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ズームレンズFD35-70mm

F4 AF

使用説明書

Zoom Lens FD  
35-70mm f/4 AF Lens

Instructions

Objectif Zoom FD  
35-70mm f/4 AF

Notice d'emploi

FD Objektiv  
1:4/35-70 mm AF

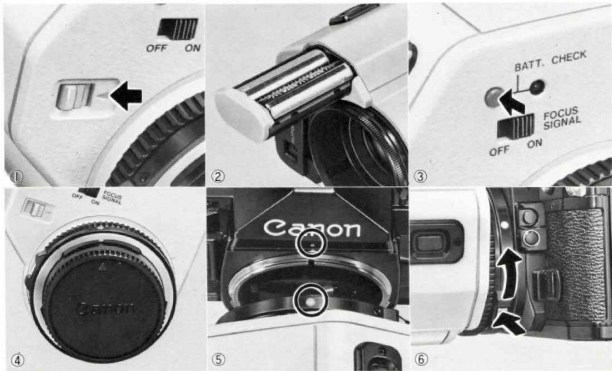
Bedienungsanleitung

Objetivo Zoom FD f/4  
de 35-70mm AF

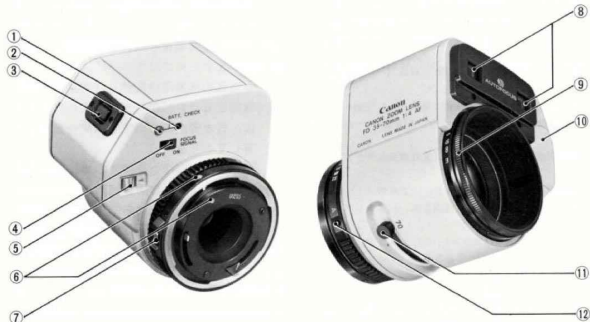
Instrucciones

# Canon





## Zoom Lens FD 35—70mm f/4 AF Instructions



- ① Battery Check LED
- ② Battery Check Button
- ③ Autofocus Button
- ④ Autofocus Signal Switch
- ⑤ Battery Magazine Release Latch
- ⑥ Mount Positioning Point
- ⑦ Lens Release Button
- ⑧ Autofocus Window
- ⑨ Focusing Ring
- ⑩ Battery Magazine
- ⑪ Zooming Lever
- ⑫ AE Lock Pin

The Canon Zoom Lens FD 35—70mm f/4 AF features an automatic focusing system built into the popular FD 35—70mm f/4 zoom lens, making it one of the simplest lenses to use of the FD series.

Canon's Solid-State Triangulation (S.S.T.) system was chosen as the autofocus module, based on its high performance in Canon's AF514XL-S autofocus movie camera. This system offers fast and precise focusing response, along with optimum reliability.

Combining the speed and ease of autofocus-ing with a versatile focal length range, the FD 35—70mm f/4 AF is the ideal lens for candid and documentary photography.

## Loading the Batteries

Two size-AA 1.5 V batteries are necessary to power the lens. To ensure proper contact, wipe the battery contacts with a clean, dry cloth before loading.

1. Push the battery magazine release latch in the direction of the arrow ①. The battery magazine will slide out about 1 mm for easy removal; simply pull it straight out. Make sure the lens is not facing downward when you push the release latch. Otherwise, the battery magazine may drop out of the lens.
2. Insert the batteries, following the diagram on the inside of the magazine. Be sure to load them correctly. If incorrectly loaded, they may leak, damaging the lens.
3. Push the magazine back into the magazine compartment ②.

## Notes

1. Battery performance drops quickly at low temperatures. When using the lens in cold conditions, keep a spare set of batteries in a warm place, such as your pocket, and alternate the sets occasionally. Alkaline-manganese batteries are recommended for use at extremely low temperatures.
2. Remove the batteries from the lens if you do not expect to use it for about three weeks or longer.
3. When changing the batteries, replace the set with two new ones of the same type and brand.

## Checking the Batteries

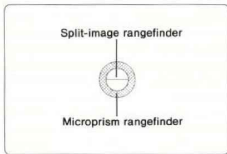
To check the batteries, press the battery check button ③. Battery voltage is sufficient if the green LED lights up. The intensity of illumination will gradually decrease as battery power drops. When the lamp no longer lights up, replace the batteries. Note that autofocus operation slows as the batteries run down.

## Rear Dust Cap

To remove the rear dust cap, turn it counterclockwise until it stops and pull it off. To replace the cap, align its arrow with the red dot on the back of the lens ④ and turn the cap fully clockwise.

## Mounting and Dismounting the Lens

1. To mount the lens on the camera, align the red mount positioning point on the lens with the red dot above the camera's mount ⑤. Then turn the lens clockwise until it stops and the lens release button pops out with a click. This ensures that the lens is mounted properly.
  2. To dismount the lens, press the lens release button while rotating the lens counterclockwise ⑥.
  3. Remove the lens cap by pulling it straight off.
- Note: Do not mount the lens if the red dot inside the camera mount is visible. In this case, release the stop-down lever before mounting the lens.



### Autofocus Frame

The focusing aids in the center of the viewfinder serve as the autofocus frame. When the lens is zoomed to 35mm for wide-angle shots, compose the picture so that your subject covers the split-image rangefinder. At the telephoto end (70mm), make sure the subject covers the microprism collar.

### Focusing the Subject

To focus, center the subject in the viewfinder and press the autofocus button. The lens will begin to focus automatically and, with the autofocus signal switch turned on, you will hear a "beep" which indicates the subject is

in focus. It may take about one second before the lens finishes focusing. If you do not wish to use the autofocus signal feature, simply turn off the switch. Once the subject is focused, the lens will automatically lock and you may remove your finger from the autofocus button. If you or your subject change location or if you wish to focus another subject, simply center the subject so that it covers the focusing aid and press the autofocus button.

### Notes

1. There are certain types of subjects which cannot be focused perfectly by the autofocus system and no focus signal will be emitted in such cases (see p. 18).
2. The autofocus button is recessed slightly to prevent it from being accidentally pressed since this could result in battery drain. Make sure that nothing presses on the button when the lens is not in use.
3. Always keep the autofocus windows clean. If they get dirty, wipe them with a clean, dry, soft cloth. Also, avoid blocking

the windows with your finger or any other object while focusing automatically.

### Focusing Range

The focusing range of the lens is 0.5m to infinity ( $\infty$ ). The autofocus range, however, extends from 1m to infinity. Close focusing distances from 0.5m to approximately 1m, which are indicated by a white line on the focusing ring, must be focused manually. To do this, simply turn the focusing ring in the usual manner until the subject in the viewfinder is sharp. Manual focusing throughout the entire distance range is also possible.

### Illumination

The autofocus system will operate properly at illumination levels between EV 4 (f/4, 1 sec.) and EV 18 (f/22, 1/500 sec.) with ASA 100 film. The lens will not focus the subject correctly outside of this range, and no autofocus signal will be emitted.

The autofocus system may not function properly with low-contrast subjects illuminated by white (daylight-type) fluorescent light. In this case, focus the subject manually.

### Zooming

You can vary the focal length of the lens from 35mm to 70mm by rotating the zooming lever which is located on the underside of the lens. With the zooming lever at the wide-angle end, the subject is smaller and you can fit more of the scene within the picture. At the telephoto end, the subject is larger and therefore fills more of the frame.

### Aperture Ring

The aperture ring is used to adjust the size of the lens opening or aperture. The small num-

bers represent large apertures which allow more light to reach the film. The larger the number, the less the light that strikes the film. Use of the "A" mark is restricted to the Canon cameras featuring shutter-priority AE. For further details, please refer to the instruction book of the camera.

### More About Autofocusing

The autofocus system produces very accurate results for the vast majority of subjects. There are certain subjects, however, which the lens may not focus exactly and, in rare cases, it may be impossible to focus the subject automatically. In such cases, focus the subject manually.

Occasionally the split-image or microprism rangefinder may indicate that the subject is not focused perfectly. In most cases, however, depth of focus will compensate for any minor focusing discrepancies.

The following subjects may not be focused exactly by the autofocus system:

1. Subjects with strong reflections
2. Subjects with very small, uniform patterns
3. Subjects with little or no contrast
4. Subjects with strong backlighting
5. Scenes in which two subjects cover the focusing aid in the viewfinder yet are at different distances from the lens
6. Subjects with a single pattern
7. Low-contrast subjects illuminated by daylight-type fluorescent light

### Specifications

**Type:** Zoom lens with automatic focusing

**Format:** 24 × 36mm

**Focal Length:** 35—70mm

**Aperture Ratio:** 1:4

**Construction:** 8 elements in 8 groups

**Coating:** Super Spectra Coating (S.S.C.)

**Diaphragm:** Fully automatic

**Aperture Scale:** 4—22 and "A" mark with AE lock pin.

**Angle of View:**

Horizontal:	54°—29°
Vertical:	38°—19°30'
Diagonal:	63°—34°

**Autofocus System:** Canon Solid-State Triangulation (S.S.T.)

**Automatic Focusing:** By pressing autofocus button.

**Autofocus Signal:** Electronic "beep" which indicates subject is focused. Signal switch may be turned off.

**Manual Focusing:** By rotating focusing ring.

**Distance Scale:** 1m — ∞ (infinity); white line between 0.5m and 1m indicates range which must be focused manually.

**Automatic Focusing Range:** 1m — ∞

**Manual Focusing Range:** 0.5m — ∞

**Illumination Range:** Autofocus system operates from EV 4 to EV 18 (low illumination measurements by tungsten light source).

**Zooming:** By rotating zooming lever.

**Power Source:** Two size-AA 1.5V alkaline-manganese or carbon-zinc batteries.

**Battery Check:** By pressing check button. LED lights up if power is sufficient. LED illumination decreases with power level.

**Mount:** FD mount with lock and lens release button. Five signal pins.

**Filter Thread:** 52mm

**Hood:** Cannot be used (will block autofocus windows).

**Dimensions:** 95.5(H) × 85(W) × 84.5(D)mm  
[3-3/4(H) × 3-3/8(W) × 3-5/16(D) in.]

**Weight:** 640 g [22-9/16 ozs.] including batteries.

Subject to change without notice.