

Canon

RF

100-300mm F2.8 L IS USM

Instructions

ENG

Thank you for purchasing a Canon product.

Canon RF100-300mm F2.8 L IS USM is a large aperture telephoto zoom lens for use with EOS R series cameras.

- “IS” stands for Image Stabilizer.
- “USM” stands for Ultrasonic Motor.

Camera Firmware

Please use the latest version of firmware with the camera in use. For details on whether the firmware is the latest version or not, and for details on updating the firmware, please check the Canon website.

Conventions used in these instructions



Warning to prevent lens or camera malfunction or damage.



Supplementary notes on using the lens and taking pictures.

Safety Precautions

Precautions to ensure that the camera is used safely. Read these precautions thoroughly. Make sure all details are observed in order to prevent risks and injury to the user and other people.



Warning

Details pertaining to risks that may result in death or serious injury.

- **Do not look directly at the sun or other strong light sources through a lens.** This may result in loss of sight.
- **Do not point the lens or camera at the sun or photograph it.** This is because the lens concentrates the sun's rays even when the sun is outside the image area or when shooting with backlight, which could cause malfunction or fire.
- **Do not leave a lens in the sun without the lens cap attached.** The lens may concentrate entering sunlight and cause a malfunction or fire.
- **Where the lens is mounted on a camera, make sure to properly support the lens.** If you hold only the camera, the lens may fall off the camera and cause a malfunction or injury.
- **Be sure to attach the included strap to the lens when carrying a camera around with the lens mounted on it.** Using the strap for the camera may allow the lens to fall off the camera and cause a malfunction or injury.



Caution

Details pertaining to risks that may result in injury or damage to other objects.

- **Do not leave the product in places exposed to extremely high or low temperatures.** The product may cause burns or injury when touched.
- **Attach a tripod or monopod that is sufficiently sturdy to the tripod mount on the lens.**

General Precautions

Handling Precautions

- Do not leave the product in excessive heat such as in a car in direct sunlight. High temperatures can cause the product to malfunction.
- If the lens is taken from a cold environment into a warm one, condensation may develop on the lens surface and internal parts. To prevent condensation in this case, first put the lens into an airtight plastic bag before taking it from a cold to warm environment. Then take out the lens after it has warmed gradually. Do the same when taking the lens from a warm environment into a cold one.
- In order to optimize aperture control, there are occasions in which the diaphragm blades will move during zooming and focusing, even when the aperture value is set for aperture priority AE or manual exposure, etc.
- Please also read any lens related handling precautions listed in your camera's instruction manual.

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.

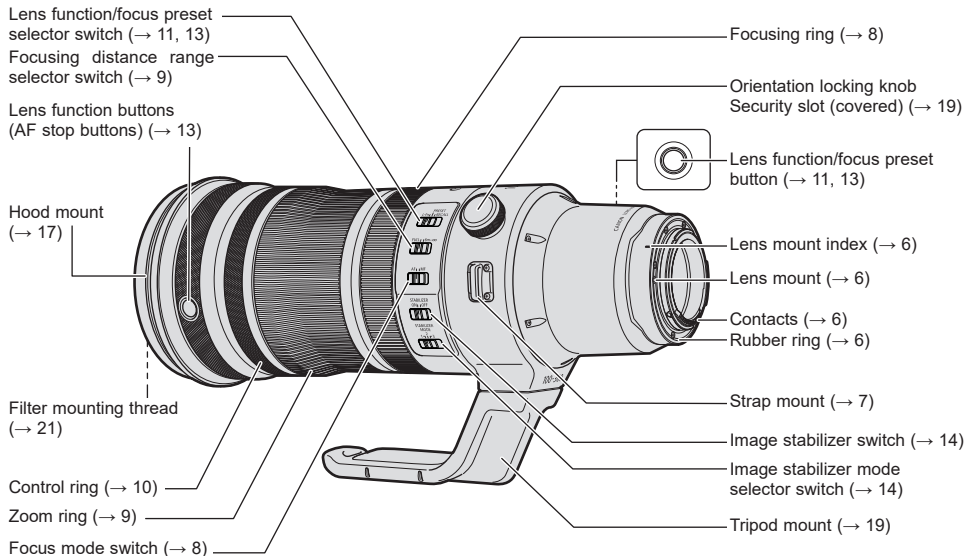
Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

This equipment has been tested and found to comply with the limits for a class B digital device, 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:

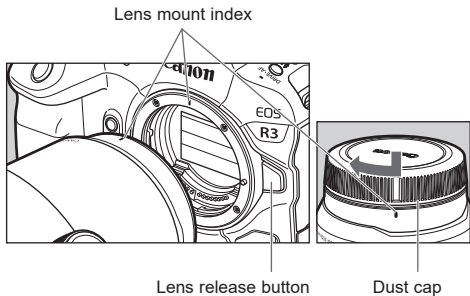
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Nomenclature



● For detailed information, reference page numbers are provided in parentheses (→ **).

1. Attaching and Detaching the Lens



Attaching the Lens

Align the lens mount indexes of the lens and camera, and turn the lens clockwise until you hear a click.

Detaching the Lens

Turn the lens counterclockwise while pressing the camera's lens release button. Detach the lens once it has stopped turning.

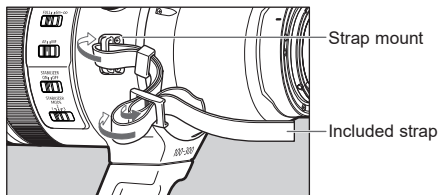
Please refer to the camera's instructions for details.

- Set the camera's power switch to OFF when attaching or detaching the lens.
- After detaching the lens, place the lens with the rear end up and attach the dust cap to prevent the lens surface and contacts from getting scratched. Make sure the lens and dust cap mount indexes are aligned when attaching the dust cap.
- Contacts that are scratched, soiled, or have fingerprints on them may result in faulty connections or corrosion, which may lead to malfunctions. If the contacts get soiled, clean them with a soft cloth.
- The lens mount has a rubber ring to improve dust-resistance and water-resistance performance. This rubber ring may cause friction marks to appear around the camera's lens mount, although this will have no effect on usage.



- Since the lens is heavier than the camera, turn the camera when attaching or detaching the lens. Ensuring that the lens can rest safely on its own is recommended, such as first mounting it on a tripod.
- Rubber rings can be replaced at a Canon Service Center. (chargeable)

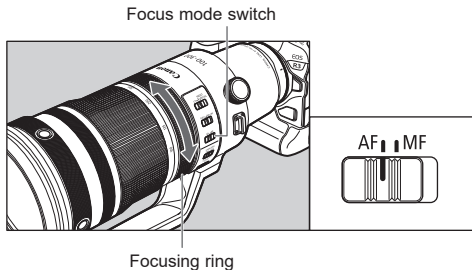
2. Attaching the Strap



Thread the end of the strap through the strap mount on the lens and then back through the clasp on the strap. Pull the strap tight and check that there is no slack in the clasp.

- Before using the lens, check that the strap is attached securely, that it is not worn (damaged), etc.

3. Setting the Focus Mode



To shoot in autofocus (AF) mode, set the focus mode switch to AF.

To use only manual focusing (MF), set the focus mode switch to MF, and focus by turning the focusing ring.



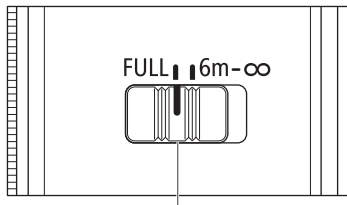
- Quickly turning the focusing ring may result in delayed focus.



- The lens' focusing ring is electronic.
- With a camera capable of electronic full-time manual focus, manual focusing is possible in both One-Shot AF and Servo AF modes. However, this requires a change in camera settings.
- When AF operation is set to One-Shot AF, manual focus is possible after autofocus has been completed by continuing to press the shutter button halfway (electronic manual focus function). However, this requires a change in camera settings.
- When movie recording, the AF speed will be slower than the still photo shooting mode. It is possible to adjust the AF speed on the camera by setting Movie Servo AF to [Enable].

Please refer to the camera's instructions for details.

4. Setting the Focusing Distance Range



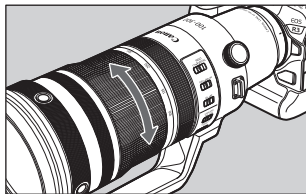
Focusing distance range selector switch

You can set the focusing distance range with a switch. By setting a suitable focusing distance range, the lens is prevented from focusing on a subject at an unintended distance.

Focusing distance range

- ① FULL (1.8m-∞)
- ② 6m-∞

5. Zooming



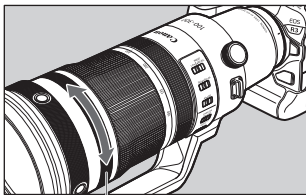
To zoom, turn the lens' zoom ring.



- Be sure to finish zooming before focusing. Zooming after focusing can affect the focus.
- Blurring may temporarily occur if the zoom ring is quickly turned.

6. Control Ring

The control ring can be assigned the functions that are commonly used with cameras, such as shutter speed and aperture settings.



Control ring

The click action of the control ring allows you to have a sense of how much it is being turned. Please refer to the camera's instructions for details on how to use the control ring.

● There are cases in which the sound of control ring operations may be recorded when shooting movies.

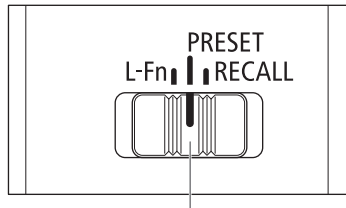
● The clicking sensation of the control ring can be removed by the Canon Service Center. (chargeable)

7. Focus Preset

By presetting any focusing distance, you can instantly focus at that point even while you are shooting a different subject. This function operates both in AF and MF mode.

< Preset the Focusing Distance >

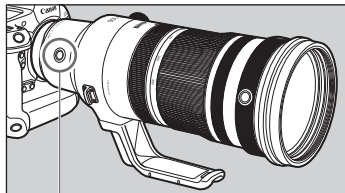
- 1 Set the lens function/focus preset selector switch to PRESET.
- 2 Focus the lens at a focusing distance you want to preset.
- 3 Press the lens function/focus preset button to preset the distance in memory.



Lens function/focus preset selector switch



< Shoot at the Preset Focusing Distance >

- 1 Set the lens function/focus preset selector switch to RECALL.
- 2 Press the lens function/focus preset button to move the focus to the preset distance. Press the shutter button while holding down the lens function/focus preset button to shoot at that distance.



Lens function/focus preset button

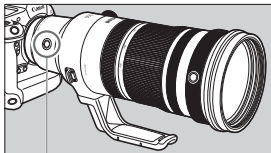
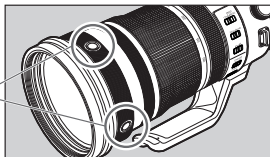
Focus Preset

-  ● Use the focus preset function after zooming. If playback is performed at a different zooming position after presetting the focusing distance, an error from the preset distance will occur.
-  ● All focus presets are initially at the lens' mechanical limit in the infinity direction (not at infinity) when the lens is mounted on a camera.
 - Preset focusing distances remain in memory until the lens is detached from the camera.

8. Lens Function Buttons (AF Stop Buttons)

In the default settings, the lens function button serves as a AF stop button. You can assign different functions to the button from the [Customize buttons] section of the camera. Please refer to the camera's instructions for details.

Lens function buttons
(AF stop buttons)



Lens function/focus preset button

Use as a AF stop button

During autofocus operation, you can press an AF stop button to temporarily pause autofocus, and then release the button to resume. Press an AF stop button to maintain a focusing distance or to avoid focus search. Press the shutter button while holding down an AF stop button to shoot at that focusing distance.

- Useful when autofocus is operating mostly in Servo AF.



- By setting the lens function/focus preset selector switch to L-Fn, the lens function/focus preset button can be used as the lens function button.
- You can assign different functions to the lens function button from the [Customize buttons] section of the camera. In this case, when setting the lens function/focus preset selector switch to L-Fn, the assigned function will also be applied to the lens function/focus preset button.
- Angle positioning of the lens function buttons is adjustable by a Canon Service Center. (chargeable)

9. Image Stabilizer

Image stabilization corrects vibrations that occurs with hand-held shots.

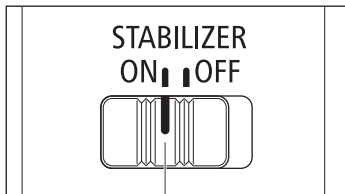


Image stabilizer switch

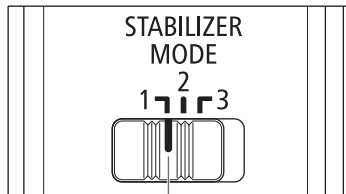


Image stabilizer mode selector switch

- 1 Set the STABILIZER switch to ON.
 - The Image Stabilizer will work in combination with cameras with in-body Image Stabilizer.
 - If you are not going to use image stabilization, set the image stabilizer switch to OFF.
- 2 Select an Image Stabilizer mode according to the application and shooting conditions.

Image Stabilizer modes

- MODE 1: Corrects vibrations in all directions. It is suited to shooting still subjects.
- MODE 2: When you take a panning shot either horizontally or vertically, corrects vibrations at right angles to the direction of panning. It is suited to shooting moving subjects.
- MODE 3: During exposure, corrects vibrations in the same way as MODE 2. Since vibration is corrected only during exposure, It is suited to shooting irregularly moving subjects.

Image Stabilizer

The Image Stabilizer for this lens is suited to hand-held shots in the following conditions.

MODE 1

Shooting still subjects



- In semi-darkened areas such as indoors or outdoors at night.
- In locations where a flash cannot be used, such as art museums and theater stages.
- In situations where your footing is uncertain.
- In situations where fast shutter speed settings cannot be used.

MODE 2

Shooting moving subjects



- Panning shots of vehicles, trains, etc.

MODE 3

Shooting irregularly moving subjects



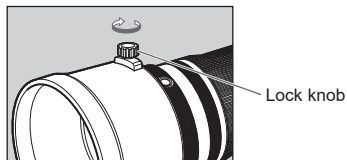
- Sports photography of soccer, basketball, etc.
- Photography of animals

Image Stabilizer

- The Image Stabilizer cannot compensate for a blurred shot caused by a subject that moved.
- The Image Stabilizer might not be fully effective in the following conditions:
 - Large shake or fast vibration
 - Panning in MODE 1
- If using a camera that allows you to change the shutter mode setting, [Elec. 1st-curtain] or [Electronic] settings is recommended* to allow the Image Stabilizer to be fully effective.
* When using an EOS R camera, select either [Mode 1] (default factory setting) or [Mode 2] in the [Silent LV shoot.] settings, or select [Enable] in the [Silent shutter] settings.
- Vibration such as during transport may unlock the Image Stabilizer and cause rattling, but this is not breakage and will have no effect on usage. This will be rectified once the lens has been mounted on the camera.
- When using a tripod, the Image Stabilizer might not be fully effective or it might be better to set the STABILIZER switch to OFF, depending on the type of tripod and where the tripod is located, as well as on the camera's settings such as shutter speed.
- Although image stabilization will operate when using a monopod, depending on the shooting conditions, sometimes the Image Stabilizer might not be fully effective.
- When movie recording, operation of the Image Stabilizer will differ.
 - For cameras with in-body Image Stabilizer, vibrations are corrected in all directions, regardless of the Image Stabilizer mode selected.
 - For cameras without in-body Image Stabilizer, the Image Stabilizer will not work when the Image Stabilizer mode is set to MODE 3.

10. Hood

The custom lens hood cuts out unwanted light that can cause flare and ghosting and protects the front of the lens from rain, snow, and dust.



● Detaching the Hood

Loosen the hood lock knob by turning it counterclockwise and detach the hood. The hood can be reverse-mounted on the lens for storage.

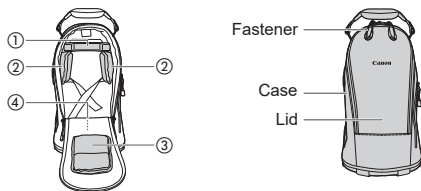
● Attaching the Hood

Loosen the hood lock knob by turning it counterclockwise. Fit the hood onto the lens's hood mount, and tighten the lock knob to fix it in place securely.

- If the hood is not attached properly, vignetting (darkening of the perimeter of the picture) may occur.

11. Case

Use the case to carry the lens.

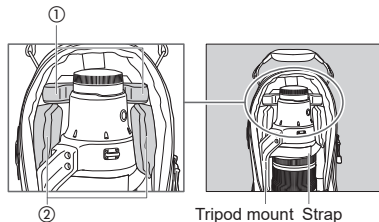


Attach all cushions inside the case as shown.

- ① Cushion (U-shaped) ×1
- ② Cushion (square, small) ×2
- ③ Cushion (square, large) ×1
- ④ Cushion (round)* ×1

* ④ is attached to the bottom of the case.

- Before stowing the lens, be sure to attach all cushions inside the case.
- The lens should always be stowed in the proper way.



Proper Way to Stow the Lens

- 1 Attach the dust cap on the lens.
- 2 Reverse the lens hood, slip it over the lens, and then attach the lens cap.
- 3 Place the lens in the case, with the tripod mount closest to you and facing the left as shown.
- 4 Fasten the lens securely with the strap.
- 5 Pull the fastener and close the lid.

12. Tripod Mount

A tripod or monopod attaches to the tripod mount on the lens.

Switching the Orientation of the Image

By loosening the orientation locking knob on the tripod mount you can rotate the camera and the lens to switch the image in any orientation (vertical, horizontal, etc.).

The mount clicks at 4 positions, every 90°.

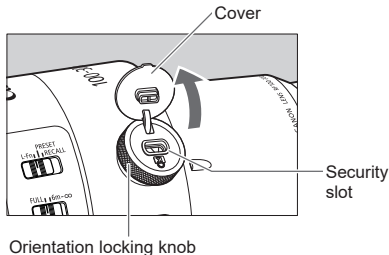
- Since the tripod mount requires special fastening, as a safety precaution, do not replace the mount yourself.

- Replacement with a monopod mount (sold separately) can be done at a Canon Service Center. (chargeable)

13. Security Slot

This lens is fitted with a security slot to prevent theft.

The security slot is located under the cover for the orientation locking knob. Attach a commercially-available wire-type security lock here.



14. Extenders (Sold separately)

Use an extender RF1.4× or RF2× to shoot a larger image of a subject. Lens specifications when using an extender are as follows.

RF1.4x		WIDE	TELE
Focal length (mm)		140	420
Aperture		f/4-f/32	f/4-f/32
Angle of view	Horizontal	14°40'	4°55'
	Vertical	9°50'	3°15'
	Diagonal	17°35'	5°55'
Maximum magnification (x)		0.08	0.22

RF2x		WIDE	TELE
Focal length (mm)		200	600
Aperture		f/5.6-f/45	f/5.6-f/45
Angle of view	Horizontal	10°	3°30'
	Vertical	7°	2°20'
	Diagonal	12°	4°10'
Maximum magnification (x)		0.12	0.31



- Attach the extender to the lens, and then attach the lens to the camera. To detach it, reverse the order.
- Extenders cannot be used more than one at a time.



- When an extender is attached, the AF speed will become slower to retain proper control.

15. Filters (Sold separately)

You can attach filters ($\varnothing 112$) to the filter mounting thread on the front of the lens.



- Only one filter may be attached.
- Detach the hood when adjusting the polarizing filter.

Specifications

Focal Length/Aperture	100-300mm f/2.8
Lens Construction	18 groups, 23 elements
Maximum Aperture	f/2.8
Minimum Aperture	f/22
Angle of View	Horizontal: 20° - 6°50', Vertical: 14° - 4°35', Diagonal: 24° - 8°15'
Min. Focusing Distance	1.8 m
Max. Magnification	0.16x (at 300 mm)
Field of View	Approx. 566 x 376 mm/22.28 x 14.80 in. (at 100 mm, 1.8 m/5.91 ft.) Approx. 222 x 149 mm/8.74 x 5.87 in. (at 300 mm, 1.8 m/5.91 ft.)
Filter Diameter	112 mm
Max. Diameter and Length	Approx. 128 x 323.4 mm/5.04 x 12.73 in.
Weight	Approx. 2590 g/91.4 oz.
Hood	ET-124
Lens Cap	E-112
Case	LS100-300

Specifications

- The lens length is measured from the lens mount surface to the front end of the lens.
Add 23.4 mm/0.92 in. when including the lens cap and dust cap.
- The maximum diameter, length and weight listed are for the lens itself only.
- Close-up Lens 250D/500D cannot be attached because there is no size that fits the lens.
- All data listed is measured according to Canon standards.
- Product specifications and appearance are subject to change without notice.

Canon