

# Canon

**ULTRASONIC**

## EF Zoom Lenses

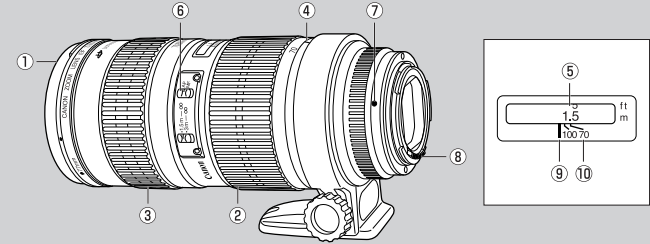
EF17-35mm f/2.8L USM  
EF28-70mm f/2.8L USM

EF70-200mm f/2.8L USM

## Instructions

### Nomenclature

- 1 Hood mount
- 2 Zoom ring
- 3 Focusing ring
- 4 Zoom position index
- 5 Distance scale
- 6 Focus mode switch
- 7 Lens mount index
- 8 Contacts
- 9 Distance index
- 10 Infrared index



Thank you for purchasing a Canon product.

#### ⚠ Safety Precautions

1. Do not look at the sun or a bright light source through the lens or camera. Doing so could result in loss of vision. Looking at the sun directly through the lens is especially hazardous.
2. Whether it is attached to the camera or not, do not leave the lens under the sun without the lens cap attached. This is to prevent the lens from concentrating the sun's rays, which could cause a fire.

#### ⚠ 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.

### 1. Mounting and Detaching the Lens

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

- After detaching the lens, place the lens with the rear end up to prevent the lens surface and contacts from getting scratched.
- If the contacts get soiled, scratched, or have fingerprints on them, corrosion or faulty connections can result. The camera and lens may not operate properly.
- If the contacts get soiled or have fingerprints on them, clean them with a soft cloth.
- If you remove the lens, cover it with the dust cap. To attach it properly, align the lens mount index and the O index of the dust cap, and turn clockwise. To remove it, reverse the order.

### 2. Setting the Focus Mode

To shoot in autofocus (AF) mode, set the focus mode switch to AF **4**. To shoot in manual focus (MF) mode, set the focus mode switch to MF, and focus by turning the focusing ring. The focusing ring always works, regardless of the focus mode.

- After autofocus in ONE SHOT AF mode, focus manually by pressing the shutter button halfway and turning the focusing ring. (Full-time manual focus)

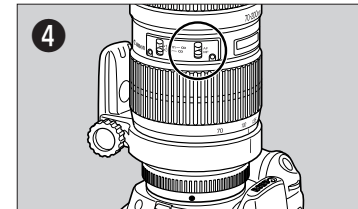
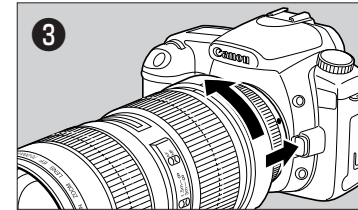
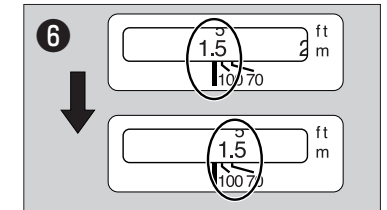
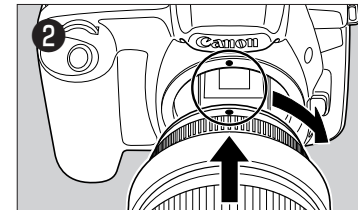
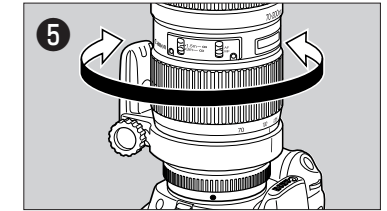
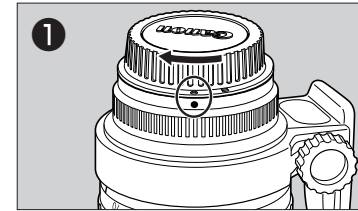
### 3. Zooming

To zoom, turn the lens' zoom ring **5**.  
• Be sure to finish zooming before focusing. Changing the zoom ring after focusing can affect the focus.

### 4. Infrared Index

The infrared index corrects the focus setting when using monochrome infrared film.  
Focus on the subject in MF, then adjust the distance setting by moving the focusing ring to the corresponding infrared index mark **6**.

- 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.



## 5. Infinity Compensation Mark

To compensate for shifting of the infinity focus point that results from changes in temperature.

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 focusing in MF on subjects at infinity distance, look through the viewfinder while rotating the focusing ring 7.

## 6. Hood

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 in the direction of the arrow until the lens's red dot is aligned with the hood's stop position mark 8.

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

- Part of the picture may be blocked if the hood is not attached properly.

## 7. Filters (Sold Separately)

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

- Use a polarizing Canon filter (77mm).

## 8. Switching the Focusing Distance Range (EF70-200mm f/2.8L USM Only)

You can set the focusing distance range to 1.5 m/4.9 ft. to infinity or 3m/9.8 ft. to infinity 9.

- If you use AF from outside the specified focusing distance range, the lens may stop focusing when it reaches the limit of the range. This is not a malfunction. If this occurs, press the shutter button halfway down again.

## 9. Extenders (Sold Separately: EF70-200mm f/2.8L USM Only)

AF is possible with Extender EF1.4x II/EF2x II.

- The aperture F values and focal lengths when an extender is used are as follows:

EF1.4x II: f/4, 98-280mm, EF2x II: f/5.6, 140-400mm

Attach the extender to the lens, and then attach the lens to the camera. To remove it, reverse the order. Errors may occur if you attach the extender to the camera first.

When you are using an extender, use the center focusing point for AF. If you use AF with a different focusing point, a focusing error may occur.

## 10. Using the Tripod Mount (EF70-200mm f/2.8L USM Only)

By loosening the orientation locking knob on the tripod mount you can rotate the camera to set the image for any vertical or horizontal position.

### Detaching the Tripod Mount

First remove the lens from the camera and then remove the tripod mount from the lens as shown below. To attach the tripod mount, reverse the procedure.

- Loosen the orientation locking knob 10.
- Align the red mark on the tripod mount with the lens mount index 11.
- Slide off the tripod collar away from the rear of the lens 12.

- The lens length is measured from the mount surface to the front end of the lens. Add 21.5 mm to include the E-77U lens cap and dust cap, and 24.2 mm for the E-77 II.

- The size and weight listed are for the lens only, except as indicated.

- Aperture settings are specified on the camera. The camera automatically compensates for variations in the aperture setting when the camera is zoomed in or out.

- All data listed is measured according to Canon standards.

- Product specifications and appearance are subject to change without notice.

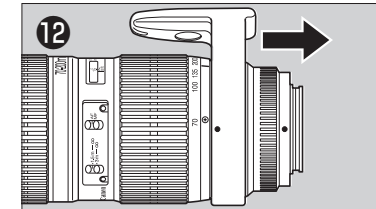
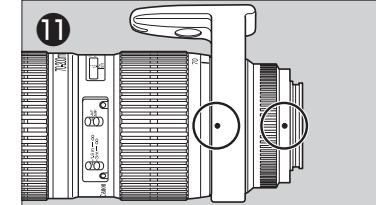
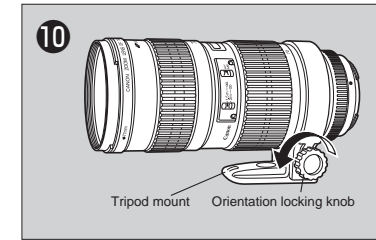
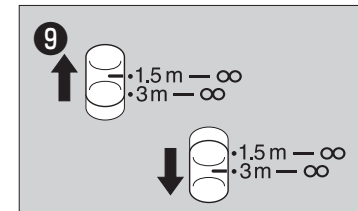
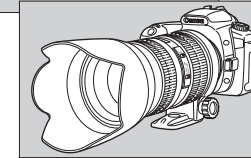
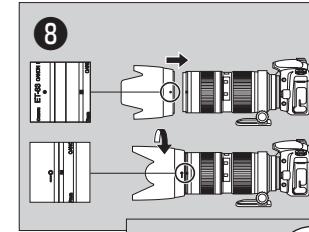
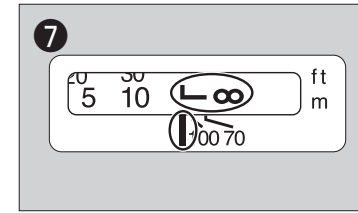
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Do not make any changes or 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.

This Class B digital apparatus complies with Canadian ICES-003.



## Specifications

	Angle of view			Lens construction	Minimum aperture	Max. magnification and field of view	Min. focusing distance	Filter diameter <Usable number>	Max. diameter and length	Weight	Hood	Case	
	Diagonal	Vertical	Horizontal										
EF17-35mm f/2.8L USM	104°-63°	70°30'-38°	93°-54°	10-15	22	0.06 -0.11x 432 x 671 mm (17" x 26.4"-8.4" x 12.6")	-214 x 320 mm	0.42 m	77 mm <1>	83.5 x 95.7 mm (3.3" x 3.8")	545 g (19.1 oz)	EW-83 CII	LP1216
EF28-70mm f/2.8L USM	75°-34°	46°-19°30'	65°-29°	11-16	22	0.08 -0.18x 298 x 452 mm (11.7" x 17.8"-5.2" x 7.8")	-133 x 198 mm	0.5 m	77 mm <1>	83.2 x 117.6 mm (3.3" x 4.6")	880 g (30.8 oz)	EW-83 BII	LP1219
EF70-200mm f/2.8L USM	34°-12°	19°30'-7°	29°-10°	15-18	32	0.06 -0.16x 409 x 617 mm (16.1" x 24.3"-6" x 8.9")	-152 x 226 mm	1.5 m	77 mm <1>	84.6 x 193.6 mm (3.3" x 7.6")	1,310 g (45.9 oz)	ET-83II	LZ1324