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This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

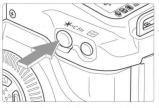
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With the same focusing point, you can obtain and lock the auto exposure setting on one part of the picture and then recompose to focus a different part of the picture. AE lock enables you to maintain the same exposure setting even after recomposing the shot. This is effective for backlit subjects.

• Also see "AE Lock Effect" on page 100 to see how AE lock works depending on the focusing point selection method and metering mode.







Focus the subject where you want to lock the exposure.

- Press the shutter button halfway to focus. (^{*}₀4)
- The exposure setting is displayed in the viewfinder.

Press the $< \frac{1}{2} >$ button. (\bigcirc 4)

- The < ★ > indicator lights in the viewfinder and the exposure setting locks (AE lock).
- Each time you press the < * > button, the auto exposure locks over the area covered by the selected focusing point.

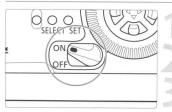
Compose the shot and take the picture.

In the One-Shot AF or AI Focus AF (except AI Servo AF) modes, AE lock is set automatically when you press the shutter button halfway and focus is achieved.

C.Fn-4-1 enables AE lock with the shutter button (pressed halfway) and focusing with the < ★ > button. (→page 96)

Exposure Compensation

Changing the standard exposure level set by the camera during picturetaking is called exposure compensation. Just turn the < \bigcirc > dial and look at the viewfinder. You can set the exposure compensation up to ±2 stops in half-stop increments.





Overexposed amount



Underexposed amount



Turn on the Quick Control Dial switch to < ON>.

Press the shutter button halfway to focus the subject. $(\Phi 4)$

Check the exposure level.

Set the exposure compensation amount.

- Turn the < () > dial to set the desired amount.
- Turn the < > dial while pressing the shutter button halfway or within 4 sec. after pressing the shutter button halfway and letting go.
- You can also refer to the LCD panel while setting the exposure compensation amount.
- The < + > side indicates an overexposed amount, and the < - > side indicates an underexposed amount.

Underexposed amount Overexposed amount

- The exposure compensation amount set is retained even after the Command Dial is set to < **OFP** >.
- To cancel the exposure compensation, set the exposure level indicator back to <0>.

After setting the exposure compensation amount, turn the Quick Control Dial switch to <OFF> to prevent inadvertent turning of the Quick Control Dial (thereby throwing off the exposure compensation amount set).

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Auto Exposure Bracketing (AEB)

With AEB, the camera automatically changes the exposure within the set range (up to ± 2 stops in 1/2-stop increments) for three successive frames. The three bracketed shots are exposed in the following sequence (\rightarrow page 79): Correct exposure, underexposure, and overexposure.







Correct exposure (0)

Underexposure (-0.5 stop)

Overexposure (+0.5 stop)



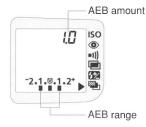
Move the $\langle \mathbf{P} \rangle$ arrow to the $\langle \mathbf{P} \rangle$ icon.

 Look at the LCD panel and press the <FUNC.> button. (https://doi.org/101616



Set the desired AEB amount.

- Turn the <
- ► The AEB amount and AEB range < > are displayed on the LCD panel.
- The sample illustration below shows an AEB amount of 1 stop with respect to the correct exposure level.



- -2.1.0.1.2+ Correct exposure

Take the pictures.

- The bracketed pictures will be taken in the current film advance mode.
- The respective AEB amount is displayed on the LCD panel and in the viewfinder for each bracketed shot.
- After the three AEB shots are taken, the AEB will not be canceled automatically. To cancel AEB, set the AEB amount back to " []]".

AEB cannot be used with flash or bulb exposures.

- In the continuous shooting mode, holding down the shutter button will take all three bracketed shots continuously. However, the viewfinder will not display the respective AEB information.
 - If the self-timer or remote control is used, the three AEB shots will be taken in continuous succession automatically.
 - If C.Fn-5-1 is set (mirror lockup), single-frame film advance will take effect during AEB shooting even if the continuous film advance mode has been set.
 - AEB can be used in combination with exposure compensation. If the AEB + exposure compensation range you set exceeds the displayable range, it will be displayed as shown below.

In the $\langle \mathbf{P} \rangle$, $\langle \mathbf{Tv} \rangle$, $\langle \mathbf{Av} \rangle$, and $\langle \mathbf{DEP} \rangle$ modes:

-2.1.0.1.2* :±1 stop AEB.
-2.1.0.1.2* :±1 stop AEB with -1-stop exposure compensation.
-2.1.0.1.2* :±1 stop AEB with -1.5-stop exposure compensation.
-2.1.0.1.2* :±1 stop AEB with -2-stop exposure compensation.

In the < M > mode:

2.1.0.1.2⁺ : ±1 stop AEB with –2-stop exposure compensation.

```
2.1.0.1.2*

: ±1 stop AEB with over −2-stop exposure compensation.

2.1.0.1.2*
```

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Bulb Exposures

A bulb exposure starts when you press the shutter button completely and ends when you release the shutter button. Bulb exposures are useful when long exposures are required for night scenes, fireworks, heavenly bodies, etc.

 Remote Switch RS-60E3 (sold separately) is convenient for bulb exposures.

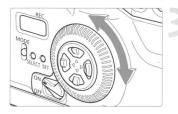


Turn the Command Dial to <M>.

Set the shutter speed to "bulb".

- Turn the < >> dial until " but b " is displayed on the LCD panel.
- "bulb" follows " 30"".





Set the aperture.

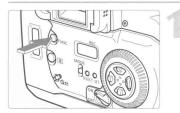
Turn the < () > dial.

Start the bulb exposure.

- Press and hold down the shutter button.
- During the bulb exposure, "bulb" blinks on the LCD panel.
- The bulb exposure continues as long as you hold down the shutter button.

📼 Multiple Exposures

By not advancing the film after taking a picture, a single frame can be shot multiple times. Up to nine multiple exposures can be taken on one frame.



Move the $\langle \mathbf{P} \rangle$ arrow to the $\langle \mathbf{m} \rangle$ icon.

- Look at the LCD panel and press the <FUNC.> button. (^{*}©6)
- The frame counter will show " ! ".





Set the desired number of multiple exposures.

• Turn the <



Three multiple exposures have been set above.

Select the picture-taking mode and take the multiple exposures.

 After you take all the multiple exposures, the film advances to the next frame automatically and the multiple-exposure setting is canceled. If you shoot multiple exposures on the first few or last few frames of roll, the multiple exposures might not be precisely aligned due to the film advance mechanism's characteristics.

- \square During multiple-exposure shooting, the < \triangleright > arrow next to the < \square > icon on the LCD panel will blink.
 - To cancel multiple exposures before shooting, set the number of multiple exposures to 1.
 - To cancel multiple exposures after shooting, follow steps 1 and 2 to set the number of multiple exposures to blank.

 $\widehat{\mathbb{Q}}^{\xi}$ Since shooting multiple exposures will expose the same frame multiple times, negative exposure compensation (\rightarrow page 72) must first be set to avoid overexposure.

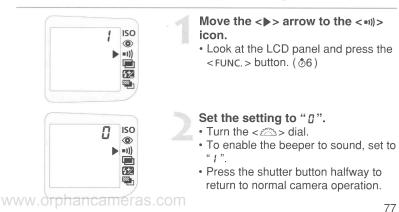
General Guide for Exposure Compensation

Multiple Exposures	2 exposures	3 exposures	4 exposures
Exposure Compensation Amount	-1.0 stop	-1.5 stop	-2.0 stop

These are only suggested exposure compensation amounts. The optimum amount depends on the scene. Experiment to find the optimum compensation amount.

I)) Silencing the Beeper

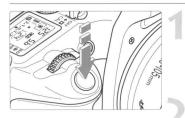
The beeper can be silenced in all of the picture-taking modes.



Mirror Lockup

Mirror lockup is enabled with C.Fn-5-1 (\rightarrow page 96). Keeping the reflex mirror in the up position prevents mirror-caused vibrations that can blur the image during close-up or telephoto shooting.

• When using mirror lockup, Remote Switch RS-60E3 (sold separately) is recommended.



Press the shutter button completely.

- The reflex mirror locks up.
- The reflex mirror will go back down automatically after 30 seconds (if no picture is taken).

Press the shutter button completely again to take the picture.

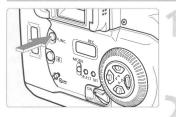
• After the picture is taken, the reflex mirror goes back down.

- In bright light such as at the beach or ski slope 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 mirror lockup with the self-timer for a bulb exposure, there will be a shutter release sound when you let go of the shutter button during self-timer operation. This is not the sound of the shutter release.
- • During mirror lockup, the film advance mode (→page 79) will be single-frame shooting regardless of the current film advance mode.
 - If mirror lockup is used with the self-timer, pressing the shutter button completely the first time will lock up the mirror and release the shutter 10 seconds later.

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ISO Setting the ISO Film Speed

If the film is not DX-coded or if you want to set a different film speed, you can set the film speed manually after loading the film into the camera. The settable film speed range is ISO 6 to 6400.



Move the <▶> arrow to the <ISO> icon.

- Look at the LCD panel and press the <FUNC.> button to move the arrow.
 ((d6)
- The current film speed is displayed.

Set the desired film speed.

- Turn the < > dial to set the film speed.
- Press the shutter button halfway to return to normal camera operation.

The manually-set film speed will be canceled if the film is taken out and DX-coded film is loaded.

With C.Fn-3-1, you can retain the manually-set film speed even after taking out the film and loading another DX-coded roll of film. (→page 96)

Selecting the Film Advance Mode

There are two film advance modes: Single-frame shooting and continuous shooting.

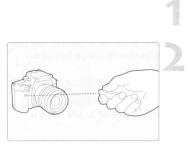


□ Single-frame Shooting After a picture is taken, the film advances by one frame automatically.

Lolding down the shutter button advances the film continuously.

Wireless Remote Control

Remote Controller RC-1 (sold separately) enables wireless remote control operation in all the picture-taking modes.



Turn the film advance mode lever to $\langle \mathfrak{H} \rangle_{\overline{i}}$ >.

Take the picture via remote control.

- Point the Remote Controller RC-1's signal emitter toward the camera's remote control sensor and press the Send button. Wireless remote control works within 5 meters from the camera.
- Remote shutter release is indicated as follows:
 2-sec. delay: The red-eye reduction lamp lights for 2 sec., then the picture is taken.
 Immediate shutter release: When the picture is taken, the red-eye reduction lamp flashes.

Certain types of fluorescent lights might cause the remote control operation to work improperly. Place the camera away from any fluorescent lights as much as possible.

If you set the film advance mode lever to < ♥ => and do nothing for four minutes, the wireless remote control mode will be canceled automatically to save battery power. To set it again, press the shutter button halfway. The < => icon displayed on the LCD panel indicates that the wireless remote control mode can be used.

Using the Remote Switch

The Remote Switch RS-60E3 (sold separately) can be used in all the picture-taking modes.



Connect the Remote Switch's plug to the camera's remote control terminal. Press the release button to take the picture.



About the Built-in Flash

Using the built-in flash is as easy as normal picture-taking. In the Basic Zone modes (except < \ge > and < \ll >), the built-in flash is fully automatic. In Creative Zone modes, it can be used at any time.

Flash Photography



Using an External EOS-Dedicated Speedlite

- An external, EOS-dedicated Speedlite attached to the camera makes flash photography as easy as any AE mode. An EX-series Speedlite enables E-TTL autoflash as well as E-TTL wireless autoflash with multiple Speedlites.
- This chapter describes the features available with Speedlite 420EX. For detailed instructions for the 420EX, refer to its instruction booklet.

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Using the Built-in Flash

In a Basic Zone Mode

In a Basic Zone mode (except $< \sum >$ and $< \ll >$), the built-in flash pops up and fires automatically when necessary in low-light or backlit conditions.

In a Creative Zone Mode

In a Creative Zone mode, you can use the built-in flash at anytime regardless of the existing light level. Just pull up the built-in flash head before taking the picture.

- P : Use this mode for automatic flash photography. The flash sync speed and flash aperture are set automatically as with the <□> (Full Auto) mode.
- **Tv** : Use this mode if you want to set a flash sync speed slower than 1/125 sec. The camera will set the flash aperture automatically to obtain a correct flash exposure.
- Av : Use this mode if you want to set the flash aperture. In this mode, you can obtain a balanced exposure between the subject and a dark background (night scene, etc.) with a slow sync speed set automatically by the camera. The flash illuminates the subject while the background is exposed with a long shutter speed.

Be sure to use a tripod when a slow sync speed is set.

- M : This mode enables you to set both the flash sync speed and flash aperture. The subject is properly exposed with the flash and the background is exposed with the flash sync speed and aperture you have set.
- **DEP** : This mode gives the same flash result as the $\langle \mathbf{P} \rangle$ mode.

Effective Range of the Built-in Flash (With EF 28-90mm f/4-5.6 lens)

100		28r	nm	90mm			
ISC	, 	Negative Film	Reversal Film	Negative Film	Reversal Film		
m		1 - 4.6	1 - 3.2	1 - 3.2	1 - 2.3		
100	ft	3.3 - 15.1	3.3 - 10.5	3.3 - 10.5	3.3 - 7.5		
m		1 - 6.5	1 - 4.6	1 - 4.6	1 - 3.2		
200	ft	3.3 - 21.3	3.3 - 15.1	3.3 - 15.1	3.3 - 10.5		
100	m	1 - 9.2	1.2 - 6.5	1 - 6.5	1 - 4.6		
400	ft	3.3 - 30.2	3.9 - 21.3	3.3 - 21.3	3.3 - 15.1		

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Flash Sync Speeds and Flash Apertures

Mode	Sync Speed	Flash Aperture The flash aperture is set automatically according to the TTL program.		
Р	The sync speed is set automatically within 1/60 - 1/125 sec.			
Tv	Any sync speed 1/125 sec. or slower can be set manually.	The flash aperture is set automatically to match the sync speed you have set and the subject brightness.		
Av	The sync speed is set automatically within a range of 30" to 1/125 sec. to match the flash aperture you have set and the subject brightness.	You set the flash aperture manually.		
М	Any sync speed 1/125 sec. or slower can be set manually.			

 Before attaching an EOS-dedicated Speedlite to the camera, push down the built-in flash if it is popped up.

- . When using the built-in flash, stay at least 1 meter away from the subject. Otherwise, part of the photo will look dark.
- . When using the built-in flash, detach any hood attached to the lens. A lens hood will partially obstruct the flash coverage.
- . If any of the following lenses is attached to the camera, the flash coverage of the built-in flash might be obstructed. Use an external, EOS-dedicated Speedlite with these lenses.

Fast lenses such as the EF 17-35mm f/2.8L USM and EF 28-70mm f/2.8L USM. Super telephoto lenses such as the EF 300mm f/2.8L IS USM and EF 600mm f/4L IS USM.

- The built-in flash's flash coverage is effective for lenses with a focal length of 28mm or longer. At focal lengths shorter than 28mm, the periphery of the photograph will look dark.
- To retract the built-in flash, push it down.
 - If you set a sync speed faster than 1/125 sec. in the < Tv > or < M > mode, the sync speed will be set automatically to 1/125 sec.
 - When it is difficult to focus, the AF-assist light will be fired automatically. (→page 30)
 - . The built-in flash and an external, EOS-dedicated Speedlite attached to the camera cannot be used at the same time

122 Flash Exposure Compensation

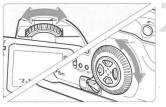
You can set flash exposure compensation with the built-in flash or an external, EOS-dedicated Speedlite as easily as normal exposure compensation. The settable range is ±2 stops in 1/2-stop increments. • Flash exposure compensation works in the Creative Zone modes.

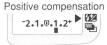


Move the $\langle \rangle$ arrow to the $\langle \Sigma \rangle$ icon on the LCD panel.

 Press the < FUNC. > button to move the arrow. (@6)







Negative compensation



Set the flash exposure compensation amount.

- Turn the < > or < > dial to set the amount.
- On the LCD panel, the plus side of the scale indicates overexposure and the minus side indicates underexposure.
- To check the flash exposure compensation amount that has been set, press the < FUNC. > button to display it on the LCD panel.
- The flash exposure compensation amount remains in effect even after the Command Dial is set to < **OFP** >.
- To cancel flash exposure compensation, set the amount back to <0>.
- Press the shutter button halfway to return to normal camera operation.

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Flash Photography with an EX-Series Speedlite

With a Canon EX-Series Speedlite, flash photography is easy as using the built-in flash. You can also use the advanced features below.

This section applies when Speedlite 420EX is attached to the camera.

E-TTL Autoflash

With E-TTL autoflash (preflash evaluative metering), an optimum flash exposure is obtained for the subject in focus. In the aperture-priority AE mode, a slow sync speed is set automatically in low-light conditions to obtain a natural-looking, balanced exposure between the subject and background.



High-Speed Sync (FP Flash)

High-speed sync (FP or focal-plane flash) enables flash synchronization with all of the camera's shutter speeds from 30 sec. to 1/4000 sec.

• FE (Flash Exposure) Lock FE lock obtains and locks the correct flash exposure for any part of the subject. This is the flash equivalent of AE lock.

Flash exposure compensation

Like normal exposure compensation, flash exposure compensation can be used to set the flash output up to ± 2 stops in 1/2-stop increments.

- FEB (Flash Exposure Bracketing) (with 550EX or MR-14EX) As with AEB (auto exposure bracketing), flash exposures can be bracketed up to ±3 stops in 1/2-stop increments.
- E-TTL wireless autoflash with multiple Speedlites With a master Speedlite (550EX, ST-E2, or MR-14EX) and the 420EX set as the slave unit(s), all the features listed above can be used for E-TTL wireless autoflash. Since no connecting cords are required, flexible and sophisticated lighting effects can be obtained.

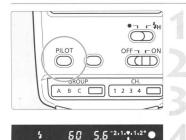
• E-TTL is an abbreviation for Evaluative-Through-The-Lens.

- With autofocus, the flash exposure is always based on the aperture, and E-TTL autoflash metering is weighted at the active focusing point assumed to be covering the main subject.
- When it is difficult to autofocus, the Speedlite's AF-assist beam is emitted automatically.

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Full Auto Flash

Full Auto E-TTL autoflash used in the <**P** > Program AE mode is explained below. For more details on using Speedlite 420EX, see the Speedlite 420EX instruction booklet.



Set the Command Dial to <P>.

Check that the 420EX's pilot lamp is lit.

Focus the subject.

Take the picture.

• Make sure the flash-ready indicator <\$> is lit, and check the shutter speed and aperture displays before taking the picture.

E-TTL Autoflash in Other Shooting Modes

Even in the < Tv >, < Av >, and < M > modes, E-TTL autoflash is as easy as normal picture-taking without flash.

(1) When you press the shutter button halfway, the camera sets the shutter speed and aperture.

Mode		Shutter Speed Setting	Flash Aperture Setting		
Tv	(Shutter speed-priority AE)	Manual (30 sec 1/125 sec.)	Auto		
Av	(Aperture-priority AE)	Auto (30 sec 1/125 sec.)	Manual		
Μ	(Manual)	Manual (30 sec 1/125 sec.)	Manual		

- (2) When you press the shutter button completely, preflash evaluative metering based on the aperture set in (1) is used for the E-TTL autoflash exposure.
- (3) The background exposure is set by the shutter speed and aperture combination.

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• About automatic reduction of flash output

- If an EOS-dedicated Speedlite is used for a subject backlit by an overhead light, the flash output is reduced automatically to avoid having an unnatural-looking exposure. This is called automatic reduction of flash output.
- In the Basic Zone modes, flash photography is as easy as with the built-in flash.
- Using the < DEP > mode with flash gives the same result as the < P > mode.

¼_H High-Speed Sync (FP Flash)

When Speedlite 420EX is set to the high-speed sync mode $< \xi_{H}$, it can synchronize at all shutter speeds, even those faster than 1/125 sec. When high-speed sync is enabled, $< \xi_{H}$ is displayed in the viewfinder. High-speed sync is useful in the cases listed below.

· High-speed sync works in Creative Zone modes.

- (1) When you want to use fill flash for a portrait and maintain background blur with a large aperture.
- (2) When you want to create a catchlight in the subject's eyes.
- (3) When you want to use fill flash to eliminate shadows.



With conventional flash.

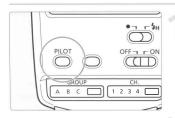


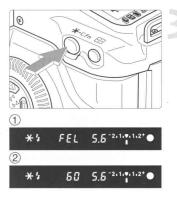
With FP flash.

* FE Lock

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

• FE lock works in Creative Zone modes.





Check that the 420EX's pilot lamp is lit.

• The flash mode can be either normal or high-speed sync. FE lock works with either mode.

Focus the subject.

• Focus at the point where you want to lock the flash exposure.

Aim the center focusing point where you want to lock the flash exposure, then press the $< \frac{1}{2} >$ button. ($\hat{0}16$)

- The < ★ > icon lights in the viewfinder.
- The Speedlite fires a preflash and stores and locks the flash exposure reading in memory.
- ► In the viewfinder, the focusing point achieving FE lock flashes in red.
- Below the viewfinder, the display shown in ① appears for 0.5 sec. followed by the display shown by ②.
- Each time you press the < X > button, a preflash fires and the flash exposure reading is locked.



For this picture, the flash exposure was locked on the face and then the picture was recomposed. The subject was exposed correctly without being affected by the background reflection.

Take the picture.

- Compose the shot and take the picture.
- Normally, use the center focusing point for FE lock.

If the subject is too far away to obtain a correct flash exposure, the < 4 > icon will blink. Get closer to the subject and follow steps 2 and 3 again.

C.Fn-8-1 enables FE lock with the user-selected focusing point. (→page 97)

52 Flash Exposure Compensation

Setting flash exposure compensation with the camera is described in "Flash Exposure Compensation" on page 84.

Flash exposure compensation can also be set with the following Speedlites: 550EX, 540EZ, 430EZ, and Macro Ring Lite MR-14EX.

• Flash exposure compensation can be set in the Creative Zone modes.

If flash exposure compensation is set with both the camera and external, EOSdedicated Speedlite, the Speedlite's setting will override the camera's.

FEB (With 550EX or MR-14EX)

With Canon Speedlite 550EX or MR-14EX, three successive flash shots can be bracketed automatically up to ± 3 stops in 1/2-stop increments. The flash output changes for the three shots while the background exposure remains the same. This technique is called flash exposure bracketing.







Correct exposure.

Underexposure (-1 stop).

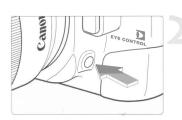
Overexposure (+1 stop).

- Flash exposure bracketing is set with the Speedlite. For details, see the Speedlite's instruction booklet.
- Single-frame shooting < □> is recommended with FEB.

Modeling Flash (With 550EX, 420EX or MR-14EX)

By firing a modeling flash, you can see the shadows and other flash lighting effects produced by multiple Speedlites in a wireless system.

• The modeling flash can be fired in the Creative Zone modes.



Make sure the camera and Speedlite are properly set for flash photography.

Press the camera's depth-of-field preview button.

 The Speedlite fires at 70 Hz for 1 second.

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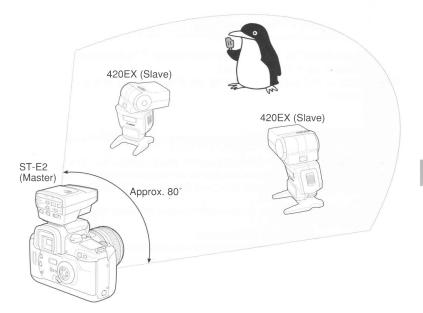
Wireless, Multi-Speedlite System

You can set up an E-TTL wireless autoflash system with a master unit (550EX, ST-E2, or MR-14EX) and slave units (420EX).

Set the 420EX's wireless selector to < SLAVE > to set it as a slave unit. Use the master unit as the main flash and the slave unit(s) as fill flash.

• For details, refer to the master and slave unit's instruction booklets.

Sample Setup for Wireless Flash



Using Other EOS-Dedicated Speedlites

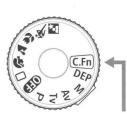
With an EOS-dedicated Speedlite other than the EX series, TTL autoflash can be easily used like any AE mode.

The flash exposure is controlled by real-time, off-the-film flash metering linked to the focusing point.

(1) When you press the shutter button halfway, the shutter speed and aperture are set automatically by the camera just like normal picturetaking without flash.

	Mode	Shutter Speed Setting	Flash Aperture Setting
Ρ	(Program AE)	Auto (1/60 sec 1/125 sec.)	Auto
Τv	(Shutter speed-priority AE)	Manual (30 sec 1/125 sec.)	Auto
Av	(Aperture-priority AE)	Auto (30 sec 1/125 sec.)	Manual
Μ	(Manual)	Manual (30 sec 1/125 sec.)	Manual

- (2) When you press the shutter button completely, TTL autoflash based on the aperture set in (1) is executed.
- (3) The background exposure is set by the shutter speed and aperture combination.
- In the Basic Zone modes, flash photography is as easy as with the built-in flash.
 - Using the < **DEP** > mode with flash gives the same result as the < **P** > mode.
 - Flash exposure compensation can also be set with the camera.
 - If the multi-Speedlite system is wired with flash cords, TTL autoflash takes effect.
 - When it is difficult to focus, the Speedlite's built-in AF-assist light will be emitted automatically.
 - About automatic reduction of flash output If an EOS-dedicated Speedlite is used for a subject backlit by an overhead light, the flash output is reduced automatically to avoid having an unnaturallooking exposure. This is called automatic reduction of flash output.



Custom Function Set

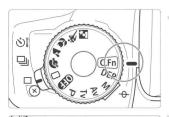
Custom Functions enable you to customize various camera features to suit your picture-taking preferences.

The construction this booklet introduced the relevant Custom Function that is listed in this chapter.

Custom Functions

Custom Function settings are applied in the Creative Zone modes. They are not applied in the Basic Zone modes.

Setting a Custom Function



ATTENT

ISO

۲

=)))

Custom Function No.

Custom

Function SettingNo.

•OFF

CAL

EO 1

CO /

C.Fn

Turn the Command Dial to < C.Fn >.

 The < Im > icon and Custom Function No. are displayed on the LCD panel.

Select the Custom Function No.

• Turn the < A dial to select the Custom Function No.

Set the Custom Function setting.

- Press the <C.Fn> button.
- The Custom Function setting changes each time you press the <C.Fn> button.

Turn the Command Dial to a setting other than $<\mathbb{C}$ [m]>.

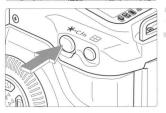
 The < Im > icon remains displayed on the LCD panel and the Custom Function setting is set.



Canceling a Custom Function







Turn the Command Dial to < C.Fn >.

• The < Im > icon and Custom Function No. are displayed on the LCD panel.

Select the Custom Function No. you want to cancel.

• Turn the < >> dial to select the Custom Function No.

Set the setting to " \square ".

• The Custom Function setting changes each time you press the <C.Fn> button.

Turn the Command Dial to a setting other than $\langle CFn \rangle$.

- The < Im > icon turns off on the LCD panel and the Custom Function setting is canceled.
- The < Im > icon remains displayed on the LCD panel if another Custom Function has been set.

Custom Function List

C.Fn	Function	No.	
C.En-1	Film of the first state		Low speed (silent)
C.Fn-I	Film rewind speed	1	High speed
C.Fn-2	Film leader position after	0	Rewinds film leader into the cartridge.
C.Fn-2	film rewind	1	Leaves film leader outside the cartridge.
C.En-3	DX-coded film speed	0	Enabled.
C.Fn-3	setting method	1	Disabled.
		0	AF start with shutter button pressed halfway and AE lock with $< \frac{1}{2}$ > button.
C.Fn-4	Shutter button and $< \frac{1}{2} >$ functions	1	AF start with $< \frac{1}{2}$ > button and AE lock with shutter button pressed halfway.
		2	AF start with shutter button pressed halfway and AF operation stopped with $< \frac{1}{2}$ > button.
C.Fn-5	Mirror lockup	0	Disabled (Normal operation).
0.111-5		1	Enabled.
C.Fn-6	Shutter curtain synchronization (with	0	1st-curtain sync (Normal operation)
0.F11-0	built-in and external flash)	1	2nd-curtain sync
		0	Built-in/external flash: Emits AF-assist/Fires main flash.
	AF-assist light emission /	1	Built-in/external flash: No AF-assist/Fires main flash.
C.Fn-7	Main flash firing	2	Built-in flash: No AF-assist/Fires main flash. External flash: AF-assist emitted/Fires main flash.
		3	Built-in/external flash: Emits AF-assist/No main flash.

C.Fn	Function	No.	STILLING STILLING
C.Fn-8	Partial metering linkage with focusing point/FE		Disabled (Partial metering and FE lock at center focusing point).
	lock	1	Enabled.
C.Fn-9	Flash sync speed in	0	Set automatically.
0.1113	aperture-priority AE mode	1	Set to 1/125 sec.
C.En-10	In-focus focusing point	0	Enabled (superimposed).
0.611-10	flashing	1	Disabled.
			< 🞰 > button + < 💮 >
C.Fn-11	Focusing point selection method	1	< >> only. (Automatic selection with the $< = >$ button.)
)) · ·	2	< ⊡ > button + < 🖄 > < () >
C.Fn-12	Switch to center focusing	0	Disabled.
0.511-12	point with the < ⊡ > button	1	Enabled.
		0	AF stop.
		1	AF start.
0 5 40	Lens AF stop button	2	AE lock during metering.
C.Fn-13	function	3	Focusing point selection method switching (between automatic and manual).
		4	AF mode switching (between One-Shot AF and AI Servo AF)
		5	Start Image Stabilizer.

Reference

Basic Photography Terms

Exposure

Exposure occurs when the film is exposed to light. Correct exposure is obtained when the film is exposed to a proper amount of light in accordance with the film's sensitivity to light. The correct exposure is adjusted with the camera's shutter speed and aperture.

Shutter speed

The shutter speed is the length of time the camera's shutter opens to expose the film to the light coming through the lens. The shutter speed is displayed on the camera's LCD panel and in the viewfinder. It ranges from 30 sec. to 1/4000 sec. and bulb.

Aperture

The aperture setting (f-number) indicates the size of the aperture opening in the lens. It is used to adjust the amount of light striking the film. The aperture setting is displayed on the camera's LCD panel and in the viewfinder. It can range anywhere from 1.0 to 91, depending on the lens attached to the camera.



ISO film speed

The ISO film speed indicates the film's sensitivity to light. The higher the film speed, the more sensitive the film is. Therefore, ISO 400 and higher-speed films are suited for low-light conditions. The ISO film speed is set in accordance with standards set by the International Standardization Organization (ISO).

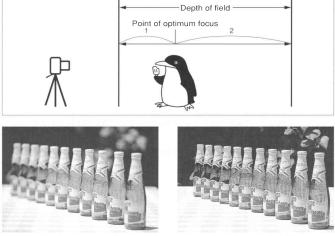
A film speed from 6 to 6400 can be set with the camera. The film speed is displayed on the LCD panel and in the viewfinder.

Depth of field

This is the range where acceptable focus can be achieved in front of and behind the point of optimum focus. The smaller the aperture (the larger the f-number), the deeper the depth of field. And the larger the aperture (the smaller the f-number), the shallower the depth of field.

The depth of field is affected as described below:

- (1) A smaller aperture (a larger f-number) increases the depth of field.
- (2) A longer distance between the camera and subject increases the depth of field.
- (3) When subject distance remains the same, a lens with a shorter focal length increases the depth of field.
- (4) The depth of field behind the point of optimum focus is longer than the depth of field in front of the point of optimum focus.



Aperture set to f/2.

Aperture set to f/22.

Reference

Feature Availability Table

	AF				Film Advance			Metering Mode					
Command Dial Mode	One-	AI	AI	Focusi	ng Point S	Selection	0.1		Self-	Evaluative	Partial	Centerw eighted	
	Shot	Servo	Focus	Auto	Manual	Eye Control	Single	Continuous	timer	Evaluative	Partial	avg.	
			•	•		*	•	11.1.1	0	•		1.11	
Ą	۲			٠		0		•	0	•			
-	•			•	In the last	0	•	E MILLO	0	•			-
	•			٠		0	٠		0	•			
N.	11.5	•		•		0	18-1	•	0	•	1.415		
<u>Š</u>	٠			٠		0	•		0	٠			
Р	0	0	0	0	0	0	0	0	0	0	0	0	
Tv	0	0	0	Q	0	- Ö	Q	0	0	0	Ó	Ó	
Av	0	0	0	Q	0	Q	0	0	0	Ò	0	0	
DEP	۲			0	0	0	0	Ö	Ó	Ó	0	0	
М	0	0	0	0	0	0	0	Ó	0	0	0	0	

• • : Set automatically. : User-selectable/settable.
• C.Fn can disable the AF-assist light.

 $* (\rightarrow page 52)$

AE Lock Effect (In Creative Zone modes)

Focusing Point Selection Method Metering Mode		Manual Focusing Point Selection / Eye Control	Automatic Focusing Point Selection		
Evaluative		AE lock is set at the selected focusing point.	AE lock is set at the focusing point which achieved focus.		
Dautial	With C.Fn-8-0	AE lock is set at the center focusing point.			
Partial With C.Fn-8-1		AE lock is set at the selected focusing point.*	AE lock is set at the center focusing point.		
Centerweighted averaging		AE lock is set at the center focusing point.			

* With Eye Control, if you press the AE lock button before pressing the shutter button halfway, the AE lock will be set at the center focusing point.

В	uilt-in Fla	sh					Functions						
Auto Firing	Manual Firing	AF- Assist	Exposure Compensation	AE Lock	FE Lock	ISO Speed	Red-eye Reduction	Beeper	Multiple Exposures	Flash Exposure Compensation	AEB	Midroll Rewind	Custom Functions
•	1.1	•					0	0				0	
•		•					0	0				0	
								0				O.	
٠		٠					0	0				0	
				100		0.10		0				0	1.
•		٠					Ö	0				0	
	0		0	0	0	0	0	Ó	0	0	0	0	0
	0	٠	0	0	0	0	0	Ö	0	0	Ó	0	0
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	Ő	٠	0	0	0	0	0	0	0	0	0	0	0
	0	•			0	0	0	0	0	0	0	0	0

AF Mode and Film Advance Mode Combination

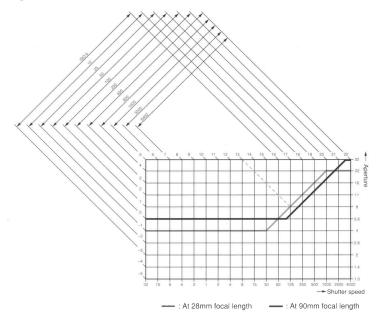
Film Advance Mode	One-Shot AF	Al Servo AF
☐ (Single)	The picture cannot be taken until focus is achieved. When focus is achieved, AF lock (focus lock) and AE lock (at the exposure setting obtained before the exposure) are applied.	Autofocus tracks the moving subject, and the exposure is set when the shutter is released.
및 (Continuous)	The same conditions above apply during continuous shooting.	The same conditions above apply during continuous shooting.

 In the AI Focus AF mode, One-Shot AF or AI Servo AF is set automatically depending on the subject.

Reference

Program Line

The program line below applies when the camera is used in the $< \mathbf{P} >$ Program AE mode with an EF 28-90mm f/4-5.6 lens.



Program Line Description

The bottom horizontal axis represents the shutter speed and the right vertical axis represents the aperture. On the left edge and top edge of the graph, the Exposure Value (EV) is indicated for the respective shutter speed and aperture combination set by the Program AE mode and denoted by the program line.

Example: When the 28mm focal length is used and the subject brightness is EV 13, the point where the diagonal line from EV 13 (on the top edge of the graph) intersects the program line indicates the corresponding shutter speed (1/125 sec.) and aperture (f/8) which the program sets automatically. The arrowhead lines above the graph indicate the metering range for the respective film speed.

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Exposure Warning List

Mode	Blinking Warning	Indication	Countermeasures	
D	- 30" 4 3.5 (-	The subject is too dark.	Use flash.	
Р		The subject is too bright.	Attach a neutral density filter to the lens.	
Tv	50¢, 3.5.	The picture will be underexposed.	Turn the < ₽ > to set a slower shutter speed.	
IV	6 <i>G</i> ,2,2,5,-	The picture will be overexposed.	Turn the <	
A.,		The picture will be underexposed.	Turn the < 2005 >to set a larger aperture (smaller f-number).	
Av	-4000(3.5	The picture will be overexposed.	Turn the < 2005 > to set a smaller aperture (larger f-number).	
	6 6 ,2,2,-	The desired depth of field cannot be obtained.	 Move away from the subject and try again. If a zoom lens is used, use the shortest focal length. 	
DEP	- 30" 3.5 -	The subject is too dark.	Use flash. The result will be the same as using the $<\mathbf{P} >$ mode.	
	- 4000 22 -	The subject is too bright.	Attach a neutral density (ND) filter to the lens.	

The sample warnings above apply when the lens used has a maximum aperture of f/3.5 and minimum aperture of f/22. The maximum and minimum aperture warning displays will differ depending on the lens attached to the camera.

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Reference

Troubleshooting Guide

If there is a problem, try to resolve it by referring to this Troubleshooting Guide. If the problem still persists, take the camera to your nearest Canon Service Center.

Nothing is displayed on the LCD panel.	The batteries are exhausted. ► Replace the batteries with new ones. (→page 18, 19) The batteries have been installed incorrectly. ► Install the batteries correctly. (→page 18)
The picture looks blurred.	The lens focus mode is set to < MF > (or < M >). ► Set the lens focus mode to < AF > (or < A >). (→page 20) There was camera shake when the picture was taken. ► Hold the camera steady or use a faster shutter speed.
The shutter does not work.	 (→page 22) The < ② > icon blinks on the LCD panel. Take out the film and load it correctly. (→page 23) The < ③ > icon blinks on the LCD panel. Replace the batteries with new ones. (→page 18) The < ③ > icon blinks while the rewound film is still in the camera. Replace with a new roll of film. (→page 23) The in-focus indicator in the viewfinder blinks and focus cannot be achieved.
The < [] > icon blinks on the LCD	 Select another focusing point. (->page 45) If focus still cannot be achieved, focus manually. (->page 55) The battery level is very low. Replace the batteries with new ones. (->page 18)
panel.	 A misoperation has occurred. Press the shutter button halfway. (→page 22) Remove and reload the batteries. (→page 19) If the < 1 > icon stops blinking, picture-taking is possible. If it is still blinking, consult your nearest Canon Service Center.

Major Accessories







Battery Pack BP-300

The vertical grip has its own shutter button and AE/FE lock button. It houses four size-AA batteries (alkaline, Ni-Cd, or nickel hydride). Two CR123A batteries to power the camera can also be used.

• EX-series Speedlites 550EX, 420EX, and 220EX

Three EOS-dedicated, E-TTL autoflash Speedlites are available. The 550EX with an autozoom head can provide a large flash output, the 420EX for affordable high performance, and the 220EX for compactness. The respective maximum Guide No. (at ISO 100 in meters) are 55, 42, and 22. All three Speedlites also enable highspeed sync (FP flash), and FE lock. With the 550EX and 420EX, E-TTL wireless autoflash with multiple Speedlites is possible.

Macro Ring Lite MR-14EX

EOS-dedicated macro ring flash featuring Guide No. 14 (at ISO 100 in meters), twin flash tubes, and E-TTL autoflash. You can fire only one or both flash tubes and control the flash ratio between the two flash tubes. Highspeed sync (FP flash) and FE lock are also possible. Sophisticated macro lighting effects can be obtained and operation is simple. The MR-14EX can also be used as the master unit in a wireless, multi-Speedlite system (with the 550EX or 420EX as slave units).

Reference



• Remote Switch RS-60E3

Wired remote switch for pressing the shutter button. It connects to the camera's remote control terminal and prevents camera shake during close-up shots, bulb exposures, etc.



• Remote Controller RC-1

Wireless remote controller for pressing the shutter button. Convenient for selftimer shots, close-up shots, bulb exposures, etc.



Camera Case EH14-L

Dedicated, semi-hard case which can accommodate the camera attached with the EF 28-105mm f/3.5-4.5 II USM lens.

Major Specifications

	<u>•</u> Туре		
	Type35mm and bu	AF/AE single-lens reflex camera with focal-plane shutter It-in motor drive, flash, and auto date back.	r
	Picture size24 mm		
	Compatible lensesCanon		
	Lens mountCanon	EF mount (electronic control)	
	 Viewfinder 		
	TypeEye-lev		
		rtical and 92% horizontal coverage	
	Eye Relief19.5 m		
		-1 diopter with 50mm lens at infinity)	
	Standard diopter–1 diop		
	Dioptric AdjustmentBuilt-in	Vew Laser-matte focusing screen with focusing points	
	Mirror Ouick-	eturn half mirror (Transmission:reflection ratio of 40:60).	
	(No via	netting with EF 600mm f/4L IS USM or shorter lens.)	
	Viewfinder information(1) On		
		w the screen: Shutter speed, aperture (FEL, DEP, CAL,	
), AE/FE lock, exposure level (AE exposure	
		pensation amount, flash exposure compensation amount	Ċ,
		ual exposure level, AEB range, red-eye reduction lamp	
	UN	ndicator), flash-ready indicator, FE lock underexposure ning, high-speed sync (FP flash), Eye Control icon, flash	
		sure compensation icon, AF/MF in-focus indicator	
	Depth-of-field Preview Depth-		
	 Exposure Control 		
		x. aperture metering with a 35-zone silicon photocell.	
	(1) Eva	uative metering (linked to all focusing points)	
		al metering (approx. 10% of viewfinder area at center)	
		terweighted averaging metering	
	Exposure Control Methods(1) Pro	ram AE (shiftable) ter speed-priority AE	
		ture-priority AE	
		th-of-field AE (non-shiftable)	
		Auto (non-shiftable)	
	(6) Pro	rammed Image Control modes	
		rait, Landscape, Closeup, Sports, Night Scene	
		L program flash AE	
		L program flash AE program flash AE	
		nual exposure	
	(10) Mil (11) Bu		
) (at 20°C with 50mm f/1.4 lens, at ISO 100)	
	Film speed rangeISO 6-6	400 (Set automatically with DX-coded film at ISO 25-	
	5000.)		
		ual exposure compensation: ±2 stops in 1/2-stop	
		ements. : ±2 stops in 1/2-stop increments (Correct exposure,	
		erexposure, and overexposure sequence).	
	AE lock(1) Auto		
	Í In C	ne-Shot AF mode, AE lock applied when focus is	
1	ww.orphancamerasch	eved.	
		10	7

Reference

Camera shake warning	(2) Manual AE lock Enabled in all metering modes with AE lock button. Max. 9 multiple exposures (cancelable and resettable anytime). Cancels automatically after all multiple exposures are taken. In the Basic Zone modes, if the shutter speed set automatically is slower than the reciprocal of the lens focal length, the shutter speed display blinks at 2 Hz.
Autofocus Type Focusing points AF working range Focusing modes	.EV 1-18 (at ISO 100)
	 Autofocus stops and locks when focus is achieved. (2) Al Servo AF Focuses the moving subject continuously up to the start of exposure. When focus is achieved, the in-focus indicator does not light (blinks at 2 Hz only if AF fails) and the beeper does not sound. (3) AI Focus AF Switches automatically between One-Shot AF and Al Servo AF to suit the subject. (4) Manual focusing Enabled with the focusing ring when the lens focus mode is
In-focus indicator	set to MF (or M). .(1) Flashing (disabled with C.Fn-10-1) focusing point superimposed in viewfinder.
Focusing point selection	 (2) In-focus indicator in viewfinder. (3) Beeper sounds (can be disabled). (1) Automatic selection: Camera-selected. (2) Manual selection: One of 7 focusing points user-selected with focusing point selector and focusing point selection keys. (Selection operation modifiable with C.Fn-11-1/2.)
Selected focusing point indicator. AF-assist light	(3) Eye Control: Focusing point eye-selected. .Superimposed in viewfinder and displayed on LCD panel. .Built-in flash fires intermittent burst automatically (disabled with C.Fn-7). Effective range: Approx. 4.5 meters at center, Approx. 4 meters at periphery.
• Eye Control Type Calibration	Eye position detected by IREDs. .Up to five calibration settings can be stored (Intelligent feature provided).
• Shutter Type	.Vertical-travel, focal-plane shutter with all speeds electronically-
Shutter speeds Shutter release Self-timer	controlled. .30 sec. to 1/4000 sec. in 1/2-stops, bulb, X-sync at 1/125 sec. .Soft-touch electromagnetic release. .Electronically-controlled with 10-sec. delay.
• Film Transport Film loading	Automatic advance to frame 1.

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Film advance
(1) Single (2) Continuous (approx. 4 fps max.). Film rewindAutomatic at the end of the roll.
(Silent or high-speed rewind enabled with C.Fn-1.) (Rewind speed switchable with midroll rewind button during rewind.)
Film rewind time a
with 24-ex. film (3)Silent mode: Approx. 13 (18) sec. / Approx. 48 dB High-speed mode: Approx. 5 (8) sec. / Approx. 55 dB
• Built-in Fla
TypeRetractable TTL automatic flash (serially controlled) on pentaprism with auto pop-up and focusing point-linked, 3-zone autoflash metering.
Guide NoGuide No. 13 (at ISO 100 in meters)
Recycling timeApprox. 2 sec.
Flash coverac
Firing precont(1) Automatic pop-up and firing in low-light or backlit conditions in the Full Auto, Portrait, Closeup, and Night Scene.
(2) III Gleative Zone modes
Manual pop-up and firing. Flash exposure ^{ition±} 2 stops in 1/2-stop increments.
 Date and nprinting (QD Model only) TypeQuartz clock with built-in auto calendar and liquid-crystal
display.
Time spanJan. 1, 1994 to Dec. 31, 2019, 0:00 to 23:59
Imprinting fc(1) Month, day, year (2) Day, month, year (3) Year, month, day (4) Day, hour, minute (5) Blank
Power sour(One CR2025 lithium battery
Other Spions
Flash contaX-sync on hot shoe.
Speedlite ctyCompatible with E-TTL/A-TTL/TTL autoflash. Custom Fu13 Custom Functions (C.Fn-1 to C.Fn-13) with 34 settings
Remote commun(1) When remote control with RS-60E3
(2) Wireless remote control with BC-1
Power sou······.Two CR123A (or DL123A) lithium batteries Battery se⊦······(_→page 19)
Battery chOre of four battery levels is displayed when the Command Dial
is released from OFF.
Dimensior
Weight
Non-QD model: 575 g / 20.3 oz (body only, excluding batteries)
the coordinations are been to or

- All perfulperfu

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