## Nikon

# NIKKOR

NIKKOR Z DX 12-28mm f/3.5-5.6 PZ VR

Reference Guide

- Read this document thoroughly before using the product.
- To ensure proper use of the product, be sure to read "For Your Safety" (page 4).
- After reading this document, keep it readily accessible for future reference.



NIKON CORPORATION

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## Introduction

## **Before You Begin**

Before using this product, please read these instructions carefully. You will also need to consult the documentation provided with the camera.

- This lens is intended exclusively for use with mirrorless cameras featuring a Nikon Z mount.
- Update the camera firmware to the latest version. With earlier versions, the
  camera may fail to detect the lens correctly and some features may not be
  available. The latest version of the camera firmware can be downloaded from
  the Nikon Download Center at the URL below.

https://downloadcenter.nikonimglib.com/

No reproduction in any form of this document, in whole or in part (except for brief quotation in critical articles or reviews), may be made without written authorization from NIKON CORPORATION.

## **For Your Safety**

To prevent damage to property or injury to yourself or to others, read "For Your Safety" in its entirety before using this product.

After reading these safety instructions, keep them readily accessible for future reference.



**WARNING:** Failure to observe the precautions marked with this icon could result in death or severe injury.



**CAUTION:** Failure to observe the precautions marked with this icon could result in injury or property damage.



### WARNING

Do not disassemble or modify this product. Do not touch internal parts that become exposed as the result of a fall or other accident.

Failure to observe these precautions could result in electric shock or other injury.

Should you notice any abnormalities such as the product producing smoke, heat, or unusual odors, immediately disconnect the camera power source.

Continued operation could result in fire, burns or other injury.

Keep dry. Do not handle with wet hands.

Failure to observe these precautions could result in fire or electric shock.

Do not use this product in the presence of flammable dust or gas such as propane, gasoline or aerosols.

Failure to observe this precaution could result in explosion or fire.



### Do not directly view the sun or other bright light source through the lens.

Failure to observe this precaution could result in visual impairment.

### Keep this product out of reach of children.

Failure to observe this precaution could result in injury or product malfunction. In addition, note that small parts constitute a choking hazard. Should a child swallow any part of this product, seek immediate medical attention.

### Do not entangle, wrap or twist the straps around your neck.

Failure to observe this precaution could result in accidents.

# Do not handle with bare hands in locations exposed to extremely high or low temperatures.

Failure to observe this precaution could result in burns or frostbite.

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For Your Safety



### Do not leave the lens pointed at the sun or other strong light sources.

Light focused by the lens could cause fire or damage to product's internal parts. When shooting backlit subjects, keep the sun well out of the frame. Sunlight focused into the camera when the sun is close to the frame could cause fire.

Do not leave the product where it will be exposed to extremely high temperatures for an extended period, such as in an enclosed automobile or in direct sunlight.

Failure to observe this precaution could result in fire or product malfunction.

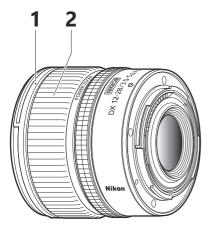
Do not transport cameras or lenses with tripods or similar accessories attached.

Failure to observe this precaution could result in injury or product malfunction.

## **Using the Lens**

### **Parts of the Lens: Names and Functions**

The parts of the lens are listed below.



### 1 Lens hood mounting mark

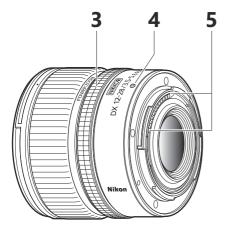
Use when attaching the lens hood.

<u>"Attaching and Removing Optional Lens Hoods" (p.14)</u>

### 2 Zoom ring

Rotate the ring to zoom in or out.

"Power Zoom" (p.16)



### 3 Control ring

#### Autofocus mode selected:

Rotate the ring to adjust a setting such as [Focus (M/A)] or [Aperture] assigned using the camera. For more information, see the description of [Custom control assignment], [Custom controls], or [Custom controls (shooting)] in the documentation provided with the camera.

## • Manual focus mode selected:

Rotate the ring to focus.

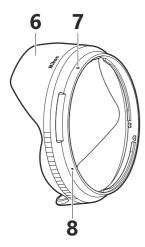
### 4 Lens mounting mark

Use when mounting the lens on the camera.

"Attachment and Removal" (p.11)

### **5** CPU contacts

Used to transfer data to and from the camera.



### 6 Lens hood \*

Lens hoods reduce stray light that would otherwise cause flare or ghosting. They also serve to protect the lens.

- \* Available separately.
- "Attaching and Removing Optional Lens Hoods" (p.14)

### 7 Lens hood lock mark

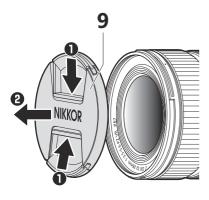
Use when attaching the lens hood.

"Attaching and Removing Optional Lens Hoods" (p.14)

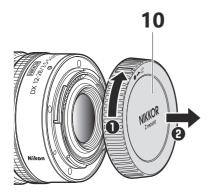
### 8 Lens hood alignment mark

Use when attaching the lens hood.

<u>"Attaching and Removing Optional Lens Hoods" (p.14)</u>



9 Lens cap (front cap)

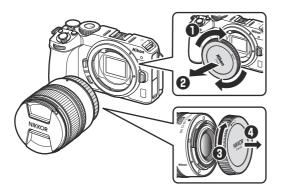


10 Lens cap (rear cap)

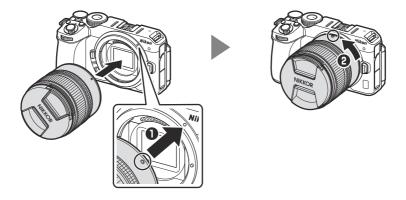
## **Attachment and Removal**

## **Attaching the Lens**

1. Turn the camera body off, remove the camera body cap, and detach the rear lens cap.

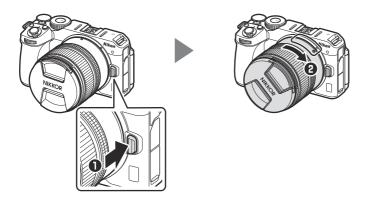


2. Position the lens on the camera body, keeping the mounting mark on the lens aligned with the mounting mark on the camera body (1), and then rotate the lens in the direction shown (2) until it clicks into place.



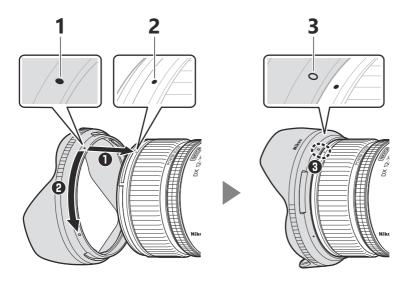
## **Removing the Lens**

- 1. Turn the camera body off.
- 2. Press and hold the lens release button (1) while turning the lens in the direction shown (2).



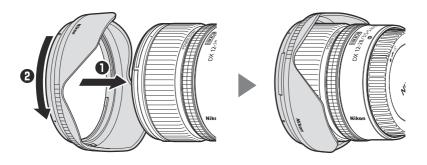
# **Attaching and Removing Optional Lens Hoods**

• Align the lens hood alignment mark with the lens hood mounting mark (1) and then rotate the lens hood in the direction shown (2) until the mounting mark is aligned with the lens hood lock mark (3).

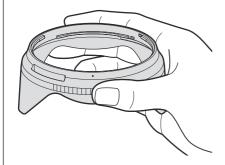


- **1** Lens hood alignment mark
- **2** Lens hood mounting mark
- **3** Lens hood lock mark

- Gripping the front too tightly makes the lens hood difficult to attach or remove.
   When rotating the lens hood, hold it near the lens hood alignment mark (•).
- To remove the lens hood, reverse the above steps.
- The lens hood can be reversed and mounted on the lens when not in use.



### **X** Reversing the Lens Hood

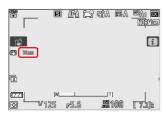


Keeping your finger and thumb wrapped around the lens hood, gently grip the knurled surface and rotate the hood until it clicks into place in the reversed position.

### **Power Zoom**

The lens features power zoom controlled via the zoom ring.

- When the lens is mounted on a compatible camera, power zoom also can be performed using:
  - camera controls assigned the power zoom role,
  - controls assigned the power zoom role on connected MC-N10 remote grips,
  - if power zoom is assigned to the camera ¶ and ℚ buttons, the + and buttons on connected ML-L7 remote controls, or
  - Nikon camera control software or apps that support power zoom.
- When the lens is mounted on a compatible camera, you can:
  - choose the speed at which the lens can be zoomed in and out using buttons assigned the power zoom role,
  - choose whether the last-selected zoom position is automatically restored when the camera is turned on, and
  - view the lens focal length in the camera shooting display.



Z 30 shooting display shown.

 Noise from the lens during zoom may be audible in video footage. If desired, the effect can be mitigated by rotating the zoom ring slowly. We recommend that you choose slower zoom speeds when using buttons assigned the power zoom role.

- For more information on using power zoom, see the documentation for the camera, software, or app in question.
- Be sure the camera firmware and all software and apps have been updated to the latest version.

## **Vibration Reduction (VR)**

The lens supports vibration reduction. Vibration reduction settings can be adjusted from the camera. See the documentation provided with the camera for details.

Vibration reduction allows shutter speeds slower than would otherwise be the case, expanding the range of shutter speeds available.

### **V**ibration Reduction

- Due to the design of the vibration reduction system, the lens may rattle when shaken. This does not indicate a malfunction.
- To reduce blur caused by tripod shake, select [**Normal**] or [**Sport**] for the on-camera vibration reduction option when the camera is mounted on a tripod. Note, however, that depending on the type of tripod and shooting conditions, there may be cases in which [**Off**] is the preferred option.
- [Normal] or [Sport] is recommended when the camera is mounted on a monopod.

## **Cautions: Taking Photographs**

- The following restrictions apply when the lens is used with an FX-format camera:
  - The camera will use the DX-format image area, which reduces the number of pixels recorded and the number of focus points.
  - The [Image Dust Off ref photo] option in the setup menu cannot be used.
- Videos shot with 1920 × 1080 120p, 1920 × 1080 100p, or 1920 × 1080 slow-motion selected for [Frame size/frame rate] in the movie shooting menu are recorded at the following frame sizes and rates when the lens is mounted on a Z 6:
  - $1920 \times 1080$ ;  $120p → 1920 \times 1080$ ; 60p
  - $-1920 \times 1080$ ;  $100p \rightarrow 1920 \times 1080$ ; 50p
  - 1920 × 1080; 30p ×4 (slow-motion) → 1920 × 1080; 30p
  - 1920 × 1080; 25p ×4 (slow-motion) → 1920 × 1080; 25p
  - 1920 × 1080; 24p ×5 (slow-motion) → 1920 × 1080; 24p

## **Precautions for Use**

- Do not pick up or hold the lens or camera using only the lens caps or lens hood.
- Keep the CPU contacts clean.
- Reattach the lens caps when the lens is not in use.
- Do not leave the lens in humid locations or in locations in which it may be exposed to moisture. Rusting of the internal mechanism can cause irreparable damage.
- Do not leave the lens next to open flames or in other extremely hot locations. Extreme heat could damage or warp the lens.
- Taking the lens from a warm to a cold environment or vice versa may cause damaging condensation inside and outside the lens. Place the lens in a sealed bag or plastic case before taking it across a temperature boundary. The lens can be taken from the bag or case once it has had time to adjust to the new temperature.
- We recommend that you place the lens in a case (available separately) to protect it from scratches during transport.
- Keep credit cards and other such magnetic storage devices away from the camera and lens. Data stored on the device could be corrupted.

## **Lens Maintenance**

- Removing dust is normally sufficient to clean the glass surfaces of the lens.
- Smudges, fingerprints, and other oily stains can be removed using a soft, clean cotton cloth or third-party lens cleaning tissue lightly dampened with a small amount of ethanol or third-party lens cleaner; clean from the center outwards in a circular motion. Be sure to clean evenly and thoroughly without leaving smears.
- Never use organic solvents such as paint thinner or benzene to clean the lens.
- Neutral Color (NC) filters (available separately) and the like can be used to protect the front lens element.
- Do not store the lens in direct sunlight or with naphtha or camphor moth balls. If the lens will not be used for an extended period, store it in a cool, dry location to prevent mold and rust.

## **Technical Notes**

## **Cameras with AF-Assist Illuminators**

The lens or lens hood may block the light from the camera AF-assist illuminator.

• For the information on using the lens with cameras that have built-in AF-assist illuminators, visit the site below.

https://downloadcenter.nikonimglib.com/

## Using the Lens on Cameras with a Builtin Flash

Shadows will be visible in photos where light from the built-in flash is obscured by the lens or lens hood. Remove the lens hood before shooting. Note, however, that depending on the distance to the subject and lens focal length, shadows may appear even when the lens hood is removed.

For information on the subject distances and focal lengths at which shadows
will not appear in photos taken with a built-in flash, visit the site below.
<a href="https://downloadcenter.nikonimglib.com/">https://downloadcenter.nikonimglib.com/</a>

## **Accessories**

## **Supplied Accessories**

- LC-67B Lens Cap (front cap)
- LF-N1 Lens Cap (rear cap)

## **Other Compatible Accessories**

- HB-112 Lens Hood
- CL-C4 Lens Case
- · 67 mm filters

### **Filters**

- Use only one filter at a time.
- Remove the lens hood before attaching filters. You will also need to remove the lens hood before rotating circular polarizing filters.

24 Accessories

## **Specifications**

Mount	Nikon Z mount
Focal length	12 – 28 mm
Maximum aperture	f/3.5 – 5.6
Lens construction	12 elements in 11 groups (including 1 ED and 1 aspherical element)
Angle of view	DX format: 99° – 53°
Focusing system	Internal focusing system
Vibration reduction	Lens shift using <b>v</b> oice <b>c</b> oil <b>m</b> otors (VCMs)
Minimum focus distance (measured from focal plane)	0.19 m (0.62 ft) at all zoom positions
Maximum reproduction ratio	0.21×
Diaphragm blades	7 (rounded diaphragm opening)
Aperture range	<ul> <li>12 mm zoom position: f/3.5 – 16</li> <li>28 mm zoom position: f/5.6 – 25</li> <li>* The value displayed at minimum aperture may vary with the exposure increment selected on the camera.</li> </ul>
Filter-attachment size	67 mm (P = 0.75 mm)

Dimensions (maximum diameter × distance to end of lens from camera lens mount flange)	Approx. 72 mm × 63.5 mm (2.9 in. × 2.5 in.)
Weight	Approx. 205 g (7.3 oz)

- Throughout this document, "FX format" and "FX" are used in reference to an angle of view equivalent to that of a 35 mm format ("full frame") camera and "DX format" and "DX" to an angle of view equivalent to that of an APS-C camera.
- Nikon reserves the right to change the appearance, specifications, and performance of this product at any time and without prior notice.

### **Notices**

## **Notices for Customers in the U.S.A.**

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.

# Federal Communications Commission (FCC) Radio Frequency Interference Statement

Note: 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.

27 Notices

### CAUTIONS

### Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Nikon Corporation may void the user's authority to operate the equipment.

Nikon Inc., 1300 Walt Whitman Road, Melville, New York 11747-3064, U.S.A. Tel.: 631-547-4200

### **Notices for Customers in Canada**

CAN ICES-003 (B) / NMB-003 (B)

## **Notices for Customers in Europe**

This symbol indicates that electrical and electronic equipment is to be collected separately.



The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- Separate collection and recycling helps conserve natural resources and prevent negative consequences for human health and the environment that might result from incorrect disposal.
- For more information, contact the retailer or the local authorities in charge of waste management.

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