

Nikon

DIGITAL CAMERA

KeyMission 360

User's Manual

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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 vii), and "Notes About Wireless Communication Functions" (page 33).
- After reading this manual, keep it in a readily accessible place for future reference.

Introduction

Read This First

Thank you for purchasing the Nikon KeyMission 360 digital camera.

- This manual uses KeyMission 360 (firmware version 1.5) and SnapBridge 360/170 (version 1.1) in the examples. If you are using older versions, update the camera firmware and SnapBridge 360/170.
- The operating procedures may vary depending on the versions of the camera firmware, SnapBridge 360/170, and OS of the smart device.

To Learn More

See the information below to learn more about the camera and related software.

KeyMission 360/ SnapBridge 360/170 Online Manual*	Describes details on how to use the camera and “SnapBridge 360/170”, the app for smartphones/tablets. https://nikonimglib.com/snbrkm/onlinehelp/en/index.html <ul style="list-style-type: none">• You can also open it by selecting SnapBridge 360/170 → Other tab → Help.
KeyMission 360/170 Utility Help	Describes details on how to use “KeyMission 360/170 Utility”, software for computers. https://nikonimglib.com/kmutil/onlinehelp/en/index.html
SnapBridge 360/170 Tutorial Videos	Videos easily explain how to use SnapBridge 360/170 for pairing and basic operations. http://imaging.nikon.com/lineup/action/keymission_360/

- * The Online Manual is available in the following languages.
Chinese (Simplified and Traditional), Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish

Nikon Download Center

<http://downloadcenter.nikonimglib.com>

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



KeyMission 360 Model Name: N1529

Nikon User Support

Should you need technical support, we offer a number of options.

Internet

For customers in the United States: www.nikonusa.com

For customers in Canada: www.nikon.ca (English), fr.nikon.ca (Français)

For customers in Mexico: www.nikon.com.mx

For customers in Brazil: www.nikon.com.br

Telephone

For customers in the United States: **1-800-NIKON-US (1-800-645-6687)**

For customers in Canada: **1-877-534-9910**

For customers in Mexico: **001-888-565-5452**

For customers in Brazil: **0800-886-4566 (0800-88 NIKON)**

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 Protectors¹



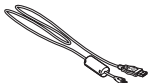
Two AA-15A Underwater Lens Protectors



EN-EL12 Rechargeable Li-ion Battery



EH-73P Charging AC Adapter²



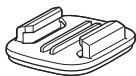
UC-E21 USB Cable



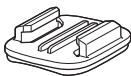
CF-AA1 BK Silicone Jacket



AA-1A Base Adapter



AA-2 Base Mount (Flat)



AA-3 Base Mount (Curved)

User's Manual (this manual)

KeyMission 360 Getting Started

Warranty

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 (📖4).

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 by selecting SnapBridge 360/170 (📖25) → 📷 **Camera** tab → **Camera settings** → **Format card**, and then completely refill it with images containing no private information such as images of empty sky (📷 **Camera** tab → **Camera settings** → **Location data** → turn off **Download from device** and then take pictures).

Next, reset all of the camera's settings by selecting SnapBridge 360/170 → 📷 **Camera** tab → **Camera settings** → **Reset all**.

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.
- Waterproof and dustproof performance is lost when the battery-chamber/memory card slot cover is open.
- 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-Shock¹ 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 test is defined by preparing 5 cameras and making sure that the test is passed within 5 cameras by dropping in 26 directions (8 corners, 12 edges, and 6 faces) from a height of 122 cm (4 ft).

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.

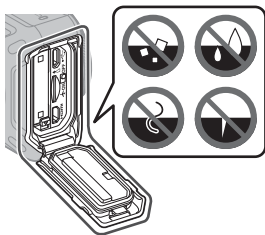
- The waterproof performance of this camera was tested in fresh water (swimming pools, rivers, and lakes) and salt water only.
- The inner portion of this camera is not waterproof. Water seeping inside the camera could cause the components to rust, resulting in high repair costs or irreparable damage.

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 (🔒).

Notes About Operating Temperature, Humidity, and Condensation

The operation of this camera has been tested at temperatures from -10°C to $+40^{\circ}\text{C}$ (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.

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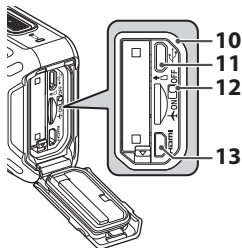
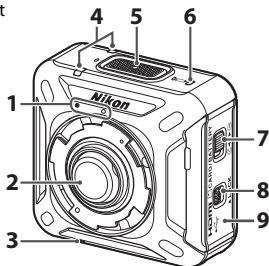


A series of horizontal dashed lines spanning the width of the page, intended for handwriting practice.

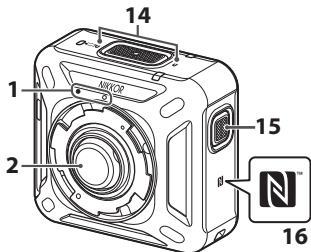
Parts of the Camera

The Camera Body

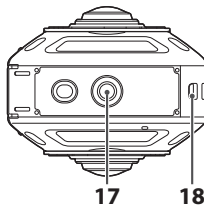
Front



Back



Bottom

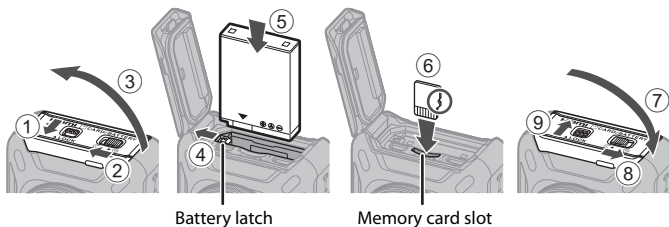


- 1** Lens protector mounting mark
- 2** Lens
- 3** Speaker
- 4** Status lamp
- 5** Movie button
- 6** Power-on lamp
- 7** Battery-chamber/memory card slot cover latch release
- 8** Battery-chamber/memory card slot cover latch
- 9** Battery-chamber/memory card slot cover

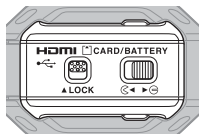
- 10** Waterproofing packing
- 11** Micro-USB connector
- 12** Airplane mode switch
- 13** HDMI micro connector (Type D)
- 14** Microphone (stereo)
- 15** Photo button
- 16** N-Mark (NFC antenna)
- 17** Tripod socket
- 18** Eyelet for fall prevention cord

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” (viii) 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 SnapBridge 360/170.

- **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 SnapBridge 360/170 (📖25) →  **Camera** tab → **Camera settings** → **Format card**.

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

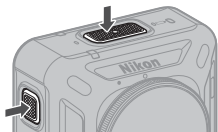
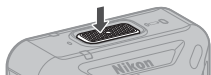
The camera supports microSD, microSDHC, and microSDXC memory cards.

- 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.

Turning the Camera On or Off

Turning On the Camera

- Press and hold down the movie button (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 (📖40) or the SnapBridge 360/170 screen.




Standby for Connection

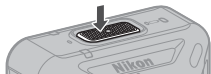
When you turn on the camera while it is paired with a smart device or remote control, the camera enters standby for connection with the smart device or remote control.

When the camera is on standby for connection, the status lamps on the camera flash green at the same time (📖41).

You can also use the camera as-is while on standby for connection.

Turning Off the Camera

- If you press and hold down the movie button (about 3 seconds) when the camera is on, the camera turns off. When the camera turns off, the power-on lamp turns off.
- By default, if the camera is not operated for about 1 minute after shooting, the camera turns off automatically (auto off). You can change the setting by selecting SnapBridge 360/170 (📖25) →  **Camera** tab → **Camera settings** → **Auto off**.



Turning Off the Camera During Remote Photography

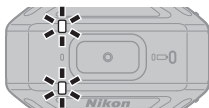
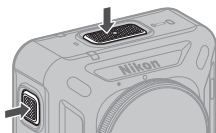
The buttons of the camera are disabled during remote photography with SnapBridge 360/170 (📖20). To turn off the camera, exit remote photography.

Using the Camera

Recording Movies or Shooting Still Images

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.
- The status lamps light red at the same time while recording movies. To end movie recording, press the movie button again. The status lamps flash red at the same time while the movie is being saved.
- 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.



Notes About Shooting

✓ Notes About Shooting

- Before shooting, check the orientation of the camera. The side with the Nikon and KeyMission 360 logos is the front. Subjects appearing at the front are displayed in the center of the frame during playback.
- Your hands will appear in images during hand-held photography because this camera captures 360° content. Use the following methods to reduce their appearance.
 - Attach the base adapter (📖10) to use accessories
 - Perform remote photography with SnapBridge 360/170 (📖20)
 - Use the ML-L6 Remote Control (available separately)
- 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.

- When the contrast is high between subjects in the front lens and back lens, the camera cannot obtain the appropriate exposure. Adjust the brightness by selecting SnapBridge 360/170 (📖25) → 📷 **Camera** tab → **Camera settings** → **Shooting options** → **Shooting options** → **Exposure compensation**.
- Under some shooting conditions, the composite boundaries may be noticeable or images may not match perfectly at the composite boundaries.

✔ Using the Camera Underwater

- Attach the underwater lens protectors when using the camera underwater (📖9). Although the lens protectors can be used underwater, captured images may be blurred.
- Select SnapBridge 360/170 (📖25) → 📷 **Camera** tab → **Camera settings** → **Shooting options** → **Still images** → set **Underwater** to **Yes**.
- Wireless communication is not available when the camera is underwater. Also, the remote control cannot be used.
- 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.

✔ Notes About Saving Movies or Still Images

The status lamps flash red at the same time or flash green at the same time while movies or still 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.

📎 Movies Over 4 GB in Size

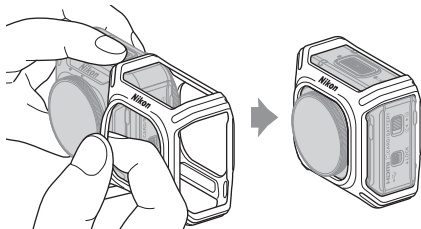
When a movie with a file size of more than 4 GB is recorded, the movie is divided into files with a maximum size of 4 GB each.

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.

Attaching the Lens Protectors/Underwater Lens Protectors

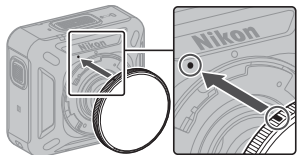
Make sure to attach the lens protectors or underwater lens protectors to protect the lenses because they are made of glass.

- **Lens protector:**
Used to protect the lens (attached to the camera at time of factory shipment). 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).

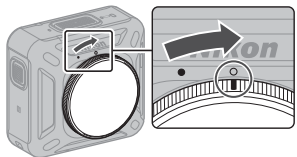


The lens protectors are used here as an example. Turn off the camera before attachment or removal.

- 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 (○).



- Check that the protectors are securely attached.
- 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 the underwater lens protectors are attached, there are black borders or bands in the images because the protectors appear in the images.
- 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

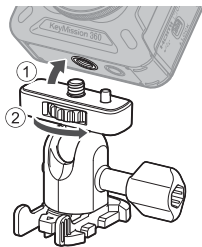
Use a soft cloth or air duster to remove foreign substances such as water or dust from the camera, lens protector, or underwater lens protector. If the camera, lens protector, or underwater lens protector is still wet when they are attached to each other, this could cause condensation.

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.

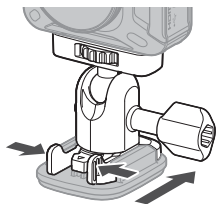
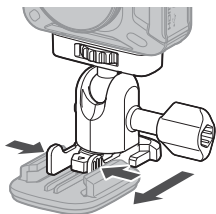
- To increase the adhesive strength, attach the base mount for 24 hours or longer before using the camera.

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



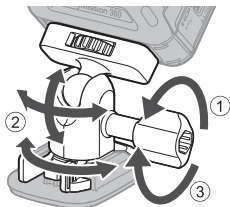
2 Attach the buckle of the base adapter to the base mount.

- 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.

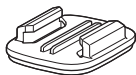
Attach the base mount to places where you want to mount the camera.

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.

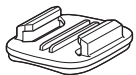
- **Base mount (flat):**

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.

Using SnapBridge 360/170

Preparing for Pairing

You can do the following when you pair the camera and a smart device installed with the dedicated app, "SnapBridge 360/170".

- Upload captured still images and movies to the smart device
- Use the smart device to perform remote photography or play back images
- Change the camera settings



Camera

- Turn off the camera (🔒5). The camera cannot enter pairing standby mode when the camera is on.
- Turn off the airplane mode switch (🔒1). You cannot pair when it is on.
- Use a sufficiently charged battery so that the camera does not turn off during the procedure.
- Insert a memory card with sufficient free space.
- Disconnect the HDMI cable or USB cable.

Smart Device


- Enable Bluetooth and Wi-Fi on the smart device. If you will use NFC, enable NFC.
- Download and install the dedicated app, "SnapBridge 360/170," from the Apple App Store® for iOS or from Google Play™ for Android™.



- "SnapBridge" cannot be used with this camera.
- You can check the OS versions that SnapBridge 360/170 supports by visiting the download sites above.





SnapBridge 360/170

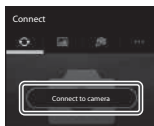
- The display language is automatically set according to the display language of the smart device. If the display language of the smart device is not supported by SnapBridge 360/170, it is set to English.
- See the online manual for more information on use (ii).
- For an overview, you can also visit the dedicated Nikon website.
<http://snapbridge.nikon.com>

Pairing with a Smart Device

When Not Using NFC

1 Prepare for pairing (13).

2 Launch SnapBridge 360/170, tap **Connect to camera** in the  **Connect** tab, and then tap **KeyMission 360**.

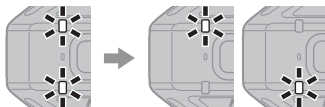
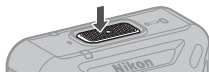


3 Check that the camera is off, and then tap **Next**.



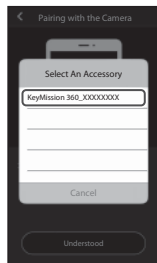
4 Press and hold down the movie button (about 7 seconds) on the camera.

- Press and hold down the movie button until the status lamps flash green at the same time, even if you hear the startup sound.
- The status lamps flash green at the same time for a while and then alternately flash green (the camera is in pairing standby mode).



5 Tap the camera name when it is displayed on the screen.

- For iOS:
When you tap the camera name, a dialog explaining the procedure is displayed. Confirm the details and tap **Understood**.
When the accessory selection screen is displayed, 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 again. It may take a while before the camera name is displayed.
- If pairing is successful, the screen shown on the right is displayed.
- 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 pairing procedure by following “When You Cannot Pair with a Smart Device” (📖18).



When Using NFC

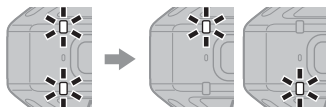
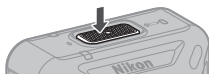
1 Prepare for pairing (📖13).

2 Close all apps that use NFC (including SnapBridge 360/170).

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

3 Press and hold down the movie button (about 7 seconds) on the camera.

- Press and hold down the movie button until the status lamps flash green at the same time, even if you hear the startup sound.
- The status lamps flash green at the same time for a while and then alternately flash green (the camera is in pairing standby mode).



4 Touch the NFC antenna of the smart device to the **N** (N-Mark) (📖1) on the camera.

- SnapBridge 360/170 launches.

5 When **Switch pairing to the camera you just touched?** is displayed, tap **OK**.




- If pairing is successful, the screen shown on the right is displayed.
- 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 pairing procedure by following "When You Cannot Pair with a Smart Device" (📖18).



Connecting after Pairing Is Successful

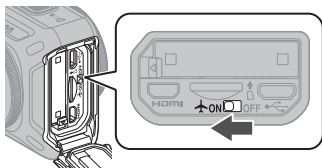
If pairing is successful, the smart device is automatically connected simply by launching SnapBridge 360/170 when the camera is turned on next time.

However, the smart device is not automatically connected in the following situations:

- When the connection is switched to the remote control
- When the smart device is unpaired ( 19)
- When the settings are reset using the following menus in SnapBridge 360/170
 -  **Camera** tab → **Camera settings** → **Reset all**
 -  **Camera** tab → **Camera settings** → **Network menu** → **Restore default settings**
- When the camera's firmware is updated

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.



Tips on Pairing

When You Cannot Pair with a Smart Device

- 1** Press and hold down the movie button (about 3 seconds) on the camera to turn it off.
 - When the camera turns off, the power-on lamp turns off.
- 2** Close SnapBridge 360/170.
 - Close SnapBridge 360/170 even if it is running in the background.
- 3** For iOS, remove the device (registered as the camera name) using the Bluetooth settings screen on the smart device.





- 4** Follow "Pairing with a Smart Device" (📖14) and repeat the pairing procedure.

Unpairing a Smart Device



When pairing with another camera that supports SnapBridge 360/170, unpair in advance.

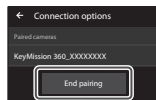
- If images cannot be uploaded to a smart device successfully such as due to long upload times, unpairing and then re-pairing may solve the problem.

1 Tap  in the  **Connect** tab.



2 Tap **End pairing** → **Yes**.

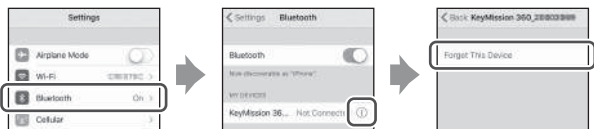
- You can also unpair using the SnapBridge 360/170 menus below:
 -  **Camera** tab → **Camera settings** → **Network menu** → **Restore default settings**
 -  **Camera** tab → **Camera settings** → **Reset all**



3 Close SnapBridge 360/170.

- Close SnapBridge 360/170 even if it is running in the background.

4 For iOS, remove the device (registered as the camera name) using the Bluetooth settings screen on the smart device.



5 To re-pair, follow the instruction in “Pairing with a Smart Device” (📖14).

Operating the Camera from a Smart Device

You can use **Remote photography** to check the composition on a smart device screen before shooting.

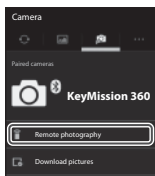
The default password for the Wi-Fi connection is "NikonKeyMission".

1 Pair the camera and the smart device (📖14).

- If they are already paired successfully, turn on the camera and launch SnapBridge 360/170.

2 Tap SnapBridge 360/170 → 📷 Camera tab → Remote photography.

- When a confirmation dialog for the Wi-Fi connection is displayed, tap **OK**.
- For Android: Proceed to step 4.
- For iOS:
 - Proceed to step 3.
 - If the Wi-Fi connection is already established, the shooting screen is displayed. Proceed to step 4.







3 For iOS, confirm the details of the dialog and tap **View settings**.

- Select the camera SSID on the Wi-Fi settings screen of the smart device. If prompted for a password, input **"NikonKeyMission"** (default) while capitalizing the "N", "K", and "M".
- When you select the camera SSID and return to SnapBridge 360/170, the shooting screen is displayed.




4 Check the composition and then shoot.



- Drag the screen to move the point of view. Tap  to return to the original point of view.
- To record a movie, tap . To shoot a still image, tap . To stop recording a movie, tap .
- The subject is not displayed while recording movies.
- The connection with the smart device is disabled temporarily while recording time-lapse movies.



Changing the SSID and Password

You can change the SSID and password by selecting SnapBridge 360/170 →  **Camera** tab → **Camera settings** → **Network menu** → **Wi-Fi** → **Network settings**. To protect your privacy, we recommend that you change the password regularly.

Downloading Images During Remote Photography

When  → **Download** in the shooting screen is on, still images captured are automatically sent to the smart device. Movies cannot be sent automatically. You can use **Download pictures** () to send movies to the smart device.

Playing Back Images Saved in the Camera/ Transferring Images to a Smart Device

You can use **Download pictures** to play back or delete images saved in the camera while a wireless connection is established. You can also download only selected images to the smart device.

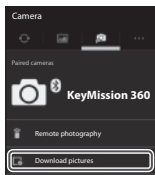
The default password for the Wi-Fi connection is “NikonKeyMission”.

1 Pair the camera and the smart device (📖14).

- If they are already paired successfully, turn on the camera and launch SnapBridge 360/170.

2 Tap SnapBridge 360/170 → 📷 Camera tab → **Download pictures.**

- When a confirmation dialog for the Wi-Fi connection is displayed, tap **OK**.
- For Android: Proceed to step 4.
- For iOS:
 - Proceed to step 3.
 - If the Wi-Fi connection is already established, thumbnails of images in the camera are displayed. Proceed to step 4.



3 For iOS, confirm the details of the dialog and tap **View settings.**

- Select the camera SSID on the Wi-Fi settings screen of the smart device. If prompted for a password, input **“NikonKeyMission”** (default) while capitalizing the “N”, “K”, and “M”.
- When you select the camera SSID and return to SnapBridge 360/170, the thumbnails of images in the camera are displayed.




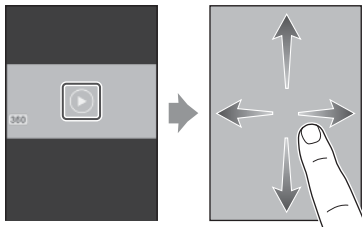
4 Tap a thumbnail.

- Perform the operations below while thumbnails are displayed to select multiple images and transfer them to the smart device.
 - For Android: Tap **☰** → **Select**, and then tap all of the images that you want to transfer. Tap **☰** → **Download selected pictures**, and then follow the on-screen instructions.
 - For iOS: Tap **Select**, and then tap all of the images that you want to transfer. Tap **Download selected pictures**, and then follow the on-screen instructions.



5 Tap .


- Part of the single image that was processed in the camera is displayed.
- Drag the image to move the point of view during playback. Tap  to return to the original point of view.




6 To transfer images to the smart device, perform the procedures below during playback.

- For Android: Tap **☰** → **Download**, and then follow the on-screen instructions.
- For iOS: Tap **Download**, and then follow the on-screen instructions.

Changing the SSID and Password

You can change the SSID and password by selecting SnapBridge 360/170 →  **Camera** tab → **Camera settings** → **Network menu** → **Wi-Fi** → **Network settings**. To protect your privacy, we recommend that you change the password regularly.

Playing Back Images Transferred to a Smart Device



1 Tap SnapBridge 360/170 →  **Gallery** tab.

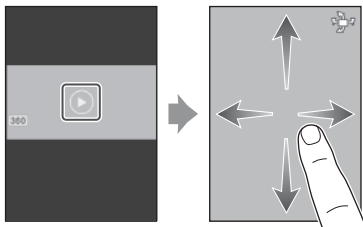


2 Select a type of gallery and tap a thumbnail.

- **Latest download:** Multiple new images automatically downloaded from the camera are displayed. Images captured using **Remote photography** or images transferred using **Download 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 .

- Part of the single image that was processed in the camera is displayed.
- Drag the image to move the point of view during playback. Tap  to return to the original point of view.
- Tap  to move the point of view according to the movement of the smart device.



Changing the Settings



Settings List

You can change the camera settings by using **Camera settings** and **Remote options** in SnapBridge 360/170 →  **Camera** tab.

- Pair the camera and smart device in advance (📖14).
- You can also change the camera settings (except some settings) by using the computer software “KeyMission 360/170 Utility”. Pairing with a smart device is not required to change settings by using KeyMission 360/170 Utility.
- Certain menu options cannot be set depending on the state of the camera.

Camera Settings

Option	Description
Date and time	Set the camera clock.
Sound settings	Set the volume of sounds during operation. <ul style="list-style-type: none">• Default setting: Normal
Auto off	Set the amount of time that elapses after shooting until the camera turns off. <ul style="list-style-type: none">• Default setting: 1 min
LED brightness	Set the brightness of the status lamps. <ul style="list-style-type: none">• Default setting: Normal
Charge by computer	Set whether or not the battery in the camera is charged when the camera is connected to a computer. <ul style="list-style-type: none">• Default setting: Auto
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.

Option	Description
Network menu	<p>When SnapBridge 360/170 →  Connect tab → Auto download is on, still images captured after setting Send while shooting → Still images to Yes are automatically sent to the paired smart device.</p> <ul style="list-style-type: none"> • Movies cannot be sent automatically. Movies can be sent using Download pictures (22).
	<p>Wi-Fi</p> <p>Configure Wi-Fi connection settings.</p>
	<p>Bluetooth</p> <p>If Send while off is set to Yes, the camera communicates with the smart device even when the camera is off. If it is set to No, communication stops when the camera turns off.</p>
	<p>Restore default settings</p> <p>Restore all Network menu settings to their default values.</p> <ul style="list-style-type: none"> • The connection with the smart device is disconnected. • The camera is paired with the most recently paired remote control.
Shooting options	<p>Movies</p> <p>Movie mode: Select a movie mode.</p> <ul style="list-style-type: none"> • Standard movie (default setting): Record normal movies. • Superlapse movie: Record movies and save them in fast motion. • 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. • Time-lapse movie: Automatically capture still images at a specified interval to create time-lapse movies.
	<p>Movie options: Select the movie image size/frame rate.</p> <ul style="list-style-type: none"> • Default setting: 1920/24p
	<p>NTSC/PAL: Select the frame rate used when recording movies.</p>
	<p>Wind noise reduction: Set whether or not to reduce wind noise during movie recording.</p> <ul style="list-style-type: none"> • Default setting: No
	<p>Still images</p> <p>Image size: Set the still image size.</p> <ul style="list-style-type: none"> • Default setting: 7744x3872 <p>Self-timer: Automatically capture still images when a preset time has elapsed.</p> <ul style="list-style-type: none"> • Default setting: 2 s

Option		Description
Shooting options	Shooting options	<p>Underwater: Set to Yes when shooting underwater.</p> <ul style="list-style-type: none"> • Default setting: No
		<p>Active D-Lighting: Reduce the loss of details in highlights and shadows.</p> <ul style="list-style-type: none"> • Default setting: No
		<p>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.</p> <ul style="list-style-type: none"> • Default setting: Auto
		<p>Color options: Change the color tone of images that will be saved.</p> <ul style="list-style-type: none"> • Default setting: Standard
		<p>Exposure compensation: Adjust overall image brightness.</p> <ul style="list-style-type: none"> • Default setting: 0.0
		<p>Restore default settings: Restore all the settings in Shooting options → Shooting options to their default values.</p>
Format card		Format a memory card.
Reset all		<p>Reset the camera's settings to their default values.</p> <ul style="list-style-type: none"> • The connection with the smart device is disconnected. • The camera is paired with the most recently paired remote control.

Remote Options

Option	Description
Choose connection	Use to switch the connection from a smart device to a paired remote control.
Pair remote	Use to pair the camera and the ML-L6 Remote Control (available separately).

Connecting the Camera to External Devices

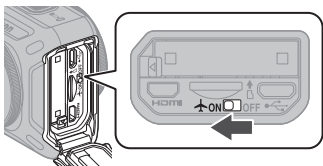
Outputting Live Images

You can output the live image appearing through the lens and the audio obtained from the microphone to an HDMI-supported device.

Use to record images from the camera with a commercially available external recorder.

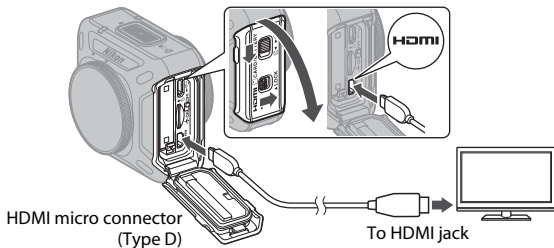
1 Turn off the camera.

2 Turn on the airplane mode switch on the camera.



3 Connect the camera to an HDMI-supported device.

- Connect a commercially available HDMI cable to the HDMI-supported device's HDMI input jack.
- Check the shape and direction of the plugs and do not insert or remove the plugs at an angle.



4 Set the HDMI-supported device's input to external input.

- See the documentation provided with your HDMI-supported device for details.

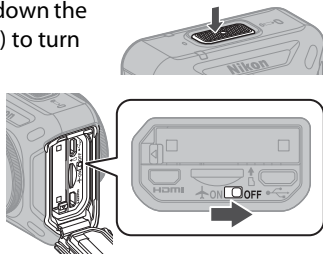
5 Press and hold down the movie button and photo button at the same time (about 3 seconds).

- The camera turns on and the live image is displayed.
- The status lamps light green at the same time while the live image is output.



6 To stop output, press and hold down the movie button (about 3 seconds) to turn off the camera.

- Return the airplane mode switch to OFF.



✓ Notes About Connecting Cables to the Camera

- Make sure that the camera battery is sufficiently charged. If the EH-62F AC Adapter (available separately) is used, this camera can be powered from an electrical outlet. Do not, under any circumstances, use an AC adapter other than the EH-62F. Failure to observe this precaution could result in overheating or damage to the camera.
- For information about the connection methods and subsequent operations, refer to the documentation included with the HDMI-supported device in addition to this document.

✓ Notes About Outputting Live Images

- Note the following while outputting live images:
 - Waterproof and dustproof performance is lost because the battery-chamber/memory card slot cover is open.
 - Buttons can be operated only to turn off the camera.
 - The camera cannot be connected to a smart device or remote control.
 - **Camera settings → Shooting options → Movies → Movie mode** is fixed to **Standard movie**.
 - If the inside of the camera becomes hot, output stops automatically and the status lamps quickly flash red at the same time. When the camera has cooled, output resumes automatically.
- The single image that was processed in the camera is displayed. You cannot move the point of view.
- The following settings are applied to the output image:
 - **Camera settings → Shooting options → Movies → NTSC/PAL**
 - **Camera settings → Shooting options → Shooting options**
- The image size of the output image is fixed to 1920×1080 pixels regardless of the **Movie options** setting.
- The frame rate of the output image varies depending on the **NTSC/PAL** setting.
 - For **NTSC**: 29.97 fps
 - For **PAL**: 25 fps

Technical Notes

Notices

Notices for Customers in the U.S.A.

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS.

DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet if needed.

The power supply unit is intended to be correctly orientated in a vertical or floor mount position.

Federal Communications Commission (FCC) Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful

interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

CAUTIONS

Modifications

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



Nikon

KeyMission 360

Interface Cables

Use the interface cables sold or provided by Nikon for your equipment. Using other interface cables may exceed the limits of Class B Part 15 of the FCC rules.

Notice for Customers in the State of California

WARNING

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm.

Wash hands after handling.

Nikon Inc.,

1300 Walt Whitman Road, Melville, New York 11747-3064, U.S.A.

Tel: 631-547-4200

Notice for Customers in Canada

CAN ICES-3 B / NMB-3 B

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, select SnapBridge 360/170 (📖25) → 📷 Camera tab → **Camera settings** → **Reset all** 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 the U.S.A. and Canada

Federal Communications Commission (FCC) and Industry of Canada (IC)

Declaration of Conformity

This device complies with Part 15 of FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

FCC/IC RF Exposure Statement

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research.

KeyMission 360, which is equipped with a TYPE1FJ (FCC ID:VPYLB1FJ / IC ID:772C-LB1FJ) Wireless LAN Module, has been tested and found to comply with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. Please refer to the SAR test report that was uploaded to FCC website.

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” (📖vii), and “Notes About Wireless Communication Functions” (📖33) 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.)

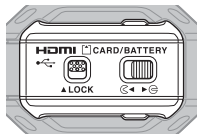
Cleaning and Storage

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.







Lamp Display

You can check the status of the camera by looking at the lamps.

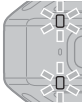
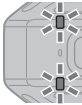
Lamp Display

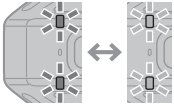
The KeyMission 360/SnapBridge 360/170 Online Manual (ii) easily explains the lamp display through animations.

Power-On Lamp

Color	Status	Description
 Green	On	<ul style="list-style-type: none">• The battery level is within 30% to 100%.• The camera is detecting a computer.
	Flashing	<ul style="list-style-type: none">• The battery is charging. Turns off when charging is complete.• The camera is connected to a computer with a USB cable.
	Quick flashing	The battery cannot be charged ( 4).
 Orange	On	The battery level is within 10% to 30%.
 Red	Flashing	The battery is exhausted. Charge or replace the battery ( 4).
 Off	–	The camera is off.


Status Lamp

Color	Status	Description
 <p>Green</p>	On at the same time	<ul style="list-style-type: none"> Live images are being output. The camera is connected to a TV with an HDMI cable.
	Flashing at the same time	<ul style="list-style-type: none"> The camera is capturing a still image. The self-timer is counting down. Pairing is complete.
	Flashing at the same time (once in 5 seconds)	The camera is on standby for connection with a smart device (you can also use the camera as-is). When you launch SnapBridge 360/170 on a paired smart device, the camera is reconnected.
	Flashing at the same time (twice in 5 seconds)	The camera is on standby for connection with a remote control (you can also use the camera as-is). When you turn on a paired remote control, the camera is reconnected.
	Alternately flashing	The camera is in pairing standby mode for a smart device.
	Alternately flashing quickly	The camera is in pairing standby mode for a remote control.
 <p>Red</p>	On at the same time	<ul style="list-style-type: none"> The camera is recording a movie in Standard movie mode. The camera is recording a movie in Superlapse movie, Loop recording, or Time-lapse movie mode (changes from flashing 3 times to on).
	Flashing at the same time	<ul style="list-style-type: none"> The camera is saving a movie. Pairing failed.
	Quick flashing at the same time	<ul style="list-style-type: none"> A memory card is not inserted. Out of memory. Output of live images is stopped because the inside of the camera became hot during output. When the camera has cooled, output resumes automatically. 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.


Color	Status	Description
 <p>Red/Green</p>	Flashing at the same time	The firmware is being updated.



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.


See the KeyMission 360/SnapBridge 360/170 Online Manual for more information (ii).

Power and Setting Issues


Problem	Cause/Solution	
The camera is on but does not respond.	<ul style="list-style-type: none"> • Wait for recording to end. • If the problem persists, turn the camera off. <p>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.</p> <p>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.</p>	– 5
	<ul style="list-style-type: none"> • Check the lamp display. • The buttons of the camera are disabled during remote photography. To operate the buttons of the camera, exit remote photography. • Buttons can be operated only to turn off the camera while a live image is output. 	40 – –
The camera does not turn on.	The battery is exhausted.	4, 36



Problem	Cause/Solution	
The camera turns off without warning.	<ul style="list-style-type: none"> The camera automatically turns off to save power (auto off function). Depending on the status of the camera, it turns off after a specific time regardless of the auto off setting. 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. 	5 – 36 –
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.	–
The camera beeps three times.	<ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> Use an approved memory card. Check that the terminals are clean. Confirm that the memory card is correctly inserted. 	4, 36 2 2 2, 3
Date and time of recording are not correct.	<ul style="list-style-type: none"> When the camera is turned on for the first time, the camera clock is set to "01/01/2017 00:00". Set the date and time of the camera clock by selecting SnapBridge 360/170 →  Camera tab → Camera settings → Date and time. The camera clock is not as accurate as ordinary watches or clocks. Periodically compare the time of the camera clock with that of a more accurate timepiece and reset as required. 	25

Shooting Issues

Problem	Cause/Solution	
Cannot take pictures or record movies.	<ul style="list-style-type: none"> Check the lamp display. Insert a memory card with sufficient free space. Disconnect the HDMI cable or USB cable. During remote photography, images cannot be captured only with the camera. Exit remote photography. Buttons can be operated only to turn off the camera while a live image is output. 	40 2 – – –

SnapBridge 360/170 Issues

Problem	Cause/Solution	
<p>The camera cannot be paired with a smart device.</p>	<ul style="list-style-type: none"> • Enable Bluetooth and Wi-Fi on the smart device. If you will use NFC, 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 with sufficient free space into the camera. • Disconnect the HDMI cable or USB cable. • Use a sufficiently charged battery. • Follow "When You Cannot Pair with a Smart Device" (📖18) and repeat the pairing procedure. • If the devices are paired, unpair and then re-pair. • The camera cannot be paired with multiple devices at the same time. • If SnapBridge is running, close it. 	<p>–</p> <p>5</p> <p>1</p> <p>2</p> <p>–</p> <p>4, 36</p> <p>–</p> <p>19</p> <p>–</p> <p>–</p>
<p>The camera cannot be operated via the smart device.</p>	<ul style="list-style-type: none"> • Perform pairing. • If SnapBridge 360/170 → 📷 Camera tab → Camera settings → Network menu → Bluetooth → Send while off is set to No, turn on the camera or set it to Yes. • Check that the 🔄 icon is displayed in SnapBridge 360/170 → 🔄 Connect screen. The 🔄 icon is not displayed when the camera is off or immediately after it is turned on. • If the camera is connected to a remote control, switch the connection to the smart device. 	<p>13</p> <p>–</p> <p>–</p> <p>–</p>
<p>Cannot upload images to a smart device that has a wireless connection established.</p>	<ul style="list-style-type: none"> • Perform the operations described below when uploading automatically. <ul style="list-style-type: none"> - Select SnapBridge 360/170 → 🔄 Connect tab → turn on Auto download. - Select SnapBridge 360/170 → 📷 Camera tab → Camera settings → Network menu → Send while shooting → set Still images to Yes. • To automatically send images captured using remote photography, tap 📷 on the shooting screen, and then turn on Download on the screen that is displayed. 	<p>–</p> <p>–</p>

Problem	Cause/Solution	
Cannot perform Remote photography or Download pictures .	<ul style="list-style-type: none"> • Enable Wi-Fi on the smart device. • If you cannot perform Remote photography or Download pictures even after pairing and establishing a Wi-Fi connection, you may be able to solve the problem with the operations below: <ul style="list-style-type: none"> - Switch the tabs in SnapBridge 360/170. - Exit and launch SnapBridge 360/170 again. - Unpair, remove the device, and then re-pair. 	– – – 19
Wi-Fi is disconnected and the Wi-Fi connection prompt is displayed again.	Wi-Fi may get disconnected in the situations below. Follow the on-screen instructions to establish a Wi-Fi connection again. <ul style="list-style-type: none"> • Switching to a tab other than the  Camera tab. • Being nearby a device that generates strong electromagnetic radiation. 	–
File cannot be played back.	<ul style="list-style-type: none"> • This app may not be able to play back images saved with another make or model of digital camera. • This app cannot play back movies recorded with another make or model of digital camera. • This app may not be able to play back data edited on a computer. 	–
Cannot edit image.	<ul style="list-style-type: none"> • Some images cannot be edited. • This app is unable to edit images captured with other cameras. 	–

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HDMI

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A series of horizontal dashed lines spanning the width of the page, intended for handwriting practice.

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