137
Auto play	Auto playback of images	112
Review time	Off / 2 sec. / 4 sec. / 8 sec. / Hold	104



- <a>a</a>2 > Shooting 2 menu screen/tubs are not displayed in Basic Zone modes.
  - These shaded menu items are not displayed in Basic Zone modes.
  - In Basic Zone modes, the RAW+ L and RAW recording quality modes are not displayed.

# Menu Settings (2)

#### <f11> Set-up 1 menu (Yellow)

Reference pages

<b>Auto power off</b> 1min. / 2 min. / 4 min. / 8 min. / 15 min. / 30 min. / Off		41
Auto rotate	On / Off	105
LCD brightness	5 levels	106
Date/Time	Setting the date/time	37
File numbering	Continuous / Auto reset	67
Format Initializes and erases card 11		118
Shoot w/o card	On / Off 41	

#### <f12> Set-up 2 menu (Yellow)

< 112 > Set-up 2 menu (Tellow)		
Language	15 languages (English, German, French, Dutch, Danish, Finnish, Italian, Norwegian, Swedish, Spanish, Simplified Chinese, Russian, Traditional Chinese, Korean, and Japanese.)	36
Video system	NTSC / PAL	114
Communication	Print/PTP / PC connection	121
Custom Functions (C.Fn)	Customize the camera	146
Clear settings	Clear all camera settings (Resets the camera to the default settings.)	35
Olean Settlings	Clear all Custom Functions (Resets all Custom Function settings to the default.)	147
Sensor cleaning	Select to clean the sensor.	39
Firmware Ver.	Select to update the firmware.	-

These shaded menu items are not displayed in Basic Zone modes.

#### **About the LCD Monitor**

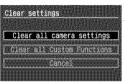
- The LCD monitor cannot be used as a viewfinder for shooting.
- Adjust the LCD monitor's brightness to one of five levels with the [\forall T1 LCD brightness] menu. (p.106)

## Restoring the Camera's Default Settings



# Select [Clear settings].

- Select the [\$12] tab.
  - Press the < ▲▼ > key to select [Clear] settings], then press < FT >.



# Select [Clear all camera settings].

 Press the < ▲▼ > key to select [Clear] all camera settings], then press < (SET) >.



## Select [OK].

- Press the < >> key to select [OK]. then press < set >. The camera's default settings will be restored.
- The camera's default settings will be as shown below

#### Shooting Settings

311001	ing settings
AF mode	ONE SHOT
AF point selection	Automatic AF point selection
Metering mode	(Evaluative metering)
Drive mode	(Single shooting)
Exposure compensation	0 (Zero)
AEB	Off
Flash exposure compensation	0 (Zero)
<b>Custom Functions</b>	Current settings retained

#### Image-Recording Settings

Quality	4L
ISO speed	100
Color space	sRGB
White balance	AWB (Auto WB)
WB correction	Off
WB bracketing	Off
Parameters	Parameter 1

In Basic Zone modes, the camera settings cannot be reset to the default.

# MENU Setting the Language

The LCD monitor's interface language can be set to one of fifteen languages.





## Select [Language].

- Select the [\$12] tab.
- Press the < ▲▼ > key to select [Language], then press < () >.
- The Language screen will appear.

# Set the desired language.

- Press the <♦> key to select the desired language, then press < (□)>.
- The interface language will change.

English	English
Deutsch	German
Français	French
Nederlands	Dutch
Dansk	Danish
Suomi	Finnish
Italiano	Italian
Norsk	Norwegian
Svenska	Swedish
Español	Spanish
简体中文	Simplified Chinese
Русский	Russian
繁体中文	Traditional Chinese
한국어	Korean
日本語	Japanese

# MENU Setting the Date and Time

Set the date and time as shown below







#### Select [Date/Time].

- Select the [f11] tab.
- Press the < ▲▼ > key to select [Date/ Time], then press < (□) >.
- The date/time screen will appear.

#### Set the date and time.

- Press the <▲▼> key to select the digit, then press <♠>.
- The selection will then shift to the next item.

#### Set the date display format.

Press the < N > key to set the date format to [mm/dd/yy], [dd/mm/yy], or [yy/mm/dd].



#### Press < (SET) >.

The date and time will be set and the menu will reappear.



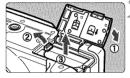
Each captured image is recorded together with the date and time it was taken. If the date and time are not properly set, the wrong date/time will be recorded with the images. Make sure you set the date and time correctly.

# Replacing the Date/Time Battery

The date/time (back-up) battery maintains the camera's date and time. The battery's service life is about 5 years. If the date/time is reset when the battery is replaced, replace the back-up battery with a new CR2016 lithium battery as described below.

The date/time setting will also be reset, so you must set the correct date/time.

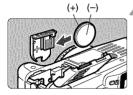




Open the cover and remove the battery.



Take out the battery holder.



Replace the battery.

Make sure the battery is in the proper + – orientation.



Insert the battery holder and close the cover.



For the date/time battery, be sure to use a CR2016 lithium battery.

# MENU Cleaning the CMOS sensor\*

The image sensor is like the film in a film camera. If any dust or other foreign matter adheres to the image sensor, it may show up as a dark speck in the images. To avoid this, follow the procedure below to clean the image sensor. Note that the image sensor is a very delicate component. If possible, you should have it cleaned by a Canon Service Center

While you clean the image sensor, the camera must be turned on. Using the AC Adapter Kit ACK-DC20 (optional, see page 158) is recommended. If you use a battery, make sure the battery level is sufficient. Before cleaning the sensor, detach the lens from the camera.



Install the DC Coupler (p.24) or a battery and set the power switch to <0N>.

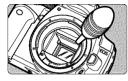
#### Select [Sensor cleaning].

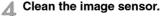
- Select the [\*T2] tab.
- Press the < ▲▼ > key to select [Sensor cleaning], then press < □>.
- If you are using a battery with sufficient power, the screen shown in step 3 will appear.
- If the battery is exhausted, a warning message will appear and you will not be able to proceed further. Either recharge the battery or use a DC coupler and start from step 1 again.



#### Select [OK].

- Press the < ◆►> key to select [OK], then press < ⑤□>.
- In a moment, the mirror will lockup and the shutter will open.
- "CLEA n" will blink on the LCD panel.





Use a rubber blower (commercially available) to carefully blow away any dust on the surface of the CMOS sensor.

#### Stop the cleaning.

- Set the power switch to <OFF>.
- The camera will turn off, the shutter will close, and the mirror will go back down.
- Set the power switch to <0N>. You can start shooting again.



- During the sensor cleaning, never do any of the following that would turn off the power. If the power is cut off, the shutter will close and it may damage the shutter curtains and image sensor.
  - Set the power switch to <OFF>.
  - Opening the CF card slot cover.
  - Opening the battery compartment cover.
  - Do not insert the blower tip inside the camera beyond the lens mount. If the power goes out, the shutter will close and the shutter curtains and image sensor may be damaged.
  - Use a blower not attached with a brush. A brush can scratch the sensor.
  - Never use canned air or gas to clean the sensor. The blowing force can. damage the sensor or the spray gas can freeze on the sensor.
  - When the battery is exhausted, the beeper will sound and the <□□>. icon will blink on the LCD panel. Set the power switch to <OFF>, replace the battery, and start over.
  - You cannot clean the sensor if Battery Grip BG-E3 (optional) is attached to the camera and size-AA batteries supply the power. Use AC Adapter Kit ACK-DC20 (optional) or use a battery having sufficient power.

# MENU Set the power-off time/Auto power off

You can set the auto power-off time for the camera to turn off automatically after a set time of idle operation. If you do not want the camera to turn off automatically, set this to [Off]. If the camera turns off automatically, just press the shutter button halfway to turn it on again.

# Select [Auto power off].

- Select the [\*11] tab.
- Press the < N > key to select [Auto power off], then press < (517)>.



#### Set the desired time.

Press the < >> key to select the desired time, then press < (sin >.

#### MENU CF Card Reminder

This prevents shooting if there is no CF card in the camera. This can be set in all shooting modes.

# Select [Shoot w/o card].

- Select the [₹11] tab.
- Press the < N > key to select [Shoot] w/o card], then press < (SET) >.



#### Select [Off].

Press the < N > kev to select [Off]. then press < (SET) >.



If [Off] has been set and you press the shutter button while there is no CF card in the camera, "no CF" will be displayed in the viewfinder.

# Dioptric Adjustment

You can adjust the sharpness of the viewfinder image. By adjusting the diopter to suit your eyesight, you can see a sharp viewfinder image even without eyeglasses. The camera's adjustable dioptric range is -3 dpt to +1 dpt.



#### Turn the dioptric adjustment knob

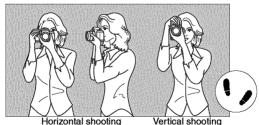
- Turn the knob left or right until the AF points in the viewfinder look sharp.
- The illustration shows the knob at the standard setting (-1 dpt).



If the camera's dioptric adjustment still cannot provide a sharp viewfinder image, using Dioptric Adjustment Lens E (10 types, optional) is recommended.

# Holding the Camera

To obtain sharp images, hold the camera still to minimize camera shake.

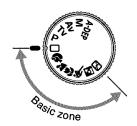


- Firmly grasp the camera grip with your right hand, and press your both elbows lightly against your body.
- Hold the lens bottom with your left hand.
- Press the camera against your face and look through the viewfinder.
- To maintain a stable stance, place one foot in front of the other instead of lining up both feet.



# Fully Automatic Shooting

This chapter explains how to use the Basic Zone modes on the Mode Dial for quick and easy shooting. In each mode  $<\square><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}><\mathfrak{A}>$ 



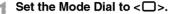
Set the Mode Dial to one of the following modes: <□>
<Ŷ><Ŷ><Ŷ><Ŷ>>⟨Ŷ}>

- The shooting procedure is the same as for " Using Full Auto" (p.44).
- To see what is set automatically in the Basic Zone modes, see "Function Availability Table" (p.152).

# ☐ Using Full Auto

All you do is point the camera and press the shutter button. Everything is automatic so it is easy to photograph any subject. With seven AF points to focus the subject, anyone can easily take nice pictures.





The AF mode will be set to < AI FOCUS>, the drive mode will be set to < □ >, and the metering mode will be set to < ◉ > automatically.



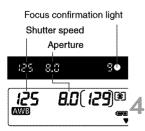
# Aim any AF point over the subject.

 Out of the seven AF points, the one covering the closest subject is selected automatically to achieve focus.



#### Focus the subject.

- Press the shutter button halfway to focus.
- The dot < · > inside the AF point achieving focus flashes briefly in red. At the same time, the beeper will sound and the focus confirmation light < ● > will light.
- The shutter speed and aperture value will be set automatically and displayed in the viewfinder and on the LCD panel. (\*\*\pm4\*)
- If necessary, the built-in flash will popup automatically.
- Under low-light conditions, if the focus cannot be achieved with the AF, AFassist beam is fired automatically. (p.74)



Check the display.





- Compose the shot and press the shutter button completely.
- The captured image will be displayed for about 2 sec. on the LCD monitor.
- To view the images recorded on the CF card, press the < ►> button. (p.107)



- While focusing with <AF>, do not touch the focusing ring at the front of the lens.
  - If you want to zoom, do it before focusing. Turning the zoom ring after achieving focus may throw off the focus.
  - When the CF card becomes full, the CF Full warning "Full CF" will appear in the viewfinder and on the LCD panel and shooting will be disabled. Replace the CF card with one that is not full.
  - If something obstructs the built-in flash from popping up, "Err 05" will blink on the LCD panel. If this happens, set the power switch to <OFF> and < ON > again.
  - Using a non-Canon lens with an EOS camera may not result in proper camera or lens operation.



- When focus is achieved, the focus and exposure setting will also be locked.
- (p.76)
- The dot < >> in multiple AF points may flash in red at the same time. This indicates that focus has been achieved at all those AF points.
- In the Basic Zone modes (except < ▲ > < ᠖ > , the built-in flash) will pop up and fire automatically in low-light or backlit conditions. To retract the flash, push it back down.
- You can disable the beeper from sounding when focus is achieved. Set the [ 1 Beep] menu item. (p.50)
- The image review time after image capture can be changed with the menu's [ Review time] setting. (p.104)
- If you want to freely select the AF point for focusing, set the Mode Dial to <P>, then follow "Selecting the AF Point" (p.73) to select the AF point.

#### **Basic Zone Modes**

Just select a shooting mode suiting the target subject, and you can easily obtain the best results.



#### **Portrait**



This mode blurs the background to make the human subject stand out.

- Holding down the shutter button executes continuous shooting.
- To increase the background blur, use a telephoto lens and fill the frame with the subject from the waist up. Or have the subject stand farther away from the background.
- The AF mode will be set to < ONE SHOT >. the drive mode will be set to <>>, and the metering mode will be set to <®> automatically.



#### Landscape



This is for wide scenic views, night scenes, etc.

- Using a wide-angle lens will further enhance the depth and breadth of the image.
- The AF mode will be set to < ONE SHOT >. the drive mode will be set to < >, and the metering mode will be set to < > automatically.



#### Close-up



Use this mode to take close-up shots of flowers, insects, etc.

- Focus the subject at the lens' closest focusing distance as much as possible.
- To obtain a larger magnification, use the telephoto end of a zoom lens.
- For better close-ups, an EOS-dedicated macro lens and Macro Ring Lite (both optional) are recommended.
- The AF mode will be set to < ONE SHOT>, the drive mode will be set to < > and the metering mode will be set to < 1 > automatically.



#### Sports



This is for fast-moving subjects when you want to freeze the action

- The camera will first track the subject with the center. AF point, Focus tracking will then continue with any of the seven AF points covering the subject.
- While you press the shutter button, focusing will continue for continuous shooting.
- Using a telephoto lens is recommended.
- When focus is achieved, the beeper will sound softly.
- The AF mode will be set to < AI SERVO >, the drive mode will be set to < □>, and the metering mode will be set to < < > automatically.

#### Night Portrait



This mode is for shooting people outside at twilight or at night. The flash illuminates the subject and a slow sync speed captures a natural-looking exposure of the background.

- If you want to shoot a night scene without people, use the < > mode instead.
- Tell the subject to keep still even after the flash fires.
- The AF mode will be set to < ONE SHOT >, the drive mode will be set to < >>, and the metering mode will be set to < > automatically.

#### **F**

#### Flash off



You can disable the flash when you do not want it to fire.

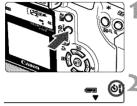
- The built-in flash or any external Speedlite will not fire
- The AF mode will be set to < Al FOCUS>, the drive mode will be set to < > and the metering mode will be set to <®> automatically.



In the < > mode, use a tripod to prevent camera shake. In the < > or < >> mode, if the shutter speed display blinks, be aware that camera shake may occur.

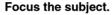
# **Self-timer Operation**

Use the self-timer when you want to be in the picture. You can use self-timer in any Basic Zone mode or Creative Zone mode.



#### Select <ঔῗ>.

■ Look at the LCD panel and press the 
<□ ॐ| > button to select < ॐ| >.



Look in the viewfinder and press the shutter button halfway to check that the focus confirmation light < > is on and the exposure setting is displayed.



#### Take the picture.

- Look through the viewfinder and press the shutter button completely.
- The beeper will sound, the self-timer lamp will start blinking, and the shot will be taken about 10 sec. later.
  - During the first 8 sec., the beeper beeps slowly and the lamp blinks slowly. Then during the final 2 sec., the beeper beeps faster and the lamp stays lit.
- During the self-timer operation, the LCD panel counts down the seconds until the picture is taken.



Do not stand in front of the camera when you press the shutter button to start the self-timer. Doing so will throw off the focus.



- Use a tripod when you use the self-timer.
- To cancel the self-timer after it starts, press the <□ ◊ > button.
- When using the self-timer to shoot only yourself, use focus lock (p.75) for an object at about the same distance as where you will be.
- You can also silence the beeper. (p.50)

### Wireless Remote Control

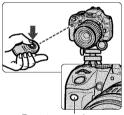
With Remote Controller RC-1 or RC-5 (optional), you can shoot remotely up to about 5 meters/16.4 ft, directly in front of the camera.







Look at the LCD panel and press the <□\o`li> button to select <o`li>.



Remote control sensor

#### Take the picture.

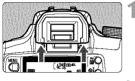
- Point the remote controller toward the camera's remote control sensor and press the transmit button.
- The camera will autofocus.
- When focus is achieved, the selftimer lamp will light and the picture will be taken.



Camera misoperation may occur near certain types of fluorescent light. During wireless remote control, try to keep the camera away from fluorescent light.

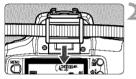
# **Using the Eyepiece Cover**

During self-timer or remote control operation when your eye does not cover the viewfinder eyepiece, stray light may enter the eyepiece and throw off the exposure. To prevent this, use the eyepiece cover (attached to the neck strap) to cover the eyepiece.



Remove the eyecup.

From the bottom of the eyecup, push it upward to remove.



#### Attaching the Eyepiece Cover

Slide the eyepiece cover down into the eyepiece groove to attach it.

# MENU Silencing the Beeper

You can disable the beeper so it does not sound in any shooting mode.

# Select [Beep].

- Select the [ 1] tab.
  - Press the < > > key to select [Beep], then press < \$\sirp>.



#### Select [Off].

Press the < N > key to select [Off], then press < (FT) >.



# **Image Settings**

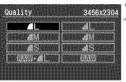
This chapter explains the digital image settings for the image-recording quality, ISO speed, white balance, color space, and processing parameters.

- For Basic Zone modes, only the image-recording quality (except RAW and RAW+ L), file numbering, and camera setting check will apply in this chapter.
- The asterisk ★ on the right of the page title indicates that the respective feature is available only in Creative Zone modes (P, Tv, Av, M, A-DEP).

# MENU Setting the Image-recording Quality ...

The **L/LLMM/LMM/LS/LS** modes record the image in the widely-used JPEG. In the **RAW** mode, the captured image will require post-processing with the software provided. In the **RAW**+L (RAW+JPEG) mode, the image is recorded in both the RAW and JPEG simultaneously. **Note that RAW** and **RAW**+L cannot be selected in the Basic Zone modes.





#### Select [Quality].

- Select the [ 1] tab.
- Press the <▲▼ > key to select [Quality], then press < (♣)>.
- The recording quality screen will appear.

#### Set the desired recording quality.

- Press the <♠> key to select the desired recording quality, then press <(SET)>.
- When you press the shutter button halfway, the image-recording quality will be displayed on the LCD panel.

#### **Image-recording Quality Settings**

Image-recording Quality	Image Type (extension)	Pixels	Print Size
■ L (Large Fine) ■ L (Large Normal)		3456 x 2304 (Approx. 8 million)	A3 or larger
■M (Medium Fine) ■M (Medium Normal)	JPEG (.JPG)	2496 x 1664 (Approx. 4.15 million)	A5 - A4
■S (Small Fine) ■S (Small Normal)		1728 x 1152 (Approx. 2 million)	A5 or smaller
RAW (RAW)	RAW (.CR2)	3456 x 2304 (Approx. 8 million)	A3 or larger



- With RAW+ L, the RAW and JPEG images will be saved under the same file No. in the same folder.

#### Image File Size and CF Card Capacity According to Image-Recording Quality

Image- recording Quality	Image File Size (Approx. MB)	Possible Shots	
<b>4</b> L	3.3	145	
<b>∄</b> L	1.7	279	
<b>⊿</b> M	2.0	245	
<b>.#</b> M	1.0	466	
<b>4</b> S	1.2	419	
₫S	0.6	790	
RAW+ ▲ L	-	41	
RAW	8.3	58	

- The number of possible shots and maximum burst (p.54) apply to a Canon 512MB CF card.
- The single image size, number of possible shots, and maximum burst during continuous shooting are based on Canon's testing standards (ISO 100 with [Parameter 1] set). The actual single image size, number of possible shots, and maximum burst will vary depending on the subject, shooting mode, ISO speed, parameters, etc.
- In the case of monochrome images (p.65), the file size will be smaller so the number of possible shots will be higher.
- On the top LCD panel, you can check the remaining number of images the CF card can record.
- A different image-recording quality can be set separately for the Basic Zone modes and Creative Zone modes.

#### About the RAW

The RAW assumes that the image will undergo post-processing with a personal computer. Special knowledge is required, but you can use the bundled software to obtain the optimum effect.

Image processing refers to adjusting the RAW image's white balance, contrast, etc., to create the desired image.

Note that RAW images will not work with direct printing or DPOF.

#### Max. Burst During Continuous Shooting

The maximum burst during continuous shooting depends on the imagerecording quality. The approx, maximum burst during continuous shooting is indicated below for each image-recording quality. Note that with high-speed CF cards, the maximum burst may be higher than shown in the table below depending on the shooting conditions.

Image- recording Quality	<b>4</b> L	#L	■M	<b>≇</b> M	<b>4</b> S	<b>≇</b> S	RAW	RAW+⊿L
Max. Burst	14	36	27	110	80	780	5	4



- The number of shots remaining during the maximum burst is displayed on the lower right of the viewfinder.
- If "9" is displayed, it indicates that the maximum burst is nine or more shots. If "5" is displayed, it is five shots.
- While you are shooting and the remaining maximum burst is fewer than 9, the viewfinder will display "8", "7", etc. If you stop the continuous shooting, the maximum burst will increase.



The above table's figures for the maximum burst apply when all the captured images have been processed internally and written to the CF card.



- With white balance bracketing (p.60), the maximum burst will be 2 shots.
  - The maximum burst is displayed even when the drive mode is set to <□> (Single) or <७>. The maximum burst is displayed even when a CF card is not in the camera. Therefore, before shooting, make sure that a CF card is installed in the camera.

# ISO Setting the ISO Speed\*

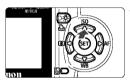
The ISO speed is a numeric indication of the sensitivity to light. A higher ISO speed number indicates a higher sensitivity to light. Therefore, a high ISO speed is suited for low light and moving subjects. However, the image may look more grainy with noise, etc. On the other hand, a low ISO speed is not suited for low light or action shots, but the image will look finer. The camera can be set between ISO 100 and 1600 in 1-stop increments

#### ISO Speed in the Basic Zone Modes

The ISO speed is set automatically within ISO 100-400.

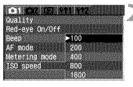
#### ISO Speed in the Creative Zone Modes

You can set the ISO speed to [100] [200] [400] [800] [1600].



#### Press the $<\Delta$ ISO> button.

The [ISO speed] menu will be displayed.



#### Set the ISO speed.

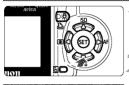
Press the < N > key to select the desired setting, then press < (ET) >.



- At higher ISO speeds and higher ambient temperatures, the image will look more grainy.
  - High temperatures, high ISO speeds, or long exposures may cause irregular colors in the image.

# WB Setting the White Balance\*

Normally, the <**AWE**> setting will set the optimum white balance automatically. If natural-looking colors cannot be obtained with <**AWE**>, you can set the white balance manually to suit the respective light source. In the Basic Zone modes, <**AWE**> will be set automatically.





#### Press the <▼ WB> button.

The [White balance] menu will appear.

#### Select the white balance setting.

- Press the <\(\phi\) > key to select the desired setting, then press <\(\sigma\).</p>
  - When you press the shutter button halfway, the white balance setting will be displayed on the LCD panel.

Display	Mode	Color temperature (Approx. K)
AWB	Auto	3000 - 7000
*	Daylight	5200
1 L	Shade	7000
4	Cloudy, twilight, sunset	6000
*	Tungsten	3200
7710	White fluorescent light	4000
4	Flash	6000
№	Custom*	2000 - 10000

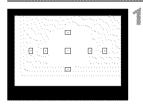
<sup>\*</sup> Set the optimum white balance manually to suit the lighting. (p.57)

#### **About White Balance**

The three RGB (red, green, and blue) primary colors exist in the light source in varying proportions depending on the color temperature. When the color temperature is high, there is more blue. And when the color temperature is low, there is more red. To the human eye, a white object looks white regardless of the type of lighting. With a digital camera, the color temperature can be adjusted with software so that the colors in the image look more natural. The subject's white color is used as the criteria for adjusting the other colors. The camera's < AWB > setting uses the image sensor for auto white balance.

# MENU Custom White Balance \*

With custom white balance, you shoot a white object that will serve as the basis for the white balance setting. By selecting this image, you import its white balance data for the white balance setting.









#### Photograph a white object.

- The plain, white object should fill the viewfinder center.
- Set the lens focus mode switch to <MF>, then focus manually, (p.76)
- Set any white balance setting (p.56).
- Shoot the white object so that a standard exposure is obtained.

#### Select [Custom WB].

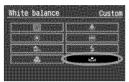
- Select the [ 2] tab.
- Press the < N > key to select
  [Custom WB], then press < (ET) >.
- The custom WB screen will appear.

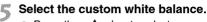
#### Select the image.

- Press the <◀▶> key to select the image that was taken in step 1, then press <(m)>.
- The image's white balance data will be imported and the menu will reappear.
- The caution screen highlighted in orange frame will appear.

#### Select [White balance].

- Select the [ 2] tab.
- Press the < ▲▼ > key to select [White balance], then press < (≱F) >.
- The white balance screen will appear.





- Press the <♦> key to select <ष्≥>, then press < FET >.
- When you press the shutter button halfway, the < ≥> icon will be displayed on the LCD panel.



- If the exposure obtained in step 1 is underexposed or overexposed, a correct white balance might not be obtained.
  - If an image was captured while the processing parameter was set to B/ W] (p.65), it cannot be selected in step 3.



Instead of a white object, an 18% gray card (commercially available) can produce a more accurate white balance.

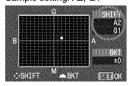
## MENU White Balance Correction \*

You can correct the standard color temperature for the white balance setting. This adjustment will have the same effect as using a color temperature conversion or color compensating filter. Each color can be corrected to one of nine levels. Users familiar with using color temperature conversion or color compensating filters will find this feature handy.





Sample setting: A2, G1



#### Select [WB SHIFT/BKT].

- Select the [ 2] tab.
- Press the < AV > key to select [WB] SHIFT/BKT], then press < set >.
- The WB correction/WB bracketing screen will appear.

#### Set the white balance correction.

- Press the <♦> key to move the "■" mark to the desired position.
- B is blue. A is amber. M is magenta. and G is green. The color in the respective direction will be corrected.
- On the upper right, the "SHIFT" indicator shows the bias direction and correction amount
- To cancel the white balance correction, press the <+> key to move the "" to the center so that "SHIFT" indicates "0.0."
- Press < FT > to exit the setting and return to the menu.



- One level of the blue/amber correction is equivalent to 5 mireds of a color temperature conversion filter. (Mired: A measurement unit indicating the density of a color temperature conversion filter.)
  - You can also set white balance bracketing and AEB in combination with white balance correction.
  - In step 2, if you turn the < △ > dial, WB bracketing will be set. (p.60)

# MENU White Balance Auto Bracketing \*

With just one shot, three images having a different color hue can be recorded simultaneously. Based on the white balance mode's color temperature, the image will be bracketed with a blue/amber bias or magenta/green bias. This is called white balance bracketing. It can be set up to ±3 levels in single-level increments.

Set the image-recording quality to a setting other than RAW and RAW+ L. (p.52)

#### Select [WB SHIFT/BKT].

- Select the [ 2] tab.
- Press the <▲▼ > key to select [WB SHIFT/BKT], then press <(st)>.
- The WB correction/WB bracketing screen will appear.

#### Set the bracketing amount.

- Turn the < \( \frac{\infty}{\infty} \) > dial to set the bracketing direction and bracketing level.
- When you turn the < △ > dial, the "■" mark on the screen will change to "■■ " (3 points). Turning the < △ > dial to the right sets the B/A bracketing, and turning it to the left sets the M/G bracketing.
- Set the bracketing level for the B/A or M/G bias up to ±3 levels in singlelevel increments. (The bracketing level cannot be set for both the B/A and M/G bias at the same time.)
- On the right side of the screen, "BKT" indicates the bracketing direction and bracketing level.
- Press < F > to exit the setting and return to the menu.





B/A bias ±3 levels



M/G bias ±3 levels





#### Take the picture.

If B/A bracketing has been set, the three images will be recorded onto the CF card in the following sequence: Normal white balance, blue bias, and amber bias. If M/G bracketing has been set, the sequence will be normal white balance, magenta bias, and green bias

#### **Canceling White Balance Auto Bracketing**



In step 3, set "BKT" to "±0" (set "■■" to "■", 1 point).



- If the image-recording quality is set to RAW or RAW+

  ■L, white balance bracketing cannot be used.
- With white balance bracketing set, the maximum burst will be 2 shots.



- When you set white balance bracketing, the possible number of shots displayed on the LCD panel will decrease to one-third the normal number.
- Since three images are recorded for one shot, the CF card will take longer to record the shot.
- You can also set white balance correction and AEB in combination with white balance bracketing. If you set AEB in combination with white balance bracketing, a total of nine images will be recorded for a single shot.
- "BKT" stands for bracketing.

# MENU Setting the Color Space\*

The color space refers to the range of reproducible colors. With this camera, you can set the color space for captured images to sRGB or Adobe RGB. For normal images, sRGB is recommended. In the Basic Zone modes, sRGB will be set automatically.

# Select [Color space].

- Select the [ 2] tab.
- Press the < ▲▼ > key to select [Color space], then press < (♣)>.



#### Set the desired color space.

Press the <▲▼ > key to select [sRGB] or [Adobe RGB], then press <(□)>.

#### **About Adobe RGB**

This is mainly used for commercial printing and other industrial uses. This setting is not recommended if you do not know about image processing, Adobe RGB, and Design rule for Camera File System 2.0 (Exif 2.21).

Since the image will look very subdued in an sRGB personal computer environment and with printers not compatible with Design rule for Camera File System 2.0 (Exif 2.21), post-processing of the image with software will be required.



- If the image is captured with the color space set to Adobe RGB, the file name will start with "\_MG\_" (first character is an underscore).
  - The ICC profile is not appended. The ICC profile is explained in the Software Instruction Manual (PDF).

# MENU Selecting the Processing Parameters\*

The image you capture can be processed internally by the camera to look more vivid and sharp or more subdued. The processing parameters can be set according to the preset Parameter 1 or Parameter 2 or to Set 1, 2, or 3 that you can set yourself. There is also a B/W parameter for black-and-white photos. In the Basic Zone modes, Parameter 1 will be set automatically.



#### Select [Parameters].

- Select the [ 2] tab.
- Press the < ▲▼ > key to select [Parameters], then press < (되) >.
- Processing parameter setting screen will appear.





#### Select the desired parameter.

- Press the < N > key to select the desired setting, then press < FT >.
- Press the <MENU> button to return to the menu.

#### **About Processing Parameters**

Parameter	Description
Parameter 1	The image will look vivid and sharp. In the Basic Zone modes, all images will be processed in this way.
Parameter 2	The colors will be more subdued than Parameter 1, making the colors look more natural.
Set 1, 2, 3	You can set and register the following settings: [Contrast], [Sharpness], [Saturation], and [Color tone]. (p.64)
B/W	You can capture black-and-white images.



- With Parameter 1, the [Contrast], [Sharpness], and [Saturation] are set to the +1 level. With Parameter 2, all the parameters are set to neutral at 0.
- In Creative Zone modes, [Parameter 1] is set by default.

# MENU Setting the Processing Parameters \*

The image you capture can be processed automatically by the camera in accordance with the parameter settings you set (five levels each for [Contrast], [Sharpness], [Saturation], and [Color tone]). You can register and save up to three sets of processing parameters.

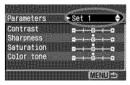




- Select the [ 2] tab.
  - Press the < N > key to select [Parameters], then press < (st) >.
  - The parameter setting screen will appear.



Press < set)>.



#### Select the set number.

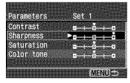
- Press the < AV > key to select [Set 1]. [Set 2], or [Set 3] then press < (st) >.
- The default parameter settings for [Set 1]. [Set 2]. and [Set 3] are all "0" (Standard).



#### Select the item to be set.

Press the < >> kev to select the desired setting, then press < (si) >.

Parameter	Minus	Plus
Contrast	Low contrast	High contrast
Sharpness	Less sharp outline	Sharper outline
Saturation	Low saturation	High saturation
Color tone	Reddish skin tone	Yellowish skin tone

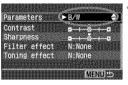


#### Set the desired setting.

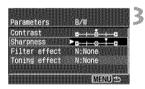
- Press the < >> kev to select the desired effect, then press < (#17) >.
- Press the <MENU> button to return to the menu.

#### **Black-and-White Shooting**

When you capture images with the processing parameter set to B/W, the camera will process and record the images as black-and-white images onto the CF card.







#### Select [B/W].

In step 3 on page 64, select [B/W], then press <</p>
>.

#### Select the item to be set.

- Press the < ▲▼ > key to select the desired setting, then press < (♣) >.
- The [Contrast] and [Sharpness] will be the same as in the table in step 4 on page 64.
- For details on [Filter effect] and [Toning effect], see page 66.

#### Set the desired setting.

- Press the <♠> key to select the desired effect, then press <♠>.
- Press the <MENU> button to return to the menu.
- When you press the shutter button halfway, the <B/W> icon will be displayed on the LCD panel.
- To obtain natural-looking, black-and-white images, set a suitable white balance.
  - JPEG images captured with the parameter set to [B/W] cannot be converted to color. Not even with any personal computer software.
  - If the image-recording quality is RAW and the parameter is [**B/W**], the image can be converted to color with the bundled software.

#### Filter Effects

The same effect as using filters with black-and-white film can be obtained with digital images. A color can be brightened by using a filter having a similar or same color. At the same time, the complementary colors will be darkened.



Filter	Effect
N: None	Normal black-and-white image with no filter effects.
Ye: Yellow	The blue sky will look more natural, and the white clouds will look more crisp.
Or: Orange	The blue sky will look slightly darker. The sunset will look more brilliant.
R: Red	The blue sky will look quite dark. Fall leaves will look crisper and brighter.
G: Green	Skin tones and lips will look fine. Tree leaves will look crisper and brighter.



Setting the [Contrast] to the plus side will make the filter effect more pronounced.

#### **Toning Effect**

When color toning is set, the selected color toning will be applied to the black-and-white image before being recorded to the CF card. It can make the image look more impressive.



Select one of the following: [N:None] [S:Sepia] [B:Blue] [P:Purple] [G:Green]

# **MENU File Numbering Methods**

The file number is like the frame number on film. There are two file numbering methods: [Continuous] and [Auto reset]. The images you take are automatically assigned a file number from 0001 to 9999 and saved in a folder (created automatically) that can hold up to 100 images.



#### Select [File numbering].

- Select the [f11] tab.
  - Press the < ▲▼ > key to select [File numbering], then press < (६१) >.

#### Select the file numbering method.

Press the <▲▼> key to select [Continuous] or [Auto reset], then press <(□)>.

#### Continuous

The file numbering continues in sequence even after you replace the CF card. This prevents images from having the same file number, so image management with a personal computer is easier. Note that if the replacement CF card already contains images captured with the camera, the file

File numbering after changing the CF card



Next sequential file number

numbering will start after the highest file number in that CF card or after the last captured image's file number, whichever is higher.

#### Auto reset

Each time you replace the CF card, the file numbering will be reset to the first file number (100-0001). Since the file number starts from 0001 in each CF card, you can organize images according to CF card. Note that if the replacement CF card already contains images, the file numbering will start after the highest file number in that CF card.

File numbering after changing the CF card



File number is reset

When folder No. 999 is created, [Folder number full] will appear on the LCD monitor. If file No. 9999 is created, "Err CF" will be displayed on the LCD panel and in the viewfinder. Replace the CF card with a new one.



For both JPEG and RAW images, the file name will start with "IMG\_". The extension will be ".JPG" for JPEG images and ".CR2" for RAW images.

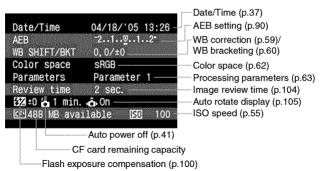
# INFO. Checking Camera Settings

When the camera is ready to shoot, press the < INFO. > button to view the current camera settings on the LCD monitor.



#### Display the camera settings.

- Press the <INFO. > button.
- The current camera settings will appear on the LCD monitor.
- To turn off the settings display, press the <INFO.> button again.

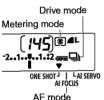




For details on the image info during playback, see "Shooting Information Display" (p. 108).

# Setting the AF, Metering, and Drive Modes





The viewfinder has seven AF points. By selecting a suitable AF point, you can shoot with autofocus while framing the subject as desired. You can also set the AF mode to suit the subject or obtain the desired effect.

Evaluative, partial, and centerweighted average metering modes are provided. Single, continuous, and self-timer drive modes are provided. Select the metering mode that suits the subject or your photographic intention.

- The asterisk ★ on the right of the page title indicates that the respective feature is available only in Creative Zone modes (P, Tv, Av, M, A-DEP).
- In the Basic Zone modes, the AF mode, AF point, metering mode, and drive mode are set automatically.

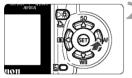
# AF Selecting the AF Mode \*

The AF mode is the autofocusing operation method. Three AF modes are provided. One-Shot AF is suited for still subjects, while Al Servo AF is for moving subjects. And AI Focus AF switches from One-Shot AF to Al Servo AF automatically if the still subject starts moving. In the Basic Zone modes, the optimum AF mode is set automatically.

> Set the lens focus mode switch to <AF>, (p.25)

Press the <▶ AF> button.

The [AF mode] menu will appear.







#### Select the AF mode

Press the < N > key to select the desired setting, then press < (517)>. ONE SHOT: One-Shot AF

ALFOCUS : AL FOCUS AF ALSERVO : AL Servo AF

When you press the shutter button halfway, the LCD panel will display an arrow < ▼ > next to the current AF mode.



- Although you can still set the AF mode while the lens focus mode switch is set to <MF>, the AF mode will not take effect during manual focus.
  - If an Extender (optional) is attached and the maximum aperture of the lens is f/5.6 or smaller, AF will not be possible. For details, see the Extender's instructions.



<AF> stands for Auto Focus, and <MF> is Manual Focus.

#### **One-Shot AF for Still Subjects**



AF point Focus confirmation



#### Pressing the shutter button halfway activates the autofocus and achieves focus once.

- The dot < · > inside the AF point. achieving focus flashes briefly in red. Also, the focus confirmation light < >> in the viewfinder lights.
- With evaluative metering, the exposure setting (shutter speed and aperture) will also be set when focus is achieved. The exposure setting and focus will be locked as long as the shutter button is pressed halfway, (p.75) You can then recompose the shot while retaining the exposure setting and point of focus.



If focus cannot be achieved, the focus confirmation light < > in the viewfinder will blink. If this occurs, a picture cannot be taken even if the shutter button is pressed fully. Recompose the picture and try and focus again. Or see "When Autofocus Fails (Manual Focusing)" (p.76).

#### Al Servo AF for Moving Subjects



#### While you press the shutter button halfway, the camera focuses continuously.

- This AF mode is for moving subjects when the focusing distance keeps changing.
- With predictive AF\*, the camera can also focus track a subject which steadily approaches or retreats from the camera.
- The exposure is set at the moment the picture is taken.



In a Creative Zone mode (except < A-DEP>), the beeper will not sound even when focus is achieved. Also, the focus confirmation light < >> in the viewfinder will not light.

#### \* About Predictive AF

If the subject approaches or retreats from the camera at a constant rate, the camera tracks the subject and predicts the focusing distance immediately before the picture is taken. This is for obtaining correct focus at the moment of exposure.

- When the AF point selection is automatic, the camera first uses the center AF point to focus. During autofocusing, if the subject moves away from the center AF point, focus tracking continues as long as the subject is covered by another AF point.
- With a manually selected AF point, the selected AF point will focus track the subject.

#### Al Focus AF for Automatic Switching of AF Mode



Al Focus AF switches the AF mode from One-Shot AF to Al Servo AF automatically if the still subject starts movina.

After the subject is focused in the One-Shot AF mode, if the subject starts moving, the camera will detect the movement and change the AF mode automatically to Al Servo AF.



When focus is achieved in the Al Focus AF mode with the Servo mode active, the beeper will sound softly. The focus confirmation light <>> in the viewfinder will not light.

### Selecting the AF Point \*

The AF point is used for focusing. The AF point can be selected automatically by the camera or manually by you.

In Basic Zone modes and the < A-DEP > mode, the AF point is selected automatically. In the  $<\mathbf{P}><\mathbf{Tv}><\mathbf{Av}><\mathbf{M}>$  modes, you can switch between automatic and manual AF point selection.

#### Automatic AF Point Selection

The camera selects the AF point automatically to suit the shooting conditions. All the AF points < -> in the viewfinder will light in red.

#### Manual AF Point Selection

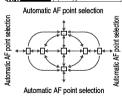
You can select any of the seven AF points manually. This is best when you want to focus a particular subject, or autofocus quickly while composing the shot.

#### <♦> Selecting with the Cross Keys









### Press the <= > button. (♦6)

The selected AF point will be displayed in the viewfinder and on the LCD panel.

#### Select the AF point.

- Press the <♦> key while looking in the viewfinder or at the LCD panel.
- ▶ Press the <◀▶> key to select a horizontal AF point, or press the < key to select a vertical AF point.
- By pressing < (str)>, you can toggle between the center AF point and automatic AF point selection.
- To return to shooting, press the shutter button halfway or press the <ा=> button again.

#### Automatic AF point selection



#### All of the AF points $<\cdot>$ will light in red.

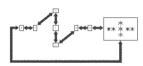
Selecting an AF point beyond a peripheral AF point will set the automatic selection mode.

#### Manual AF point selection



Select the desired AF point so the < · > lights in red.

#### Selecting with the Dial



- Press the < = > button, then turn the < 5℃ > dial
- When you turn the dial, the selection will go in the looping sequence shown on the left.



- When looking at the LCD panel to select the AF point, note the following: Automatic selection [--=-], center [ - 7. top [ right [
- If focus cannot be achieved with an EOS-dedicated, external Speedlite's AF-assist beam, select the center AF point.

#### About AF-Assist beam with the Built-in Flash

Under low-light conditions, when you press the shutter button halfway, the built-in flash fires a brief burst of flashes. It illuminates the subject to enable easier autofocusing.



- In the <▲> <﴿ > <Ы> modes, the AF-assist beam does not light.
  - The built-in flash's AF-assist beam is effective up to about 4 meters/13.2 feet.
  - In the Creative Zone modes when you pop-up the built-in flash with the <>> button, the AF-assist beam will be fired when necessary.

### **Using Focus Lock**

After achieving focus, you can lock the focus on a subject and recompose the shot. This is called "focus lock." Focus lock works only in the One-Shot AF mode.

- Set the Mode Dial to a Creative Zone mode.
- Select the desired AF point. (p.73)



Focus the subject.

Move the AF point over the subject and press the shutter button halfway.



Keep pressing the shutter button halfway and recompose the picture as desired.

- If the AF mode is Al Servo AF (or Al Focus AF set to Servo mode), focus lock will not work.
- ☐ Focus lock is also possible in Basic Zone modes (except < (€ >). In this case, start from step 3.

### When Autofocus Fails (Manual Focusing)

Autofocus can fail to achieve focus (the focus confirmation light <●> blinks) with certain subjects such as the following:

#### Subjects Difficult to Focus

- (a) Low-contrast subjects Example: Blue sky, solid-color walls, etc.
- (b) Subjects in low light
- (c) Extremely backlit and reflective subjects Example: Car with a reflective body, etc.
- (d) Overlapping near and far objects Example: Animal in a cage, etc.
- (e) Repetitive patterns Example: Skyscraper windows, computer keyboards, etc.

#### In such cases, do one of the following:

- (1) Focus an object at the same distance as the subject and lock the focus before recomposing. (p.75)
- (2) Set the lens focus mode switch to <MF> and focus manually.

#### Manual Focusing



Focusing ring

Set the lens focus mode switch to <MF>.

#### Focus the subject.

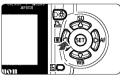
Focus by turning the lens focusing ring until the subject is in focus in the viewfinder



If you press the shutter button halfway during manual focusing, the AF point(s) achieving focus and the focus confirmation light < > in the viewfinder will light when focus is achieved.

### Selecting the Metering Mode \*

The camera has three metering modes: Evaluative, partial, and center-weighted average metering. In the Basic Zone modes, evaluative metering will be set automatically.







The [Metering mode] menu will appear.

#### Select the metering mode.

Press the < ▲▼ > key to select the desired setting, then press < (♣) >.



: Partial Metering

□: Center-weighted Averaged Metering

When you press the shutter button halfway, the selected metering mode will be displayed on the LCD panel.



#### Evaluative Metering

This is the camera's standard metering mode suited for most subjects even under backlit conditions. After detecting the main subject's position, brightness, background, front and back lighting, etc., the camera sets the proper exposure.

- During manual focusing, evaluative metering is based on the center AF point.
- If the subject brightness and background light level are very different (there is a strong backlight or spotlight), use partial metering < > instead.



#### Partial Metering

Effective when the background is much brighter than the subject due to backlighting, etc. Partial metering covers about 9% of the viewfinder area at the center. The area covered by partial metering is shown on the left.



#### □ Center-weighted Average Metering

The metering is weighted at the center and then averaged for the entire scene.

### Selecting the Drive Mode

Single and continuous drive modes are provided. In the Basic Zone modes, the optimum drive mode is set automatically.





#### Press the < □ 🐧 > button.

 Look at the LCD panel and press the <□ ॐ; > button to select the drive mode.

☐ : Single shooting

When you press the shutter button completely, one shot will be taken

be taken.

lacksquare : Continuous shooting

(Max. 3 shots per sec.)
While you press the shutter
button completely, shots will be
taken continuously.

**ర్జ్**: Self-timer/Remote control

(p.48/49)



 During continuous shooting, the captured images are first stored in the camera's buffer memory and then successively transferred to the CF card. When the



buffer memory becomes full during continuous shooting, "buSY" will be displayed on the LCD panel and in the viewfinder and the camera cannot take any more shots. As the captured images are transferred to the CF card, you will be able to capture more images. Press the shutter button halfway to check in the viewfinder's bottom right the current remaining shots of the maximum burst.

- If "Full CF" is displayed in the viewfinder and on the LCD panel, wait until the access lamp stops blinking, then replace the CF card.
- When the battery level is low, the maximum burst will be slightly lower.



# **Advanced Operations**



With Creative Zone modes, you can set the desired shutter speed or aperture value to obtain the result you want. You take control of the camera.

- The asterisk ★ on the right of the page title indicates that the respective feature is available only in Creative Zone modes (P, Tv, Av, M, A-DEP).
- After you press the shutter button halfway and let go, the timer operation will keep the LCD panel and viewfinder information displayed for about 4 sec. (\*\*\tilde{O}4\*).
- To see what can be set in the Creative Zone modes, see "Function Availability Table" (p.152).

### P Program AE



Like < > > (Full Auto) mode, this is a general-purpose shooting mode. The camera automatically sets the shutter speed and aperture value to suit the subject's brightness. This is called Program AE.

- \* <P > stands for Program
- \* AE stands for Auto Exposure

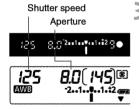






### Focus the subject.

 Look through the viewfinder and aim any AF point over the subject. Then press the shutter button halfway.



### Check the display.

- The shutter speed and aperture value will be set automatically and displayed in the viewfinder and on the LCD panel.
- A correct exposure will be obtained as long as the shutter speed and aperture value display do not blink.



#### Take the picture.

Compose the shot and press the shutter button completely.





- If "30" and the maximum aperture blink, it indicates that the subject is too dark. Increase the ISO speed or use flash.
- If "4000" and the minimum aperture blink, it indicates that the subject is too bright. Decrease the ISO speed or use an ND filter (optional) to reduce the amount of light entering the lens.



#### Differences Between <P> and <□> (Full Auto)

- In both modes, the automatically-set shutter speed and aperture combination are the same.
- In the <P> mode, you can set or use the functions below, but not in the <D> mode.

#### Shooting Settings

- AF mode selection
- AF point selection
- Drive mode selection
- Metering mode selection
- Program Shift
- Exposure compensation
- AEB
- AE lock with < X > button
- Depth-of-field preview
- Clear all camera settings
- Custom Function (C.Fn)
- Clear all Custom Functions
- Sensor cleaning

#### Flash Settings (Built-in flash)

- Flash On/Off
- FE lock
- Flash exposure compensation

#### Flash Settings (EX-series Speedlite)

- Manual/stroboscopic flash
- High-speed sync (FP flash)
- FF lock
- Flash ratio control
- Flash exposure compensation
- FEB
- 2nd-curtain sync
- Modeling flash

#### Image-Recording Settings

- RAW, RAW+
   L selection
- ISO speed setting
- White balance selection
- Custom white balance selection
- White balance correction
- WB bracketing
- Color space selection
- Processing parameter setting

#### **About Program Shift**

- In Program AE mode, you can freely change the shutter speed and aperture value combination (program) set by the camera while maintaining the same exposure value. This is called program shift.
- To do this, press the shutter button down halfway, then turn the < >> dial until the desired shutter speed or aperture value is displayed.
- Program shift is canceled automatically after the image is captured.
- If you use flash, you cannot use program shift.

### Tv Shutter-Priority AE

In this mode, you set the shutter speed and the camera automatically sets the aperture value to suit the subject's brightness. This is called shutter-priority AE. A fast shutter speed can freeze the motion of a fast-moving subject, and a slow shutter speed can blur the subject to give the impression of motion.

\* < Tv > stands for Time value.



Fast shutter speed



Slow shutter speed



Set the Mode Dial to <Tv>.





- Set the desired shutter speed.
  - While looking at the LCD panel, turn the < \( \frac{200}{200} \) > dial.
  - It can be set in 1/3-stop increments.

### Focus the subject.

- Press the shutter button halfway.
- The aperture value is set automatically.



- Check the viewfinder display and shoot.
  - As long as the aperture value is not blinking, the exposure will be correct.



- If the maximum aperture blinks, it indicates underexposure. Turn the < 600 > dial to set a slower shutter speed until the aperture value stops blinking or set a higher ISO speed.
- If the minimum aperture blinks, it indicates overexposure. Turn the < 600 > dial to set a faster shutter speed until the aperture value stops blinking or lower the ISO speed.



### Shutter Speed Display

The shutter speeds from "4000" to "4" indicate the denominator of the fractional shutter speed. For example, "125" indicates 1/125 sec.Also, "0"6" indicates 0.6 sec. and "15" is 15 sec.

4000 3200 2500 2000 ISON 1250 1000 800 640 SOO 400 320 250 200 160 125 100 80 60 ° 50 40 · 30 15 13 10 8 6 5 grey ... ing ing zu zug guz wi su su su igu igu 15'' 20'' 25'' 30''

### Av Aperture-Priority AE

In this mode, you set the desired aperture and the camera sets the shutter speed automatically to suit the subject brightness. This is called aperture-priority AE.

A larger aperture opening (lower f/number) will result in a blurred background ideal for portraits. This occurs because a lower f/number decreases the depth of field (range of acceptable focus). On the other hand, a smaller aperture opening (higher f/number) will make more of the foreground and background fall within acceptable focus. A smaller aperture opening increases the depth of field.

\* < Av > stands for Aperture value.



With a large aperture opening



With a small aperture opening



#### Set the Mode Dial to < Av>.







#### Set the desired aperture value.

- While looking at the LCD panel, turn the < ☆ > dial.
- It can be set in 1/3-stop increments.

#### Focus the subject.

- Press the shutter button halfway.
- The shutter speed is set automatically.

# Check the viewfinder display and shoot.

As long as the shutter speed is not blinking, the exposure will be correct.







If the "30"" shutter speed blinks, it indicates underexposure. Turn the dial to set a larger aperture (lower f/number) until the blinking stops or set a higher ISO speed.

If the "4000" shutter speed blinks, it indicates overexposure. Turn the < 600 > dial to set a smaller aperture (higher f/number) until the blinking stops or set a lower ISO speed.

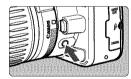


#### 🖪 Aperture Value Display

The higher the f/number, the smaller the aperture opening will be. The aperture values displayed will differ depending on the lens. If no lens is attached to the camera, "00" will be displayed for the aperture value.

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### Depth of Field Preview\*



Press the depth-of-field preview button to stop down to the current aperture setting. The diaphragm in the lens will close to the current aperture and you can check the depth of field (range of acceptable focus) through the viewfinder.



- The higher the f/number, the darker the viewfinder will look.
- in the <A-DEP> mode, press the shutter button halfway to focus, then press the depth-of-field preview button while still pressing the shutter button halfway.
- The exposure is locked (AE lock) while you press the depth-of-field preview button.

### **M** Manual Exposure



In this mode, you manually set both the shutter speed and aperture value as desired. To determine the correct exposure, refer to the exposure level indicator in the viewfinder or use a handheld exposure meter. This method is called manual exposure.

\* < M > stands for Manual.

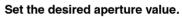


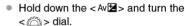
Set the Mode Dial to <M>.



Set the desired shutter speed.











Standard exposure index



Exposure level mark



#### Focus the subject.

- Press the shutter button halfway.
- The exposure setting will be displayed on the LCD panel and in the viewfinder.
- you how far you are from the standard exposure level.

#### Set the exposure.

Check the exposure level and set the desired shutter speed and aperture value.



: Standard exposure level.



: To set it to the standard exposure level, set a slower shutter speed or a larger aperture opening.



To set it to the standard exposure level, set a faster shutter speed or a smaller aperture opening.



Take the picture.



If the exposure level mark <1> blinks at the <+2> or <-2> level, it indicates that the exposure level exceeds the standard exposure by ±2 stops.

### A-DEP Automatic Depth-of-Field AE

This mode is for obtaining a wide depth of field automatically between a near subject and far subject. It is effective for group photos and landscapes. The camera uses the seven AF points to detect the nearest and farthest subjects to be in focus.

\* < A-DEP > stands for Auto-depth of field.



### Set the Mode Dial to < A-DEP>.



### Focus the subject.

- Move the AF point over the subject and press the shutter button halfway.
   (\*\tilde{0}4\*)
- All the subjects covered by the AF points flashing in red will be in focus.
- Hold down the shutter button halfway and press the depth-of-field preview button to see the depth of field (range of acceptable focus), (p.85)



- The < A-DEP> mode cannot be used if the lens' focus mode switch is set to <MF>. The result will be the same as using the <P> mode.
- If the "30"" shutter speed blinks, it indicates that the subject is too dark. Increase the ISO speed.
- If the "4000" shutter speed blinks, it indicates that the subject is too bright. Decrease the ISO speed.

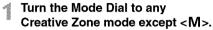


- If the aperture value blinks, it indicates that the exposure level is correct but the desired depth of field cannot be obtained. Either use a wideangle lens or move further away from the subjects.
- In this shooting mode, you cannot freely change the shutter speed and aperture value. If the camera sets a slow shutter speed, hold the camera steady or use a tripod.
- If you use flash, the result will be the same as using <P> with flash.

### Setting Exposure Compensation \*

Exposure compensation is used to alter the standard exposure setting set by the camera. You can make the image look lighter (increased exposure) or darker (decreased exposure). You can set the exposure compensation up to ±2 stops in 1/3-stop increments.





#### Check the exposure level indicator.

Press the shutter button halfway and check the exposure level indicator.

#### Set the exposure compensation amount.

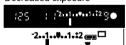
- < ₹~%> dial
- To cancel the exposure compensation, set the exposure compensation amount back to <1>.

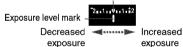
Standard exposure index



Decreased exposure

Increased exposure







- The exposure compensation amount will remain in effect even after the power switch is set to <OFF>.
- If the standard exposure setting is 1/125 sec, and f/8.0, setting the exposure compensation amount to plus or minus one stop will be the same as setting the shutter speed or aperture value as follows:

	-1 stop ← 0 → +1 stop
Shutter Speed	250 ← 125 → 60
Aperture Value	11 ← 8.0 → 5.6

## MENU Auto Exposure Bracketing (AEB) \*

By changing the shutter speed or aperture automatically, the camera can bracket the exposure up to ±2 stops in 1/3-stop increments for three successive shots. This is called Auto Exposure Bracketing (AEB).



Standard exposure



Decreased exposure



Increased exposure

### Select [AEB].

- Select the [ 2] tab.
- Press the < N > key to select [AEB]. then press < (SET) >.



#### Set the AEB amount.

- Press the < >> key to set the AEB amount, then press < fir)>.
- When you press the shutter button halfway, the < >> icon and AEB amount will appear on the LCD panel.





#### Standard exposure

S. S. Zantanyantai 2 G Decreased exposure

S. S. 214 1 14 2 15 250

Increased exposure

Ç,Ç 21.1m¥.,,},i2 80

- The three bracketed shots will be exposed in the following sequence: standard exposure, decreased exposure, and increased exposure.
- As shown on the left, the respective bracketing amount will be displayed as each bracketed shot is taken.
- The current drive mode (p.78) will be used for the shooting.

#### Canceling AEB



- Follow steps 1 and 2 to set the AEB amount to < 2.1.0.1.2.>.
- AEB will also be canceled. automatically if you turn the power switch to <OFF>, change lenses, obtain flash-ready, replace the battery, or replace the CF card.



AEB cannot be used with flash or bulb exposures.



- If the drive mode is set to continuous (□), the three bracketed shots will be taken continuously and then the shooting will stop automatically. If the drive mode is set to single image ( ), you must press the shutter button three times.
- If the self-timer/remote control has been set, the three bracketed shots will be taken continuously.
- If C.Fn-7 [Mirror lockup] is set to [1:Enabled] (p.150), the drive mode for AEB will be single even if it is set to continuous.
- AEB can be combined with exposure compensation.

### X AE Lock\*

AE lock enables you to lock the exposure at a different place from the point of focus. By locking the exposure, you can recompose the shot while maintaining the same exposure setting. This is called AE lock. It is effective for backlit subjects.

### Focus the subject.

- Press the shutter button halfway.
- The exposure setting will be displayed.

#### Press the < X > button. (♦4)

- The < \* > icon lights in the viewfinder to indicate that the exposure setting is locked (AE lock).
- Each time you press the < \*\* > button, it locks the current exposure setting.





AF lock indicator



#### Recompose and take the picture.

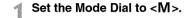
If you want to maintain the AE lock while taking more shots, hold down the < \*> button and press the shutter button to take another shot.



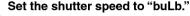
- If the AF mode is One-Shot AF or AI Focus AF (when not AI Servo AF) and the metering mode is < > (Evaluative), pressing the shutter button halfway will automatically set AE lock at the same time when focus is achieved.
- The AE lock effect will differ depending on the AF point and metering mode. For details, see "AE Lock" (p.153).

### **Bulb Exposures**

When bulb is set, the shutter stays open while you hold down the shutter button fully, and closes when you let go of the shutter button. This is called bulb exposure. Use bulb exposures for night scenes. fireworks, the heavens, and other subjects requiring long exposures.







- Look at the LCD panel and turn the < > dial to select "buLb."
- The next setting after "30"" is "buLb."



#### Set the desired aperture value.

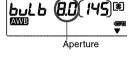
 Hold down the < Av™ > button and turn the < 2000 > dial.



#### Take the picture.

- Press the shutter button completely.
- The elapsed exposure time will be displayed on the LCD panel. (Displays 1 sec. to 999 sec.)
- The exposure continues as long as you hold down the shutter button. Elapsed exposure time (sec.)







Since bulb exposures will have more noise than usual, the image will look grainy.



- Bulb exposures may result in grainy images due to picture noise. You can reduce noise by setting C.Fn-2 [Long exposure noise reduction] to [1: On] (p.148).
  - For bulb exposures, using Remote Switch RS-60E3 (optional) is recommended.
  - Remote Controller RC-1/RC-5 (optional) can also be used for bulb exposures. When you press the transmit button, the exposure will start 2 sec. later. To stop the exposure, press the button again.

### Mirror Lockup \*

Mirror lockup is enabled with C.Fn-7 [Mirror lockup] set to [1: Enable] (p.150). The mirror can be swung up separately from when the exposure is made. This prevents mirror vibrations which may blur the image during close-ups or when a super telephoto lens is used. Set Custom Functions with [172 Custom Functions (C.Fn)].



### Press the shutter button completely.

The mirror will swing up.

### Again press the shutter button completely.

The picture is taken and the mirror goes back down.



- In very bright places such as at the beach or ski ground on a sunny day, take the picture promptly after mirror lockup.
  - During mirror lockup, do not point the camera lens at the sun. The sun's heat can scorch and damage the shutter curtains.
  - If you use bulb exposures, the self-timer, and mirror lockup in combination, keep pressing the shutter button completely (2 sec. selftimer + bulb exposure time). During the 2-sec, self-timer countdown, if you let go of the shutter button, there will be a shutter-release sound. This is not the shutter being released (no picture is taken).



- During mirror lockup, the drive mode will be set to single shooting regardless of the current drive mode setting (single or continuous).
- If you use the self-timer and mirror lockup, press the shutter button completely and the shot will be taken 2 sec. after the mirror goes up.
- The mirror locks up, and after 30 seconds, it will go back down automatically. Pressing the shutter button completely again locks up the mirror again.
- For mirror lockup shots, using Remote Switch RS-60E3 (optional) is recommended.
- Remote Controller RC-5 (optional) can also be used for mirror lockup shots. Press the transmit button and the mirror locks up before the shot is taken 2 sec. later.

# Flash Photography



The built-in flash or an EOS-dedicated, EX-series Speedlite enables E-TTL II autoflash (evaluative flash metering with preflash), making flash photography as easy as normal shooting. The result is naturallooking flash photos. In the Basic Zone modes (except < >> < >> >, flash photography is fully automatic. In Creative Zone modes, flash can be used whenever necessary.

### Using the Built-in Flash

E-TTL II autoflash obtains high-precision and consistent flash shots.

#### Using the Built-in Flash in the Basic Zone

If necessary, the built-in flash will pop-up automatically in low-light or backlit conditions. (except in the <a> <<>>> <<<>> > <<>><>>> > modes)

#### Using the Built-in Flash in the Creative Zone

Regardless of the light level, you can press the <\$> button to pop-up and fire the built-in flash whenever desired.

- P: For fully automatic flash photography. The shutter speed (1/60 sec. 1/200 sec.) and aperture value are set automatically, just as in < > (Full Auto) mode.
- Tv : Enables you to set the desired shutter speed (30 sec. 1/ 200 sec.). The camera then automatically sets the flash aperture value to obtain the proper exposure at the shutter speed you have set.
- Av : Enables you to set the desired aperture value. The camera then automatically sets the shutter speed (30 sec. 1/200 sec.) to obtain the proper exposure at the aperture you have set.

Against dark backgrounds such as the night scenes, slow-sync shooting will be set so that both the subject and background are exposed correctly. The main subject is exposed with the flash, and the background is exposured with a slow shutter speed.

- Because automatic slow-sync shooting uses a slow shutter speed, always use a tripod.
- If you do not want a slow shutter speed to be set, set C.Fn-3 [Flash sync. speed in Av mode] to [1: 1/200sec. (fixed)]. (p.148)
- M : You can set both the shutter speed (bulb or 30 sec. 1/200 sec.) and aperture value. The main subject is exposed properly by the flash. The background exposure will vary depending on the shutter speed and aperture.

**A-DEP**: The flash result will be the same as the <**P**> mode.

#### Built-in Flash Range

#### With FF-S18-55mm f/3 5-5 6 II

[m / ft]

ISO speed	Wide angle: 18mm	Telephoto: 55mm
100	Approx. 1 - 3.7 / 3.3 - 12.1	Approx. 1 - 2.3 / 3.3 - 7.5
200	Approx. 1 - 5.3 / 3.3 - 17.4	Approx. 1 - 3.3 / 3.3 - 10.8
400	Approx. 1 - 7.4 / 3.3 - 24.3	Approx. 1 - 4.6 / 3.3 - 15.1
800	Approx. 1 - 10.5 / 3.3 - 34.4	Approx. 1 - 6.6 / 3.3 - 21.7
1600	Approx. 1 - 14.9 / 3.3 - 48.9	Approx. 1 - 9.3 / 3.3 - 30.5

#### With EF-S17-85mm f/4-5.6 IS USM

[m / ft]

ISO speed	Wide angle: 17mm	Telephoto: 85mm
100	Approx. 1 - 3.3 / 3.3 - 10.8	Approx. 1 - 2.3 / 3.3 - 7.5
200	Approx. 1 - 4.6 / 3.3 - 15.1	Approx. 1 - 3.3 / 3.3 - 10.8
400	Approx. 1 - 6.5 / 3.3 - 21.3	Approx. 1 - 4.6 / 3.3 - 15.1
800	Approx. 1 - 9.2 / 3.3 - 30.2	Approx. 1 - 6.6 / 3.3 - 21.7
1600	Approx. 1 - 13.0 / 3.3 - 42.7	Approx. 1 - 9.3 / 3.3 - 30.5



- Use the built-in flash at least 1 m/3.3 ft away from the subject. Closer distances will cause the lens barrel to partially obstruct the flash.
  - When using the built-in flash, detach any hood attahed to the lens. A lens hood will partially obstruct the flash.
  - A super telephoto lens or fast, large-aperture lens may partially obstruct the built-in flash coverage. In such a case, using an EX-series Speedlite (optional) is recommended.
  - The built-in flash's coverage is effective with lens focal lengths as short as 17mm. If the lens is shorter than 17mm, the periphery of the flash photo will look dark.



- To retract the flash, push it back down.
  - In the <Tv > <M> modes, even if you set the shutter speed to one faster than 1/200 sec., it will be set automatically to 1/200 sec.
  - If autofocus cannot be achieved, the AF-assist beam (small flashes fired by the built-in flash) will be fired automatically (except in the < > < < > < 53 > modes), (p.74)

ed-eye on/ort #0ff

Metering mode

#### **Using Red-eye Reduction**



#### Select [Red-eve On/Off].

- Select the <

  ↑ tab.
  </p>
- Press the <▲▼ > key to select [Redeve On/Off], then press <(€1)>.

#### Set the red-eye reduction.

- Press the < > > key to select [On], then press < (ser) >.
- When you press the shutter button halfway, the < > icon will be displayed in the viewfinder.

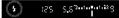


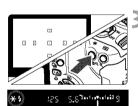
- When you press the shutter button down halfway, the red-eye reduction lamp indicator appears in the viewfinder.
- Red-eye reduction will not work unless the subject looks at the red-eye reduction lamp. Tell the subject to look at the lamp.
- To increase the effectiveness of red-eye reduction, press the shutter button down fully after the red-eye reduction lamp (which lights for approximately 1.5 seconds) indicator goes off.
- You can shoot anytime by pressing the shutter button down fully, even while the red-eye reduction lamp is still on.
- The effectiveness of red-eye reduction varies from subject to subject.
- Red-eye reduction is more effective in brighter rooms or when the camera is closer to the subject.

#### \* FE lock\*

FE (flash exposure) lock obtains and locks the correct flash exposure reading for any part of a subject.









#### Check that the <\$> icon is lit.

- Press the <\$> button to pop-up the built-in flash.
- Press the shutter button halfway and look in the viewfinder to check that the < 5 > icon is lit.

#### Focus the subject.

Press the shutter button halfway. Keep pressing the shutter button halfway until step 4.

#### Press the < <del>X</del> > button. (₲16)

- Aim the viewfinder center over the subject where you want to lock the flash exposure, then press the < \*> button.
- The Speedlite will fire a preflash and the required flash output is calculated and retained in memory.
- In the viewfinder, "FEL" is displayed for a moment and <★> will light.
- Each time you press the < \*> button, a preflash is fired and the required flash output is calculated and retained in memory.

- Compose the shot and press the shutter button fully.
- The flash is fired to take the picture.
- If the subject is too far away and beyond the effective range of the flash, the <\$> icon will blink. Get closer to the subject and repeat steps 2 to 4.

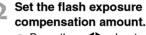
### Flash Exposure Compensation ★

In the same way as normal exposure compensation, you can set exposure compensation for flash. You can set flash exposure compensation up to  $\pm 2$  stops in 1/3-stop increments.



#### Select [Flash exp comp].

- Select the [ 2] tab.
- Press the <▲▼ > key to select [Flash exp comp], then press <</p>
  (♣)>.



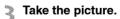
Press the <◀▶> key to set the desired amount, then press <ණ>>.

Standard exposure index

Exposure level mark

Decreased Increased exposure exposure

- To cancel the flash exposure compensation, set the flash exposure compensation amount back to <\(^1\_i > .\)
- When you press the shutter button halfway, the < 22 > icon will be displayed in the viewfinder and on the LCD panel.









- The flash exposure compensation amount will remain in effect even after you turn the power switch to <OFF>.
- The procedure is the same with EX-series Speedlites. The flash exposure compensation amount can be set with the camera.

### Using EOS-Dedicated, External Speedlites

#### With EX-series Speedlites

An EOS-dedicated, EX-series Speedlite (optional) makes flash photography as easy as normal shooting. You can easily do the flash operations below. For detailed procedures, see the Speedlite's instruction manual.

#### E-TTL II Autoflash

E-TTL II is a new autoflash exposure system incorporating improved flash exposure control and lens focusing distance information, making it more precise than the previous E-TTL (evaluative flash metering with preflash) system. The camera can execute E-TTL II autoflash with any EX-series Speedlite.

#### • High-Speed Sync (FP flash)

With high-speed sync, you can set a sync speed faster than 1/200 sec.

#### • FE (Flash Exposure) Lock

Press the camera's < \* > button to lock the flash exposure at the desired part of the subject.

#### Flash Exposure Compensation

In the same way as normal exposure compensation, you can set exposure compensation for flash. The flash exposure compensation amount can be set with the camera up to  $\pm 2$  stops in 1/3-stop increments. With Speedlites which you can set the flash exposure compensation, it can be set up to  $\pm 3$  stops in 1/3-stop increments.

#### • FEB (Flash Exposure Bracketing)

The flash output is changed automatically for three successive shots (only with FEB-compatible Speedlites). Set flash exposure bracketing up to ±3 stops in 1/3-stop increments.

#### • E-TTL II Wireless Autoflash with Multiple Speedlites

As with wired, multiple Speedlites, wireless E-TTL II autoflash with multiple Speedlites provides all the above features. Since connection cords are unnecessary, flexible and sophisticated lighting setups are possible (only with wireless-compatible Speedlites).

#### About EZ/E/EG/ML/TL-series Speedlites

The flash cannot be fired with an EZ/E/EG/ML/TL-series Speedlite set in the TTL or A-TTL autoflash mode. Use the Speedlite's manual flash mode instead if provided.



- Before attaching an external Speedlite, retract the built-in flash if it is popped up.
- If the EX-series Speedlite's firing mode is set to TTL autoflash with the Custom Function, the Speedlite will not fire.



- If autofocus cannot be achieved, the external, EOS-dedicated Speedlite's AF-assist beam (if the Speedlite has an AF-assist beam) will be emitted automatically (except in the <>> < \$\leq > < \$\leq > \leq \text{\$\text{\$}} > \text{modes}.
- The camera is a Type-A camera that can use all the features of EXseries Speedlites.

### Using Non-Canon Flash Units

The camera can synchronize with compact, non-Canon flash units at 1/ 200 sec, or slower. Be sure to test the flash unit beforehand to make sure it synchronizes properly with the camera.



- If the camera is used with a flash unit or flash accessory dedicated to another camera brand, the camera may not operate properly and malfunction may result.
- Do not attach a high-voltage flash unit on the camera's hot shoe. It might not work.



#### LCD Panel Illumination



The LCD panel is provided with illumination.

To illuminate the LCD panel, press the <\\$> button (\ddot{0}6). To turn off the illumination, press the button again. Use it to read the LCD panel in the dark.



- Pressing any shooting-related button or turning the Mode Dial while the LCD panel is illuminated prolongs the illumination.
- When the camera is connected to a printer and the <☆> button turns blue, the button functions as a Direct print button. (p.136)

as how to view and erase captured images and how to connect the camera to a TV monitor.

#### For images taken with another camera:

The camera might not be able to properly display images captured with a different camera or edited with a personal computer or whose file name was changed.

### MENU Setting the Image Review Time

You can set how long the image is to be displayed on the LCD monitor right after it is captured. To keep the image displayed, set [Hold]. To not have the image displayed, set [Off].



- Select the [ ] tab.
- Press the <▲▼ > key to select [Review time], then press <<p>[Fig. 2]



Press the <▲▼ > key to select the desired setting, then press <(□) >.





- If you press the <INFO.> button during the image review right after shooting, you can change the display format.
  - The [Hold] setting keeps displaying the image until you press the shutter button halfway. However, if auto power off has been set, the camera will turn off automatically after the auto power off time elapses.
- During the image review for single-shooting, you can delete the displayed image by pressing the < m > button and selecting [OK].
- To view the images captured so far, see "Image Playback" (p.107).

### MENU Auto Image Rotation

Vertical shots can be rotated automatically so that they are displayed upright during playback.

### Select [Auto rotate].

- Select the [ ft 1] tab.
- Press the < AV > key to select [Auto] rotate], then press < (st) >.



#### Select [On].

Press the < T > key to select [On], then press < FT>.

#### Take a vertical shot.

The image review right after image capture will not display the image vertically on the LCD monitor.



#### Playback the image.

- Press the < >> button.
- The vertical shot will be displayed vertically as shown on the left.



- Auto rotate will work only if [Auto rotate] has been set to [On]. Auto rotate will not work with vertical images captured while [Auto rotate] was [Off]. It will not rotate even if you later switch it to [On] for playback.
- If the vertical image is taken while the camera is pointed up or down, the image might not rotate automatically for playback.



When you change the camera's orientation between horizontal and vertical, the camera orientation sensor will make a small sound. This is normal and not a defect.

### MENU Setting the LCD Brightness

You can adjust the brightness of the LCD monitor to one of five levels.





### Select [LCD brightness].

- Select the [ \*11] tab.
- Press the < T > key to select [LCD] brightness], then press < (5ET) >.
- The LCD Brightness screen will appear.

#### Adjust the brightness.

- While looking at the gray chart on the left, press the < ◀▶> key to adjust.
- return to the menu

### Image Playback

You can select any captured image to view. You can view a single image, the shooting information, an index display, or a magnified view.

#### **►** Single image display



#### Playback the image.

- Press the <>> button.
- The last captured image will appear on the LCD monitor.

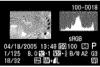


### Select the image.

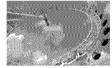
- To view images starting with the last image, press the < ◀> key. To view images starting with the first image, press the < ▶> key.
- Press the <INFO,> button to switch the display format.



Single image display (with basic info)



Shooting information



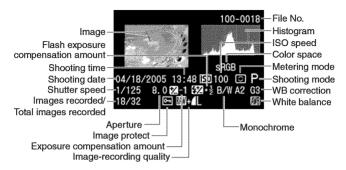
Single image display (no shooting info)

To quit the playback, press the < >> button. The LCD monitor will turn off.



- Even in display formats other than single image (index display, magnified view, etc.), you can press the <INFO.> button to display or hide the basic info.
- After continuous shooting while data is being written to the CF card (access lamp blinking), press the <►> button to display the last image which has been written to the CF card so far. Press the <►> key to select the image. You can view in sequence the images whose writing to the CF card has been completed.

#### Shooting Information Display



#### Histogram

A histogram is a graph indicating the image's brightness distribution. The horizontal axis indicates the brightness level (darker on the left and brighter on the right), while the vertical axis indicates how many pixels exist for each brightness level.

The more pixels there are toward the left, the darker the image. And the more pixels there are toward the right, the brighter the image.

If there are too many pixels on the left, the shadow detail will be lost. And if there are too many pixels on the right, the highlight detail will be lost. The tones inbetween will be reproduced.

With the image's histogram, you can check how accurate or lopsided the exposure is and how rich the overall tonal range is.

#### Sample Histograms



Dark image



Normal image



Bright image

#### **Highlight Alert**

When the shooting information is displayed, any overexposed areas of the image will blink. To obtain more image detail in the overexposed areas, set the exposure compensation to a negative amount and shoot again.

#### Index Display

Nine thumbnail images are displayed on one screen.

## Playback the image.

- Press the < >> button.
- The last captured image will appear on the LCD monitor.

## Display the index images.

- Press the < □□□ > button.
- The selected thumbnail will be highlighted within a green frame.







## Select the image.

Press the < \$\ddots\$ kevs to move the</p> green frame in the respective direction.

#### Switching from the index display to another display mode

- To display a single image, press the <►> button.
- Pressing the <⊕ > button switches to the single image display and pressing it again switches to magnified view.



While the index is displayed, press the < JUMP > button, then press the > key to jump nine images forward or back. (p.111)

## ⊕/Q Magnified View

You can magnify the image by 1.5x to 10x on the LCD monitor.

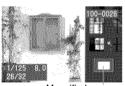
## Playback the image.

Display the image in the single-image or image info display mode.

## Magnify the image.

- Press the < \mathbb{Q} > button.
- At first, the center of the image will be magnified.
- To increase the magnification, hold down the < 4 > button.
- Press the < ■• > button to reduce the magnification. If you hold down the button, the magnification will decrease until it reaches the size in step 1.





Magnified area

## Scroll around the image.

- Press the <♦> kevs to scroll around in the respective direction.
- Repeat steps 2 and 3 to magnify other areas of the image.
- To exit the magnified display, press the < >> button and the single image display will return.







While in the magnified view, you can maintain the same magnified area and magnification when you turn the < > dial to view another image.

## JUMP Jump Display

During the single image, image with shooting information, index, or magnified image display, you can jump forward or back to images stored on the CF card.

How to use Jump function



Jump bar

## Playback the image.

## Go to the jump display.

- Press the < JUMP > button.
- On the lower right of the screen, you can see the jump bar.
- During the single image or image with shooting information display, you can switch the jump method (10 images/100 images/Date) by pressing the < vexternal vextern

## Jump forward or back.

- To quit the image jump, press the < JUMP > button. The jump bar will disappear.

# Jumping during the single image or image with shooting information display Jump by 610 images or 6100 images

Press the <◀> key to jump back by 10 images/100 images. Or press the <▶> key to jump forward by 10 images/100 images. Jump by date

You can jump to a picture taken on a specific date. (If there are multiple pictures taken on the same date, the display will jump to the first picture taken on that date.) Press the < ◀> key to jump back to an older picture. Or press the < ▶> key to jump forward to a newer picture.

#### Jumping in the magnified view

Turn the < > dial counterclockwise to jump ten images backward, or turn it clockwise to jump ten images forward. The magnified position and magnification will be maintained during the image jump.

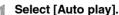
#### Jumping in the index display mode

Press the <◀> key to jump back by 9 images. Or press the <▶> key to jump forward by 9 images.

## MENU Automated Playback of Images (Auto Play)

You can playback the CF card's images in an automatic slide show. Each image will be displayed for about 3 sec.





- Select the [ ] tab.
- Press the <▲▼ > key to select [Auto play], then press <<p>(€) >.
- The Autoplay screen will appear.



## Start the auto play.

- After [Loading image...] is displayed for a few seconds, auto play will start.
- To pause the auto play, press < (\$\sigma > \).
- During pause, [ II ] will be displayed on the upper left of the image.Press ⟨⟨□⟩ again to resume the auto play.



## Stop the auto play.

To stop the auto play and return to the menu, press the <MENU> button.



- During auto play, auto power off will not work.
- The display time may vary depending on the image.



- During auto play, you can press the <INFO.> button to change the display format.
- During pause, you can press the <◄►> key to view another image.

#### MENU Rotating an Image

You can rotate an image by 90° or 270° clockwise. The image can then be displayed in the correct orientation during playback.







## Select [Rotate].

- Select the [▶] tab.
- Press the < AV > key to select [Rotate], then press < (str) >.
- The Rotate screen will appear.

## Rotate the image.

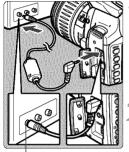
- Press the < ◀▶> key to select the image to be rotated, then press <(SET) >.
- Each time you press < \$\sigma\$>, the image will rotate clockwise.
- To rotate another image, repeat step 2.
- To exit the Rotate screen and return to the menu, press the <MENU> hutton



- If you have set [111 Auto rotate] to [On] (p.105) before taking the vertical shots, you need not rotate the image as described above.
  - You can rotate the image even after you change the display format to shooting info display, magnified view, or index display after step 1.

## Displaying the Images on TV

By connecting the camera to a TV set with the video cable (provided), you can view the captured images on a TV set. Always turn off the camera and the television before connecting or disconnecting them.

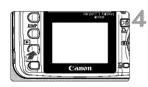


Video IN terminal



- Open the camera's terminal cover.
- Use the video cable (provided) to connect the camera's < "OUT" > terminal to the TV monitor's VIDEO IN terminal.
- Insert the cable plug all the way in.
- Turn on the TV and switch the TV's line input to Video IN.

brace Turn the power switch to <0N>.



Press the <▶> button.

- The image will appear on the TV screen. (The camera's LCD monitor will display nothing.)
- After you finish, set the power switch to <OFF>, turn off the TV, then disconnect the video cable



- If the proper video system format is not set, the image will not be displayed properly. Set the proper video system format with [f12 Video system].
- Do not use any video cable other than the one provided. Images might not be displayed if you use a different video cable.
- Depending on your TV or monitor, part of the image might be truncated.

## MENU Protecting Images

This prevents the image from being erased accidentally.





Image protect icon

## Select [Protect].

- Select the [ ] tab.
- Press the < ▲▼ > kev to select [Protect], then press < (str) >.
- The Protect screen will appear.

## Protect the image.

- Press the <◀▶> kev to select the image to be protected, then press < (SET) >.
- When an image is protected, the < | > icon will appear below the image.
- To cancel the image protection, press the < (507) > button again. The < 10-70 > icon will disappear.
- To protect another image, repeat step 2
- To exit the Protect screen and return. to the menu, press the <MENU> button.



- Once an image is protected, it cannot be erased by the camera's Erase function. To erase a protected image, you must first cancel the protection.
  - If you erase all the images (p.117), only the protected images will remain. This is convenient when you want to erase unnecessary images all at once.
  - You can protect the image even after you change the display format to shooting info display, magnified view, or index display after step 1.



## m Erasing Images

You can erase images individually or erase all the images at one time in the CF card. Protected images (p.115) will not be erased.



Once an image is erased, it cannot be recovered. Make sure you no longer need the image before erasing it. To prevent important images from being erased accidentally, protect them.

## Erasing a Single Image



## Playback the image.

Press the < ► > button



## Select the image to be erased.

 Press the <◀▶> key to select the image to be erased.



## Display the Erase menu.

- Press the < 前> button.
  - The Erase menu will appear at the bottom of the screen.



## Erase the image.

- Press the <◀▶> kev to select [Erase], then press < (SET) >.
- The access lamp will blink and the image will be erased.
- If there are other images you want to select, repeat steps 2 to 4.

## **Erasing All Images**



## Playback the image.

Press the < ► > button

## Display the Erase menu.

- Press the < m

   button.
  </p>
- The Erase menu will appear at the bottom of the screen.



## Select [All].

- Press the < >> key to select [AII]. then press < (SET) >.
- The confirmation dialog will appear.



## Erase the image.

- Press the < >> key to select [OK]. then press < (SET) >.
- All unprotected images will be erased.
- While the images are being erased. you can cancel the erasure by pressing < (SET) >.



After continuous shooting, while data is being written to the CF card (access lamp blinking), you can press the <►> button and then press the < m>> button to erase the displayed image or all images. If you select [AII] and press < (sin >, the images captured during continuous shooting (including those not vet processed) and all the images on the CF card will be erased.

## MENU Formatting the CF Card

Format the CF card before using it in the camera.

Formatting a CF card will erase everything in the card. It will also erase any protected images, so make sure the card has nothing you need to keep. If necessary, transfer the images to a personal computer before formatting the card.





## Select [Format].

- Select the [ \*11] tab.
- Press the < N > key to select [Format], then press < (SET) >.
- The confirmation dialog will appear.

#### Format the CF card.

- Press the <◀▶> key to select [OK], then press < m>.
- The CF card will be formatted (initialized).
- When the formatting is completed. the menu will reappear.



- A non-Canon CF card or a CF card formatted with another camera or personal computer might not work properly with the camera. If this happens, format the card with the camera first. Then it might work with the camera.
- The CF card's capacity displayed on the Format screen may be lower than the capacity indicated on the card.

## Handling "Err CF"

"Err CF" (CF error) displayed on the LCD panel indicates a problem with the CF card that prevents images from being recorded or read. Use another CF card instead.

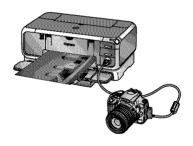
Or, if you have a commercially-available CF card reader that can read the CF card, use it to transfer all the images in the card to a personal computer. After transferring all the images to a personal computer, format the CF card. It may then return to normal.



# **Direct Printing** from the Camera

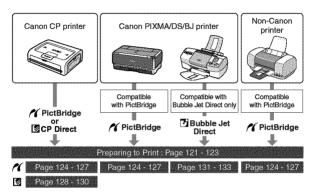
You can connect the camera directly to a printer and print out the images in the CF card.

The camera enables direct printing with printers compatible with "< </p>
✓ > PictBridge", Canon "<</p>
✓> CP Direct", and Canon "<</p>
✓> Bubble Jet Direct."



#### Conventions Used in this Chapter

This chapter includes procedures for various types of printers. After "Preparing to Print" on the next page, follow the instructions applicable to your printer on the pages indicated.



## Canon's PictBridge Web Site

The Web site below gives more information about using your Canon camera with various printers such as which paper types to use.

http://canon.com/pictbridge/

## **Preparing to Print**

You do the direct printing procedure entirely through your camera's LCD monitor.

#### **Setting the Camera**

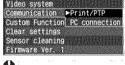


- Select the [f12] tab.
- Press the < > key to select [Communication], then press < >.

## 2

## Select [Print/PTP].

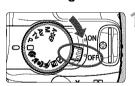
Press the < ▲▼ > key to select [Print/ PTP], then press < (≶ET) >.



When connecting the camera to a personal computer, set

[Communication] to [PC connection]. Communication between the camera
and personal computer will not work if [Print/PTP] is set.

#### Connecting the Camera to the Printer



Turn the camera's power switch to <0FF>.

## Set up the printer.

For details, refer to the printer's manual.



- RAW images are not compatible with direct printing.
- Do not disconnect the cable during direct printing.

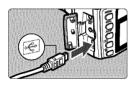


## Connect the camera to the printer.

Refer to the table (Printers and Cables) below to select the proper cable to connect the camera to printer.

#### Printers and Cables

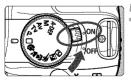
	Printer Compatibility	Suitable Cable	
16	PictBridge only		
<b>1</b>	PictBridge and CP Direct	Interface cable provided with camera The plug at both ends have the < + C+ >	
/( []	PictBridge and Bubble Jet Direct	icon.	
	CP Direct only	Cable provided with printer	
7	Bubble Jet Direct only	Only one plug has the <-↔> icon.	



- When connecting the cable plug to the camera's < DIGITAL > terminal, the cable plug's <+ ← > icon must face the front side of the camera.
- To connect to the printer, refer to the printer's instruction manual.



## Turn on the printer.



## Turn the camera's power switch to < ON >.

Some printers may have a beeping sound.

#### PictBridge



#### CP Direct



#### Bubble Jet Direct



## Playback the image.

- Press the < ► > button.
- The Direct print button lamp will light in blue.
- The procedure will be different depending on the icon displayed. See the applicable pages below.

Icon	Reference pages
16	124 - 127, 136
	128 - 130, 136
3	131 - 133, 136



- If the camera is running by battery power, make sure it is fully charged.
  During direct printing, keep checking the battery level.
- If there is a long beeping sound in step 5, it indicates a problem with the PictBridge printer. To find out what's wrong, do the following: Press the < ►> button to playback the image and follow the steps below.
  - 1. Press < (SET) >.
  - 2. On the print setting screen, select [Print].

The error message will be displayed on the LCD monitor. See "Error Messages" on page 127.

- Before disconnecting the cable, turn off the camera and printer. Pull out the cable while holding the plug, not the cord.
- When connecting the camera to the printer, do not use any cable other than the dedicated interface cable.



For direct printing, using AC Adapter Kit ACK-DC20 (optional) to power the camera is recommended.

## Printing with PictBridge

The setting options will differ depending on the printer. Some settings might be disabled. For details, refer to your printer's instruction manual.

Printer-connected icon



## Select the image(s) to be printed.

- Check that the 
  Check that the 
  If > icon is displayed on the upper left of the LCD monitor.
- Press the < >> key to select the image to be printed.

## Press < (\$\vec{set})>.

The Print setting screen will appear.

#### Print setting screen



- Set the date imprinting to on or off.
- Set the printing effects.
- Set the quantity to be printed.
- Set the trimming area.
- Set the paper size, type, and layout.
- Returns to the screen in step 1.
- Starts the printing.

The paper size, type, and layout you have set will be displayed.

\* Depending on your printer, certain settings like date imprinting and trimming might not be available.



#### Select [Paper Settings].

- Press the < N > key to select [Paper settings], then press < ).</p>
- The Paper settings screen will appear.

## Setting the Paper Size



- Press the < ▲▼ > key to select the size of the paper loaded in the printer, then press < (□) >.
- The Paper Type screen will appear.

#### Setting the Paper Type



- Press the < N > key to select the type of the paper loaded in the printer, then press < +> >.
- The Page Layout screen will appear.

#### About the Paper Types

If you are using a Canon PIXMA/DS/BJ printer with Canon paper, set the respective paper type as follows:

Photo	Photo Paper Plus Glossy
Fast Photo	Photo Paper Pro
Default	Photo Paper Plus Glossy

If you are using a non-Canon printer, refer to the printer's instruction manual.

## Setting the Layout



- Press the < ▲▼ > key to select the desired layout, then press < (토丁) >.
- The Print setting screen will reappear.

#### Lavout Settings

Borderless	The print will have no borders. If your printer cannot print borderless prints, the print will have borders.	
Bordered	The print will have a white border along the edges.	
**-up	Option to print 2, 4, 8, 9, 16, or 20 copies of same image on one sheet.	
Default	With a Canon printer, the default is borderless.	



## Set the other options.

If desired, also set the < ∅ > date imprinting, < > printing effects, and < 2 > number of copies.

#### O Date imprinting



#### Printing effects

Number of copies





- Press the < N > key to select the desired option.
- Press the <◀▶> key to select the desired setting.
- Depending on the BJ printer, the < >> Printing effects setting may enable you to select the [Vivid] (for vivid greens and blue sky), [NR] (noise reduction), [Vivid+NR] or [On] setting.
- For details on trimming, see page 134



## Start printing.

- Press the < AV > key to select [Print]. then press < set) >.
- The printing will start.
- When the printing ends, the screen will return to step 1.
- To stop the printing, press < (str) > while [Stop] is displayed, then select [OK] and press < (SET) >.



- Depending on the image's file size and recording quality, it may take some time for the printing to start after you select [Print].
  - The [Default] setting for printing effects and other options are the printer's own default settings as set by the printer's manufacturer. See the printer's instruction manual to find out what the [Default] settings

#### Handling Printer Errors

If you resolve a printer error (no.ink, no paper, etc.) and select [Continue] to resume printing but it does not resume, operate the buttons on the printer to resume printing. For details, see the printer's instruction manual.

#### **Error Messages**

If a problem occurs during printing, an error message will appear on the camera's LCD monitor. Press < ( ) to stop printing. After resolving the problem, resume printing. For details on how to resolve a problem with the printer, refer to the printer's instruction manual.

#### Paper Error

Check whether the paper is properly loaded in the printer.

#### Ink Error

The printer has run out of ink or the waste ink tank is full.

#### Hardware Error

Check for any printer problems other than paper and ink problems.

#### File Error

The selected image cannot be printed via PictBridge.

Images taken with a different camera or images edited with a computer might not be printable.

## Printing with CP Direct

Printer-connected icon



## Select the image to be printed.

- on the upper left of the LCD monitor.
  - Press the <◀▶> key to select the image to be printed.



The Print setting screen will appear.

#### Print setting screen



- Set the quantity to be printed.
- Set the trimming area.
- Set the printing style.
- Returns to the screen in step 1. Starts the printing.
- The printing style settings are displayed.
- < <>> is the date icon.



## Select [Style].

- Press the < N > key to select [Style], then press < (SET) >.
- The Style screen will appear.



## Set the options as desired.

Set the [Image], [Borders], and [Date] as desired.

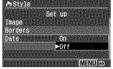
#### [Image]



#### [Borders]



#### [Date]



- Press the < N > key to select the desired option, then press < FT >.
- Press the < N > key to select the desired setting, then press < 5.</p>
- [Image] is selectable when credit card-size paper is used. If you select [Multiple], 8 small images of the same picture will be printed on the paper.
- Check the [Borders] and [Date] settings and set them if necessary.
- When you are done, press the <MENU> button to return to the Print setting screen.



#### Set the number of copies.

- Set as necessary.
- Press the < V > key to select [copies].
- Press the < >> key to set the desired quantity.
- Set a number from 1 to 99.

## 6

## Set the trimming.

- Set as necessary.
- For details on trimming, see page 134.



## Start printing.

- Press the < T > key to select [Print], then press < F) >.
- The printing will start.
- When the printing ends, the screen will return to step 1.
- To stop the printing, press < set) > while [Stop] is displayed, then select [OK] and press < set) >.



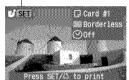
- The date may look light if it is imprinted on a bright background or border.
- If [Multiple] is selected, [Borders] and [Date] cannot be selected. [Borderless] will be set and [Date] will be set to [Off]. The image will also be cut off along all four edges.



- If [Date] is [On], the date recorded for the image will appear on the print. The date will appear on the lower right of the image.
- If you select [Stop] while printing only one image, the printing will not stop until it finishes printing the image. If you are printing multiple images, the printing will stop after the current image is finished printing.
- If a problem occurs during printing, an error message will appear on the camera's LCD monitor. Select [Stop] or [Resume] (after resolving the problem). If [Resume] is not displayed, select [Stop].

## Direct Printing with Bubble Jet Direct

Printer-connected icon



#### Select the image to be printed.

- Press the <**◄▶**> key to select the image to be printed.



The Print setting screen will appear.

#### Print setting screen



- Set the quantity to be printed.
- Set the trimming area.
- Set the printing style.
- Returns to the screen in step 1.
   Starts the printing.
- The printing style settings are displayed.
- <Ø> is the date icon.



## Select [Style].

- Press the < N > key to select [Style], then press < N >.
- The Style screen will appear.

## 4

#### Set the options as desired.

#### [Paper]

# Style Set up Paper Card #1 Borders Card #2 Date Card #3 LTR A4 (USID) \$\infty\$

#### [Borders]



#### [Date]



- Press the <▲▼> key to select the desired option, then press <€€>>.
- Press the < N > key to select the desired setting, then press < 5 >.
- [Paper] is the size of the paper loaded in the printer.
- Check the [Borders] and [Date] settings and set them if necessary.
- When you are done, press the <MENU> button to return to the Print setting screen.



## Set the number of copies.

- Set as necessary.
  - Press the < N > key to select [copies].
  - Press the < >> key to set the desired quantity.
  - Set a number from 1 to 99.

## Set the trimming.

- Set as necessary.
  - For details on trimming, see page 134.



## Start printing.

- Press the < ▲▼ > key to select [Print], then press < (⑤) >.
- The printing will start.
- When the printing ends, the screen will return to step 1.
- To stop the printing, press < m> while [Stop] is displayed, then select [OK] and press < m>>.



If [Borders] is set, the date might be imprinted on the border, depending on the printer.



- If [Date] is [On], the date recorded for the image will appear on the print. The date will appear on the lower right of the image.
- If you select [Stop] during the printing, the printing will stop and the paper will be discharged.
- If a problem occurs during printing, an error message will appear on the camera's LCD monitor. Select [Stop] or [Continue]. If you select [Continue] and the printer does not resume printing, it will resume automatically after you resolve the problem.
- If you are using a BJ printer equipped with an operation display panel, the error No. will be displayed if an error occurs. To resolve the respective error, refer to the BJ printer's instruction manual.

## **Setting the Trimming**

You can crop the image and print only the cropped portion as if the image was recomposed.

Do the trimming right before printing. If you set the trimming and then set the print settings, you may have to set the trimming again.



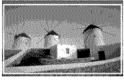


- Press the < N > key to select [Trimming], then press < F) >.
- The trimming screen will appear.



## Trim the image.

- The image area within the trimming frame will be printed.
- The operation guide disappears while you trim the image. It will reappear after 5 sec. of idle time.



#### Changing the trimming frame size

When you press the <<sup>Q</sup> > or < 록<sup>Q</sup> > button, the size of the trimming frame will change. The smaller the trimming frame, the larger the image magnification will be.



#### Moving the trimming frame

Press the <♦> keys to move the trimming frame in the respective direction. Move the trimming frame until it shows the desired image area or composition.

#### Rotating the frame

The <INFO.> button toggles between the vertical and horizontal orientation of the trimming frame. For example, a horizontal shot can be printed as a vertical shot.

#### Image area to be printed



## Exit the menu.

- The Print setting screen will reappear.
- On the upper left, you can see the trimmed image area that will be printed.



- Depending on the printer, the trimmed image area might not be printed as you specified.
- The smaller you make the trimming frame, the grainier the picture will look. If the picture will be too grainy, the trimming frame will turn red.
- While trimming the image, look at the camera's LCD monitor. If you look at the image on a TV screen, the trimming frame might not be displayed accurately.



The trimming frame shape will be different depending on the [Paper settings], [Image] / [Paper], [Page layout] / [Borders] settings.

## **Easy Printing**

When you print directly from your camera to your printer, the printing settings will be saved in your camera. To use the same settings again, follow the steps below.

- Connect the camera to a printer and prepare for printing.
- Playback the images and select the ones to be printed.



Press the <♣> button that lights in blue.

The blue lamp will blink and printing will start.



- With Easy Printing, only one print can be printed each time.
- With Easy Printing, any cropping (trimming) will not be applied.



# DPOF: Digital Print Order Format

With DPOF (Digital Print Order Format), you can use the camera to specify which images in the CF card are to be printed and the quantity. This feature is very convenient when you make prints with a DPOFcompatible printer or photo lab.

#### **About DPOF**

DPOF (Digital Print Order Format) is a standard for recording print ordering instructions to the CF card. It is for images taken with a digital camera, and you can specify which photos and the quantity to print. With a DPOF-compatible digital camera, you can do the following:

 By inserting a CF card into a printer compatible with DPOF, you can make prints as specified.

 Printers capable of direct printing from the camera can print the images as specified by DPOF.

When ordering prints from a photo lab, you do not need to fill in any order form to specify the image selections, quantity, etc.



## **MENU Print Ordering**

#### Print Settings

Set the print type, date imprinting, and file No. imprinting. The print settings will be applied to all print-ordered images. (They cannot be set individually for each image.)



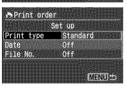


- Select the [E] tab.
- Press the <▲▼> key to select [Print Order], then press < (\$\sir\$)>.
- The Print Order screen will appear.



## Select [Set up].

- Press the <◀▶> key to select [Set up], then press <(♥)>.
- The Print setting screen will appear.



## Set the options as desired.

- Set the [Print type], [Date], and [File No.].
- Press the < N > key to select the desired option, then press < (5ET) >.
- Press the < ▲▼ > key to select the desired setting, then press < (□) >.

[Print type]

Standard

Index

Both

Priot order

Print type

File No.

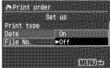
Date



[Date]



|File No.|



	•	Standard		Prints one image on one sheet.
Print Type	<b>®</b>	Index		Multiple, thumbnail images are printed on one sheet.
		Both		Prints both the standard and index prints.
Date	Date On Off		[On] imprints the recorded date on the print.	
File No.	C	n	[On] imprints the file No. on the print.	
I lie IVO.	Off		[OII] imprints the the No. on the print.	



#### Exit the menu.

- Press the <MENU> button.
- The Print Order screen will reappear.
- Next, select [Order] or [All] to select the images to be printed.



- RAW images cannot be selected for printing.
  - Even if [Date] and [File No.] are set to [On], the date or file No. might not be imprinted depending on the print type setting and printer type.
  - With [Index] prints, both the [Date] and [File No.] cannot be set to [On] at the same time.
  - When printing with DPOF, you must use the CF card whose Print Order specifications have been set. It will not work if you just extract images from the CF card and try to print them.
  - Certain DPOF-compatible printers and photo labs might not be able to print the photos as you specified. If this happens with your printer, refer to the printer's instruction manual. Or check with your photo lab about compatibility when ordering prints.
  - Do not insert into the camera a CF card whose print order specifications have already been set by a different camera and then try to set print order specifications. The print order may not work or may be overwritten. Also, depending on the image type, the print order may not be possible.

#### Selecting Individual Images for Printing







- Press the < ◀▶> key to select [Order], then press < (ছा)>.
- The Order screen will appear.

## Select the image to be printed.

Press the < >> key to select the image to be printed.

## Order the print.

The print order will vary depending on the [Print Type] setting (p.138).

#### For [Standard] and [Both]

- For standard-type prints, you can set the quantity (up to 99) for each image.
- Press the < N > key to select the print quantity.

#### For [Index]

- If you want to include the image in the index print, checkmark <√> the box. Otherwise, leave the box unchecked.
- Pressing < > toggles between checkmarking and uncheckmarking the box.
- If there are other images you want to select, repeat steps 2 and 3.
- You can select up to 998 images.









#### Exit the menu.

- Press the <MENU> button.
- The Print Order screen will reappear.
- Press the <MENU> button again to save the print order to the CF card. The menu will then reappear.

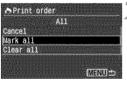
## Selecting All Images

The print order can also be set or canceled for all the images in the CF card. For standard-type prints, a quantity of one will be ordered for all the images. Note that after following the "Selecting Individual Images" procedure, if you do the "Selecting All Images" procedure, the print order will change to "All images."



## Select [All].

- Press the <◀▶> key to select [AII], then press <(□)>.
- The All screen will appear.



## Select [Mark all].

- Press the <▲▼ > key to select [Mark all], then press <☞>.
- One print each will be specified for all the images, then the Print Order screen will reappear.
- If you select [Clear all], all the images selected for printing will be deselected.
- If you select [Cancel], the Print Order screen will reappear.



#### Exit the menu.

- On the Print Order screen, press the <MENU> button.
- The settings will be saved to the CF card, and the menu will reappear.



- Note that RAW images cannot be selected for printing even when you set "Mark all."
  - When using a PictBridge printer, print no more than 400 images for one print order. If you specify more than this, all the selected images might not be printed.

## MENU Direct Printing with DPOF

With a printer compatible with direct printing, you can easily print images specified with DPOF.

## Prepare to print.

 See page 121, 122. See "Setting the Camera" and "Connecting the Camera to the Printer" (steps 1 to 5).

## 2000

## Select [Print order].

- Select the [ ] tab.
- Press the < ▲▼ > key to select [Print order], then press < (३६०) >.
- The Print Order screen will appear.



2 sec.

01.02 - \$11.512

Protect

Antate

Print order Auto play

Heview time

## Select [Print].

- Press the <♦> key to select [Print], then press <<p>(\$\subseteq\$i)>.
- [Print] will be displayed only if the camera is connected to the printer and printing is possible.
- The Print setting screen will appear.

## hall

## Set the printing options.

#### PictBridge



#### CP Direct



#### Bubble Jet Direct



#### PictBridge

Set the [Paper settings] and <>> printing effects. (p.124)

## ☑CP Direct / ☑Bubble Jet Direct

Set the [Style]. (p.128/131)

## Start printing.

- Press the < N > key to select [OK]. then press < FET >.
- The printing will start.
- To stop the printing, press < (str) > while [Stop] is displayed, then select [OK] and press < (FET) >.



- When printing with a PictBridge or Bubble Jet Direct printer, be sure to set the paper size.
  - With PictBridge, the file No. cannot be imprinted.
  - If [Bordered] is set, the date might be imprinted on the border, depending on the printer.
  - The date might look light if it is imprinted on a bright background or border



- With CP Direct, if [Print type] is set to [Index], the number of images printed on one index sheet will be as follows:
  - Credit card size: 20 images
- 9 x 13 cm size: 42 images
- 10 x 14.8 cm size: 63 images

As for the number of index images with Bubble Jet Direct, see the BJ printer's instruction manual.

- If you stopped the printing and want to resume printing the remaining images, select [Resume]. Note that printing will not resume if you stop the printing and do any of the following:
  - Before resuming the printing, you changed the print order settings.
  - . Before resuming the printing, you erased an image that was to be printed.
  - . In the case of index printing with CP Direct, you changed the paper cassette before resuming the printing.
  - . In the case of index printing with PictBridge, you changed the paper settings before resuming the printing.
  - . When you stopped the printing, the CF card's remaining capacity was
- If there is a printing problem, see page 127 for PictBridge, page 130 for CP Direct, or page 133 for Bubble Jet Direct.

# Customizing the Camera

Custom Functions enable you to customize various camera features to suit your picture-taking preferences.

Custom Functions work only in Creative Zone modes.

## MENU Setting a Custom Function\*



#### Custom Function No.





Description

## Select [Custom Functions (C.Fn)].

- Select the [172] tab.
  - Press the < N > key to select [Custom Functions (C.Fn)], then press < (SET) >.
  - The Custom Function screen will appear.

#### Select the Custom Function No.

Press the < T > kev to select the Custom Function No., then press <(SET)>.

## Change the setting.

- Press the < N > key to select the desired setting (number), then press < (SET) >.
- Repeat steps 2 and 3 if you want to set other Custom Functions
- On the bottom of the screen, you can see the current Custom Function settings.

## Exit the menu.

- Press the <MENU> button to return to the menu
- When you press the shutter button halfway, the < Cfn > icon will be displayed on the LCD panel.

#### Resetting All Custom Functions\*







### Select [Clear settings].

- Select the [§12] tab.
- Press the <▲▼ > key to select [Clear settings], then press <<p>,

## Select [Clear all Custom Functions].

Press the < ▲▼ > key to select [Clear all Custom Functions], then press <(str)>.

#### Select [OK].

Press the < ◀►> key to select [OK], then press < ᢎr)>. All the Custom Functions will then be reset to the default settings.

## MENU Custom Function Settings\*

#### C.Fn-1 SET button/Cross keys funct.

You can change the function assigned to the  $<\mathfrak{M}>$  button and  $<\diamondsuit>$  keys for shooting.

#### 0: Normal

#### 1: SET:Quality

When you press < (), the [1] Quality] menu appears so you can quickly change the setting.

#### 2: SET:Parameter

When you press < (st) >, the [ 2 Parameters] menu appears so you can quickly change the setting.

#### 3: SET:Playback

When you press  $\langle \mathfrak{M} \rangle$ , the images recorded in the CF card will be played. Assigns the same function as the  $\langle \mathbb{N} \rangle$  button.

#### 4: Cross keys:AF frame selec.

At first, you can just use the <♠> keys to select an AF point directly without pressing the <> button. To set automatic AF point selection, press the <> button. Also, to select the center AF point, press <€□>.

#### C.Fn-2 Long exposure noise reduction

#### 0: Off

#### 1: On

Reduces noise in bulb exposures 30 sec. or longer at ISO 100 - 800 or 1 sec. or longer at ISO 1600. After the picture is taken, the time required for noise-reduction processing will be the same as the exposure time. During the noise reduction processing, "buSY" will be displayed and shooting will not be possible.

#### C.Fn-3 Flash sync. speed in Av mode

#### 0: Auto

#### 1: 1/200sec. (fixed)

Sets the flash sync speed to 1/200 sec. in the aperture-priority AE (Av) mode. (Against dark backgrounds such as the night sky, the subject's background will look dark.)

#### C Fn-4

#### Shutter button/AE lock button

#### 0: AF/AE lock

#### 1: AE lock/AF

Convenient when you want to focus and meter separately. Press the < \*>
button to autofocus and press the shutter button halfway to attain AE lock.

#### 2: AF/AF lock, no AE lock

In the AI Servo AF mode, you can press the <★> button to stop the AF operation momentarily. This prevents the AF from being thrown off by any obstacle passing between the camera and subject. The exposure is set at the moment the picture is taken.

#### 3: AE/AF, no AE lock

This is useful for subjects which keep moving and stopping repeatedly. In the Al Servo AF mode, you can press the <★> button to start or stop the Al Servo AF operation. The exposure is set at the moment the picture is taken. Thus, the optimum focusing and exposure will always be attained as you wait for the decisive moment.

#### C.Fn-5 AF-assist beam

You can enable or disable the camera's AF-assist beam or have it emitted by the EOS-dedicated Speedlite instead.

#### 0: Emits

#### 1: Does not emit

The AF-assist beam is not emitted at all regardless of the shooting conditions.

#### 2: Only emits ext. flash

With an EOS-dedicated Speedlite, it will emit the AF-assist beam when necessary. The camera's built-in flash will not emit the AF-assist beam regardless of the shooting conditions.

#### C Fn-6

#### Exposure level increments

#### 0: 1/3-stop

#### 1: 1/2-stop

Sets 1/2-stop increments for the shutter speed, aperture, exposure compensation. AEB. etc.



The exposure level will be displayed in the viewfinder and on the LCD panel as shown below.





#### C.Fn-7 Mirror lockup

#### 0: Disable

#### 1: Enable

Effective for close-up and telephotos shots to prevent camera shake caused by the mirror's reflex action. For more on mirror lockup, see page 94.

#### C.Fn-8 E-TTL-I

#### 0: Evaluative

Fully automatic flash photography under all conditions, from low light to daylight fill-flash.

#### 1: Average

The flash exposure is averaged for the entire area covered by the flash. Since the camera will not execute automatic exposure compensation, adjust the flash exposure compensation if necessary. This also applies if you use FE lock.

#### C.Fn-9 Shutter curtain sync.

#### 0: 1st-curtain sync.

#### 1: 2nd-curtain sync.

When a slow shutter speed is set, you can capture a light trail following the subject. The flash fires right before the shutter closes. This Custom Function can be used to obtain 2nd-curtain sync effects even with EX-series Speedlites which do not provide 2nd-curtain sync. If the EX-series Speedlite has this feature, it will override this Custom Function.

When 2nd-curtain sync is used, a preflash will be fired for flash metering control right after you press the shutter button completely. Remember that the main flash will fire right before the shutter closes.

This section will help you understand your camera better. It covers information on camera features, system accessories, and other reference information.

## Function Availability Table

●: Set automatically O: User selectable

E2000000000000000000000000000000000000		***************************************		2020/02/2020/02/2	11000000000000	000000000000000000000000000000000000000	01550700000000	, au	Omat	loany	SOURCE STATE OF THE PARTY OF TH	ULIFOZKUPANIN	************	ctable
	Mode Dia	al			Ba	sic Zo	ne				Crea	itive 2	one	
			0	Ð	224	8	氦	Ø	Ø	P	Tv	Αv	M	A-DEP
Q	JPEG		0	0	0	0	0	0	0	0	0	0	0	0
Quality	RAW									0	0	0	0	0
	RAW +	IL								0	0	0	0	0
sp is	Auto		*	•			0	•	*					
speed	Manual									0	0	0	0	0
ba	Auto WB		•	0	•	*		•		0	0	0	0	0
Auto WB Preset WB, Custom WB, WB correction, WB bracketing		ι, Ί								0	0	0	0	0
Para	meters				<b>●</b> (F	⊃aram	eter 1	)		0	0	0	0	0
	One-Shot				•			•		0	0	0	0	•
	Al Servo									0	0	0	0	-
AF	Al Focus		•							0	0	0	0	
	AF point	Auto					•	•		0	0	0	0	*
	selection	Manual								0	0	0	0	
m	Evaluative	9		•			•	•	*	0	0	0	0	0
Exposure	Partial									0	0	0	0	0
ure	Center-weight	ed average								0	0	0	0	0
=	Program :	shift								0				
Metering mode	Exposure con	npensation								0	0	0		0
ng	AEB									0	0	0	0	0
₩	AE lock									0	0	0		0
	Depth-of-fiel	d preview								0	0	0	0	0
Drive	Single							0		0	0	0	0	0
Ve	Continuo	sı		•						0	0	0	0	0
	Auto		•	0				•						
ם	Manual									0	0	0	0	0
₹	Flash off								*					
Built-in flash	Red-eye re	eduction	0	0		0		0		0	0	0	0	0
St.	FE lock									0	0	0	0	0
	Flash exposure o									0	0	0	0	0
Custom Functions/Clearing All Custom Functions									0	0	0	0	0	
Camera setting reset									0	0	0	0	0	
Imag	e sensor c	leaning								0	0	0	0	0

#### AF Modes and Drive Modes

Drive mode		AF mode	
Drive mode	One-Shot AF	Al Focus AF	Al Servo AF
□ Single shooting	The picture cannot be taken until focus is achieved. When focus is achieved, it is locked. With evaluative metering, the exposure setting is also locked. (The exposure setting is stored in memory before the shot is taken.)	Automatically switches from One-Shot AF to Al Servo AF if the subject starts moving.	The focusing tracks the subject movement. The exposure is set at the moment the picture is taken.
☐Continuous shooting	The above conditions apply during continuous shooting. During continuous shooting (max. 3 shots/sec.), focusing is not executed.		The above conditions apply during continuous shooting. During continuous shooting (max. 3 shots/sec.), focusing is executed.

#### AE Lock

(In Creative Zone modes)

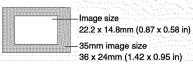
Materian	AF point selection				
Metering mode	Automatic AF point selection	Manual AF point selection			
Evaluative     Metering*	AE lock is applied at the AF point that achieved focus.	AE lock is applied at the selected AF point.			
Partial Metering					
Center-weighted Average Metering	AE lock is applied at the ce	nter AF point.			

<sup>\*</sup> When the lens' focus mode switch is set to <MF>, AE lock is applied at the center AF point.



## Image Conversion Factor

Since the image area is smaller than the 35mm film format, it will look like the lens focal length is increased by 1.6x.



## **Troubleshooting Guide**

If there is a problem, first refer to this Troubleshooting Guide. If this Troubleshooting Guide does not resolve the problem, contact your dealer or nearest Canon Service Center.

#### **Power Source**

#### The battery cannot be recharged.

- You are using the wrong battery.
- Use Battery Pack NB-2LH.
- The battery pack is not properly attached to the battery charger.
- Attach the battery pack properly to the charger. (p.20)

#### The camera does not operate even when the power switch is set to < ON>.

- The battery is exhausted.
- Recharge the battery pack. (p.20)
- The battery is not installed properly.
- Install the battery properly. (p.22)
- Battery compartment cover is not closed.
- Close the battery compartment cover securely. (p.22)
- CF card slot cover is not closed.
- Close the CF card slot cover securely. (p.26)

#### The access lamp still blinks even when the power switch is set to <OFF>.

- If you set the power switch to <OFF> right after shooting, the access lamp will still light/blink for a few seconds until the camera finishes recording the image onto the CF card.
- When the camera finishes recording the image to the CF card, the access lamp will stop blinking and the power will turn off automatically.

#### The battery becomes exhausted quickly.

- The battery is not fully charged.
- Recharge the battery fully. (p.20)
- The battery's service life has expired.
- Replace the battery pack with a new one.

#### The camera turns off by itself.

- Auto power off is in effect.
- Press the shutter button halfway. If you do not want auto power off to take effect, set [\$\forall T1 \text{ Auto power off} \text{ on the menu to [Off].}

#### Only the <---> icon blinks on the top LCD panel.

- The battery is almost exhausted.
- Recharge the battery pack. (p.20)

#### Shooting

#### No images can be shot nor recorded.

- The CF card is not properly inserted.
- Insert the CF card properly. (p.26)
- The CF card is full.
- Use a new CF card or erase unnecessary images. (p.26, 116)
- The battery is exhausted.
- Recharge the battery pack. (p.20)
- You did not focus perfectly. (The focus confirmation light
   < → > in the viewfinder blinks.)
- Press the shutter button halfway again and focus the subject. If you still cannot focus properly, focus manually. (p.28, 76)

#### The LCD monitor does not display a clear image.

- The LCD monitor screen is dirty.
- Use a soft, lens cloth to clean the screen.
- The LCD's service life has expired.
- Consult your nearest customer service center or dealer.

#### The image is out of focus.

- The lens focus mode switch is set to <MF>.
- Set the lens focus mode switch to <AF>. (p.25)
- Camera shake occured when you pressed the shutter button.
- To prevent camera shake, hold the camera still and press the shutter button gently. (p.28, 42)

#### The CF card cannot be used.

- [Err \*\*] is displayed on the LCD panel.
- If it is [Err CF], see page 118.
- If it is [Err 02], see page 157.
- You are using a non-Canon CF card.
- Using Canon CF cards is recommended. (p.159)

#### Image Review & Operation

#### The image cannot be erased.

- The image is erase-protected.
- Cancel the protection. (p.115)

#### The wrong shooting date and time is displayed.

- The correct date and time has not been set.
- Set the correct date and time. (p.37)

#### No image appears on the TV screen.

- Video cable plugs are not inserted all the way.
- Insert the video cable plugs all the way in. (p.114)
- The correct video format (NTSC or PAL) has not been set.
- Set the camera to the correct video format matching the TV set. (p.34)
- You are not using the video cable that came with the camera.
- Use the video cable that came with the camera. (p.114)

#### **Direct Printing**

#### The images cannot be printed.

- The camera is not properly connected to the printer.
- Use the specified cable to properly connect the camera to the printer. (p.122)
- The printer is not turned on.
- Turn on the printer.

#### **Error Codes**

If a camera error occurs, "Err xx" will be displayed on the LCD panel. Follow the countermeasures below to resolve the problem for respective error code.

If the same error occurs often, something is probably wrong with the camera. Jot down the "xx" error code and contact your nearest Canon Service Center.

If an error code appears after you take the picture, the camera might have missed the shot. Press the < >> button to see if the image appears on the LCD monitor.

Error Code	Countermeasures
Err 01	Communications between the camera and lens is faulty. Clean the lens contacts. (p.9)
Err 02	There is a problem with the CF card. Try any of the following: Remove and re-insert the CF card. Format the CF card. Use a different CF card.
Err 04	The CF card is full. Erase unnecessary images in the card or replace the CF card.
Err 05	Something obstructed the built-in flash's automatic pop-up operation.  Turn the power switch to < OFF > and < ON > again.
Err 99	An error other than the above has occurred. Remove and re-install the battery. This error may occur if you use a non-Canon lens and the camera or lens does not operate properly as a result.

## **Major Accessories (Optional)**



#### **Battery Pack NB-2LH**

Compact, high-capacity, lithium-ion, secondary power pack.



#### AC Adapter Kit ACK-DC20

Power source kit (AC adapter, DC coupler, power cord) for supplying power to the camera from a household power outlet. Compatible with 100 - 240 V AC.



#### **Battery Grip BG-E3**

This accommodates two NB-2LH packs or six size-AA batteries. It provides a vertical-grip shutter button, electronic dial, AE lock/FE lock button, AF point selection button, and exposure compensation/aperture setting button.



#### Semi-Hard Case EH18-L

Dedicated case to protect the camera.

It can accommodate the camera attached with the EF-S18-55mm t/3 5-5 6 Il lens



#### **Shoe-mount Speedlites**

An EX-series Speedlite can be attached to the camera's hot shoe. You can use E-TTL II autoflash to obtain flash exposures as easy as normal shooting without flash.



#### **Macro Lites**

The EX-series Macro Lites (two models) are ideal for close-up flash photography. You can fire only one or both flash tubes and control the flash ratio to easily obtain sophisticated lighting effects with E-TTL II autoflash.





RC-1

RC-5

#### Remote Controller RC-1 and RC-5

Remote control transmitter that enables you to shoot from 5 m (16.4 ft.) away from the camera. The RC-1 can trip the shutter immediately or after a 2-sec. delay, and the RC-5 trips the shutter after a 2-sec. delay.



#### Remote Switch RS-60F3

Remote switch to prevent camera shake during supertelephoto shots, close-ups, and bulb exposures. The cord is 60cm/2.0 ft. The switch provides the same effect as pressing the shutter button halfway or completely. A shutter-release lock is also provided.



#### E-series Dioptric Adjustment Lenses

One of ten E-series dioptric adjustment lenses (-4 to +3 diopters) can be attached to the camera's eyepiece to further expand the dioptric adjustment range.



#### CF card

Data storage media where the captured images are recorded.

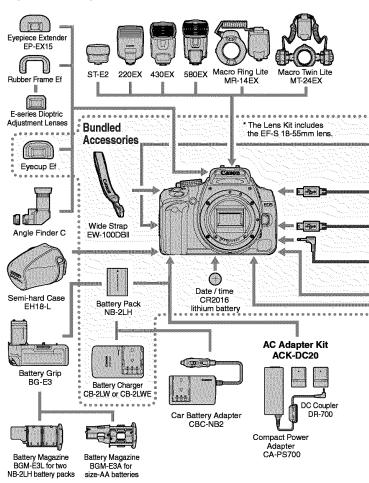
CF cards made by Canon are recommended.

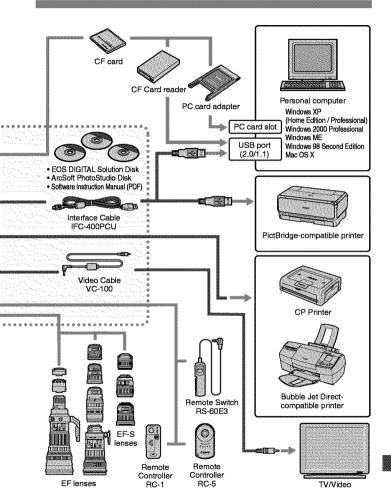


#### PC card adapter

Enables a CF card to be inserted into a PC card slot or PC card reader.

## System Map





## **Specifications**

Type:

Digital, single-lens reflex, AF/AE camera with built-in

flash

Recording media: CF card (Type I or II) \*Compatible with Microdrive and

2GB and larger CF cards

Image size: 22.2 x 14.8mm

Compatible lenses: Canon EF lenses (including EF-S lenses)

(35mm-equivalent focal length is equal to approx.1.6

times the marked focal length)

Lens mount: Canon EF mount

Imaging Element

Type: High-sensitivity, high-resolution, large single-plate CMOS

sensor

Pixels: Effective pixels: Approx. 8.00 megapixels

Total pixels: Approx, 8,20 megapixels

Aspect ratio: 3:2

Color filter system: RGB primary color filter

Low-pass filter: Located in front of the image sensor, non-removable

Recording System

Recording format: Design rule for Camera File System 2.0

Image type: JPEG, RAW (12bit)

RAW+JPEG

simultaneous recording: Possible

File size: (1) Large/Fine: Approx. 3.3 MB (3456 x 2304 pixels)

(2) Large/Normal: Approx. 1.7 MB (3456 x 2304 pixels)
(3) Medium/Fine: Approx. 2.0 MB (2496 x 1664 pixels)
(4) Medium/Normal: Approx. 1.0 MB (2496 x 1664 pixels)
(5) Small/Fine: Approx. 1.2 MB (1728 x 1152 pixels)
(6) Small/Normal: Approx. 0.6 MB (1728 x 1152 pixels)

(7) RAW: Approx. 8.3 MB (3456 x 2304 pixels) \* Exact file sizes depend on the subject, ISO speed,

processing parameters, etc.

File numbering: Consecutive numbering or auto reset

Color space: sRGB or Adobe RGB

Processing parameters: Parameter 1 and 2, set 1 to 3 (three custom parameter

sets), B/W

Interface: USB 2.0 Hi-Speed (Print/PTP, PC connection selectable)

Video output (NTSC/PAL)

#### White Balance

Type: Auto, daylight, shade, cloudy, tungsten light, white

fluorescent light, flash, custom

Auto white balance: Auto white balance with the imaging sensor

Color temperature correction: White balance correction:

±9 stops in full-stop increments White balance bracketing: ±3 stops in full-stop increments

\* Blue/amber bias or magenta/green bias possible

Color temperature

information transmission: Provided

#### Viewfinder

Type: Eye-level pentamirror Coverage: Vertical/Horizontal 95%

Magnification: 0.8x (-1 diopter with 50mm lens at infinity)

Eyepoint: 21 mm

Built-in dioptric adjustment: -3.0 - +1.0 diopter
Focusing screen: Fixed, precision matte
Mirror: Quick-return half mirror

(Transmission:reflection ratio of 40:60, no mirror cut-off

with EF600mm f/4 or shorter lenses)

Viewfinder information: AF information (AF points, focus confirmation light), exposure information (shutter speed, aperture value, AE

lock, exposure level, AEB in progress, exposure warning), flash information (flash ready, red-eye reduction enabled, red-eye reduction lamp on, high-speed sync, FE lock, flash exposure compensation).

maximum burst, CF card information

Depth-of-field preview: Enabled with depth-of-field preview button

#### Autofocus

Type: TTL-CT-SIR with a CMOS sensor

(TTL secondary image registration, phase detection)

AF points: 7 AF points

Metering range: EV 0.5 - 18 (at 20°C/68°F, ISO 100)

Focus modes: One-Shot AF, Al Servo AF, Al Focus AF, Manual focusing

(MF)

AF point selection: Auto or manual

Selected AF point indicator: Superimposed in viewfinder and indicated on LCD panel

AF-assist beam: Small series of flashes fired by built-in flash

Effective range: Approx. 4.0m/13.1ft. at center, approx.

3.5m/11.5ft. at periphery

Exposure Control

Metering modes: 35-zone TTL full aperture metering

Evaluative metering (linkable to any AF point)

Partial metering (approx. 9% of viewfinder at center)

· Center-weighted average metering

Metering range: EV 1 - 20 (at 20°C/68°F with 50mm f/1.4 lens, ISO 100)

Exposure control: Program AE (Full Auto, Portrait, Landscape, Close-up,

Sports, Night Portrait, Flash Off, Program), shutterpriority AE, aperture-priority AE, depth-of-field AE,

manual exposure, E-TTL II autoflash

ISO speed: Basic Zone modes: Automatically set (ISO 100 - 400)

Equivalent to ISO 100, 200, 400, 800, 1600

Exposure compensation: Manual: ±2 stops in 1/3- or 1/2-stop increments (can be

combined with AEB)
AEB: ±2 stops in 1/3- or 1/2-stop increments

AE lock: Auto: Applied in One-Shot AF mode with evaluative

metering when focus is achieved

Manual: By AE lock button in all metering modes

Shutter

Type: Electronically-controlled, focal-plane shutter

Shutter speeds: 1/4000 to 30 sec. (1/3- and 1/2-stop increments), bulb,

X-sync at 1/200 sec.

Shutter release: Soft-touch electromagnetic release

Self-timer: 10-sec. delay

Remote control: Remote Switch RS-60E3

Remote Controller RC-5/RC-1

Built-in Flash

Type: Retractable, auto pop-up flash

Flash metering: E-TTL II autoflash

Guide No.: 13/43 (ISO 100, in meters/feet)

Recycle time: Approx. 3 sec.

Flash-ready indicator: Flash-ready icon lights in viewfinder

Flash coverage: 17mm lens angle of view

FE lock: Provided

Flash exposure compensation: ±2 stops in 1/3- or 1/2-stop increments

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#### External Speedlite

EOS-dedicated Speedlite: E-TTL II autoflash with EX-series Speedlite

Zooming to match

lens focal length: Provided

#### Drive System

Drive modes: Single, continuous, and self-timer/remote control

Continuous: Max. 3 shots per sec.

Max. burst: JPEG (Large/Fine): Approx. 14 shots

RAW: Approx. 5 shots, RAW+JPEG (Large/Fine):

Approx. 4 shots

\* With a Canon 512MB CF card.

\* Varies depending on the subject, ISO speed, processing parameters. CF card, etc.

#### LCD Monitor

Type: TFT color liquid-crystal monitor

Monitor size: 1.8 in.

Pixels: Approx. 115,000

Coverage: 100% with respect to the effective pixels

Brightness adjustment: Five levels provided

(Gray level chart displayed during adjustment)

Interface languages: 15

#### Image Playback

Display format: Single image (with or without info), shooting information,

9-image index, magnified view (Approx. 1.5x - 10x), autoplay, image rotation, and jump (by 10/100 images or

date)

Highlight warning: In the shooting information mode, any overexposed

highlight areas with no image infomation will blink.

#### Image Protection and Erase

Protect: Single images can be erase-protected or not.

Erase: One image or all images in the CF card can be erased

(except protected images).

#### Direct Printing

Compatible printers: CP Direct, Bubble Jet Direct, and PictBridge-compatible

printers

Printable images: JPEG images (DPOF printing possible)

Easy Print feature: Provided

• DPOF: Digital Print Order Format

DPOF: Version 1.1 compatible

Customization

Custom Functions: 9 Custom Functions with 24 settings

Power Source

Battery: Battery Pack NB-2LH, quantity 1

\* AC Adapter Kit ACK-DC20 enables a household AC outlet to supply power.

\* Battery Grip BG-E3 enables size-AA batteries to supply

power.

Battery life: [shots]

Temperature	Shooting Conditions		
remperature	No Flash	50% Flash Use	
At 20°C / 68°F	Approx. 600	Approx. 400	
At 0°C / 32°F	Approx. 450	Approx. 350	

<sup>\*</sup> The above figures apply when a fully-charged Battery Pack NB-2LH is used.

\* The figures above are based on CIPA (Camera & Imaging Products Association) testing standards.

Battery check: Automatic

Power saving: Provided. Power turns off after 1, 2, 4, 8, 15, or 30 min.

Date/Time battery: CR2016 lithium battery, quantity 1

• Dimensions and Weight

Dimensions (W x H x D): 126.5 x 94.2 x 64 mm / 5.0 x 3.7 x 2.5 in.

Weight: 485 g / 17.1 oz. (body only)

Operation Environment

Working temperature range: 0°C - 40°C / 32°F - 104°F

Working humidity: 85% or less

#### Battery Charger CB-2LW

Compatible battery: Battery Pack NB-2LH

Recharging time: Approx. 90 min.

Rated input: 100 - 240 V AC, 50/60 Hz

Rated output: 8.4 V DC, 0.55 A

Working temperature range: 0°C - 40°C / 32°F - 104°F

Dimensions (W x H x D): 91 x 56 x 22.5 mm / 3.6 x 2.2 x 0.9 in

Weight: Approx. 68 g / 2.4 oz

#### Battery Charger CB-2LWE

Compatible battery: Battery Pack NB-2LH

Recharging time: Approx. 90 min.

Rated input: 100 - 240 V AC. 50/60 Hz

Rated output: 8.4 V DC. 0.55 A

Working temperature range: 0°C - 40°C / 32°F - 104°F

Dimensions (W x H x D): 91 x 56 x 22.5 mm / 3.6 x 2.2 x 0.9 in Weight: Approx. 61 g / 2.2 oz (without power cord)

All the specifications above are based on Canon's testing standards.

The camera's specifications and physical appearance are subject to change without notice.

#### Digital Camera Model DS126071 Systems

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The cable with the ferrite core provided with the digital camera must be used with this equipment in order to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canon U.S.A. Inc.
One Canon Plaza, Lake Success, NY 11042, U.S.A.

Tel No. (516)328-5600

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This Instruction Manual booklet is current as of January 2005. For information on the camera's compatibility with any accessories and lenses introduced after this date, contact any Canon Service Center.