

Choose from 3 different manuals.

The **Network Guide** (this manual)

The **Reference Manual** (pdf)

In addition to the material covered in the *User's Manual* supplied with the camera, the *Reference Manual* details the options available in the camera menus and covers such topics as connecting the camera to other devices.

Among the topics covered in the Reference Manual are:

- Basic shooting and playback operations
- · Advanced shooting options
- The camera menus
- Connecting to computers, printers, and HDMI devices
- Flash photography using optional flash units

The Reference Manual (pdf) is available from the Nikon Download Center.

2 7: https://downloadcenter.nikonimglib.com/en/products/492/Z_7.html
2 6: https://downloadcenter.nikonimglib.com/en/products/493/Z_6.html

The Reference Manual can also be viewed online in html format.

https://onlinemanual.nikonimglib.com/z7_z6/en/

About This Guide

This guide is chiefly devoted to describing how to connect to a wireless local area network (LAN) using the camera's built-in Wi-Fi and how to use network features once connected. Be sure to read this guide and the camera manual thoroughly and to keep them where they will be read by all those who use the product. Should damage to this guide render it illegible, a replacement copy (pdf) can be downloaded from the Nikon Download Center.

Symbols and Conventions

To make it easier to find the information you need, the following symbols and conventions are used:



This icon marks notes; information that should be read before using this product.



This icon marks tips, additional information you may find helpful when using this product.



This icon marks references to other sections in this manual.

Menu items, options, and messages displayed in the camera monitor are shown in **bold**

Throughout this manual, smartphones and tablets are referred to as "smart devices", and the XQD memory cards used by the camera as "memory cards".

Camera Settings

The explanations in this manual assume that default settings are used.

Illustrations

The appearance and content of the software and operating system dialogs, messages, and displays shown in this guide may vary with the operating system used. For information on basic computer operations, see the documentation provided with the computer or operating system.

Camera and Network System Chart

The types of network connection available with the camera and optional accessories are shown below. The focus of this guide is on connecting to computers; for information on connecting to networks using a WT-7 wireless transmitter, see the manual supplied with the WT-7.





What Networks Can Do for You

The camera supports network connections to computers, smartphones, tablets, and other devices. Once connected, you can upload pictures or control the camera remotely.

Want to upload pictures to a computer?

...then connect via Wi-Fi (O 1)

Using the camera's built-in wireless LAN (Wi-Fi), you can connect to computers to upload photos and movies.

Connecting to a Computer

The camera can connect either:

by direct wireless link (access-point mode, ● 3), or

.

Want to download pictures to or control the camera from a smart device?

...then connect using the SnapBridge app (O 18) Install the SnapBridge app on your smartphone or tablet (smart device) and connect to the camera via Bluetooth or Wi-Fi.

Want to upload pictures to a computer or ftp server, control the camera from a computer, or control the camera from a web browser?

...then connect using the WT-7 (O 37)

Connecting to a network using the optional WT-7 wireless transmitter gives access to a variety of features.

features.

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Connecting to Computers via Wi-Fi

Infrastructure and Access-Point Modes

The camera can connect either via a wireless router on an existing network (infrastructure mode) or by direct wireless link (access-point mode).

Access-Point Mode

The camera and computer connect via direct wireless link, with the camera acting as a wireless LAN access point and without the need for





Access-point mode (O 3)

complicated adjustments to settings. Choose this option when working outdoors or in other situations in which the computer is not already connected to a wireless network.

Infrastructure Mode

The camera connects to a computer on an existing network (including home networks) via a wireless router. The computer can still connect to the Internet while connected to the camera.

Infrastructure Mode

This guide assumes you are connecting via an existing wireless network. Connection to computers beyond the local area network is not supported.

Connecting in Access-Point Mode

Follow the steps below to create a direct wireless link to a computer in access-point mode.

- 1 Display network settings. Select Connect to PC in the camera setup menu, then highlight Network settings and press 2.
- 2 Select Create profile.
 Highlight Create profile and press J.



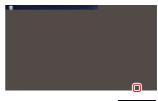
3 Select Direct connection to PC.
Highlight Direct connection to PC
and press J.



The camera SSID and encryption key will be displayed.



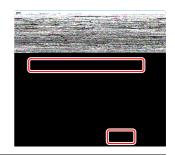
4 Connect from the computer. Windows: Click the wireless LAN icon in the taskbar and select the SSID displayed by the camera in Step 3. When prompted to enter the network security key, enter the encryption key displayed by the camera in Step 3.





macOS/OS X: Click the wireless LAN icon in the menu bar and select the SSID displayed by the camera in Step 3. When prompted to supply a password, enter the encryption key displayed by the camera in Step 3.

5 Launch the Wireless Transmitter Utility. When prompted, launch the Wireless Transmitter Utility on the computer. 6 Select the camera. In the Wireless Transmitter Utility, select the camera name displayed in Step 5 and click **Next**.



7 Enter the authentication code. The camera will display an authentication code.

Enter the authentication code in the dialog displayed by the Wireless Transmitter Utility and click **Next**.

8 Complete the pairing process.
When the camera displays a message stating that pairing is complete, press

In the Wireless Transmitter Utility, click **Next**. The application will close automatically.

A connection will now be established between the camera and computer.

9 Check the connection. When a connection is established, the network SSID will be displayed in green in the camera Connect to PC menu.

Connecting in Infrastructure Mode

Follow the steps below to connect to a computer on an existing network in infrastructure mode.

- 1 Display network settings. Select Connect to PC in the camera setup menu, then highlight Network settings and press 2.
- 2 Select Create profile.
 Highlight Create profile and press J.

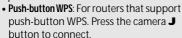


3 Search for existing networks. Highlight Search for Wi-Fi network and press J. The camera will search for networks currently active in the vicinity and list them by name (SSID).



"Easy Connect"

To connect without entering an SSID or encryption key, press **X** in Step 3, then press **J** and choose from the following options:





 PIN-entry WPS: The camera will display a PIN; to connect, use a computer to enter the PIN into the router (for more information, see the documentation provided with the router).
 After connecting, proceed to Step 6. 4 Choose a network.

Highlight a network SSID and press J (if the desired network is not displayed, press **X** to search again). Encrypted networks are indicated by a **h** icon: if the selected network is

encrypted, you will be prompted to enter the encryption key as described in Step 5. If the network is not encrypted, proceed to Step 6.

Hidden SSIDs

Networks with hidden SSIDs are indicated by blank entries in the network list. If you highlight a blank entry and press **J**, you will be prompted to provide the network name; press **J**, enter a name, and then press X. Press X again to proceed to Step 5.



5 Enter the encryption key. When prompted to enter the encryption key for the wireless router, press J ...

...and enter the key as described below. For information on the encryption key, see the documentation for the wireless router. Press X when entry is complete.

Press X again to initiate the connection. The message at right will be displayed for a few seconds when the connection is established.

Text Entry

A keyboard is displayed when text entry is required. Tap letters on the screen (to cycle through the upper- and lower-case and symbol keyboards, tap the keyboard selection button) or use the multi selector to highlight characters and press J to insert them at the current cursor position.

- 6 Obtain or select an IP address. Highlight one of the following options and press J.
 - Obtain automatically: Select this option if the network is configured to supply the IP address automatically.
 - Entermanually: When prompted, enter an IP address by rotating the main command dial to highlight segments, pressing 4 and 2 to change and pressing J to accept. Press X to exit to the "IP address"

8 Select the camera. In the Wireless Transmitter Utility, select the camera name displayed in Step 7 and click **Next**.



9 Enter the authentication code. The camera will display an authentication code.

Enter the authentication code in the dialog displayed by the Wireless Transmitter Utility and click **Next**.

Uploading Pictures

You can select pictures for upload in the camera playback display or upload pictures as they are taken.

Destination Folders

By default, images are uploaded to the following folders:

- Windows: \Users\(user name)\Pictures\Wireless Transmitter Utility
- Mac: /Users/(user name)/Pictures/Wireless Transmitter Utility
 The destination folder can be selected using the Wireless Transmitter
 Utility. For more information, see the utility's online help.

Selecting Pictures for Upload

Follow the steps below to select pictures for upload.

- 1 Start playback. Press the **K** button on the camera and select full-frame or thumbnail playback.
- 2 Press the i button. Select a picture and press the i button to display the playback i menu.



3 Choose Select to send/deselect (PC). Highlight Select to send/deselect (PC) and press J. A white transfer icon will appear on the picture. If the camera is currently connected to a network, upload will begin immediately; otherwise, upload will



begin when a connection is established. The transfer icon turns green during upload.

D Deselecting Pictures

To remove transfer marking from the current picture, highlight **Select to send/deselect (PC)** and press **J**. To remove transfer marking from all pictures, select **Connect to PC > Options > Deselect all?** in the setup menu.

Uploading Photos as They Are Taken

To upload new photos as they are taken, select On for Connect to PC > Options > Auto send. Upload begins only after the photo has been recorded to the memory card; be sure a memory card is inserted in the camera. Movies and photographs taken in movie mode are not uploaded automatically when recording is complete but must instead be uploaded from the playback display.

The Transfer Icon

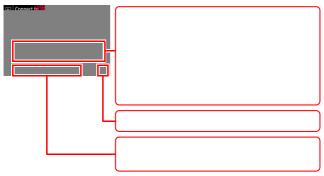
Upload status is indicated by the transfer icon.

- **Y** (white): **Send**. The picture has been selected for upload but upload has not yet begun.
- **X** (green): **Sending**. Upload in progress.
- Y (blue): **Sent**. Upload complete.



The "Connect to PC" Status Display

The Connect to PC display shows the following information:



Loss of Signal

Wireless transmission may be interrupted if the signal is lost, but can be resumed by turning the camera off and then on again.

Disconnecting and Reconnecting

The camera's link to an existing network can be suspended or resumed as described below.

Disconnecting

You can disconnect by turning the camera off, selecting **Disable** for **Connect to PC > Wi-Fi connection** in the setup menu, or selecting **Wi-Fi connection > Close Wi-Fi connection** in the **i** menu for shooting mode. The connection to the computer will also end if you use Wi-Fi to connect to a smart device.

Access-Point Mode

An error will occur if the computer's wireless connection is disabled

Reconnecting

To reconnect to an existing network, either:

- select Enable for Connect to PC > Wi-Fi connection in the setup menu, or
- choose Wi-Fi connection > Establish Wi-Fi connection with PC in the in menu for shooting mode.

Connecting to Smart Devices

To connect to the camera from a smartphone or tablet (below, "smart device"), download the SnapBridge app.

The SnapBridge App

Use the SnapBridge app for wireless connections between the camera and smart devices.



The SnapBridge app is available free of charge from the Apple App Store® and on Google Play™. Visit the Nikon website for the latest SnapBridge news.

What SnapBridge Can Do for You

Using the SnapBridge app, you can:

- Download pictures from the camera
 Download existing pictures or download new pictures as they are taken.
- Control the camera remotely (remote photography)

 Control the camera and take pictures from the smart device.

For details, see the SnapBridge app online help: https://nikonimglib.com/snbr/onlinehelp/en/index.html

Wireless Connections

Using the SnapBridge app, you can connect via Wi-Fi (● 20) or Bluetooth (● 26). Connecting via Bluetooth allows you to set the camera clock and update location data using information provided by the smart device.



Wi-Fi

Bluetooth

Connecting via Wi-Fi (Wi-Fi Mode)

Follow the steps below to connect to the camera via Wi-Fi.

1 Smart device

If you have launched the app before, open the
tab and tap > Wi-Fi mode before proceeding to Step 3.



2 Smart device: Choose the camera and connection type. When prompted to choose the camera type, tap mirrorless camera and then tap Wi-Fi connection.

3 Camera: Turn the camera on. The smart device will instruct you to ready the camera. Turn the camera on. Do NOT tap **Next** until you have completed Step 4.

4 camera: Enable Wi-Fi. Select Connect to smart device > Wi-Fi connection in the setup menu, then highlight Establish Wi-Fi connection and press J.

The camera SSID and password will be displayed.

Enabling Wi-Fi You can also enable Wi-Fi by selecting Wi-Fi connection > Establish Wi-Fi conn. with smart device in the i menu

5 Smart device: Tap Next.

Tap Next once you have enabled Wi-Fi on the camera as described in the preceeding step.



- **6** Smart device: Tap View options. After reading the instructions displayed by the smart device, tap View options.
 - Android devices: Wi-Fi settings will be displayed.
 - iOS devices: The "Settings" app will launch. Tap < Settings to open the "Settings" app. Next, scroll up and tap Wi-Fi, which you'll find near the top of the settings list.





7 Smart device: Enter the camera SSID and password. Enter the SSID and password displayed by the camera in Step 4.



You will not be required to enter the password when next you connect to the camera.

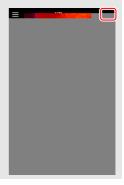
 $\textbf{8} \ \textbf{Smart device} : \textbf{Return to the SnapBridge app.}$

After a Wi-Fi connection is established, Wi-Fi mode options will be displayed. See online help for information on using the SnapBridge app.



Ending Wi-Fi Connections

To end the Wi-Fi connection, tap . When the icon changes to , tap and select **Exit Wi-Fi mode**.



Connecting via Bluetooth

For information on pairing the camera and smart device when connecting for the first time, see "Connecting for the First Time: Pairing", below. For information on connecting once pairing is

2 Android device: Launch the SnapBridge app. If this is the first time you have launched the app, tap Connect to camera and

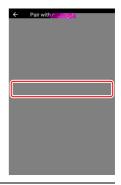
proceed to Step 3.



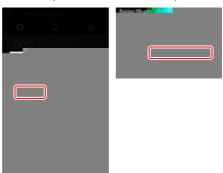
If you have launched the app before, open the tab and tap Connect to camera.



Android device: Choose the camera. Tap the camera name.



Camera/Android device: Check the authentication code. Confirm that the camera and Android device display the same authentication code (circled in the illustration).



5 Camera/Android device: Initiate pairing. Camera: Press J.



Android device: Tap the button indicated in the illustration (the label may differ depending on the version of Android you are using).



Pairing Error

If you wait too long between pressing the button on the camera and tapping the button on the Android device, pairing will fail and an error will be displayed.

- Camera: Press J and return to Step 1.
- Android device: Tap OK and return to Step 2.

6 Camera/Android device: Follow the on-screen instructions.

Camera: Press J. The camera will display a message stating that the devices are connected.



Android device: Pairing is complete. Tap **OK** to exit to the **t**ab.



Pairing for the First Time

The first time you pair the Android device with a camera after installing the SnapBridge app, you will be prompted to select auto link (auto upload and auto clock and location synchronization) options. This prompt will not appear again, but auto link settings can be accessed at any time using **Auto link** in the tab.

Pairing is now complete. The next time you use the SnapBridge app, you can connect as described in "Connecting to a Paired Device" (36).

Ending Bluetooth Connections

To end the connection to the smart device, select ${\bf Disable}$ for ${\bf Connect}$ to ${\bf smart}$ device ${\bf > Pairing}$ (Bluetooth) ${\bf > Bluetooth}$ connection in the camera setup menu.

Follow the steps below to pair the camera with an iOS device. For information on Android devices, see "Android" (© 26).

1 Camera: Ready the camera.
Select Connect to smart device >
Pairing (Bluetooth) in the setup
menu, then highlight Start pairing
and press J ...







2 i0S device: Launch the SnapBridge app. If this is the first time you have launched the app, tap Connect to camera and proceed to Step 3.



6 Camera/iOS device: Initiate pairing. Camera: Press J.

iOS device: Tap the button indicated in the illustration (the label may differ depending on the version of iOS you are using).

Pairing Error

If you wait too long between pressing the button on the camera and tapping the button on the iOS device, pairing will fail and an error will be displayed.

- iOS device: Dismiss the SnapBridge app and check that it is not running in the background, then open the iOS "Settings" app and request iOS to "forget" the camera

7 Camera/iOS device: Follow the on-screen instructions.

Camera: Press J. The camera will display a message stating that the devices are connected.



iOS device: Pairing is complete. Tap OK to exit to the tab.



Pairing for the First Time

The first time you pair the iOS device with a camera after installing the SnapBridge app, you will be prompted to select auto link (auto upload and auto clock and location synchronization) options. This prompt will not appear again, but auto link settings can be accessed at any time using **Auto link** in the tab.

Pairing is now complete. The next time you use the SnapBridge app, you can connect as described in "Connecting to a Paired Device" (© 36).

Ending Bluetooth Connections

To end the connection to the smart device, select **Disable** for **Connect to smart device** > **Pairing (Bluetooth)** > **Bluetooth connection** in the camera setup menu.

■■ Connecting to a Paired Device

Connecting to a smart device that has already been paired with the camera is quick and easy.

1 Camera: Enable Bluetooth. In the setup menu, select Connect to smart device > Pairing (Bluetooth) > Bluetooth connection, then highlight

Connecting to Networks Using the WT-7

When attached to the camera, the optional WT-7 wireless transmitter can be used to connect to computers, ftp servers, or other devices over Ethernet or wireless networks.

Before Connecting the WT-7

Before connecting the WT-7, confirm that the firmware for the camera and WT-7 have been updated to the latest versions. For more information, visit the Nikon website for your region (• xii).

Using the WT-7, you can:

- Upload existing photos and movies to an ftp server or computer
 Not only can you copy
 pictures to computers (image
 transfer mode), you can also
 upload them to ftp servers (ftp
 upload mode). Pictures can be
 uploaded as they are taken.
- Control the camera and take pictures remotely from a computer Installing Camera Control Pro 2 (available separately) on a network computer gives you

Connect the WT-7 using the USB cable supplied with the camera.
Turn the transmitter on and select Wireless transmitter (WT-7) > Wireless transmitter > Use in the camera setup menu.
See the manuahe m0nnecting to Networks Using the WT-7

Select to Send (Bluetooth)

Select pictures for upload to a smart device or choose whether to mark pictures for upload as they are taken. Upload begins immediately when a connection is established.

Option	Description
Auto select to send	If On is selected, photos will be marked for upload to a smart device as they are taken (this does not apply to photos taken in movie mode, which must be selected for upload manually). Regardless of the option selected with the camera, photos are uploaded in JPEG format at size of 2 megapixels.
Manual select to send	Mark selected pictures for upload.
Deselect all	Remove transfer marking from all images.

Wi-Fi Connection

Connect to smart devices via Wi-Fi.

■■ Fstablish Wi-Fi Connection

Initiate a Wi-Fi connection to a smart device. To connect, select the camera SSID on the smart device and enter the password (O 20). Once a connection is established, this option will change to Close Wi-Fi connection, which can be used to end the connection when desired

■■ Wi-Fi Connection Settings

Access the following Wi-Fi settings:

- SSID: Set the camera SSID.
- Authentication/encryption: Choose OPEN or WPA2-PSK-AES.
- Password: Set the camera password.
- Channel: Select Auto to have the camera choose the channel automatically, or select Manual and choose the channel manually.
- Current settings: View current Wi-Fi settings.
- Reset connection settings: Select Yes to reset Wi-Fi settings to default values

Send While Off

If **On** is selected, upload of images to smart devices connected via Bluetooth will continue even when the camera is off.

Connect to PC

Connect to computers via Wi-Fi.

Wi-Fi Connection

Select Enable to connect using the settings currently selected for Network settings.

Network Settings

Select **Create profile** to create a new network profile (**O** 3, 7). If more than one profile already exists, you can press **J** to select a profile from a list. To edit an existing profile, highlight it and press **2**. The following options will be displayed:

- General: The profile name and password. Select Profile name to rename the profile (by default, the profile name is the same as the network SSID). To require that a password be entered before the profile can be changed select On for Password protection (to change the password, highlight On and press 2).
- Wireless: Adjust settings for connection to a network via a router (infrastructure mode) or for direct wireless connection to the camera (access-point mode).
 - Infrastructure mode: Enter the network SSID and password and choose the type of authentication/encryption used on the network (OPEN or WPA2-PSK-AES). The channel is selected automatically.
 - Access-point mode: Enter the SSID and choose a channel (select Auto for automatic channel selection or

Options

Adjust upload settings.

■■ Auto Send

Select On to upload new photos as they are taken. Upload begins only after the photo has been recorded to the memory card; be sure a memory card is inserted in the camera. Movies and photos taken in movie mode are not uploaded automatically when recording is complete but must instead be uploaded from the playback display (O 14).

■■ Delete After Send

Select Yes to delete photographs from the camera memory card automatically once upload is complete (files marked for transfer before this option is selected are not deleted). Deletion may be suspended during some camera operations.

■■ Send File As

When uploading NEF+JPEG images, choose whether to upload both the NEF (RAW) and JPEG files or only the JPEG copy.

■ Deselect All?

Select Yes to remove transfer marking from all images. Upload of images with a "sending" icon will immediately be terminated.

MAC Address

Display the camera MAC address.

Wireless Transmitter (WT-7)

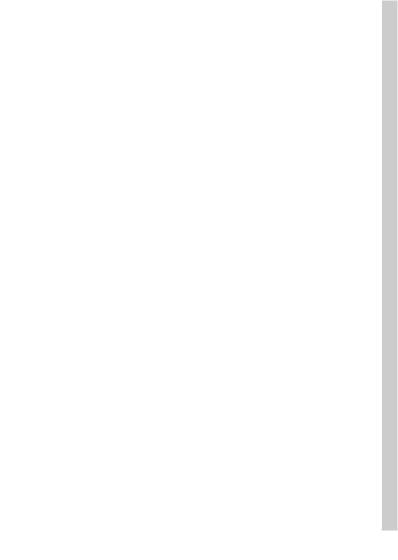
Adjust settings for connection using an optional WT-7 wireless transmitter. These settings take effect when the WT-7 is connected and turned on, in which case the options selected for Connect to smart device and Connect to PC are



automatically disabled. Information on the Wireless transmitter option can be found below; for information on Choose hardware, Network settings, and Options, see the manual provided with the WT-7.

Wireless Transmitter

Select **Use** to enable WT-7 when it is connected to the camera.



Appendix

Apple Public Source License

This product includes Apple mDNS source code that is subject to the terms of the Apple Public Source License located at URL https://developer.apple.com/opensource/.

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