

Canon EF LENS

EF16-35mm F2.8L USM

Instruction



ULTRASONIC

使用本镜头前，请详细阅读本说明书。
请将说明书妥善保存，以备将来参考。

Thank you for purchasing a Canon USM lens.

The Canon EF 16-35mm f/2.8L USM lens is a high-performance, ultra-wide-angle zoom lens for use with Canon EOS cameras.

"USM" stands for Ultrasonic Motor.

Features

1. Aspherical and UD lens elements result in sharp pictures and outstanding image delineation.
2. Ultrasonic Motor (USM) for silent and high-speed AF operation.
3. Manual focusing enabled even in the AF mode.
4. Circular diaphragm for better background blur.
5. Sealed construction for higher dust- and water-resistance compared to previous lenses. (For maximum protection, a filter must also be attached to the front of the lens.)

Handling Cautions

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.

Although the lens is dust- and water-resistant, a filter must also be attached to the front of the lens for complete protection. (The front of the lens moves during zooming.)

Conventions used in this instruction



Warning to prevent lens or camera malfunction or damage.



Supplementary notes on using the lens and taking pictures.

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.

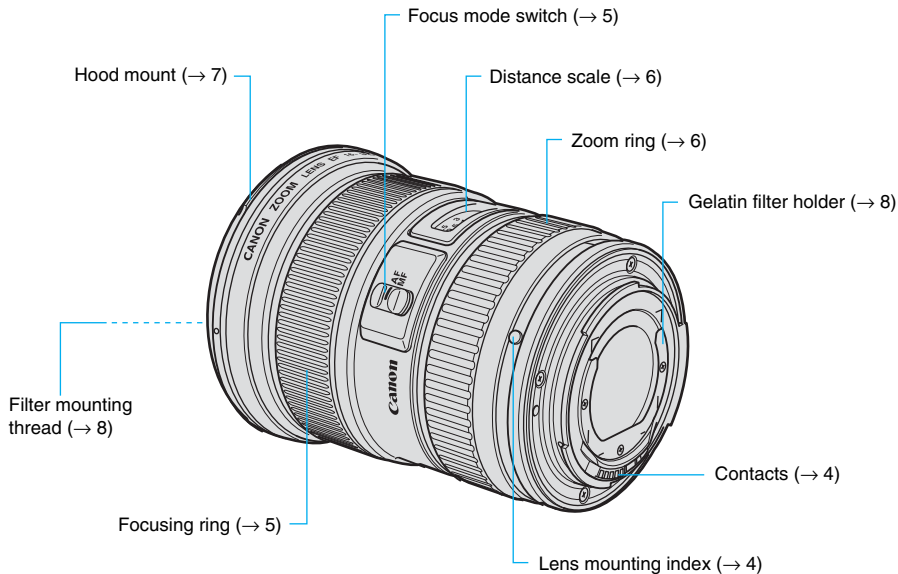
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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.
 - Consult the dealer or an experienced radio/TV technician for help.
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This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Industry Canada.

Nomenclature



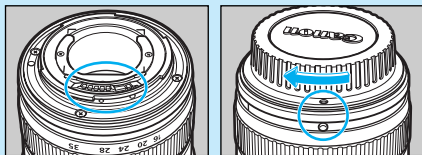
- Numbers in parentheses indicate reference page numbers.

1. Mounting and Detaching the Lens

See your camera's instructions for instructions on mounting and detaching the lens.

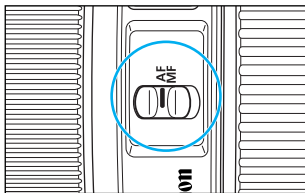


The lens mount has a rubber ring for enhanced water- and dust-resistance. The rubber ring may cause slight abrasions around the camera's lens mount, but this will not cause any problems. If the rubber ring becomes worn, it is replaceable by a Canon Service Center at cost.



- After detaching the lens, attach the dust cap to the rear of the lens to prevent the contacts and lens from getting scratched.
- If the contacts are dirty, scratched, or soiled with fingerprints, etc., corrosion or a faulty connection or operation may result.
- Always attach the dust cap to the lens when the lens is not mounted on the camera. To attach the dust cap, align the mark on the dust cap with the mark on the lens and turn the dust cap clockwise. To remove the dust cap, turn it counter-clockwise.

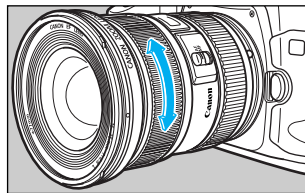
2. Setting the Focus Mode



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

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

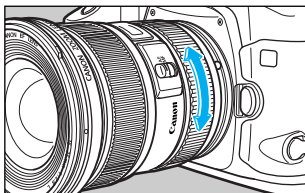
3. Focusing Ring



The focusing ring always works, regardless of the focus mode.

- After autofocusing in ONE SHOT AF mode, focus manually by pressing the shutter button halfway and turning the focusing ring.

4. Zooming

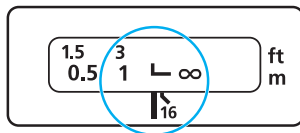


To zoom, turn the zoom ring.



- Be sure to finish zooming before focusing. Changing the zoom ring after focusing can affect the focus.
- For flash pictures, use an external, EOS-dedicated Speedlite instead of the camera's built-in flash. The long lens may partially obstruct the light of the built-in flash.

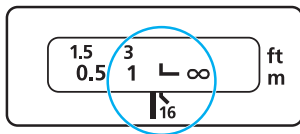
5. Infinity Compensation Mark



To compensate for shifting of the infinity focus point that results from changes in temperature, you can rotate the distance scale slightly past the normal infinity focus mark.

- The infinity position at normal temperature is the point at which the vertical line of the **L** mark is aligned with the distance indicator on the distance scale.
- For accurate manual focusing on subjects at infinity distance, look through the viewfinder while rotating the focusing ring.

6. Infrared Index



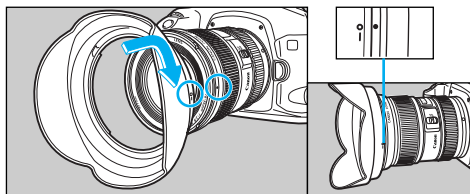
The infrared index corrects the focus setting when using monochrome infrared film. Focus on the subject manually, then adjust the distance setting by moving the focusing ring to the corresponding infrared index mark.

- The compensation amount differs depending on the focal length. Use the indicated focal length as a guide when setting the compensation amount.

 Some EOS cameras cannot use infrared film. See the instructions for your EOS camera.

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- The infrared index position is based on a wavelength of 800 nm.
 - Be sure to observe the manufacturer's instructions when using infrared film.
 - Use a red filter also when you take the picture.

7. Hood



The EW-83E hood can keep unwanted light out of the lens, and also protects the front of the lens from rain, snow, and dust.

To attach the hood, align the hood's attachment position mark with the red dot on the front of the lens, then turn the hood clockwise until the lens's red dot is aligned with the hood's stop position mark.

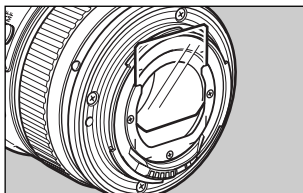
The hood can be reverse-mounted on the lens for storage.

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- Part of the picture may be blocked if the hood is not attached properly.
 - To attach (remove) the hood, grasp the base of the hood and turn it clockwise (counterclockwise). Do not hold the hood by the outer rim as this could result in the hood being distorted if too much pressure is applied.

8. Filters (Optional)

You can attach filters to the filter mounting thread on the front of the lens.

9. Gelatin Filter



There is a gelatin filter holder at the rear of the lens. Cut the gelatin filter to fit within the white frames. Then insert the gelatin filter into the filter holder.



- Only one filter may be attached.
- If you need a polarizing filter, use Canon's PL-C II 77mm polarizing filter.
- When the PL-C II 77mm polarizing filter is attached, the lens cap cannot be attached.



When you use a gelatin filter, ghosting or flare spots may appear in the image.

10. Extension Tubes (Optional)

With Extension Tube EF 12 II or EF 25 II, the camera-to-subject distance and image magnification will be as follows:

		Camera-to-Subject Distance (mm)		Magnification	
		Near	Far	Near	Far
EF12 II	16mm	161	202	0.87×	0.61×
	35mm	164	245	0.75×	0.36×
EF25 II	16mm	Incompatible		Incompatible	
	35mm	195	209	1.09×	0.80×

11. Specifications

Image Size	24 × 36 mm
Focal Length/Aperture	16 – 35 mm f/2.8
Lens Construction	10 groups, 14 elements
Minimum Aperture	f/22
Angle of View	Diagonal: 108° 10' – 63° Vertical: 74° 10' – 38° Horizontal: 98° – 54°
Min. Focusing Distance	0.28 m/0.9 ft.
Max. Magnification and Field of View	0.22× (at 35 mm), approx. 236 × 375 mm – 108 × 163 mm/9.2 × 14.7 inch – 4.2 × 6.4 inch (at 0.28 m)
Filter Diameter	φ 77 mm
Hood	EW-83E
Max. Diameter and Length	φ 83.5 × 103 mm/ φ 3.3 × 4.0 inch
Weight	600 g/21 oz

- The lens length is measured from the mount surface to the front end of the lens. Add 21.5 mm when including the lens cap and dust cap.
- The size and weight listed are for the lens only, except as indicated.
- Aperture settings are specified on the camera.
- All data listed is measured according to Canon standards.
- Product specifications and appearance are subject to change without notice.

