Nikon

DIGITAL CAMERA

KeyMission 360

Quick Start Guide

The KeyMission 360	ii
SnapBridge	iv
Introduction	vi
Parts of the Camera	1
Getting Started	4
Using the Camera	20
Technical Notes	34

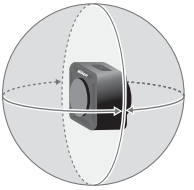
En

- Read this manual thoroughly before using the camera.
- To ensure proper use of the camera, be sure to read the For Your Safety leaflet, "<Important> Notes About Shockproof, Waterproof, and Dustproof Performance and Condensation" (page x), and "Notes About Wireless Communication Functions" (page 35).
- After reading this manual, keep it in a readily accessible place for future reference.

The KeyMission 360

The KeyMission 360 is a new concept camera that is slightly different from the cameras before it.

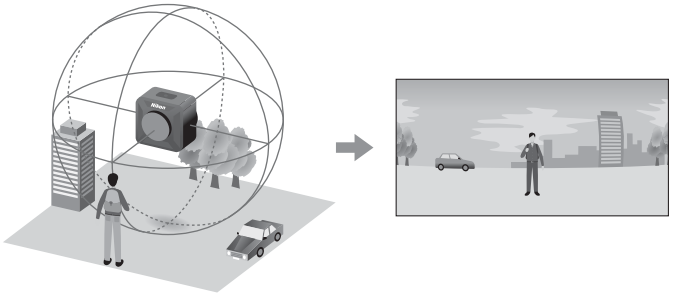
- **Create 360° content**
  The camera combines two images captured by lenses with an angle of view of about 180 degrees so that you can enjoy creating 360° content (except when shooting underwater).
- **Easy shooting with just one button**
  You can press a button to simultaneously turn on the camera and shoot.
- **Connect to a smart device**
  Perform various operations and settings using a dedicated app due to the camera's lack of a screen.
- **A wide variety of accessories that expands shooting capabilities**



The Images

The two captured images are processed in the camera and saved as a single image. You can shoot at a 4K UHD size.

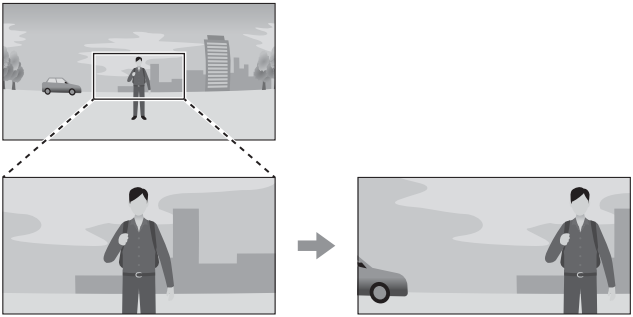
- The camera may be unable to capture subjects within about 60 cm (2 ft) from the camera's top, bottom, or sides.
- Under some shooting conditions, the boundaries of the composited areas may be noticeable.
- Under some shooting conditions, images may not match perfectly at the composite boundaries.



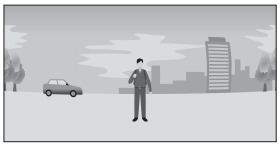
KeyMission 360 Model Name: N1529

Playing Back Images

- **Playing back using the SnapBridge 360/170 app, the KeyMission 360/170 Utility, or a TV (HDMI connection):**
  Part of the single image that was processed in the camera is displayed and you can play back while moving the point of view.



- **Playing back using other software:**
  The single image that was processed in the camera is displayed. You cannot move the point of view during playback.



Operations Available with the SnapBridge 360/170 App

- **Remote photography**
  Release the shutter from places away from the camera.
- **Changing camera settings**
  Change settings related to the camera's date and time, shooting, or lamp brightness.
- **Image playback and editing**
  Play back images, crop still images, edit movies, or extract still images from movies.

See the SnapBridge 360/170 app online help for more information.

SnapBridge

Your images. The world. Connected

Welcome to SnapBridge — Nikon's new family of services to enrich your image experience. SnapBridge connects your camera and compatible smart device, through a combination of *Bluetooth*® low energy (BLE) technology and a dedicated app. The stories you capture with your Nikon camera and lenses are automatically transferred to the device as they are taken. They can even be uploaded effortlessly to cloud storage services, inviting access across all your devices.

* Wireless communication is not available when the camera is underwater.

Download the SnapBridge app to get started!

The dedicated app "SnapBridge 360/170" is required to set up this camera, use remote photography, play back images, change settings, and more.

Before setting up the camera, install the dedicated app on your smartphone or tablet.

Through a few simple steps, this app connects your Nikon cameras with a compatible iPhone®, iPad® and/or iPod touch® or smart devices running on the Android™ operating system. The app is available free from the website (http://snapbridge.nikon.com), Apple App Store® and Google Play™.

For the latest information on SnapBridge, visit the Nikon website for your area (🕮viii).

The exciting image experience that SnapBridge 360/170 offers…

Automatic picture transfer from camera to smart device[1] thanks to the constant connection between the two devices — making online photo sharing easier than ever

Upload of photos and thumbnail images to the NIKON IMAGE SPACE cloud service[2]

[1] Movies cannot be automatically transferred.
[2] NIKON IMAGE SPACE does not support the viewing of 360° content by moving the point of view.

A range of services that enriches your imaging life, including:

- Camera remote control

- Automatic update of camera's date and time info and location info

- Receive camera's firmware updates

Introduction

Read This First

Thank you for purchasing the Nikon KeyMission 360 digital camera.

Using "SnapBridge 360/170"

The dedicated app "SnapBridge 360/170" is required to connect the camera and your smartphone or tablet.

Before setting up the camera, install the dedicated app on your smartphone or tablet (🕮iv).

Downloading the "Reference Manual"

The Reference Manual (PDF format) is available in various languages. Download the Reference Manual from our Download Center at the URL below and save it on your smartphone, tablet or computer for reference.

- The Reference Manual can be viewed using Adobe Acrobat Reader (downloadable from the Adobe website) or iBooks (an iOS app).

Downloading "KeyMission 360/170 Utility"

KeyMission 360/170 Utility is free computer software that enables you to transfer images and movies to your computer for viewing and editing. You can also change the camera's settings. Download the software from our Download Center at the URL below.

Visit Our Download Center

http://downloadcenter.nikonimglib.com

Visit our website to download manuals for Nikon imaging products, computer software, or firmware.

Scan this image with your smart device's QR code reader.

Nikon User Support

Visit the site below to register your camera and keep up-to-date with the latest product information. You will find answers to frequently asked questions (FAQs) and can contact us for technical assistance.

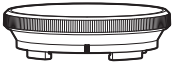
http://www.europe-nikon.com/support

Confirming the Package Contents

In the event that any items are missing, please contact the store where you purchased the camera.

☐ KeyMission 360 Digital Camera

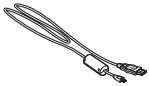
☐ Two AA-14A Lens Protectors[1]



☐ Two AA-15A Underwater Lens Protectors

☐ EN-EL12 Rechargeable Li-ion Battery

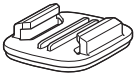
☐ EH-73P Charging AC Adapter[2]



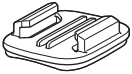
☐ UC-E21 USB Cable

☐ CF-AA1 BK Silicone Jacket

☐ AA-1A Base Adapter



☐ AA-2 Base Mount (Flat)



☐ AA-3 Base Mount (Curved)

☐ Quick Start Guide (this manual)

☐ Warranty (printed on the back cover of this manual)

☐ For Your Safety

[1] Attached to the camera at time of factory shipment.

[2] A plug adapter is included if the camera was purchased in a country or region that requires a plug adapter. The shape of the plug adapter varies with the country or region of purchase (📖6).

NOTE: A memory card is not included with the camera. microSD, microSDHC, and microSDXC memory cards are referred to as "memory cards" in this manual.

Information and Precautions

Life-Long Learning

As part of Nikon's "Life-Long Learning" commitment to ongoing product support and education, continually updated information is available online at the following websites:

- For users in the U.S.A.: http://www.nikonusa.com/
- For users in Europe: http://www.europe-nikon.com/support/
- For users in Asia, Oceania, the Middle East, and Africa: http://www.nikon-asia.com/

Visit these websites to keep up-to-date with the latest product information, tips, answers to frequently asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area. Visit the website below for contact information.

http://imaging.nikon.com/

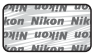
Use Only Nikon Brand Electronic Accessories

Nikon digital cameras are designed to the highest standards and include complex electronic circuitry. Only Nikon brand electronic accessories (including battery chargers, batteries, AC adapters, and USB cables) certified by Nikon specifically for use with this Nikon digital camera are engineered and proven to operate within the operational and safety requirements of this electronic circuitry.

THE USE OF NON-NIKON ELECTRONIC ACCESSORIES COULD DAMAGE THE CAMERA AND MAY VOID YOUR NIKON WARRANTY.

The use of third-party rechargeable Li-ion batteries not bearing the Nikon holographic seal could interfere with normal operation of the camera or result in the batteries overheating, igniting, rupturing, or leaking.

Holographic seal: Identifies this device as an authentic Nikon product.



For more information about Nikon brand accessories, contact a local authorized Nikon dealer.

Before Taking Important Pictures

Before taking pictures on important occasions (such as at weddings or before taking the camera on a trip), take a test shot to ensure that the camera is functioning normally. Nikon will not be held liable for damages or lost profits that may result from product malfunction.

About the Manuals

- No part of the manuals included with this product may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without Nikon's prior written permission.
- Illustrations and screen content shown in this manual may differ from the actual product.
- Nikon reserves the right to change the specifications of the hardware and software described in these manuals at any time and without prior notice.
- Nikon will not be held liable for any damages resulting from the use of this product.
- While every effort was made to ensure that the information in these manuals is accurate and complete, we would appreciate it were you to bring any errors or omissions to the attention of the Nikon representative in your area (address provided separately).

Comply with Copyright Notices

Under copyright law, photographs or recordings of copyrighted works made with the camera can not be used without the permission of the copyright holder. Exceptions apply to personal use, but note that even personal use may be restricted in the case of photographs or recordings of exhibits or live performances.

Disposing of Data Storage Devices

Please note that deleting images or formatting data storage devices such as memory cards does not completely erase the original image data. Deleted files can sometimes be recovered from discarded storage devices using commercially available software, potentially resulting in the malicious use of personal image data. Ensuring the privacy of such data is the user's responsibility.

Before discarding a data storage device or transferring ownership to another person, erase all data in the device using commercial deletion software, or format the device using **Camera ➔ Camera settings ➔ Format card** in the SnapBridge 360/170 app (📖28), and then completely refill it with images containing no private information such as images of empty sky (**Camera ➔ Camera settings ➔ Location data ➔** turn off **Download from device** and then take pictures).

Next, reset all of the camera's settings in **Camera ➔ Camera settings ➔ Reset all** in the SnapBridge 360/170 app.

Care should be taken to avoid injury or damage to property when physically destroying memory cards.

<Important> Notes About Shockproof, Waterproof, and Dustproof Performance and Condensation

- The shockproof, waterproof, and dustproof performance described here do not guarantee that the camera will remain completely waterproof or free from damage and trouble under all conditions.
- Do not subject the camera to excessive shock, vibration or pressure by dropping it, hitting it, or placing a heavy object on it. Failure to observe this precaution could deform the camera, cause water to seep inside, or damage the airtight seals, resulting in camera malfunction.
- Your Nikon warranty may not cover troubles caused by water seeping inside the camera due to improper handling of the camera.

Notes About Shockproof Performance

This camera has passed Nikon's in-house test (drop test from a height of 200 cm (6 ft 6 in.) on a 5 cm (2 in.) thick plywood panel) compliant with the MIL-STD 810F Method 516.5-Shock[1] standard.[2]

Changes in appearance, such as paint peeling off and deformation of the camera, are not measured in Nikon's in-house test.

1 U.S. Department of Defense test method standard.
This drop test drops 5 cameras in 26 directions (8 edges, 12 corners, and 6 faces) from a height of 122 cm (4 ft) to make sure that one to five cameras pass the test (if any defect is detected during the test, another five cameras are tested to make sure that the test criteria are satisfied for one to five cameras).

2 When the lens protectors or underwater lens protectors are attached.

Notes About Waterproof and Dustproof Performance

The camera is rated equivalent to JIS/IEC waterproof class 8 (IPX8) and JIS/IEC dustproof class 6 (IP6X) and can shoot images underwater at a depth of 30 m (100 ft) for up to 60 minutes.[1, 2]

1 This rating indicates that the camera has been designed to withstand the specified water pressure for the specified period of time when the camera is used according to the methods defined by Nikon.

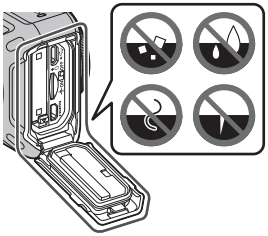
2 The camera can be used up to a water depth of about 20 m (65 ft) when the lens protectors are attached.
- The waterproof performance of this camera was tested in fresh water (swimming pools, rivers, and lakes) and salt water only.
- The inner portion of this camera is not waterproof. Water seeping inside the camera could cause the components to rust, resulting in high repair costs or irreparable damage.

Precautions When Cleaning

- Do not puncture the microphone or speaker openings with a sharp implement. If the inside of the camera is damaged, the waterproof performance will deteriorate.
- Do not use soap, neutral detergents, or chemicals such as benzene for cleaning.

Notes About Shockproof, Waterproof, and Dustproof Performance

- Do not drop the camera, strike it against a hard object such as a rock, or throw it against a water surface.
- Do not subject the camera to shock when using it underwater.
  - Do not subject the camera to water pressure by exposing it to rapids or waterfalls.
  - Do not expose to depths greater than 30 m (100 ft) underwater.
  - Make sure not to drop the camera underwater. This camera does not float in water.
- Do not continuously use the camera underwater for 60 minutes or more.
- Do not insert a wet memory card or battery in the camera.
  - Do not open the battery-chamber/memory card slot cover when the camera or your hands are wet. Doing so may cause water to seep inside the camera or result in camera malfunction.
- Do not open the battery-chamber/memory card slot cover underwater.
- If moisture such as water droplets adheres to the outside of the camera or inside of the battery-chamber/memory card slot cover, immediately wipe it off with a soft dry cloth.
  - If a foreign substance adheres to the outside of the camera or inside of the battery-chamber/memory card slot cover, immediately remove it with a blower or a soft cloth.



- Do not leave the camera in cold conditions or in hot conditions of 40°C (104°F) or more for a long period of time.
  - Doing so could cause deterioration of the waterproof performance.
  - When using the camera underwater, make sure the water temperature is from 0°C to 40°C (32°F to 104°F).
- Do not use the camera at hot springs.

Before Using the Camera Underwater

Check the items below before using the camera underwater.

- Make sure that there are no foreign substances inside the battery-chamber/memory card slot cover.
- Make sure that the waterproofing packing of the battery-chamber/memory card slot cover is not cracked or deformed.
  - Make sure that the waterproofing packing is not detached from the camera.
- Make sure that the battery-chamber/memory card slot cover is firmly closed.
  - Make sure that the battery-chamber/memory card slot cover latch is in the LOCK position (📖4).

Notes About Operating Temperature, Humidity, and Condensation

The operation of this camera has been tested at temperatures from −10°C to +40°C (14°F to 104°F).

When you use the camera in cold climate regions or at high altitudes, observe the following precautions.

- Battery performance deteriorates temporarily when cold. Keep the camera and batteries warm under your clothing before use.

● Environmental conditions that are likely to cause condensation

Fogging (condensation) may occur on the inside of the lenses, lens protectors, or underwater lens protectors depending on environments of sharp temperature changes or high humidity, or the condition of the camera, such as described below. This is not a malfunction or defect.

- The camera is suddenly immersed in cold water after being in a hot place on land.
- The camera is brought to a warm place such as inside a building after being in the cold outdoors.
- The battery-chamber/memory card slot cover is opened or closed in a high-humidity environment.
- The camera, lens protector, or underwater lens protector are still wet when they are attached to each other.
- The camera is used for an extended period of time in a low-temperature environment.

● Reducing condensation

- Open the battery-chamber/memory card slot cover, put the camera and a commercially-available desiccant in a container such as a plastic bag, and seal the container.
  Condensation is less likely to occur if the humidity inside the camera is reduced.
- Avoid storing the camera in places where the camera may become hot (such as places exposed to direct sunlight) before using it underwater.
  Taking the camera underwater while it is hot causes condensation due to sudden changes in temperature.

● Clearing the fogging

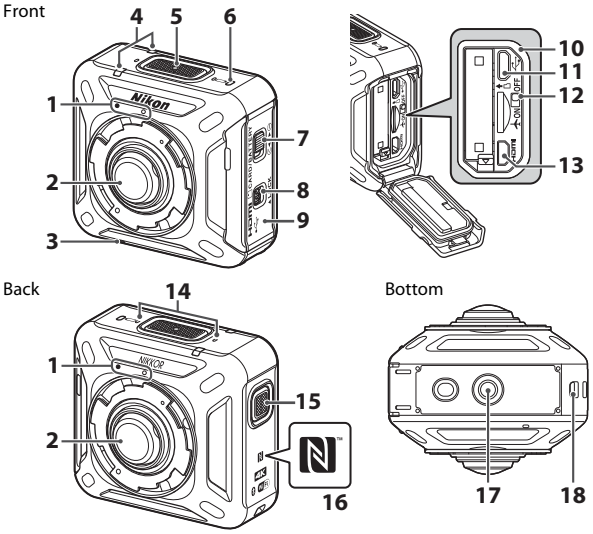
- Turn off the camera and open the battery-chamber/memory card slot cover while in a place where the ambient temperature is stable (avoid places with high temperature, high humidity, sand, or dust).
  To clear the fogging on the lens, remove the battery and memory card, and leave the battery-chamber/memory card slot cover open to allow the camera to adjust to the ambient temperature. When a lens protector or underwater lens protector is fogged, remove the protector, and attach it to the camera again after the fogging has cleared.

Inspection and Repair

- If the camera is exposed to shock, it is recommended to consult your retailer or Nikon-authorized service representative to confirm the waterproof performance (charged service).
- If the waterproofing packing begins to deteriorate, consult your retailer or Nikon-authorized service representative. The waterproof performance of the waterproofing packing may start to deteriorate after one year.
- If water seeps inside the camera, immediately stop using it and take it to your Nikon-authorized service representative.

Parts of the Camera

The Camera Body

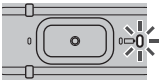
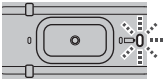
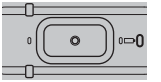


1	Lens protector mounting mark
2	Lens
3	Speaker
4	Status lamp
5	Movie button
6	Power-on lamp
7	Battery-chamber/memory card slot cover latch release
8	Battery-chamber/memory card slot cover latch
9	Battery-chamber/memory card slot cover
10	Waterproofing packing
11	Micro-USB connector
12	Airplane mode switch
13	HDMI micro connector (Type D)
14	Microphone (stereo)
15	Photo button
16	N-Mark (NFC antenna)
17	Tripod socket
18	Eyelet for fall prevention cord

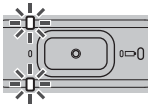
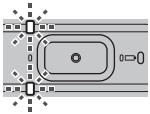
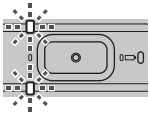
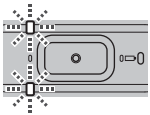
Lamp Display

You can check the status of the camera by looking at the lamps.
Use **Camera ➔ Camera settings ➔ LED brightness** in the SnapBridge 360/170 app (28) to change the brightness of the lamps.

Power-On Lamp

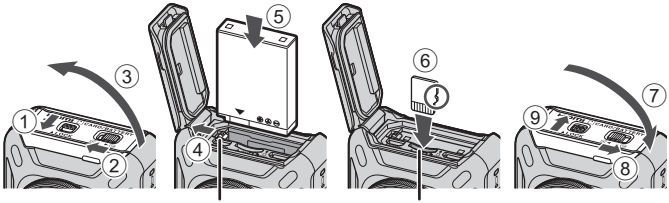
Status	Color	Description
 On	Green	• The battery level is within 30% to 100%. • The camera is detecting a computer.
	Orange	The battery level is within 10% to 30%.
Flashing	Green	• The battery is charging. Turns off when charging is complete. • The camera is connected to a computer with a USB cable.
	Red	The battery is exhausted. Charge or replace the battery (6).
 Quick flashing	Green	The battery cannot be charged (6).
 Off	–	The camera is off.

Status Lamp

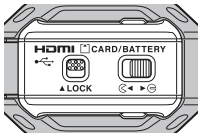
Status	Color	Description
 On at the same time	Green	The camera is connected to a TV with an HDMI cable.
	Red	The camera is recording a movie in **Standard movie** or **Time-lapse movie** mode.
 Alternately flashing	Green	The camera is on standby for pairing (📖9).
 Flashing at the same time	Green	• Pairing is complete. • The camera is capturing a still image. • The self-timer is counting down.
	Red	• The camera is recording a movie in **Superlapse movie** or **Loop recording** mode. • The camera is saving a movie (slightly quick flashing). • Pairing failed.
	Red/Green	The firmware is being updated.
 Quick flashing at the same time	Red	• A memory card is not inserted (📖4). • Out of memory. • The inside of the camera has become hot. The camera turns off automatically. Wait until the camera or battery temperature has cooled before resuming use. • The firmware version update failed.

Getting Started

Inserting the Battery and Memory Card



- Unlock the battery-chamber/memory card slot cover latch (①), move the battery-chamber/memory card slot cover latch release to the ⮜ position (②), and then open the battery-chamber/memory card slot cover (③).
- With the battery's positive and negative terminals oriented correctly, move the orange battery latch (④), and fully insert the battery (⑤).
- Slide the memory card in until it clicks into place (⑥).
- Be careful not to insert the battery or memory card upside-down or backward, as this could cause malfunction or damage to the camera or memory card.
- Close the cover (⑦), move the battery-chamber/memory card slot cover latch release to the ▶ position (⑧), and then move the battery-chamber/memory card slot cover latch to the LOCK position (⑨).
- Check that the battery-chamber/memory card slot cover latch and battery-chamber/memory card slot cover latch release are positioned as shown in the figure on the right, and that their orange indicator marks are not visible.



Notes About Waterproof and Dustproof Performance

See "Notes About Shockproof, Waterproof, and Dustproof Performance" (xi) for more information.

Formatting a Memory Card

The first time you insert a memory card that has been used in another device into this camera, insert the memory card into the camera, and make sure to format it using the SnapBridge 360/170 app.

- **Note that formatting a memory card permanently deletes all images and other data on the memory card.** Be sure to make copies of any images you wish to keep before formatting the memory card.
- Insert the memory card into the camera, and select **Camera → Camera settings → Format card** in the SnapBridge 360/170 app (📖28).

Removing the Battery or Memory Card

Turn the camera off and make sure that the power-on lamp and status lamps have turned off, and then open the battery-chamber/memory card slot cover.

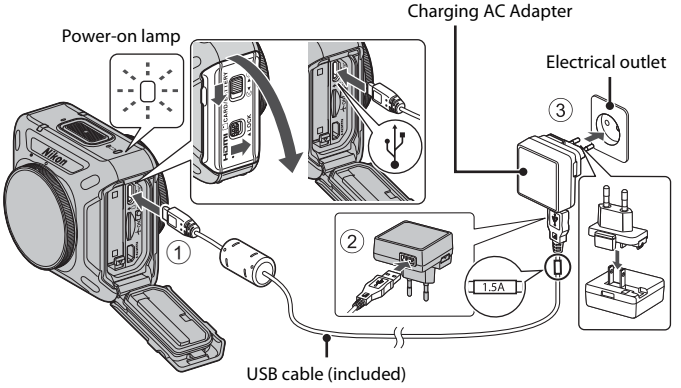
- Move the battery latch to eject the battery.
- Gently push the memory card into the camera to partially eject the memory card.
- Be careful when handling the camera, battery, and memory card immediately after using the camera, as they may be hot.
- To prevent yourself from accidentally pressing the movie button or photo button and unintentionally shooting, we recommend that you take out the battery when carrying the camera.

Memory Cards That Can Be Used

The camera supports microSD, microSDHC, and microSDXC memory cards.

- UHS-I is supported.
- Use microSDXC memory cards with an SD Speed Class rating of 6 or faster for recording movies.
  - Use memory cards with a UHS Speed Class rating of 3 or faster when the image size/frame rate is **2160/24p** (4K UHD) or **1920/24p**.
  - When using a memory card with a lower Speed Class rating, movie recording may stop unexpectedly.
- If you use a card reader, make sure that it is compatible with your memory card.
- Contact the manufacturer for information on features, operation, and limitations on use.

Charging the Battery



If a plug adapter* is included with your camera, securely connect it to the Charging AC Adapter. Once the two are connected, attempting to forcibly remove the plug adapter could damage the product.

* The shape of the plug adapter varies according to the country or region in which the camera was purchased.
This step can be omitted if the plug adapter comes permanently bonded to the Charging AC Adapter.

- Charging starts when the camera is connected to an electrical outlet while the battery is inserted, as shown in the illustration. The power-on lamp slowly flashes green while the battery is charging.
- When charging is complete, the power-on lamp turns off. Unplug the Charging AC Adapter from the electrical outlet, and disconnect the USB cable.
  Charging time is about 2 hours and 20 minutes for a fully exhausted battery.
- The battery cannot be charged when the power-on lamp quickly flashes green, possibly due to one of the reasons described below.
  - The ambient temperature is not suited to charging.
  - The USB cable or Charging AC Adapter is not properly connected.
  - The battery is damaged.

Notes About the USB Cable

- Do not use a USB cable other than the UC-E21. Using a USB cable other than the UC-E21 could result in overheating, fire or electric shock.
- Check the shape and direction of the plugs and do not insert or remove the plugs at an angle.

Notes About Charging with the Charging AC Adapter

The camera can be operated while the battery is charging, but the charging time increases.

Notes About Charging with a Computer

When **Camera → Camera settings → Charge by computer** is set to **Auto** in the SnapBridge 360/170 app (28), connecting the camera to a computer that is running will automatically charge the battery inserted into the camera using power supplied by the computer.

- When connected to a computer, the camera turns on and starts charging. The camera cannot be operated with buttons during this time.
- About 3 hours and 30 minutes are required to charge a fully exhausted battery. Charging time increases when images are transferred while the battery is charging.
- The camera turns off automatically if there is no communication with the computer for 30 minutes after the battery has finished charging.

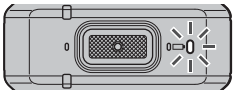
Turning the Camera On or Off

Turning On the Camera

- Press and hold down the movie button for about 3 seconds to turn on the camera.

- Shooting starts when the camera turns on by pressing the movie button or photo button.

- When the camera turns on, the power-on lamp turns on.
- You can check the battery level by looking at the power-on lamp (🕮2) or the SnapBridge 360/170 app screen.



Power-on lamp

Turning Off the Camera

- If you press and hold down the movie button for about 3 seconds when the camera is on, the camera turns off.
- By default, if the camera is not operated for about 30 seconds, the camera turns off automatically (auto off). You can change the setting using the SnapBridge 360/170 app.

- When the camera turns off, the power-on lamp turns off.

☑ The Status of the Camera at the Time of Purchase

The camera is in standby mode for initial pairing (🕮10) at the time of purchase. To shoot without pairing, turn on the airplane mode switch (🕮1) on the camera. Turning off the airplane mode switch will return the camera to initial pairing standby mode.

Turning Off the Camera During Remote Photography

The buttons of the camera are disabled during remote photography with the SnapBridge 360/170 app. To turn off the camera, exit remote photography.

See the SnapBridge 360/170 app online help for details about remote photography.

Pairing with a Smartphone or Tablet

Here, pairing refers to the setting used to connect the camera and smartphone or tablet (below, "smart device") through Bluetooth.

- The smart device screen and buttons may differ from the actual screen.

Preparing for Pairing

Prepare for pairing in advance.

Camera

- Press and hold the movie button for about 3 seconds to turn it off (📖8). When the camera turns off, the power-on lamp turns off. The camera cannot enter pairing standby mode when the camera is on.
- Use a sufficiently charged battery so that the camera does not turn off during the procedure.
- Turn off the airplane mode switch (📖1). You cannot pair when it is on.
- Insert a memory card with sufficient free space.
- Disconnect the HDMI cable or USB cable.

Smart Device

- Two types of apps are available: "SnapBridge" and "**SnapBridge 360/170**". Use "**SnapBridge 360/170**" when pairing with this camera.

Start pairing when preparations are complete.

The pairing procedure varies depending on how you use the camera. Proceed from "Initial Pairing" (📖10) or "Re-pairing" (📖14).

Initial Pairing

Perform initial pairing in the following situations:
- When pairing for the first time after purchasing the camera
- When pairing for the first time after updating the camera's firmware

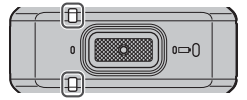
For iOS or NFC-incompatible Android Devices

1 Prepare for pairing (📖9).
- Make sure that the camera is off (the power-on lamp is off).

2 Enable Bluetooth and Wi-Fi on the smart device.
- Do not pair from the Bluetooth setting screen of the smart device.

3 Install and start the SnapBridge 360/170 app.

4 Press the movie button or photo button on the camera to put it into pairing standby mode.



Status lamps

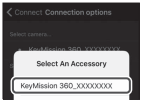
- When the status lamps flash green at the same time for a while and then alternately flash green, the camera enters pairing standby mode.
- If the camera remains in pairing standby mode for about 4 minutes, it turns off (the power-on lamp turns off) automatically. If the camera turns off during the pairing procedure, press the movie button or photo button on the camera to put it into pairing standby mode.

* If the camera does not enter pairing standby mode even after pressing the movie button or photo button, press and hold the movie button for about 7 seconds while the camera is off.

5 When the screen shown on the right is displayed, tap the camera name.

- For iOS:

  When the accessory selection screen is displayed after tapping the camera name, wait for the Bluetooth icon at the top right corner of the screen to change from white to gray, and then tap the camera name. It may take a while before the camera name is displayed.



- If pairing is successful, the screen shown on the right is displayed. Follow the on-screen instructions.

- If pairing is successful, the smart device is automatically paired simply by starting the SnapBridge 360/170 app when the camera is turned on next time (except when unpairing using the menus below or the camera's firmware is updated).
  - **Connect ➔ Connection options ➔ End pairing**
  - **Camera ➔ Camera settings ➔ Reset all**
  - **Camera ➔ Camera settings ➔ Network menu ➔ Restore default settings**
- If pairing fails, the status lamps flash red six times at the same time. When a message indicating that pairing has failed is displayed on the screen, tap **OK** and repeat the procedure from step 1.

For NFC-compatible Android Devices

1 Prepare for pairing (📖9).

- Make sure that the camera is off (the power-on lamp is off).

2 Enable Bluetooth, Wi-Fi, and NFC on the smart device.

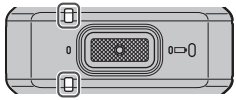
- Do not pair from the Bluetooth setting screen of the smart device.

3 Install the SnapBridge 360/170 app.

4 Close all apps that use NFC, including the SnapBridge 360/170 app.

- Pairing may fail if apps that use NFC are running.

5 Press the movie button or photo button on the camera to put it into pairing standby mode.

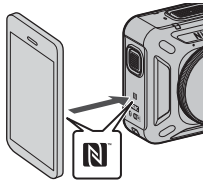


Status lamps

- When the status lamps flash green at the same time for a while and then alternately flash green, the camera enters pairing standby mode.
- If the camera remains in pairing standby mode for about 4 minutes, it turns off (the power-on lamp turns off) automatically. If the camera turns off during the pairing procedure, press the movie button or photo button on the camera to put it into pairing standby mode.

* If the camera does not enter pairing standby mode even after pressing the movie button or photo button, press and hold the movie button for about 7 seconds while the camera is off.

6 Tap the NFC antenna of the smart device to the N (N-Mark) on the camera.



- The SnapBridge 360/170 app starts. When **Camera name acquired. Connect?** is displayed, select **OK**.

- If pairing is successful, the screen shown on the right is displayed.
- If pairing is successful, the smart device is automatically paired simply by starting the SnapBridge 360/170 app when the camera is turned on next time (except when unpairing using the menus below or the camera's firmware is updated).
  - **Connect ➔ Connection options ➔ End pairing**
  - **Camera ➔ Camera settings ➔ Reset all**
  - **Camera ➔ Camera settings ➔ Network menu ➔ Restore default settings**
- If pairing fails, the status lamps flash red six times at the same time. When a message indicating that pairing has failed is displayed on the screen, tap **OK** and repeat the procedure from step 1.

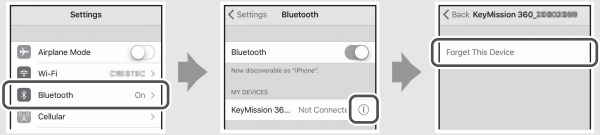
When You Cannot Pair

1 Press and hold the movie button on the camera for about 3 seconds to turn it off.

- When the camera turns off, the power-on lamp turns off.

2 Close the SnapBridge 360/170 app.

3 For iOS, remove the Bluetooth device (registered as the camera name) in the Bluetooth setting screen of the smart device.

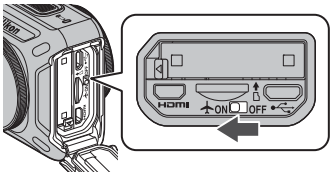


- For Android, proceed to step 4.

4 Follow "Initial Pairing" (🕮10) and repeat the pairing procedure.

Where the Use of Wireless Devices Is Prohibited

Turn on the airplane mode switch on the camera. This will temporarily interrupt the constant connection with the smart device, but the connection is automatically re-established when airplane mode is turned off.



The Display Language

The display language of the SnapBridge 360/170 app is automatically set according to the display language of the smart device. If the display language of the smart device is not supported by the SnapBridge 360/170 app, it is set to English.

Shooting/Playback/Setting with the SnapBridge 360/170 App

See the SnapBridge 360/170 app online help for more information (in the app, tap **Other ➔ Info/settings ➔ Instructions**).

Re-pairing

Perform re-pairing in the following situations:

- When pairing again with the same smart device after removing the camera using one of the following menus in the SnapBridge 360/170 app:
  - **Connect ➔ Connection options ➔ End pairing**
  - **Camera ➔ Camera settings ➔ Reset all**
  - **Camera ➔ Camera settings ➔ Network menu ➔ Restore default settings**

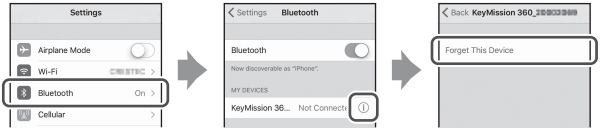
For iOS or NFC-incompatible Android Devices

1 Prepare for pairing (📖9).

- Make sure that the camera is off (the power-on lamp is off).

2 Close the SnapBridge 360/170 app.

3 For iOS, remove the Bluetooth device (registered as the camera name) in the Bluetooth setting screen of the smart device.



- For Android, proceed to step 4.

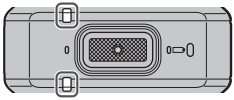
4 Enable Bluetooth and Wi-Fi on the smart device.

- Do not pair from the Bluetooth setting screen of the smart device.

5 Start the SnapBridge 360/170 app.

6 Press and hold down the movie button on the camera for about 7 seconds to put it into pairing standby mode.

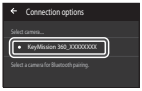
- When the status lamps flash green at the same time for a while and then alternately flash green, the camera enters pairing standby mode.
- If the camera remains in pairing standby mode for about 4 minutes, it turns off (the power-on lamp turns off) automatically.



Status lamps

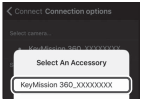
7 Tap **Connect ➔ Connection options**.

8 Tap the camera name.



- For iOS:

  When the accessory selection screen is displayed after tapping the camera name, wait for the Bluetooth icon at the top right corner of the screen to change from white to gray, and then tap the camera name. It may take a while before the camera name is displayed.



- If pairing is successful, the screen shown on the right is displayed.

For NFC-compatible Android Devices

1 Prepare for pairing (📖9).

- Make sure that the camera is off (the power-on lamp is off).

2 Enable Bluetooth, Wi-Fi, and NFC on the smart device.

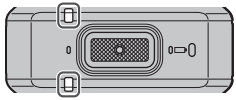
- Do not pair from the Bluetooth setting screen of the smart device.

3 Close all apps that use NFC, including the SnapBridge 360/170 app.

- Pairing may fail if apps that use NFC are running.

4 Press and hold down the movie button on the camera for about 7 seconds to put it into pairing standby mode.

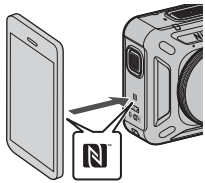
- When the status lamps flash green at the same time for a while and then alternately flash green, the camera enters pairing standby mode.
- If the camera remains in pairing standby mode for about 4 minutes, it turns off (the power-on lamp turns off) automatically.



Status lamps

5 Tap the NFC antenna of the smart device to the N (N-Mark) on the camera.

- The SnapBridge 360/170 app starts. When **Camera name acquired. Connect?** is displayed, select **OK**.



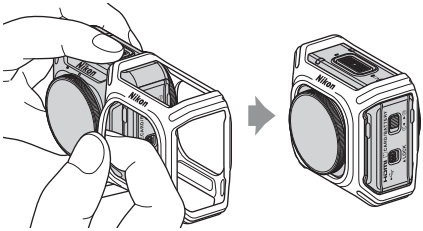
- If pairing is successful, the screen shown on the right is displayed.

Attaching the Silicone Jacket

We recommend attaching the silicone jacket to soften physical impacts to the camera.

Attach by inserting the camera from the side of the silicone jacket so that the Nikon logos of the camera and silicone jacket overlap.

- If the Nikon logos do not overlap, the silicone jacket may appear in the images.
- When using the camera underwater, remove the silicone jacket because it may shift out of place and appear in the images.



Notes About the Silicone Jacket

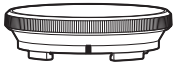
- The silicone jacket is made of silicone. Cracking may occur from areas that are damaged.
- The silicone jacket may stretch or break if subjected to excessive force.
- Do not store in locations exposed to direct sunlight or high temperatures or humidity.
- Wash in fresh water only.
- Do not clean with hard brushes or with alcohol, thinner, or other volatile substances.
- This silicone jacket cannot completely protect the camera or lenses from falls or other physical shocks.

The Lens Protector/Underwater Lens Protector

Make sure to attach the lens protectors or underwater lens protectors to protect the lens because they are made of glass.

- Lens protector:
  Used to protect the lens (attached to the camera at time of factory shipment). Although the camera can be used underwater because it is waterproof, captured images may be blurred. The lens protectors can be used up to a water depth of about 20 m (65 ft).

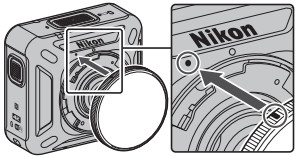
- Underwater lens protector:
  Used for shooting underwater. The underwater lens protectors can be used up to a water depth of 30 m (100 ft).



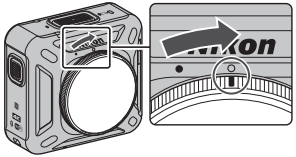
Attaching the Lens Protectors/Underwater Lens Protectors

The lens protectors are used here as an example. Turn off the camera before attachment or removal.

1 Align the marks of the lens protector and camera (●).



2 Rotate the lens protector in the direction of the arrow until it clicks to align the mark of the lens protector and mark at the center of the camera (○).



- Attach the same type of protector to both lenses.
- For removal, follow the procedure for attachment in reverse order.

Notes About the Lens Protectors and Underwater Lens Protectors

- Be careful not to subject the protectors to physical impacts or rubbing. Doing so could cause scratches or damage.
- When you are not using the camera, insert it into a case made of soft cloth material with the lens protectors or underwater lens protectors attached.

Notes About Attaching the Lens Protector or Underwater Lens Protector

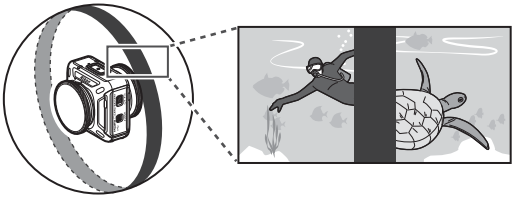
- Use a soft cloth or air duster to remove foreign substances such as water or dust from the camera, lens protector, or underwater lens protector. If the camera, lens protector, or underwater lens protector are still wet when they are attached to each other, this could cause condensation.
- Check that the protectors are securely attached.

Notes About the Underwater Lens Protectors

When the underwater lens protectors are attached, there are black borders or bands in the images because the protectors appear in the images.

Using the Camera Underwater

- Set **Underwater** in the SnapBridge 360/170 app to **Yes** (📖29).
- Wireless communication is not available when the camera is underwater.
- There are shooting ranges that cannot be captured underwater because the images are magnified compared to images captured on land. Therefore you cannot capture 360° content.



Visualization of shooting underwater with the underwater lens protectors attached

Using the Camera

Recording Movies or Shooting Still Images

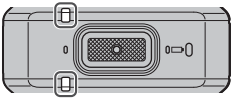
Before shooting, check the orientation of the camera (the side with the Nikon logo is the front).

- Your hands will appear in images during hand-held photography because this camera captures 360° content. To reduce the appearance of hands, use the base adapter (🕮31) to stabilize the camera and shoot.
- The camera may be unable to capture subjects within about 60 cm (2 ft) from the camera's top, bottom, or sides because the subjects are outside the angle of view (i.e., the area visible in the frame). Point the lens toward important subjects when shooting.
- If stains such as fingerprints are on the lens protector or underwater lens protector, they will appear in the images or make images look fogged. Wipe off the stains with a soft dry cloth before shooting.

Shooting with the Camera Only

1 Press the movie button or photo button.

- Pressing the movie button or photo button when the camera is off automatically turns on the camera and shooting begins.



Status lamps

- The status lamps light or flash red at the same time while recording movies (🕮3). To end movie recording, press the movie button again.
- When the photo button is pressed, the shutter sound is produced. When **Self-timer** is set to **2 s** or **10 s**, the camera beeps to indicate that the self-timer is activated, and then the shutter sound is produced. The status lamps flash green at the same time while the still image is being saved.
- You can change the volume of sounds during operation using the SnapBridge 360/170 app.

Shooting with a Smart Device

1 Pair the camera and the smart device (📖9).

2 Tap **Camera ➔ Remote photography** in the SnapBridge 360/170 app.

- When a confirmation dialog for the Wi-Fi connection is displayed, tap **OK**. For iOS, select the camera SSID under **Settings ➔ Wi-Fi** to initiate a Wi-Fi connection (if prompted, enter a password; the default is "NikonKeyMission").

3 To record a movie, tap ⏺. To shoot a still image, tap ○.

- The status lamps light or flash red at the same time while recording movies (📖3). To stop recording a movie, tap ⏺.
- When ○ is tapped, the shutter sound is produced. When **Self-timer** is set to **2 s** or **10 s**, the camera beeps to indicate that the self-timer is activated, and then the shutter sound is produced. The status lamps flash green at the same time while the still image is being saved.
- You can change the volume of sounds during operation using the SnapBridge 360/170 app.
- Still images captured are automatically sent to the smart device.

☑ Notes About Saving Movies or Images

The status lamps light in red at the same time or flash green at the same time while movies or images are being saved. **Do not open the battery-chamber/memory card slot cover or remove the battery or memory card**. Doing this could result in loss of data, or in damage to the camera or the memory card.

☑ Notes About Exposure

When the contrast is high between subjects in the front lens and back lens, the camera cannot obtain the appropriate exposure. Adjust the brightness using **Camera ➔ Camera settings ➔ Shooting options ➔ Shooting options ➔ Exposure compensation** in the SnapBridge 360/170 app (📖28).

☑ Notes About the Composited Areas of Two Images

- Under some shooting conditions, the boundaries of the composited areas may be noticeable.
- Under some shooting conditions, images may not match perfectly at the composite boundaries.

☑ The Password

We recommend that you change the default password to protect your privacy. You can change the password by using **Camera ➔ Camera settings ➔ Network menu ➔ Wi-Fi ➔ Network settings ➔ Password** in the SnapBridge 360/170 app (📖28).

Number of Images That Can Be Saved

- The approximate number of images that can be saved can be checked on the shooting screen of the SnapBridge 360/170 app.
- Note that due to JPEG compression, the number of images that can be saved may vary greatly depending on the image content, even when using memory cards with the same capacity and the same image size settings. In addition, the number of images that can be saved may vary depending on the make of the memory card.

Maximum Movie Recording Time

The available recording time for a single movie depends on the remaining space in a memory card.

- The remaining recording time for a single movie is displayed on the shooting screen of the SnapBridge 360/170 app.
- The actual remaining recording time may vary depending on the movie content, subject movement, or type of memory card.
- Use microSDXC memory cards with an SD Speed Class rating of 6 or faster for recording movies.
  - Use memory cards with a UHS Speed Class rating of 3 or faster when the image size/frame rate is **2160/24p** (4K UHD) or **1920/24p**.
  - When using a memory card with a lower Speed Class rating, movie recording may stop unexpectedly.

Camera Temperature

- The camera may become hot when recording movies for an extended period of time or when the camera is used in a hot area.
- If the inside of the camera becomes extremely hot when recording movies, the status lamps will quickly flash red and the camera will automatically stop recording.
  After the camera stops recording, it turns itself off.
  Leave the camera off until the inside of the camera has cooled.

Movies Over 4 GB in Size

When a movie with a file size of more than 4 GB is recorded, the movie is divided into files with a maximum size of 4 GB each.

Notes About Movie Recording

Notes About Recorded Movies

- The following phenomena may be saved in movies.
  - Banding may occur in images under fluorescent, mercury-vapor, or sodium-vapor lighting.
  - Subjects that move quickly from one side of the frame to the other, such as a moving train or car, may appear skewed.
  - The entire movie image may be skewed when the camera is panned.
  - Lighting or other bright areas may leave residual images when the camera is moved.
- Depending on the distance to the subject, colored stripes may appear on subjects with repeating patterns (fabrics, lattice windows, etc.) during movie recording and playback. This occurs when the pattern in the subject and the layout of the image sensor interfere with each other; it is not a malfunction.

Selecting a Movie Mode

Select the desired type of movie to record by using **Movie mode** (📖29) in the SnapBridge 360/170 app.

- **Standard movie:**
  Record normal movies.
- **Superlapse movie:**
  The camera records movies and saves them in fast motion (**960/30p** or **960/25p**). Use to record a movie while moving the camera. The camera compresses the time of changes in the subject and saves the movie.
  At **6×**, a movie recorded for six minutes is played back as a one-minute movie.
- **Loop recording:**
  If the camera exceeds the specified time when recording a movie, the camera continues recording while deleting the recorded movie data from the beginning.
  - The movie is recorded as five separate files. The length of one file varies depending on the specified time.

Specified time	Length of one file
5 min	1 min
10 min	2 min
30 min	6 min
60 min	12 min

  - If the recording time exceeds the specified time and reaches the length of one file, the camera continues recording while deleting the first file. The most recent data is saved on the memory card, resulting in a movie of the specified length.
  - If the length of the last file does not reach the length of one file, it is saved as-is.
    Example: If you recorded for 5 min and 30 s with a specified time of **5 min**
    Five 1-min files and one 30-s file are saved (up to six files).
  - When playing back the recorded movies saved in the camera on a TV, split movies are played back continuously.

- **Time-lapse movie:**
  The camera can automatically capture still images at a specified interval to create time-lapse movies.
  When **NTSC/PAL** (🕮29) is set to **NTSC**, 300 images are captured. When set to **PAL**, 250 images are captured.

Type	Interval time	Time required for shooting	
		NTSC	PAL
2 s	2 s[2]	10 min	8 min 20 s
5 s	5 s[2]	25 min	20 min 50 s
10 s	10 s[2]	50 min	41 min 40 s
30 s	30 s[2]	2 h 30 min	2 h 5 min
Night sky[1]	30 s	2 h 30 min	2 h 5 min

[1] Suited for recording the movement of stars.
[2] The exposure lock (**Yes** or **No** for **AE lock only**) can be set.

Notes About Time-lapse Movie

- If the battery is not sufficiently charged, the camera may not be able to capture all of the images.
- Use a tripod to stabilize the camera when recording time-lapse movies.
- Sound is not recorded.

Playing Back Images

Playing Back Images Saved in the Camera

1 Pair the camera and the smart device (📖9).

2 Tap **Camera → Download selected pictures** in the SnapBridge 360/170 app.

- When a confirmation dialog for the Wi-Fi connection is displayed, tap **OK**. For iOS, select the camera SSID under **Settings → Wi-Fi** to initiate a Wi-Fi connection (if prompted, enter a password; the default is "NikonKeyMission").
- Multiple images saved in the camera are displayed.

3 Tap the image that you want to play back, and then tap ▶ on the displayed screen.

- The image is played back. Drag the screen during playback to move the point of view.
- To transfer images to the smart device, follow the procedures described below while playing them back.
  - For Android: Tap ⋮ → **Download**, and then follow the on-screen instructions.
  - For iOS: Tap **Download**, and then follow the on-screen instructions.
- You can check the transferred images with the procedures described below.
  - For Android: **Gallery → Pictures on device**
  - For iOS: **Gallery → All**

The Password

We recommend that you change the default password to protect your privacy. You can change the password by using **Camera → Camera settings → Network menu → Wi-Fi → Network settings → Password** in the SnapBridge 360/170 app (📖28).

Playing Back Images Transferred to a Smart Device

1 Tap **Gallery** in the SnapBridge 360/170 app.

2 Select a type of gallery.

- **Latest download**: Multiple new images automatically downloaded from the camera are displayed. Images captured using **Remote photography** or images transferred using **Download selected pictures** are not displayed in **Latest download**.
- **Pictures on device** (for Android) / **All** (for iOS): All images transferred from the camera are displayed.

3 Tap the image that you want to play back, and then tap ▶ on the displayed screen.

- The image is played back. Drag the screen during playback to move the point of view.
- You can also edit images such as cropping. See the SnapBridge 360/170 app online help for details.

Playback on a TV or Computer

You can play back images on a TV or computer. See the Reference Manual (PDF format) for details (📖vi).

Editing Images on a Computer

If you transfer captured images to a computer, you can edit the images using KeyMission 360/170 Utility.

See the KeyMission 360/170 Utility online help for more information.

Changing the Settings

Perform the following operations in the SnapBridge 360/170 app to change the camera settings.

Pair the camera and smart device in advance (📖9).

- **Camera ➔ Camera settings**

Option		Description
Date and time		Set the camera clock.
Sound settings		Set the volume of sounds during operation. • **High**, **Normal** (default setting), **Low**, **Off**
Auto off		Set the amount of time that elapses after shooting until the camera turns off. • **2 s**, **5 s**, **30 s** (default setting), **1 min**, **5 min**
LED brightness		Set the brightness of the lamps. • **High**, **Normal** (default setting), **Low**, **Off**
Charge by computer		Set whether or not the battery in the camera is charged when the camera is connected to a computer.
Image Comment		A comment registered with **Input comment** is attached to images.
Copyright information		Copyright information registered with **Artist** and **Copyright** is attached to images.
Location data		Set whether or not to add shooting location information to the images that you take.
Firmware version		View the current camera firmware version.
Network menu		Configure the wireless network settings to connect the camera and a smart device.
	Send while shooting	Set whether to automatically upload captured images to a smart device. Movies cannot be uploaded using **Send while shooting**. To transfer movies to a smart device, use the SnapBridge 360/170 app.
	Wi-Fi	Configure Wi-Fi connection settings.
	Bluetooth	Configure Bluetooth connection settings.
	Restore default settings	Restore all **Network menu** settings to their default values.

Option			Description
Shooting options			Change settings related to shooting.
	Movies	Movie mode (📖24)	Select the desired movie option to record. • **Standard movie** • **Superlapse movie**: **2×**, **4×**, **6×**, **10×**, **15×** • **Loop recording**: **5 min**, **10 min**, **30 min**, **60 min** • **Time-lapse movie**: **2 s**, **5 s**, **10 s**, **30 s**, **Night sky**
		Movie options	Set the movie image size. • When **NTSC/PAL** is set to **NTSC** **2160/24p**, **1920/24p** (default setting), **960/30p**, **640/120p**, **320/240p** • When **NTSC/PAL** is set to **PAL** **2160/24p**, **1920/24p** (default setting), **960/25p**, **640/100p**, **320/200p**
		NTSC/PAL	Select the frame rate used when recording movies.
		Wind noise reduction	Set whether or not to reduce wind noise during movie recording.
	Still images	Image size	Set the still image size. • **7744×3872** (default setting), **3872×1936**
		Self-timer	Automatically capture still images when a preset time has elapsed. • **Off**, **2 s** (default setting), **10 s**
	Shooting options	Underwater	Set to **Yes** when shooting underwater.
		Active D-Lighting	Reduce the loss of details in highlights and shadows.
		White balance	Adjust white balance to suit the light source in order to make the colors in images match what you see with your eyes. • **Auto** (default setting): White balance is automatically adjusted. • **Daylight**: Use under direct sunlight. • **Incandescent**: Use under incandescent lighting. • **Fluorescent**: Use under fluorescent lighting. • **Cloudy**: Use under overcast skies.

Option			Description
Shooting options		Color options	Change the color tone of images that will be saved. • **Standard** (default setting): Standard processing for balanced results. Recommended for most situations. • **Vivid**: Images are enhanced for a vivid, photoprint effect. Select for images that emphasize primary colors, such as blue, red, and green. • **Monochrome**: Images are captured in black-and-white.
		Exposure compensation	Adjust overall image brightness (–2.0 – +2.0 EV in steps of 1/3 EV).
		Restore default settings	Restore all **Shooting options** settings to their default values.
Format card			Format a memory card.
Reset all			Reset the camera's settings to their default values.

- **Camera ➔ Remote options**

Option	Description
Choose connection	Select **Camera & smart device** or **Camera & remote**.
Pair remote	Use to register a remote control that is not paired with the camera, to the camera.

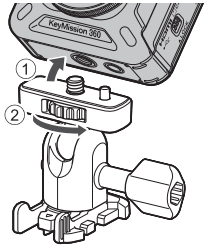
- Certain menu options cannot be set depending on the state of the camera.
- See the SnapBridge 360/170 app online help for more information.
- For information about pairing with the separately available ML-L6 Remote Control, see the Reference Manual (PDF format) (vi).

Using the Base Adapter and Base Mount

Attaching the base adapter to the camera allows you to use special accessories such as a base mount.

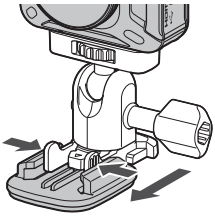
- To increase the adhesive strength, attach the base mount for 24 hours or longer before using the camera.

1 Align the camera screw with the tripod socket of the camera (①), and tighten the screw knob (②).

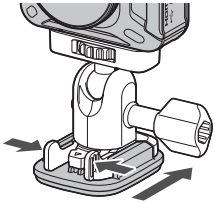


2 Attach the buckle of the base adapter to the base mount.

- While holding the two protrusions of the buckle at the same time, slide the buckle until it clicks into place.

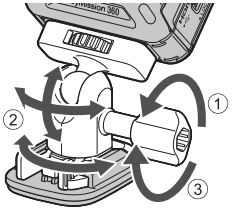


- When removing the buckle, hold the two protrusions at the same time, and slide them in the direction opposite of that for attachment.



3 Adjust the camera angle.

- Loosen the plate lock (①), set the camera angle (②), and then tighten the lock (③).



4 Make sure that there are no foreign substances on the surface to which the base mount will be attached.

- If there are foreign substances such as dust or water, remove them.

5 Peel off the release liner from the back of the base mount, and firmly press the base mount so that the entire surface is attached.

Base Mount

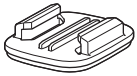
The base mount is an accessory that is used to easily attach and detach a base adapter mounted with the camera.

Attach the base mount to places where you want to mount the camera.

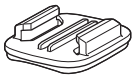
Use the flat or curved type depending on the surface to which the base mount will be attached.

The base mount is not designed for use on vehicles. Do not attach it on vehicles.

- **Base mount (flat):**
  Use to attach to flat surfaces.



- **Base mount (curved):**
  Use to attach to curved surfaces such as helmets.



Notes About Using the Base Adapter and Base Mount

- Do not use the base adapter and base mount so that they are subjected to sudden loads, such as directly attaching them to skis or snowboards. Subjecting them to sudden loads will damage the accessories or detach the base mount.
- You cannot reuse a base mount after it has been attached and then removed.
- The surface may be damaged or the paint may peel off depending on the material to which the base mount is attached. Care should be taken when attaching the base mount.
- The base mount is not suited for attachment to surfaces made of rough material such as wood or concrete.

Technical Notes

Notices

Notices for Customers in Europe

CAUTIONS

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

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.

This symbol on the battery indicates that the battery is to be collected separately.

The following apply only to users in European countries:

- All batteries, whether marked with this symbol or not, are designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

Notes About Wireless Communication Functions

Restrictions on Wireless Devices

The wireless transceiver included in this product conforms to wireless regulations in the country of sale and is not for use in other countries (products purchased in the EU or EFTA can be used anywhere within the EU and EFTA). Nikon does not accept liability for use in other countries. Users who are unsure as to the original country of sale should consult with their local Nikon service center or Nikon-authorized service representative. This restriction applies to wireless operation only and not to any other use of the product.

Security

Although one of the benefits of this product is that it allows others to freely connect for the wireless exchange of data anywhere within its range, the following may occur if security is not enabled:

- Data theft: Malicious third-parties may intercept wireless transmissions to steal user IDs, passwords, and other personal information.
- Unauthorized access: Unauthorized users may gain access to the network and alter data or perform other malicious actions. Note that due to the design of wireless networks, specialized attacks may allow unauthorized access even when security is enabled. Nikon is not responsible for data or information leaks that may occur during data transfer.
- Do not access networks that you are not permitted to use, even if they are displayed on your smartphone or tablet. Doing so may be regarded as unauthorized access. Only access networks that you are permitted to use.

Personal Information Management and Disclaimer

- User information registered and configured on the product, including wireless LAN connection settings and other personal information, is susceptible to alteration and loss resulting from operational error, static electricity, accident, malfunction, repair or other handling. Always keep separate copies of important information. Nikon is not responsible for any direct or indirect damages or lost profits resulting from alteration or loss of content that is not attributable to Nikon.
- Before discarding this product or transferring it to another owner, perform **Camera ➔ Camera settings ➔ Reset all** in the SnapBridge 360/170 app (📖28) to delete all user information registered and configured with the product, including wireless LAN connection settings and other personal information.
- Nikon is not responsible for any damages resulting from unauthorized use of this product by third parties in the event that the product is stolen or lost.

Precautions When Exporting or Carrying This Product Abroad

This product is controlled by the United States Export Administration Regulations (EAR). The permission of the United States government is not required for export to countries other than the following, which as of this writing are subject to embargo or special controls: Cuba, Iran, North Korea, Sudan, and Syria (list subject to change).

Notice for Customers in Europe

Declaration of Conformity (Europe)

Hereby, Nikon Corporation, declares that KeyMission 360 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity may be consulted at http://imaging.nikon.com/support/pdf/DoC_KeyMission_360.pdf.

Caring for the Product

Observe the precautions described below in addition to the warnings in the For Your Safety leaflet, "<Important> Notes About Shockproof, Waterproof, and Dustproof Performance and Condensation" (📖x), and "Notes About Wireless Communication Functions" (📖35) when using or storing the device.

The Camera

Do Not Apply Strong Impact to the Camera

The product may malfunction if subjected to strong shock or vibration. In addition, do not touch or apply force to the lens.

Avoid Sudden Changes in Temperature

Sudden changes in temperature, such as when entering or leaving a heated building on a cold day, can cause condensation to form inside the device. To prevent condensation, place the device in a carrying case or a plastic bag before exposing it to sudden changes in temperature.

Keep Away from Strong Magnetic Fields

Do not use or store this device in the vicinity of equipment that generates strong electromagnetic radiation or magnetic fields. Doing so could result in loss of data or camera malfunction.

Do Not Point the Lens at Strong Light Sources for Extended Periods

Avoid pointing the lens at the sun or other strong light sources for extended periods when using or storing the camera. Intense light may cause the image sensor to deteriorate or produce a white blur effect in photographs.

Turn the Product Off Before Removing or Disconnecting the Power Source or Memory Card

Do not remove the battery while the product is on, or while images are being saved or deleted. Forcibly cutting power in these circumstances could result in loss of data or in damage to the memory card or internal circuitry.

The Battery

Precautions for Use

- Note that the battery may become hot after use.
- Do not use the battery at ambient temperatures below 0°C (32°F) or above 40°C (104°F) as this could cause damage or malfunction.
- If you notice any abnormalities such as excessive heat, smoke, or an unusual smell coming from the battery, immediately discontinue use and consult your retailer or Nikon-authorized service representative.
- After removing the battery from the camera or optional battery charger, put the battery in a plastic bag, etc. in order to insulate it.

Charging the Battery

Check the battery level before using the camera and replace or charge the battery if necessary.

- Charge the battery indoors with an ambient temperature of 5°C to 35°C (41°F to 95°F) before use.
- A high battery temperature may prevent the battery from charging properly or completely, and may reduce battery performance. Note that the battery may become hot after use; wait for the battery to cool before charging.
  When charging the battery inserted into this camera using the Charging AC Adapter or a computer, the battery is not charged at battery temperatures below 0°C (32°F) or above 50°C (122°F).
- Do not continue charging once the battery is fully charged as this will result in reduced battery performance.
- The battery temperature may increase during charging. However, this is not a malfunction.

Carrying Spare Batteries

Whenever possible, carry fully charged spare batteries when taking pictures on important occasions.

Using the Battery When Cold

On cold days, the capacity of batteries tends to decrease. If an exhausted battery is used at a low temperature, the camera may not turn on. Keep spare batteries in a warm place and exchange as necessary. Once warmed, a cold battery may recover some of its charge.

Battery Terminals

Dirt on the battery terminals may prevent the camera from functioning. Should the battery terminals become dirty, wipe them off with a clean, dry cloth before use.

Charging an Exhausted Battery

Turning the camera on or off while an exhausted battery is inserted in the camera may result in reduced battery life. Charge the exhausted battery before use.

Storing the Battery

- Always remove the battery from the camera or optional battery charger when it is not being used. Minute amounts of current are drawn from the battery while it is in the camera, even when not in use. This may result in excessive battery drain and complete loss of function.
- Recharge the battery at least once every six months and completely exhaust it before returning it to storage.
- Put the battery in a plastic bag, etc. in order to insulate it and store it in a cool place. The battery should be stored in a dry location with an ambient temperature of 15°C to 25°C (59°F to 77°F). Do not store the battery in hot or extremely cold locations.

Battery Life

A marked drop in the time a fully charged battery retains its charge, when used at room temperature, indicates that the battery needs to be replaced. Purchase a new battery.

Recycling Used Batteries

Replace the battery when it no longer holds a charge. Used batteries are a valuable resource. Please recycle used batteries in accordance with local regulations.

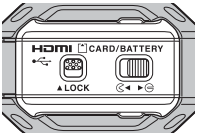
The Charging AC Adapter

- The EH-73P Charging AC Adapter is for use only with compatible devices. Do not use with another make or model of device.
- Do not use any USB cable other than the UC-E21. Using a USB cable other than the UC-E21 could result in overheating, fire or electric shock.
- Do not, under any circumstances, use another make or model of charging AC adapter other than the EH-73P Charging AC Adapter, and do not use a commercially available USB-AC adapter or a battery charger for a mobile phone. Failure to observe this precaution could result in overheating or in damage to the camera.
- The EH-73P is compatible with AC 100–240 V, 50/60 Hz electrical outlets. When using in other countries, use a plug adapter (commercially available) as necessary. For more information about plug adapters, consult your travel agency.
- The symbols on this product represent the following:
  ~ AC, ⎓ DC, ⧈ Class II equipment (The construction of the product is double-insulated.)

Cleaning and Storage

Cleaning after Using the Camera Underwater

Follow the procedure below to rinse the camera with fresh water within 60 minutes after using it underwater or at the beach. The underwater lens protectors are used here as an example.



1. Check that the battery-chamber/memory card slot cover is securely closed (locked).

- Check that the battery-chamber/memory card slot cover latch and battery-chamber/memory card slot cover latch release are positioned as shown in the figure on the right, and that their orange indicator marks are not visible.

2. Wash with fresh water while the underwater lens protectors are attached.

Immerse the camera in a shallow basin filled with fresh water for 10 minutes.

- Immerse the camera in fresh water and shake it sufficiently in the water to remove any foreign substances from the camera. If foreign substances still remain, remove them with a cotton swab, etc.
- When the camera is immersed in the water, a few air bubbles may come out from the water drain holes of the camera such as openings in the microphone or speakers. This is not a malfunction.

3. Wrap the camera with a soft dry cloth to wipe off water droplets, and dry the camera in a well-ventilated and shady place.

- Place the camera on a dry cloth to dry it.
- Do not dry the camera with hot air from a hair dryer or clothes dryer.

4. Check that there are no water droplets, remove the underwater lens protectors, and then remove any water droplets or sand remaining on the inner side of the underwater lens protectors with a soft dry cloth.

- Attaching an underwater lens protector while the inner side is still wet could cause condensation or a malfunction.

5. After making sure that there are no water droplets on the camera, open the battery-chamber/memory card slot cover and use a soft dry cloth to gently wipe off any water or sand remaining on the waterproofing packing or inside the camera.

- If the cover is closed when the inside is wet, this could cause condensation or a malfunction.

Cleaning after Using the Camera in Conditions Other than Underwater

Use a blower or air duster to remove any dust or lint that adheres to the lenses, lens protectors, silicone jacket, camera body, special accessories, etc. To remove fingerprints or other stains, gently wipe the parts with a soft dry cloth. If you wipe with too much pressure or with a rough cloth, it may damage the camera or cause a malfunction.

Storage

If you do not intend to use the camera for an extended period, remove the battery and avoid storing the camera in any of the following types of locations:

- Places that are poorly ventilated or subject to humidity of over 60%
- Places exposed to temperatures above 50°C (122°F) or below –10°C (14°F)
- Places next to equipment that produces strong electromagnetic fields, such as televisions or radios

  To prevent mold or mildew, take the camera out of storage at least once a month, and turn it on and release the shutter a few times before putting it away again. Completely exhaust the battery before storing it, and recharge it at least once every six months. Also, place the battery in a container such as plastic bag in order to insulate it, and store it in a cool place.

Troubleshooting

If the camera fails to function as expected, check the list of common problems below before consulting your retailer or Nikon-authorized service representative.
Also, refer to the Reference Manual (PDF format) (📖vi).

Camera Issues

Problem	Cause/Solution	📖
The camera is on but does not respond.	• Wait for recording to end. • If the problem persists, turn the camera off. If the camera does not turn off, remove and reinsert the battery or batteries or, if you are using an AC adapter, disconnect and reconnect the AC adapter. Note that although any data currently being recorded will be lost, data that have already been recorded will not be affected by removing or disconnecting the power source. • The buttons of the camera are disabled during remote photography. To operate the buttons of the camera, exit remote photography.	–
The camera does not turn on.	The battery is exhausted.	6, 38
Cannot take pictures or record movies.	• During remote photography, images cannot be captured only with the camera. Exit remote photography. • Disconnect the HDMI cable or USB cable. • Insert a memory card with sufficient free space.	– – 4
The camera turns off without warning.	• The camera automatically turns off to save power (auto off function). • The camera and battery may not work properly at low temperatures. • The inside of the camera has become hot. Leave the camera off until the inside of the camera has cooled, and then try turning it on again.	8 38 –
The camera becomes hot.	The camera may become hot when used for an extended period of time such as to shoot movies, or when used in a hot environment; this is not a malfunction.	–

Problem	Cause/Solution	🕮
The camera beeps three times.	• The battery is exhausted. • Out of memory. Insert a memory card with sufficient free space. • The camera has run out of file numbers. Change the memory card, or format the memory card. • An error occurred while accessing the memory card. - Use an approved memory card. - Check that the terminals are clean. - Confirm that the memory card is correctly inserted.	6, 38 4 4 4, 5

SnapBridge 360/170 App Issues

Problem	Cause/Solution	🕮
The camera cannot be paired.	• Enable Bluetooth and Wi-Fi on the smart device. When using NFC on an NFC-compatible Android device, enable NFC. • Turn off the camera. The camera cannot enter pairing standby mode when the camera is on. • Turn off the airplane mode switch on the camera. • Insert a memory card. • Disconnect the HDMI cable or USB cable. • The camera battery is exhausted.	– 8 1 4 – 6, 38
The camera cannot be operated via the smart device.	• Perform pairing. • If pairing has already been performed, select **Camera & smart device** using 📷 **Camera ➔ Remote options ➔ Choose connection** in the SnapBridge 360/170 app.	9 28
Cannot take pictures or record movies remotely.	• Enable Wi-Fi on the smart device. • Disconnect the HDMI cable or USB cable. • Insert a memory card with sufficient free space.	– – 4

Trademark Information

- Windows is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- The *Bluetooth*® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Nikon Corporation is under license.
- Apple®, App Store®, the Apple logos, Mac, OS X, iPhone®, iPad®, iPod touch® and iBooks are trademarks or registered trademarks of Apple Inc., in the U.S. and other countries.
- Android and Google Play are trademarks or registered trademarks of Google Inc. The Android robot is reproduced or modified from work created and shared by Google and used according to terms described in the Creative Commons 3.0 Attribution License.
- iOS is a trademark or registered trademark of Cisco Systems, Inc., in the United States and/or other countries and is used under license.
- Adobe, the Adobe logo, Acrobat, and Reader are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- The microSD, microSDHC, and microSDXC logos are trademarks of SD-3C, LLC.

- HDMI, HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

- Wi-Fi and the Wi-Fi logo are trademarks or registered trademarks of the Wi-Fi Alliance.
- The N-Mark is a trademark or registered trademark of NFC Forum, Inc. in the United States and in other countries.
- All other trade names mentioned in this manual or the other documentation provided with your Nikon product are the trademarks or registered trademarks of their respective holders.

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

AVC Patent Portfolio License

This product is licensed under the AVC Patent Portfolio License for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC standard ("AVC video") and/or (ii) decode AVC video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, L.L.C.
See http://www.mpegla.com.

Warranty Terms - Nikon Europe Service Warranty

Dear Nikon Customer,
We thank you for your purchasing this Nikon product. Should your Nikon product require warranty service, please contact the dealer from whom it was purchased or a member of our authorized service network within the sales territory of Nikon Europe B.V. (e.g. Europe/Russia/others). See details under:
http://www.europe-nikon.com/support

In order to avoid any unnecessary inconvenience, we advise you to read the user manuals carefully before contacting the dealer or our authorized service network.
Your Nikon equipment is guaranteed against any manufacturing defects for one full year from the date of original purchase. If during this period of guarantee the product proves defective due to improper material or workmanship, our authorized service network within the sales territory of Nikon Europe B.V. will, without charge for labor and parts, repair the product in the terms and conditions set as below. Nikon reserves the right (at its sole discretion) to replace or repair the product.

1. This warranty is only provided upon presentation of the completed warranty card and original invoice or purchase receipt indicating the date of purchase, product type and dealer's name, together with the product. Nikon reserves the right to refuse free-of-charge warranty service if the above documents cannot be presented or if the information contained in it is incomplete or illegible.

2. This warranty will not cover:
- necessary maintenance and repair or replacement of parts due to normal wear and tear.
- modifications to upgrade the product from its normal purpose as described in user manuals, without the prior written consent of Nikon.
- transport costs and all risks of transport relating directly or indirectly to the warranty of the products.

- any damage resulting from modifications or adjustments which may be made to the product, without the prior written consent of Nikon, in order to comply with local or national technical standards in force in any other country than the ones for which the product was originally designed and/or manufactured.

3. The warranty will not be applicable in the case of:

- damage caused by misuse including but not limited to failure to use the product for its normal purpose or according to the user instructions on the proper use and maintenance, and to installation or use of the product inconsistent with the safety standards in force in the country where it is used.
- damage caused by accidents including but not limited to lightning, water, fire, misuse or neglect.
- defacing, illegibility or removal of the model or serial number on the product.
- damage resulting from repairs or adjustments which have been conducted by unauthorized service organizations or persons.
- defects in any system into which the product is incorporated or with which it is used.

4. This service warranty does not affect the consumer's statutory rights under applicable national laws in force, nor the consumer's right against the dealer arising from their sales/purchase contract.

Notice: An overview of all authorized Nikon Service Stations can be found online by following this Link (http://www.europe-nikon.com/service/).

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

NIKON CORPORATION

© 2016 Nikon Corporation

CE

CT6L04(11)
6MQA1711-04