● *85mm F1.4 Aspherical IF Lens*

Instruction Manual

Thank you for purchasing the 85mm F1.4 Aspherical IF lens.
We believe that you will have a special photographic experience with this new 85 mm F1.4 Aspherical IF lens.

Our complex aspherical lens manufacturing technology, coupled with state-of-the-art optical technology, led to a lens that was patented, designed, and manufactured specifically for photography.
In using this technology we have succeeded in reducing optical aberrations and maintaining the performance of our lens.

Advantages of the 85mm F1.4 Aspherical IF lens

1. Corrects aberrations using a complex aspherical lens and, in the fully open position, produces a high resolution and high contrast at the center of the lens as well as around its periphery.
2. Uses high quality optical glass for optimal refraction and dispersion.
3. Delicate focus control with smooth operation
4. Coating design by controlling ghosting as much as possible and reproducing vivid color images
5. Maintains compact size with inner focus design.
6. Produces smooth focusing by means of the aperture design, which comes close to a circular shape with its 8 diaphragm blades.

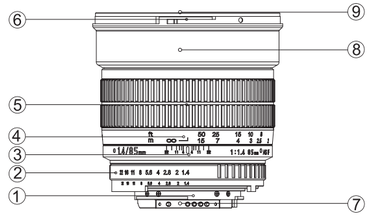
The 85mm F1.4 Aspherical IF lens for photography is designed with its own mount.
You can mount the lens directly onto the camera without using an additional adaptor.

Read this manual carefully to familiarize yourself with your lens for correct use.
※ Please read the Safety Precautions at the back of this instruction manual prior to use.

● Please read this instruction manual prior to use. ●

1. Component Names

【Figure】



① Mount	④ Distance scale	⑦ CPU electronic contacts
② Aperture adjustment ring	⑤ Focus ring	⑧ Hood locking tube
③ Indicator Mark	⑥ Hood locking area	⑨ Filter locking area

2. Attaching and Detaching

The 85mm F1.4 Aspherical IF lens mount is uniquely designed for Canon, Nikon (Fujifilm) F, Pentax (Samsung GX) K, Sony α (Minolta), Canon M, Sony E, Fujifilm X, Samsung NX, Four Thirds, and Micro Four Thirds cameras.

【Attaching】

Hold the hood locking area of the lens gently, and align the distance scale indicator mark with the lens attachment reference point on the camera. Next, push the lens into the camera and turn the lens carefully until it makes a clicking sound, and the distance scale indicator mark is positioned on the upper part of the camera.

【Detaching】

Hold the hood locking area of the lens gently, and press the lens release button on the camera. Turn the lens until the distance scale indicator mark of the lens is aligned with the lens attachment reference point on the camera, and then pull the lens out.

3. Focus Adjustment

You can adjust the focus of the subject by turning the focusing ring when using the 85mm F1.4 Aspherical IF lens, as it is an MF (Manual Focus) adjustment lens.

【Nikon (Fujifilm) / Pentax (Samsung) Mount】

① To change the focus from a subject that is far away to a subject that is close, turn the focusing ring to the left (∞ to 1 m) and focus on the clearest subject by using the indication signal on the camera, or by checking visually.

② To change the focus from a subject that is close to a subject that is far away, turn the focusing ring to the right (1 m to ∞) and focus on the clearest subject by using the indication signal on the camera, or by checking visually.

【Sony (Minolta) / Canon Mount】

① To change the focus from a subject that is far away to a subject that is close, turn the focusing ring to the right (∞ to 1 m) and focus on the clearest subject by using the indication signal on the camera, or by checking visually.

② To change the focus from a subject that is close to a subject that is far away, turn the focusing ring to the left (1 m to ∞) and focus on the clearest subject by using the indication signal on the camera, or by checking visually.

4. Brightness Control

You can set the depth of field and brightness by turning the aperture adjustment ring when using the 85 mm F1.4 Aspherical IF lens.

【Aperture adjustment ring markings】

① Nikon (Fujifilm) / Sony (Minolta) / Canon

22	16	11	8	5.6	4	2.8	2	1.4

② Pentax (Samsung)

A • 22	16	11	8	5.6	4	2.8	2	1.4

Brightness can be set more precisely by making half stops.

Example)
1.4 and 2 are one stop apart (1 EV).

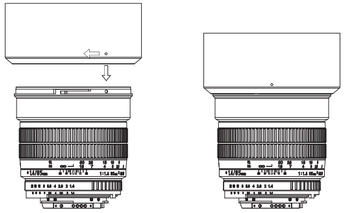
22	16	11	8	5.6	4	2.8	2	1.4

Set a 0.5 stop (0.5 EV) between 1.4 and 2.

22	16	11	8	5.6	4	2.8	2	1.4

5. Mounting the Hood

The hood has a bayonet system which guarantees speedy, efficient, safe and precise installation, and enables you to enjoy shooting that is free from ghosting or flaring.



Align the attachment reference point on the hood with the reference point on the lens. Push the hood onto the lens and turn the hood to the right until it makes a clicking sound.

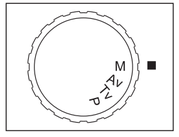
6. Camera Settings

Some cameras require special settings when using this lens.
Please read the information below and set your camera accordingly.

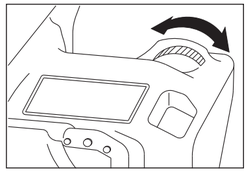
○ Canon Mount

The diaphragm of the 85mm F1.4 Aspherical IF Canon mount is not compatible with the camera.
If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture adjustment ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

1) Set the camera mode dial to M.



2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.



※ For some Canon cameras, if you set the camera mode dial to Av and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the 40D. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

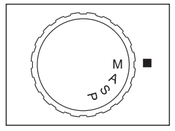
The lens that has a point of contact
A drive motor of aperture that inside of the lens makes cameras can control the aperture value. It measures an exposure automatically by communication between camera and lens and it helps to obtain optimum exposure value. (It can be set manually at M mode)
(Regarding additional information about each mode of the cameras, please refer to the user manual or ask it to manufacturer of cameras)

○ Nikon (Fujifilm) AE Mount

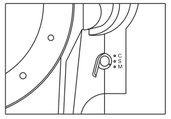
Your Nikon mount has electronic contacts that allow it to communicate with Nikon AF cameras. These contacts enable the A, S, and P modes of the camera. When a subject is correctly in focus, the camera emits a beep or an indicator light comes on.

○ Nikon (Fujifilm) F Mount

1. Set the camera mode dial to M.



2. Set the focus adjustment lever of the camera to M.



3. When an MF lens is attached, some Nikon cameras allow you to enter the focal length and the brightness. With these Nikon cameras, you can use the MF lens more efficiently by entering the focal length and the brightness.

※ The shutter speed of some Nikon cameras changes automatically if the focal length and the brightness are set, and the desired brightness is set in A/S/P mode by turning the aperture adjustment ring.

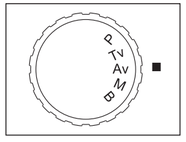
(The settings for the camera or the menu may vary based on the camera model or due to a menu upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

○ Pentax (Samsung GX) K Mount

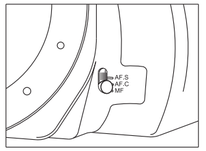
1. AV mode (Aperture Priority Mode)
The 85mm F1.4 Aspherical IF Pentax / Samsung mounts support Av mode.

1) Align the A mode indicator with the distance scale indicator mark by pressing the A button on the aperture adjustment ring of the lens.

2) Set the mode dial of the camera to Av.

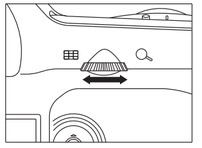


3) Set the focus adjustment lever of the camera to MF.



4) Camera Settings
The user sets the menu. ⇒ The aperture ring is used. ⇒ Not allowed.

5) Adjust the brightness by turning the dial at the back of the camera.

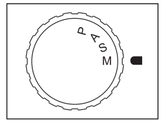


(The procedures above are for the K20D. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

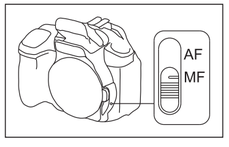
○ Sony (Minolta)α Mount

The diaphragm of the 85mm F1.4 Aspherical IF Sony (Minolta) α mount is not compatible with the camera.
If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture adjustment ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

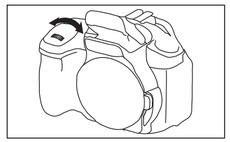
1) Set the camera mode dial to M.



2) Set the focus adjustment lever of the camera to MF.



3) Adjust the shutter speed to achieve the appropriate exposure for the brightness.



(The procedures above are for the α350. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

○ Konica Minolta (Minolta), DYNA series cameras

If this lens is used on some Konica Minolta (Minolta) or DYNA series cameras, the release lock function (misuse prevention function) of the camera must be disabled. It is required to disable the release lock function only on the first use as below.

Procedure for disabling the release lock function

① Set the main switch of the camera to OFF.

② Detach the lens from the camera body and set the main switch of the camera to ON by pressing the following two buttons.

9xi ··· function button + AE lock button
7xi ··· function button + AE lock button
5xi ··· function button + spot button
3xi ··· Modification is required at a service center.
807si ··· AEL button + shooting scene select button
707si ··· card button + spot button
507si ··· lens exchange button + ISO lock button
DYNAX3L ··· shooting scene select button + button
303si ··· AV button + self mode button
303si SUPER ··· drive button + spot button
101si ··· self-timer button + flash button
360si ··· self-timer continuous shooting button + screen select button
α-Sweet ··· self-timer continuous shooting button + spot button
α-Sweet S ··· (set the function dial to multi light exposure) P button + self-timer button
DYNAX30 ··· self-timer button + turn the left dial on the main body away from OFF.

α-Sweet II, II L ··· Set the camera to custom function 14 and change the selection number from 1 to 2 (N.A).

α-7, -9, -Ti ··· Set the camera to custom function 16 and change the selection number from 1 to 2 (N.A).

α-Sweet Digital ··· Execute the following operation.

MENU ⇒ *2 ⇒ Release lock without the lens ⇒ To the right ⇒ N.A. ⇒ Execute ● ⇒ MENU

α-7 Digital ··· Execute the following operation.

MENU ⇒ *3 ⇒ Release lock without the lens ⇒ To the right ⇒ N.A. ⇒ Execute ● ⇒ MENU

※ If the release lock is disengaged in the above way, the state of disengagement is maintained even though the main switch is turned off. If you want to enable the release lock function, perform the above procedure again.

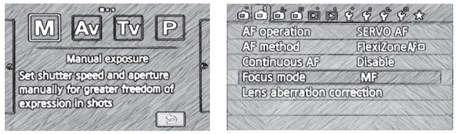
(The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

○ Mirrorless Cameras (Canon M, Samsung NX, Sony E, Fujifilm X)

The diaphragm of the 85 mm F1.4 Aspherical IF Canon M, Samsung NX, Sony E and Fujifilm X mounts are not compatible with the cameras. If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture adjustment ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

【 Canon M Mount 】

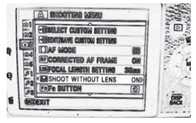
1) Set the exposure to manual exposure (M) and change the focus mode to MF.



(The procedures above are for the Canon M. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

【 FUJIFILM X Mount 】

1) Set the focus mode to M.

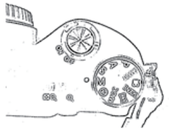


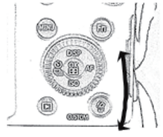
2) Press the MENU/OK button, and select ON at 'Shoot without lens' in the shooting menu.

(The procedures above are for the X-Pro1. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

【 Samsung NX Mount 】

1) Set the camera mode dial to M.
2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.



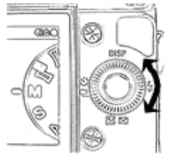


※ For some Samsung NX cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the NX200. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

【 Sony E Mount 】

1) Set the camera mode dial to M.
2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.



※ For some Sony E cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

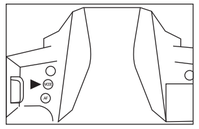
(The procedures above are for the NEX-5. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

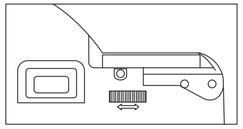
○ Four Thirds, Micro Four Thirds

The diaphragm of the 85mm F1.4 Aspherical IF Four Thirds and Micro Four Thirds mounts are not compatible with the camera. If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture adjustment ring so it is fully open when attaching the lens to the camera, and then set the depth of field and brightness you want prior to shooting.

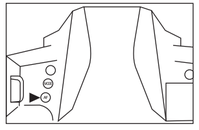
【 Four Thirds Mount 】

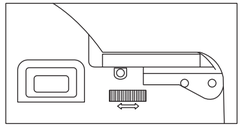
1) Hold down the MODE button and turn the dial until it is set to M. (shooting conditions)
MODE + control dial ▶ M mode setting (manual shooting)



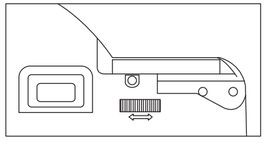


2) Hold down the AF button and turn the dial until it is set to MF. (focusing)
AF + control dial ▶ MF setting (manual focusing)





3) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.

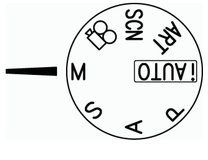


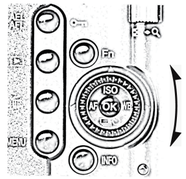
※ For some Four Thirds cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the Olympus E-3. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera manual or contact the camera manufacturer for detailed information.)

【 Micro Four Thirds Mount 】

1) Set the camera mode dial to M.





2) Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the brightness.

※ For some Olympus (MFT) and Panasonic (MFT) cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(The procedures above are for the E-P2. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Therefore refer to the camera manual or contact the camera manufacturer for detailed information.)

7. Specifications

SPECIFICATIONS		1:1.4 85mm AS IF UMC									
APERTURE RANGE		F1.4 ~ 22									
OPTICAL CONSTRUCTION		9 ELEMENTS IN 7 GROUPS (1 ASPHERICAL LENS)									
MINIMUM FOCUSING DISTANCE		1.0m(3.3ft)									
FILTER SIZE		Ø 72mm									
MAXIMUM DIAMETER		Ø 78mm									
MOUNT		CANON EOS	NIKON AE	PENTAX K	SONY α	CANON M	FUJIFILM X	SAMSUNG NX	SONY E	FOUR -THIRDS	MICRO FOUR -THIRDS
ANGLE OF VIEW	35mm	28.3°	28.3°	28.3°	28.3°	-	-	-	28.3°	-	-
	APS-C	17.7°	19.1°	19.1°	19.1°	17.7°	19.1°	19.1°	19.1°	-	-
	FOUR-THIRDS (4/3")	-	-	-	-	-	-	-	-	14.4°	14.4°
LENGTH		74.7mm	72.2mm	73.2mm	74.2mm	100.6mm	101mm	93.2mm	100.7mm	80mm	99.5mm
WEIGHT		540g	520g	510g	530g	570g	610g	560g	570g	520g	565g
FUNCTION		A / S / M / P mode(NIKON AE)									

※ If more than one filter is attached to the camera, it may cause vignetting (the reduction of an image's brightness at the periphery). When attaching a filter which is coated on both sides, you can obtain clear images.

8. Troubleshooting

Issue	Causes	Corrective Action
A lens cannot be attached to the camera.	The attachment reference point on the lens is not aligned with the lens attachment reference point on the camera.	Align the attachment reference point on the lens with the lens attachment reference point on the camera.
A lens cannot be detached from the camera.	Incorrect rotation direction for detaching the lens. If you turn the lens while holding the camera, it may cause damage to the lens.	Press the lens release button on the camera, and gently turn the lens to the lens attaching/detaching reference points, in the direction as marked on the camera, and then pull the lens forward.
Blurry images	Incorrect focusing Insufficient shutter speed or camera shake.	Turn the focusing ring while checking the indication or checking an object visually, set the focus until it becomes clear, and then press the shutter. Steady the camera and take a photograph at a shutter speed of 1/125 secs.
rEE (blinking)	The aperture adjustment ring on the lens is not set to the minimum aperture value.	Turn the aperture adjustment ring to set it to the minimum aperture value. (F22)
Automatic focusing does not work properly.	A manual focusing lens has trouble with automatic focusing.	Use the focusing ring to adjust the focus.
Dark or too bright pictures	Inappropriate exposure	Adjust the aperture adjustment ring accordingly.
The camera flash is not functioning.	The non-CPU lens may not be compatible, depending on the camera.	See the camera manual.
	This lens corresponds to the Nikon AI-P lens.	See the camera manual or flash manual. This lens is not a "D-type" lens (which relays distance information to the camera).
The camera finder indication or the display does not display.	This lens does not have an electric contact signal, so there is no communication with the camera through electric signals.	No problem with shooting
Zooming failure	This lens is a single lens.	
This lens cannot be mounted on other cameras.	This lens is designed for its own mount.	Purchase the designated lens mount.
You want to attach our 2X or 1.4X converter lens.	Our converter is designed for the T (M42 screw) mount only. Therefore it cannot be used with the 16 mm F2.0 ED AS UMC CS lens.	Use each company's own mount converter. However, be aware that auto focusing is unavailable.

9. Safety Precautions

The following precautions are divided into two types according to the level of danger.

⚠WARNING If this instruction is not followed, it may cause death or severe injury to the user.

⚠CAUTION If this instruction is not followed, it may cause death or severe injury to the user.

The following pictograms are used in the below precautions:

⚠ Requires caution. Inside the pictogram it shows contents of precautions. (It shows outbreak of fire in the pictogram on the left.)

⃠ Shows prohibition. Inside the pictogram it shows contents of prohibition. (It shows prohibition of dismantling in the pictogram on the left.)

❗ Shows instruction. Inside the pictogram it shows contents of instructions. (It shows instruction of precaution in the pictogram on the left.)

⚠WARNING

⚠CAUTION

WARNING!
Do not wet this product or expose it to a moist environment. It may cause a fire or electric shock.

CAUTION!

- Do not use this product or store it close to devices that generate heat i.e., heaters, thermal regulators, stoves or stereo amplifiers.
- Do not leave the lens in conditions where drastic temperature changes can occur.
- Do not touch the surface of the lens by hand, and avoid making contact with sharp objects.
- Avoid dropping the lens.
- Do not soak the lens in water, and avoid water splashing onto the lens.
- If there are foreign bodies on the lens, use a lens cleaning kit only.