

Operating Instructions INTERCHANGEABLE LENS FOR DIGITAL CAMERA

Manuel d'utilisation

OBJECTIF INTERCHANGEABLE POUR APPAREIL PHOTO NUMÉRIQUE

Bedienungsanleitung WECHSELOBJEKTIV FÜR DIGITAL-KAMERA

Instrucciones de funcionamiento ÓPTICA INTERCAMBIABLE PARA CÁMARA DIGITAL

Istruzioni per l'uso LENTI INTERCABIABILI PER FOTOCAMERA DIGITALE

使用説明書

數位相機可用替換鏡頭

Инструкция по эксплуатации СМЕННЫЙ ОБЪЕКТИВ ДЛЯ ЦИФРОВОЙ ФОТОКАМЕРЫ

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

H-ES35100



Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Model No./Modelo/Model Nr./Modelo N./
Modello N./ 型號 / Модель №.

Precautions

■ Handling of the lens

- When using this lens, take care not to drop, bump, or apply undue force to it. Doing so may cause malfunction or damage to the lens and the digital camera.
- Impacts may be affected by dust, dirt, and soiling (water, oil, fingerprints, etc.) on the lens surface. Before and after recording, use a blower to blow off dust and dirt from the surface of the lens, then lightly wipe with a soft dry cloth to remove soiling.
- When the lens is not in use, be sure to attach the lens cap and lens cap to prevent dust and other particles from accumulating on or entering the lens.
- To protect the lens contact points (3), do not do the following. These may cause malfunction. (See illustration A)

- Touch the lens contact points.
- Allow the lens contact points to become dirty.
- Place the lens with its mount surface facing down.

■ Dust and splash resistant

- Splash Resistant and Dust Resistant** are terms used to describe an extra level of protection this lens offers against exposure to a minimal amount of moisture, water or dust. These terms do not guarantee that damage will not occur if this lens is subjected to direct contact with water or dust infiltration.
- The following precautions to provide satisfactory dust and splash resistant performance. If the lens is not working properly, consult the dealer or Panasonic.
- Attach to a digital camera that is dust and splash resistant.
- When attaching or removing the lens, be careful so that foreign objects such as sand, dust, and water droplets do not adhere to or enter the lens mount (3), digital camera and lens.
- If the lens is exposed to water droplets or other liquids, wipe them off with a soft, dry cloth.
- To improve the dust and splash resistant performance of the lens, a lens mount rubber is used in the mount.
- The lens mount rubber will leave scuff marks on the digital camera mount, but this does not impact performance.
- For information on changing the lens mount rubber, contact Panasonic.

■ Condensation (when the lens is fogged up)

- Condensation occurs as a result of changes in humidity changes. Please be careful, as it may cause lens stains, mold and malfunction.
- If condensation occurs, turn off the digital camera and leave it for approx. 2 hours. The fog will disappear naturally when the temperature of the digital camera becomes close to the ambient temperature.

B Supplied Accessories

Check that all the accessories are supplied before using the product. Product numbers correct as of August 2023. These may be subject to change.

- Lens pouch
- Lens cap
- Lens rear cap
- Lens hood

- Fitted to the lens at the time of purchase.

C Names and Functions of Components

- Lens surface
- Focus ring
 - Rotates the focus ring to focus when set to MF (Manual Focus).
 - You can set the amount of movement of the focus ring using the focus ring with the menus in compatible digital cameras. Refer to the operating instructions for the digital camera for details.
- Zoom ring
 - Zooms to telephoto or wide-angle.
- O.I.S. switch
 - The stabilizer function is set to activate if the O.I.S. switch is set to [ON].
 - *We recommend setting the O.I.S. switch to [OFF] when using a tripod.
- Contact points
- Lens mount rubber
- Lens lifting mark

Note

- There may be differences in focus when you use zoom after focusing. Focus again.
- While shooting video, in some situations, AF operation and stabilizer operation of the lens may be heard. It is recommended to record as follows:
 - Set to MF to record
 - Turn off the image stabilizer and use a tripod for recording

D Attaching the Lens

For information on how to attach the lens, refer to the operating instructions for your digital camera.

- Attach the lens after turning off the digital camera.
- Attach the lens after removing the lens rear cap. (See illustration 1)
- After removing the lens rear cap, be sure to attach the lens cap and lens rear cap to prevent dust and other particles from accumulating on or entering the lens.

■ Attaching the lens hood (See illustration 2)

- Align mark  (O) on the lens hood with the mark on the tip of the lens.
- Rotate the lens hood in the direction of the arrow to align mark  (O) on the lens hood with the mark on the tip of the lens.

■ Removing the lens hood (See illustration 3)

- Rotate the lens hood in the direction of the arrow and then remove it.

Note

- When carrying, the lens hood can be attached in the reverse direction. (See illustration 4)

- It is recommended to remove the lens hood when during flash photography as the lens hood can block the light from the flash.
- To prevent dropping of the lens, you should never carry the lens by just holding the lens hood.

■ Notes on filter use

- It is possible to attach the lens cap or the lens hood with the filter already attached.
- There may be some vignetting in recorded images if multiple filters are attached simultaneously.
- It is not possible to attach any items other than filters such as a conversion lens or adaptor to the front of the lens and use it in combination with this lens. Lens damage may result if such items are attached.

Cautions for Use

- Do not spray the lens with insecticides or volatile chemicals.
 - If such substances get onto the lens they can damage the exterior case or cause the paint to peel.
- Do not point the lens at the sun or other strong light sources.
 - This may cause the lens to collect an excessive amount of light, resulting in fire and/or malfunction (silica gel).
- Do not use while directly touching the lens at low temperatures for a long period of time.
 - In cold places (environments below 0 °C (32 °F), such as ski slopes), prolonged direct contact with the lens may cause skin injury. Use gloves or similar when using the lens for long periods.

When cleaning, wipe lightly using a soft dry cloth that does not produce dust.

- Do not use solvents such as benzene, thinners, alcohol, kitchen cleansers, etc., as this can cause problems such as deformation of the casing or peeling of the coating.
- Do not use wipes with chemicals.
- Do not keep products made of rubber, PVC or similar materials in contact with the lens or for a long period of time.
- Do not disassemble or alter this product.
- When the lens is not going to be used for a prolonged period, we recommend storing with the lens cap attached.
- Check all the parts before recording when you have not used the lens for a long period of time.
- Avoid using or storing the lens in any of the following locations as this may cause problems in operation or malfunctioning:
 - In direct sunlight or on a beach in summer
 - In locations with high temperatures and humidity levels or severe changes in temperature and humidity
 - In sandy or dusty locations
 - Where there is fire
 - Near heaters, air conditioners or humidifiers
 - Where water may make the lens wet
 - Where there is vibration
 - Inside a vehicle
- Refer also to the operating instructions for the digital camera.

Troubleshooting

A rattling sound, etc. is heard when the digital camera is turned on or off or the lens is shaken.

There is a sound from the lens when taking pictures.

Specifications

The specifications are subject to change for performance enhancement.

INTERCHANGEABLE LENS FOR DIGITAL CAMERA

"LEICA DG VARIO-ELMARIT 35-100mm/F2.8/POWER O.I.S."

Mount
Micro Four Thirds Mount

Focal length
F=35 mm to 100 mm (35 mm film camera equivalent: 70 mm to 200 mm)

Lens construction
18 elements in 13 groups (1 UED lens, 2 ED lenses)

Aperture type
7 diaphragm blades/circular aperture diaphragm

Maximum aperture
F2.8

Maximum aperture value
F22

Angle of view
34° (Wide) to 12° (Tele)

In focus distance
0.05 m (2.8 feet) to ∞ (from the focus distance reference line)

Maximum image magnification
0.1x (35 mm film camera equivalent: 0.2x)

Optical image Stabilizer

Yes

Filter diameter
58 mm

Maximum diameter
∅67.4 mm (2.7")

Overall length
Approx. 99.9 mm (3.9") (from the tip of the lens to the base side of the lens mount)

Mass (Weight)
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

Power
Approx. 360 g (0.79 lb)

