# **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

In using this technology we have succeeded in reducing optical aberrations and maintaining the performance of our lens.

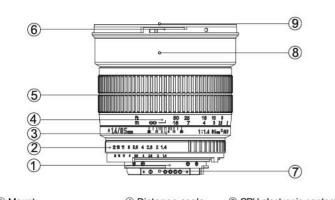
#### Advantages of the 85mm F1.4 Aspherical IF lens 1. Corrects aberrations using a complex aspherical lens and, in the fully open

- 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
- 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]



 Distance scale
 OPU electronic contacts ① Mount ② Aperture adjustment ring ⑤ Focus ring 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.

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.

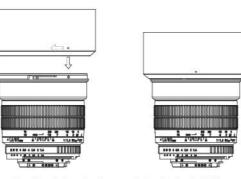
Example) 1.4 and 2 are one stop apart (1 EV).

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.



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

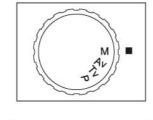
#### 6. Camera Settings

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

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.

The diaphragm of the 85mm F1.4 Aspherical IF Canon mount is not compatible with

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.

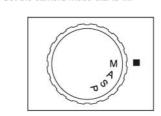
(The procedures above are for the 40D. The settings for the camera or the menu may vary based on the camera model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

#### O 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.

#### O Nikon (Fujifilm) F Mount

1. Set the camera mode dial to M.



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



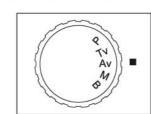
- 3. When an MF lens is attached, some Nikon cameras allow you to enter the focal length and the brightness. With these Nikon cameras, you can use the MF lens more efficiently by entering the focal length and the brightness.
- ※ The shutter speed of some Nikon cameras changes automatically if the focal 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.)

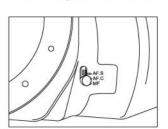
### O Pentax (Samsung GX) K Mount

- 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.  $\Rightarrow$  The aperture ring is used.  $\Rightarrow$  Not allowed.
- 5) Adjust the brightness by turning the dial at the back of the camera.



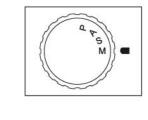
(The procedures above are for the K20D. The settings for the camera or the menu may vary based on the model or due to a functional upgrade. Refer to the camera instruction manual or contact the camera manufacturer for detailed information.)

### O Sony (Minolta)α Mount

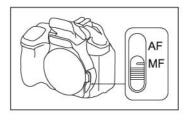
The diaphragm of the 85mm F1.4 Aspherical IF Sony (Minolta)  $\alpha$  mount is not compatible with the camera If the brightness is set to F8 or above, you may not be able to set the correct focus

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



(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.)

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.

② Detach the lens from the camera body and set the main switch of the camera

9xi ··· function button + AE lock button 7xi ··· function button + AE lock button 5xi ··· function button + spot button

Procedure for disabling the release lock function Set the main switch of the camera to OFF.

to ON by pressing the following two buttons.

3xi ··· Modification is required at a service 807si ··· AEL button + shooting scene select

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

707si ··· card button + spot button 507si ··· lens exchange button + ISO lock button

α-Sweet ··· self-timer continuous shooting button + spot button  $\alpha\text{-}\mathsf{Sweet}\,\mathsf{S}\,\cdots$  (set the function dial to multi light exposure) P button + self-timer button

DYNAX3L ··· shooting scene select button + button from OFF.

DYNAX30 ··· self-timer button + turn the left dial on the main body away

number from 1 to 2 (N.A).  $\alpha$ -7, -9, -Ti  $\cdots$  Set the camera to custom function 16 and change the selection number from 1 to 2 (N.A).  $\alpha$ -Sweet Digital  $\cdots$  Execute the following operation.  $\mathsf{MENU} \Rightarrow {}^*2 \Rightarrow \mathsf{Release} \; \mathsf{lock} \; \mathsf{without} \; \mathsf{the} \; \mathsf{lens} \Rightarrow \mathsf{To} \; \mathsf{the} \; \mathsf{right} \Rightarrow \mathsf{N.A.} \Rightarrow \mathsf{Execute} \; \bullet \Rightarrow \mathsf{MENU}$ 

α-Sweet II, II L ··· Set the camera to custom function 14 and change the selection

 $\alpha\text{--}7$  Digital  $\cdots$  Execute the following operation. \* 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

(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.)

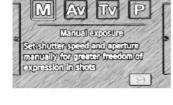
release lock function, perform the above procedure again.

## O 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 ]

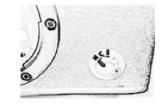
1) Set the exposure to manual exposure (M) and change the focus mode to MF.



(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

# [FUJIFILM X Mount]

1) Set the focus mode to M.





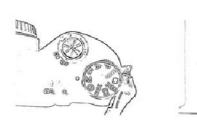
Lens abenration correction

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

(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.



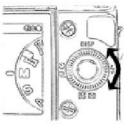
\* For some Samsung NX cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(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.



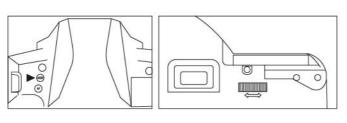
\* For some Sony E cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(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.)

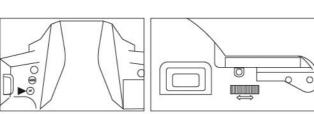
The diaphragm of the 85mm F1.4 Aspherical IF Four Thirds and Micro Four Thirds mounts are not compatible with the camera. If the brightness is set to F8 or above, you may not be able to set the correct focus due to a difficulty in viewing the subject through the camera viewfinder. Turn the aperture adjustment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

# [ Four Thirds Mount ]

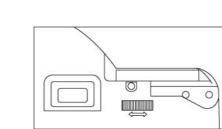
1) Hold down the MODE button and turn the dial until it is set to M. (shooting conditions) MODE + control dial ▶ M mode setting (manual shooting)



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



Adjust the shutter speed by turning the dial to achieve the appropriate exposure for the

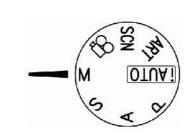


\* For some Four Thirds cameras, if you set the camera mode dial to A and set the brightness by turning the aperture adjustment ring on the lens, the camera automatically changes the shutter speed. Therefore you don't need to adjust the shutter speed as well, which is required in M mode.

(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

85 mm

Focal length

Functions

Aperture range		F1.4 - 22									
Image se	ensor size	sor size 36 X 24 mm									
Angle of view		35 mm full frame					2	28.5° (diagonal)			
		APS-C (1:1.5x)					1	19.1° (diagonal)			
		Four	Thirds	(4/3")			1	14.4° (diagonal)			
Focusing range		∞ to 1.0 m									
Filter connection		Ф 72									
Max. diameter		Φ 78 mm									
Optical construction		9 elements in 7 groups (1 aspherical lens)									
Mounts		Canon	Nikon Nikon AE	Pentax	Sony	Canon M	Fujifilm X	Samsung NX	Sony E	Four- thirds	Micro Four -Third
Angle of	35 mm	28.5°	28.5°	28.5°	28.5°						
	APS-C	17.7°	19.1°	19.1°	19.1°	19.1°	19.1°	19.1°	19.1°		
view	FOUR-THIRDS (4/3")									14.4°	14.4
Length (	ength (mm) 74.7 7		72.2	73.2	74.2	100.6	101	93.2	100.7	80	99.5
Weight (g)		540	515 520	515	535		615	560	570	525	

\* 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

A / S / M / P mode (Nikon AE)

is coated on both sides, you can obtain clear images.

### 8. Troubleshooting A lens cannot be attached to A lens cannot be detached Turn the focusing ring while checking the indication or checking an object visually, set the focus until it becomes clear, and then press the shuttor. Steady the camera and take a photograph at a shutter speed of 1/125 secs. Blurry images FEE (blinking) Automatic focusing does not A manual focusing lens has trouble with Use the focusing ring to adjust the focus work properly. The camera flash is not This lens is not a "D-type" lens (which relays distance information to the camera This lens does not have an electric contact signal, so there is no communication with the camera through electric signals. or the display does not Zooming failure This lens cannot be mounted 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.

# 9. Safety Precautions

You want to attach our 2X or

according to the level of o	langer.		used in the below precautions:				
<b>∆WARNING</b>	<b>△CAUTION</b>	Requires caution. Inside the pictogram it shows contents of precautions.  (It shows outbreak of fire in the pictogram on the left.)					
If this instruction is not followed, it may cause death	If this instruction is not followed, it may cause death	Shows prohibition, Inside the pictogram it shows contents of prohibition. (It shows prohibition of dismertifier in the pictogram on the left.)  (It shows instruction, inside the pictogram it shows contents of instructions. (It shows instruction of precaution in the pictogram on the left.)					
or severe injury to the user.	or severe injury to the user.						
<b>∆ WARNING</b>	<b>△ CAUTION</b>						
Don't look at the sun through the lens. It may cause blindness.	Attach the lens to the camera correctly and ensure the lens is held in place properly, otherwise the lens may not be removable, or may become loose and cause an accident.	Don't put excessive pressure on the lens attached to the camera; otherwise it may to be camera mount. Be sure to hold the lens when operating or moving.	Ensure that the camera checking the lens beforehand or blest shooting for important events such as a such as a no oversees trip.				
Don't leave the lens within reach of babies, as it may be asserted to the baby if the ens falls or is dropped.	Don't attempt to modify or to alter the lens. It may lead to falure of the camera. Modified or altered lenses may not be repaired.	Don't leave the lens in direct sunight. It may cause a fire, depending on lenses that concentrate light on a close object.	Don't look at the sun directly through a camera with a lens attached. It may cause damage to one's eyesight.				

The following process tions are divided into two types

#### 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.,

#### Do not leave the lens in conditions where drastic temperature changes can 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.

heaters, thermal regulators, stoves or stereo amplifiers.