

HD PENTAX-D FA* 70-200mmF2.8ED DC AW OPERATING MANUAL

Thank you for purchasing the HD PENTAX-D FA*70-200mm F2.8ED DC AW lens. This lens is an interchangeable lens for PENTAX SLR cameras. Its image circle covers the 35 mm film format, and it also obtains optimum image clarity with PENTAX digital SLR cameras.

Please read this operating manual carefully before using the lens to ensure that it is used properly. In addition, also refer to your camera operating manual.

To use this lens, please keep the firmware of the camera up to date.

• Illustrations shown herein may differ from the actual appearance.

Specifications and external dimensions are subject to change without notice.

Refer to your camera operating manual for details about mounting and removing the lens.



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DFA70200EN

FOR SAFE USE OF YOUR LENS

Although we have carefully designed this lens for safe operation, please pay special attention to items marked with the following symbols when using the lens.

- Warning** This symbol indicates precautions that if not followed, could result in serious injury to the user.
- Caution** This symbol indicates precautions that if not followed, could result in minor or medium injury to the user or damage to the equipment.

Warning
Never look at the sun through the lens mounted on the camera for a long time. Serious damage to your eyes or total loss of eyesight may occur, particularly when looking directly through the lens.

Caution
Do not leave the lens in direct sunlight without a lens cover or lens cap. Direct sunlight passing through the lens will be intensified, and should it focus on flammable materials, fire may occur.

Precautions When Using the Lens

Storage and mildew prevention

- Take the lens out of the protective case or camera bag, and store it in a dry, well-ventilated place.
- Avoid storing the lens in a poorly ventilated place such as a closet, wardrobe, drawer, vehicle, or where insect repellent or medicine is kept.
- Avoid storing the lens in areas of high temperature and humidity, where there is a risk of mildew growth. Store the lens with a desiccant (anti-mildew agent) in a dry cabinet, airtight container, or plastic bag.

Precautions and lens maintenance

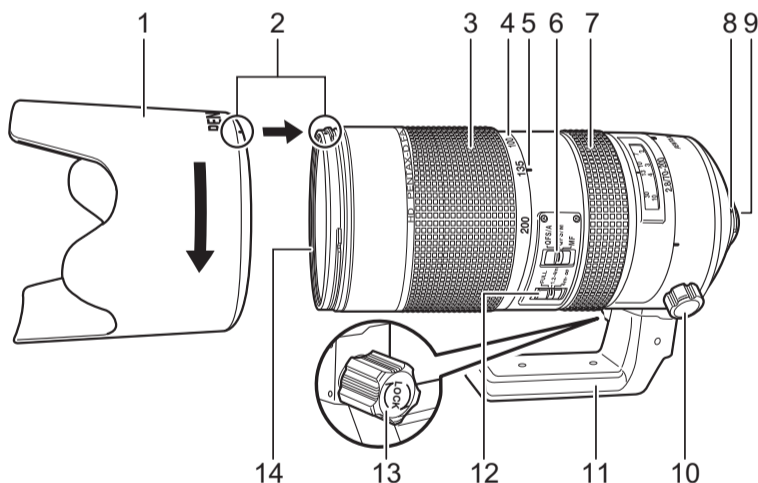
- Never use any organic solvent such as thinner, alcohol, or benzene, etc. to remove dust on the lens.
- The lens is a precise optical instrument. Be careful not to let it fall, or subject it to strong shocks or pressure. Use a cushion or similar pad to protect the lens from the vibrations of motorcycles, automobiles, boats, etc.
- Avoid subjecting the lens to rapid changes in temperature, otherwise condensation can occur both inside and outside of the lens. Put the lens in a plastic bag or camera bag, and take it out after the lens has reached ambient temperature.
- When the lens is not attached to the camera body, attach both the supplied lens cap and lens mount cap to protect it from dust.
- Do not leave the camera with the lens cap off attached to a tripod or other rigid camera support. The inner parts of the camera can be damaged by direct sunlight.

* Have the lens inspected by a dealer every one or two years to maintain its high performance.

Features of This Lens

- The "★(star)" lens aims for the highest performance of our interchangeable lenses. This lens has brightness of an F2.8 aperture in the entire zoom range, and provides high imaging performance from the center to peripheral areas.
- This lens prevents flare and realizes to achieve image quality with excellent contrast. This is done by using our proprietary "Aero Bright Coating" which was created using nano-technology together with our proprietary "HD Coating (High Definition Coating)" which increases transparency and reduces reflection more than conventional multi-coatings.
- Equipped with "Quick-shift Focus System" (can be switched with the focus mode switch), you can focus manually even while autofocus is operating, not just after autofocusing.
- Circular aperture (up to F5.6) keeps light sources and other fuzzy points perfectly round.
- This lens has a dust-proof and water-resistant construction with each part individually sealed.
- SP (Super Protect) coating applied to the front surface of the lens to effectively repel water and grease and easily wipe off dust and stain.

Names of Parts



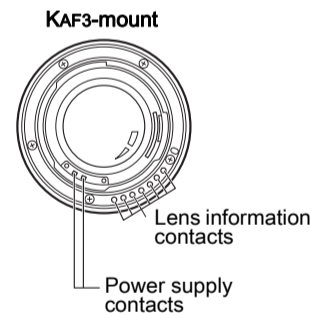
- | | |
|-----------------------------|----------------------------------|
| 1 Lens hood | 8 Mounting index |
| 2 Lens hood attaching index | 9 Lens mount |
| 3 Zoom ring | 10 Camera orientation lock screw |
| 4 Focal length scale | 11 Tripod mount |
| 5 Zooming index | 12 Focus range limiter |
| 6 Focus mode switch | 13 Mounting screw |
| 7 Focusing ring | 14 Front-ring thread |

About the Lens Mount

This "KAF3-mount" enables autoexposure, and autofocus operated by a DC motor in the lens. When using the camera that does not support an internal motor, autofocus is not available.

CAUTION

Be careful not to damage or dirty the lens information contacts and the power supply contacts on the mount surface of the lens. Otherwise, failure or malfunction may result.



* This lens does not have an aperture ring. Aperture settings are controlled automatically as if set to the auto "A" position, so accessories without an auto "A" setting cannot be used with this lens.

About the Lens Hood

Using a lens hood is recommended to block stray light from entering the lens. The internal reflection of stray light degrades image quality.

<How to attach>

Align the index on the lens hood with the attaching index on the lens, and push both parts straight toward each other. Attach the lens hood on the lens by turning the hood in the clockwise direction, as viewed from the front of the lens, to lock it until it clicks into position.

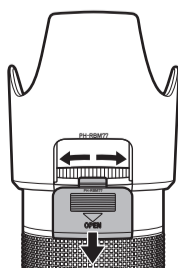
* When the lens hood is not in use, it can also be turned around and attached in the reversed position.

The included lens hood has a PL filter window which facilitates the manipulation of the circular polarizing filter when the lens hood is attached.

<How to use>

1. Remove the PL filter window cap by sliding it in the direction as shown in the illustration.
2. Turn the outer rim of the circular polarizing filter from the PL filter window as shown in the illustration.
3. Attach the PL filter window cap.

* When shooting, be sure the PL filter window cap is in place to achieve maximum effect of the lens hood.



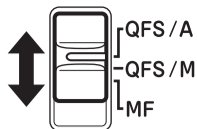
About Lens Filters (commercially available)

Screw a commercially available 77 mm diameter filter to the front of the lens.

CAUTION

- Since a filter becomes a part of the optical system when attached to the lens, handle it with due care to protect it from dust, dirt and scratches.
- Use a circular polarizing filter if you attach a filter to a PENTAX digital SLR camera. If you use a normal polarizing filter, exposure and autofocus are less-accurate.

Focusing



Focus Mode Switching

Use the focus mode switch to switch between autofocus and manual focus.
Place the switch at QFS/A or QFS/M to use autofocus.
Place the switch at MF to use manual focus.

* Set the camera's focus mode to autofocus (AF).

Using the Quick-shift Focus System

On cameras that support this function, you can adjust the focus position by holding down the shutter release button halfway (or holding down the AF button) in autofocus mode and then turning the focusing ring.

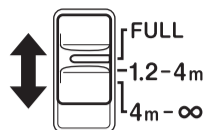
QFS/A : After focusing with the autofocus, you can adjust the focus manually.

QFS/M : You can adjust the focus manually while the autofocus is operating.

CAUTION

Keep pressing the shutter release button (or AF button) after you achieve proper focus and before taking a picture. If you let go of the shutter release button before taking a picture, autofocus will operate again when you press the shutter release button again.

Focus Range Limiter



You can use the autofocus more effectively by switching the focus range limiter to limit the operating range of the autofocus to close range (1.2 to 4 m) or to far range (4 m to ∞).

* When it is at "FULL", the limiter is canceled, and the autofocus range is from 1.2 m to ∞.

* The limiter does not operate in manual focus.

Tripod Mount

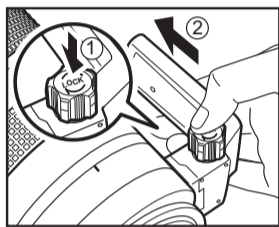
This lens is equipped with a tripod mount (removable), and can be set on a tripod.

Switching Between Horizontal and Vertical Shooting

Loosen the camera orientation lock screw and turn the camera by 90° left or right. Then tighten the camera orientation lock screw.

Removing the Tripod Mount

1. Loosen the mounting screw.
2. While pressing on the mounting screw (1), slide the tripod mount in the direction of the arrow (2), as shown in the diagram to the right.



To attach the tripod mount, slide it in the opposite direction of the arrow until it clicks, then firmly tighten the mounting screw.

CAUTION

- Attach only to a stable tripod.
- Attach the tripod mount securely to the lens in the proper way and firmly tighten the mounting screw otherwise the camera may shake or the lens may fall off. We also recommend using a fast shutter speed.

Main Specifications

Focal Length (in 35 mm format equivalent)	70 - 200 mm (107 - 307 mm)
Lens Construction	19 elements in 16 groups
Angle of View	23°-8.1° (when attached to PENTAX digital SLR cameras) 34.5°-12.5° (when attached to PENTAX 35mm SLR cameras)
Maximum Aperture	F2.8
Minimum Aperture	F22
Mount	KAF3
Minimum Focusing Distance	1.2 m/3.9 ft.
Maximum Magnification	0.13x
Filter Diameter	77 mm
Maximum Diameter x Length	Approx. 91.5 mm/3.6 in. x Approx. 203 mm/8 in.
Weight	Approx. 1755 g/61.9 oz. (with hood approx. 1835 g/64.7 oz.) (with hood and tripod mount approx. 2030 g/71.6 oz.)
Package Contents	Lens case HS110-230, Lens hood PH-RBM77, Lens cap O-LC77, Lens mount cap K, Tripod mount O-TM80

For customers in USA

STATEMENT OF FCC COMPLIANCE

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.

Changes or modifications not approved by the party responsible for compliance could void the user's authority to operate 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.

For customers in Canada

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

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



The CE Mark is a Directive conformity mark of the European Union.

RICOH IMAGING COMPANY, LTD.

2-35-7, Maeno-cho, Itabashi-ku, Tokyo 174-8639, JAPAN
(<http://www.ricoh-imaging.co.jp>)

RICOH IMAGING EUROPE S.A.S.

Parc Tertiaire SILIC 7-9, avenue Robert Schuman - B.P. 70102,
94513 Rungis Cedex, FRANCE
(<http://www.ricoh-imaging.eu>)

RICOH IMAGING AMERICAS CORPORATION

633 17th Street, Suite 2600, Denver, Colorado 80202, U.S.A.
(<http://www.us.ricoh-imaging.com>)

RICOH IMAGING CANADA INC.

5520 Explorer Drive Suite 300, Mississauga, Ontario, L4W 5L1, CANADA
(<http://www.ricoh-imaging.ca>)

RICOH IMAGING CHINA CO., LTD.

23D, Jun Yao International Plaza, 789 Zhaoyabang Road, Xu Hui District,
Shanghai, 200032, CHINA
(<http://www.ricoh-imaging.com.cn>)