

● 16mm T2.6 ED AS UMC
(for Cinema)

Instruction Manual

We believe that this new 16mm T2.6 ED AS UMC lens for video recording will give the user a special photographic experience.

The 16mm T2.6 ED AS UMC lens features an optical system based on cutting-edge optical technology, and maintains excellent resolution through the adoption of a glass molding aspherical lens and a low dispersive lens, as well as through the application of UMC (Ultra Multi Coating).

Advantages of the 16mm T2.6 ED AS UMC

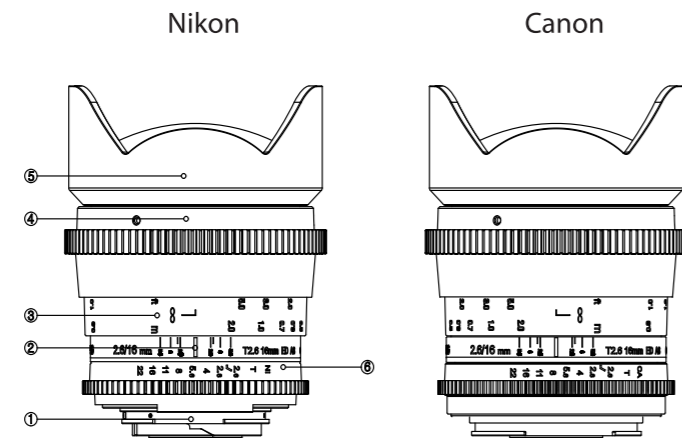
1. The lens can handle the 35mm full frame image sensor size.
2. It compensates for aberrations by using a glass molding aspherical lens made of high class optical glass. Even at the fully opened position, a high-resolution and high-contrast image is produced from the center of the lens as well as around the periphery.
3. Smooth bokeh (out-of-focus areas) and star-like rays are expressed using 9 aperture blades.
4. The hood and UMC (Ultra Multi Coating) design suppresses flaring and ghost images.
5. Robust durability with a high-strength aluminum alloy body.
6. Smooth control when a follow focus is attached since the lens is equipped with a gear for the focus and aperture.

The 16mm T2.6 ED AS UMC lens for video recording is designed with its own mount. You can mount the lens directly onto the camera without using an additional adaptor.

- ※ Please read this instruction manual carefully and use the product accordingly.
- ※ Please read the 'Safety Precautions' at the back of this instruction manual prior to use.

1. Component Names

[Figure]



- ① Mount (Camera mount) ② Reference Line of Distance Scale
 ③ Focus Scaling Ring ④ Focusing Gear ⑤ Hood
 ⑥ Aperture Adjustment Gear

2. Attaching and Detaching Camera

The 16mm T2.6 ED AS UMC lens mount is uniquely designed for Canon EF, Nikon (Fujifilm) F, Pentax(Samsung GX) K, Sony(Minolta) α, Canon M, Sony E, Fujifilm X, Samsung NX, Four-thirds and Micro four-thirds compatible cameras.

[Attaching]

Gently hold the lens hood, align the camera mount attachment point with the attachment reference point or line on the lens, push the lens into the camera, and gently rotate the lens 90 degrees clockwise from the front view until it makes a clicking sound.

[Detaching]

Gently hold the lens hood, press the lens release button on the camera, and turn the lens counterclockwise to detach the lens.

3. Focus Adjustment

When using the 16mm T2.6 ED AS UMC lens, you can set the focus of a subject by turning the focusing gear, since it is an MF (Manual Focus) adjustment lens.

[Nikon, Pentax K Mount]

- ① To change the focus from a subject that is far away to a subject that is close, turn the focusing gear counterclockwise (from ∞ to 0.3m) 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 gear clockwise (from 0.3m to ∞) and focus on the clearest subject by using the indication signal on the camera, □ or by checking visually.

[Canon, Sony α, Canon M, Sony E, Fujifilm X, Samsung NX, FT, MFT Mount]

- ① To change the focus from a subject that is far away to a subject that is close, turn the focusing gear clockwise (from ∞ to 0.3m) and focus on the clearest subject by checking visually.
- ② To change the focus from a subject that is close to a subject that is far away, turn the focusing gear counterclockwise (from 0.3m to ∞) and focus on the clearest subject by checking visually.

4. Attaching and Detaching Camera

You can set a desired brightness by turning the aperture adjustment gear when using the 16mm T2.6 ED AS UMC lens.

You can set T No. from 2.6 to 22.

(The aperture is not positioned at any exact point, □ as it is adjustable continuously.)

5. Camera Settings

Some cameras require special settings when using this lens.

○ Canon EF Mount

- 1) Record a video in Av, Tv, P, CA, □, or M mode.
- 2) Please note that while recording a video the shutter speed is limited to a minimum of 1/30.

(The procedures above are for the Canon 5D Mark II. 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.)

○ Nikon F Mount

Please refer to the following and set the camera as necessary.

- 1) Record a video in M or A mode.
- 2) Adjust the exposure using the dial steps from +5 to -5.

(The procedures above are for the D700. 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.)

○ Pentax K Mount

- 1) Record a video in ƒ mode.
- 2) Please note that while recording a video the shutter speed is limited to a minimum of 1/30.

(The procedures above are for the K-30. 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 α Mount

- 1) Record a video in A, S, P, or M mode.

(The procedures above are for the A580. 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.)

○ Canon M Mount

- 1) Record a video in Av, Tv, P, CA, or M mode.
- 2) Please note that while recording a video the shutter speed is limited to a minimum of 1/30.

(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 manual or contact the camera manufacturer for detailed information.)

○ Fujifilm X Mount

- 1) Record a video in ƒ mode.

(The procedures above are for the X-Pro 1. 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) Record a video in A, S, P, or M mode.
- 2) Adjust the exposure by rotating the dial at the back of the camera.

(The procedures above are for the NEX-5. 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.)

○ Samsung NX Mount

- 1) Record a video in Av, M, or ƒ mode.
- 2) Please note that while recording a video the shutter speed is limited to a minimum of 1/30.

(The procedures above are for the NX-200. 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.)

○ Four-thirds FT Mount

- Record a video in P , A, or M mode.
- Please note that while recording a video the shutter speed is limited to a minimum of 1/30.

(The procedures above are for the E-5. 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.)

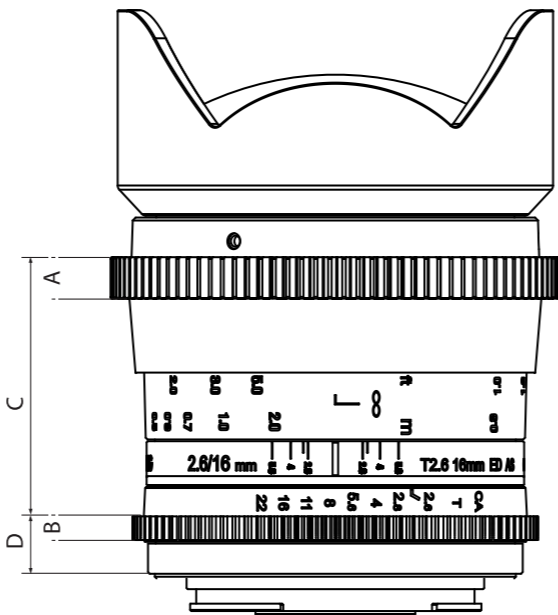
○ Micro Four-thirds Mount

- Record a video in P , A, or M mode.
- Adjust the exposure by rotating the dial at the back of the camera.

(The procedures above are for the E-5. 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.)

6. Specifications

FOCAL LENGTH		16mm											
APERTURE RANGE(T-STOP)		T2.6 - T22											
OPTICAL CONSTRUCTION		14 ELEMENTS IN 11 GROUPS(2 ASPHERICAL LENSES)											
MINIMUM FOCUSING DISTANCE		0,3m (0,98 ft)											
MOUNT		Nikon F	Canon EF	Sony A	Pentax K	Sony E	Fujifilm X	Canon M	Samsung NX	MFT	Four Thirds		
ANGLE OF VIEW	35mm	106.91°	106.91°	106.91°	106.91°	106.91°	-	-	-	-	-		
	APS-C	82.02°	79.85°	82.02°	82.02°	82.02°	82.02°	79.85°	82.02°	-	-		
	FOUR-THIRDS (4/3")	-	-	-	-	-	-	-	-	66.86°	66.86°		
FILTER SIZE		N/A											
FOCUS RING DIAMETER		Φ 81.6mm											
APERTURE RING DIAMETER		Φ70.4mm	Φ 73.6mm										
MAXIMUM DIAMETER		Φ 81.6mm											
LENGTH		93.6mm	96.1mm	95.6mm	94.6mm	122.1mm	122.4mm	122.0mm	114.6mm	120.9mm	101.4mm		
WEIGHT		515g	530g	525g	520g	540g	580g	540g	530g	535g	545g		
GEAR	MODULE	0.8mm											
	A	7mm											
	B	4mm											
	C	43.8mm											
	D	8mm	10.5mm	10mm	9mm	36.5mm	36.8mm	36.4mm	29mm	35.3mm	15.8mm		



7. Fault Finding

Symptoms	Cause	Solution
The 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, gently turn the lens toward the lens attachment/detachment reference point marked on the camera, and then pull the lens away.
Blurry images	Incorrect focusing, Camera shake, or insufficient shutter speed.	Turn the focusing ring while checking the subject with the indicator in the camera or checking visually to set the focus until the subject is clear, and then press the shutter. After selecting a shutter speed of 1/125 sec or faster, steady the camera and take a photograph.
Automatic focusing does not work properly.	This is a manual focusing lens and does not have an automatic function.	Turn the focusing gear to focus on a subject.
The pictures are too dark or too bright.	The exposure is incorrect.	Set the aperture adjustment ring of the lens correctly.
The camera flash is not synchronized to the camera.	The manual focusing lens may not be compatible depending on the camera.	See the camera manual.
There is no camera finder indication or display.	This lens doesn't have electronic contacts, so there is no electronic communication with the camera.	No problem with shooting.
Zoom failure.	This lens is a single lens.	
The lens can't be mounted to other cameras.	This lens is designed for a specific mount type.	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, thus it cannot be used with this product.	You can use each company's own mount converter. However, be aware that auto focusing is unavailable.

8. Safety Precautions

The following precautions are divided into two types according to the level of danger.	
Warning Not follow these instructions may cause death or severe injury to the user.	Caution Not follow these instructions 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. (The pictogram on the left shows the caution for ignition.)	
Shows prohibition. Inside the pictogram it shows contents of prohibition. (The pictogram on the left shows the prohibition of disassembly.)	
Shows instruction. Inside the pictogram it shows contents of instructions. (It shows instruction of precaution in the pictogram on the left.)	

Warning	Caution
<p>Don't look at the sun through the lens. It may cause blindness.</p>	<p>Attach the lens to the camera correctly and make sure that the lens is attached firmly. If the lens is not attached correctly, it may not be pulled out or it may fall down, causing injury.</p>
<p>Keep the lens out of children's reach. It may drop or fall down, causing injury.</p>	<p>Do not apply excessive weight on the lens attached to the camera. It may cause damage to the lens and camera mounts. Be sure to hold the lens when operating or moving.</p>
<p>Do not modify or alter the lens. Modified or altered lenses may not be repaired.</p>	<p>Do not leave the lens in direct sunlight. It may cause a fire, depending on lenses that concentrate light on a close object.</p>
<p>Do not look at the sun directly through a camera with a lens attached. It may cause damage to one's eyesight.</p>	<p>Ensure that the camera operates properly by checking the lens beforehand or by test shooting for important events such as a wedding ceremony and an overseas trip.</p>

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, stereo amplifiers.
- Do not expose the lens to drastic temperature changes.
- Do not touch the surface of the lens with your hand, or let it come into contact with sharp objects.
- Do not drop 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.

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