

Wi-Fi® connection guide

Linking with the Wi-Fi compatible equipment allows you to remotely operate the camera, or share pictures with people in distant places even during recording or playing back.



[Remote Shooting]

You can remotely operate the camera using a smartphone/tablet. You need to install "Image App" on your smartphone/tablet.



[Playback on TV]

By linking with the DLNA compatible TV, you can display pictures on TV right after taking them or display them on TV later by playing them back on the camera.



[Send Images While Recording]

Every time you take a picture, the picture can be automatically sent to a specified location. You can play back the picture on the smartphone/tablet, or save and edit it on PC.



[Send Images Stored in the Camera]

You can select and send recorded images.

For details, refer to "Operating Instructions for advanced features".

The camera cannot be used to connect to a public wireless LAN connection.

■ About the Wi-Fi connection lamp



Wi-Fi connection lamp
Lit blue: The Wi-Fi connection is on standby
Blinking blue: Sending/receiving data through the Wi-Fi connection

- We strongly recommend that you set an encryption to maintain information security.
- When sending images on a mobile network, high packet communication fees may be incurred depending on the details of your contract.
- **Do not remove the memory card or battery or move to an area without any reception while sending images.**
- *Wi-Fi, "Wi-Fi Protected Setup", "Wi-Fi Direct", "WPA" and "WPA2" are marks or registered marks of the Wi-Fi Alliance.

[Airplane Mode]

Electromagnetic waves from the camera can affect instruments and meters. In airplane cabins or in other restricted areas, set [Airplane Mode] to [ON].

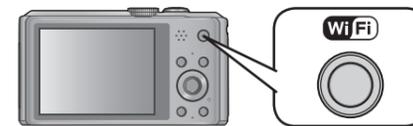
- ① Press [MENU/SET]
- ② Press ▲▼◀▶ to select [Setup] and press [MENU/SET]
- ③ Press ▲▼ to select [Airplane Mode] and press [MENU/SET]
- ④ Press ▲▼ to select [ON] and press [MENU/SET]

Sequence of connecting operation

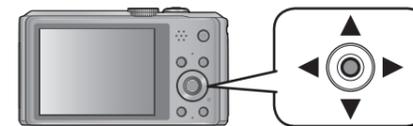
The operation to connect this unit to other devices by Wi-Fi differs by function, connection method, etc. Perform operation by following the screen display and refer to the manual, etc. for the connecting device or WEB service.

Preparation: You may be required to configure settings on applicable devices depending on the connecting device or WEB service.

1 Press [Wi-Fi] button



2 Press ▲▼◀▶ to select the item and press [MENU/SET]



• You can also select it by touch operations.

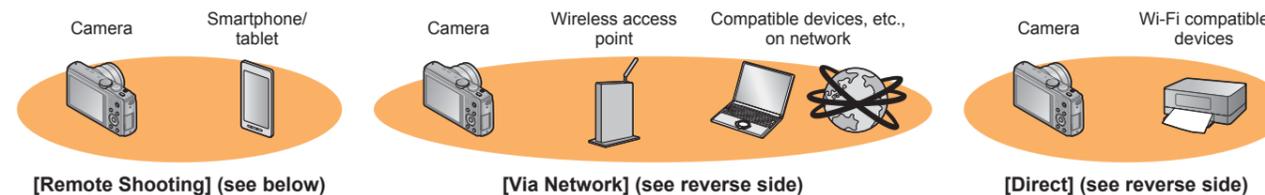
[New Connection]: Configure settings for a new Wi-Fi connection with Wi-Fi compatible devices or WEB services. ([Remote Shooting] / [Playback on TV] / [Send Images While Recording] / [Send Images Stored in the Camera])

[History Connection]: Connect to compatible devices or WEB services using the same setting as before when connecting with Wi-Fi.

[Favorite Connection]: You can register frequently used connection settings.

[Wi-Fi Setup]: Configure various Wi-Fi settings.

3 Connect to Wi-Fi



Recording/viewing pictures with a smartphone/tablet [Remote Shooting]

This section describes how to make a Wi-Fi connection between this unit and a smartphone/tablet to record pictures using the smartphone/tablet and to transfer pictures to the smartphone/tablet.

1 Installing "Panasonic Image App"

The "Panasonic Image App" is an application provided by Panasonic that allows your smartphone/tablet to perform the following operations of a Wi-Fi-compatible LUMIX. ("Panasonic Image App" is indicated as "Image App" in the text.)

■ Version

1.2 or above

■ Supported OS

Android 2.2 - Android 4.2
iOS 4.3 - iOS 6.0

■ Installation procedure

Connect your smartphone/tablet to the Internet, and please install "Panasonic Image App" from the following site.

- "Google Play™ Store" (for Android)
- "App StoreSM" (for iOS)

In the search field of each site, search by entering "Panasonic Image App" to find it quickly.

- The service may not be able to be used properly depending on the type of smartphone/tablet being used. For compatible devices, see the following support site.
<http://panasonic.jp/support/global/cs/dsc/>
(This site is available in English only.)
- Android and Google Play are trademarks or registered trademarks of Google Inc.
- App Store is a service mark of Apple Inc.



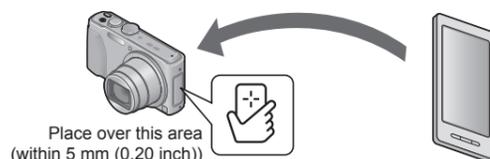
2 Easily connect to a smartphone/tablet

Use the NFC (Near Field Communication) function to easily connect this unit to a smartphone/tablet with Wi-Fi for remote recording and to send pictures to the smartphone/tablet.

- This function can be used with NFC compatible devices with Android (2.3.3 or above). (Not available in certain models)

1 Start up "Image App" on your smartphone/tablet

2 Place your smartphone/tablet to the side of this unit



- Do not bump your smartphone/tablet strongly against this unit. (The smartphone/tablet or this unit may get scratched)
- For information on how to use NFC compatible devices, please contact the device manufacturer.
- If there is no immediate reaction, slightly move the position where the smartphone/tablet was placed.

3 Press ◀▶ to select [Yes] and press [MENU/SET]

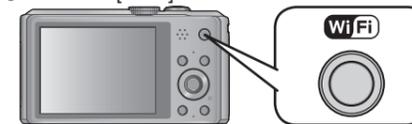
4 Place your smartphone/tablet over this area of the unit again

- When the connection is complete, live images captured by the camera will be displayed on your smartphone/tablet.
- Smartphone/tablet that have already been approved to connect can connect by performing the operations in step 1 and 2.

When manually connecting without the NFC function

■ Operating this unit

- ① Press the [Wi-Fi] button



- ② Use ▲▼◀▶ to select [New Connection] and press [MENU/SET]
- ③ Use ▲▼ to select [Remote Shooting] and press [MENU/SET]

■ On your smartphone/tablet

- ④ Select the SSID displayed on the camera, and enter the password
 - The SSID displayed differs depending on the connection method.
 - To connect [Via Network], select a wireless access point and adjust the settings.
- ⑤ Start up "Image App"
 - When the connection is complete, live images captured by the camera will be displayed on the "Image App" screen.

3 Taking pictures / Playing back pictures



■ Taking pictures via a smartphone/tablet (remote recording)

- ① Select [📷] on a smartphone/tablet



■ Playing back pictures in the camera

- ① Select [📺] on a smartphone/tablet



- Read the [Help] in the "Image App" menu for further details on how to operate.
- The screen differs depending on the operating system.

Transferring a still picture easily to your smartphone/tablet

When transferring just 1 still picture to your smartphone/tablet with "Image App" installed, you can use the NFC function to easily send the picture.

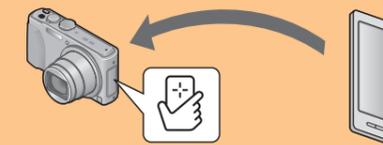
- ① Start up "Image App" on your smartphone/tablet



- ② Display the still picture to be transferred to your smartphone/tablet on the 1-picture screen (full screen)



- ③ Place your smartphone/tablet to the side of this unit



Connecting via a wireless access point / Connecting directly

Press ▲ ▼ to select connection method, and then press [MENU/SET]

Connection method	[Via Network]	[Direct]
[Wi-Fi Direct]™		
[WPS (Push-Button)]	① Press ▲ ▼ to select [WPS (Push-Button)] and press [MENU/SET] ② Set the device to WPS mode	
[WPS (PIN code)]	① Press ▲ ▼ to select [WPS (PIN code)] and press [MENU/SET] ② Press ▲ ▼ to select the wireless access point you are connecting to, and press [MENU/SET] ③ Enter the PIN code displayed on the camera screen into the wireless access point ④ Press [MENU/SET]	① Press ▲ ▼ to select [WPS (PIN code)] and press [MENU/SET] ② Enter the PIN code of the device into this unit
[Manual Connection]	① Press ▲ ▼ to select the wireless access point you are connecting to, and press [MENU/SET] ② (If network authentication is encrypted) Enter the encryption key • If no wireless access points appear, you can directly enter the SSID etc. to register one.	① Enter the SSID and password into the device. The SSID and password are displayed on the connection waiting screen of this unit.

Playback on TV

You can use the Wi-Fi function [Playback on TV] to display pictures on a television that is compatible with a DLNA certified digital media renderer (DMR).

Preparations: Set the TV to DLNA waiting Mode.

- 1 Press [Wi-Fi] button
- 2 Press ▲ ▼ ◀ ▶ to select [New Connection] and press [MENU/SET]
 - You can also select it by touch operations.
- 3 Press ▲ ▼ to select [Playback on TV] and press [MENU/SET]
- 4 Press ▲ ▼ to select connection method, and then press [MENU/SET]
 - [Via Network]:
When you want to connect to your TV via an wireless access point.
 - [Direct]:
When you want to directly connect this unit to the device you are using as a wireless access point.
- 5 Press ▲ ▼ to select a device you want to connect, and then press [MENU/SET]
- 6 Take or play back pictures on this unit

• DLNA, the DLNA Logo and DLNA CERTIFIED are trademarks, service marks, or certification marks of the Digital Living Network Alliance.

Using the map data on the disc (supplied)

You can use "LUMIX Map Tool" to copy the map data on the disc (supplied) to a memory card. When the map data is copied to the memory card, detailed maps can be displayed on the camera.

Installing "LUMIX Map Tool"

■ Operating environment

Windows® XP (32-bit) SP3
Windows Vista® (32-bit) SP2
Windows® 7 (32-bit, 64-bit) and SP1
Windows® 8 (32-bit/64-bit)
Mac® OS X v10.4, v10.5, v10.6, v10.7, and v10.8

■ Windows

- ① Insert the disc
- ② Click [Applications]
- ③ Click [Recommended Installation] or [LUMIX Map Tool]
Continue the installation procedure following the instructions displayed on the screen.

■ Mac

- ① Insert the disc
- ② Double-click the recognised disc to open
- ③ Double-click the [Application] folder to open
- ④ Double-click the [MAPTOOL] folder to open
- ⑤ Double-click [LUMIX Map Tool.pkg]
Continue the installation procedure following the instructions displayed on the screen.

When sending images to PC

You can select and send recorded images. Prepare folders for receiving images on the PC before sending a picture to the PC.

1 To create a folder that receives images

- Create a PC user account (account name (up to 254 characters) and password (up to 32 characters)) consisting of alphanumeric characters. An attempt to create a receive folder may fail if the account includes non-alphanumeric characters.

■ When using "PHOTOfunSTUDIO"

1 Install "PHOTOfunSTUDIO" to the PC

- For details on hardware requirements and installation, read "Operating Instructions for advanced features".

2 Create a folder that receives images with "PHOTOfunSTUDIO"

- To create the folder automatically, select [Auto-create]. To specify a folder, create a new folder, or set a password to the folder, select [Create manually].
- For details, refer to the operating instructions of "PHOTOfunSTUDIO" (PDF).

■ When not using "PHOTOfunSTUDIO"

1 Enable sharing of the folder used for receiving data

- For details, refer to the operating instructions of your PC or Help on the operating system.

2 Connecting to your PC

- Turn the computer on.
- If the standard settings are changed for the workgroup on the connected PC, you must change settings in [PC Connection] on this unit.

1 Press [Wi-Fi] button

2 Press ▲ ▼ ◀ ▶ to select [New Connection] and press [MENU/SET]

- You can also select it by touch operations.

3 Press ▲ ▼ to select [Send Images Stored in the Camera], and press [MENU/SET]

4 Press ▲ ▼ to select [PC] and press [MENU/SET]

5 Press ▲ ▼ to select connection method, and then press [MENU/SET]

- [Via Network]:
When you want to connect to your PC via a wireless access point.
- [Direct]:
When you want to directly connect this unit to the device you are using as a wireless access point.

6 Press ▲ ▼ to select the PC you want to connect to, and then press [MENU/SET]

7 Press ▲ ▼ to select the folder you want to send, and then press [MENU/SET]

8 Press ▲ ▼ to select [SINGLE] or [MULTI], and then press [MENU/SET]

9 Select and send the images

- [SINGLE] setting
 - ① Press ◀ ▶ to select the picture
 - ② Press [MENU/SET]
 - Confirmation screen is displayed. If you select [Yes], the operation is executed.
- [MULTI] setting
 - ① Press ▲ ▼ ◀ ▶ to select the picture, and then press the [DISP.] button to set (repeat)
 - ② Press [MENU/SET]
 - Confirmation screen is displayed. If you select [Yes], the operation is executed.

- Folders sorted by the sent date are created in the specified folder, and pictures are saved in those folders.
- If the screen for a user account and password entry appears, enter the one you set on your PC.

Copying detailed maps to a memory card

Since the map data size is large, be sure to check the free space on the memory card before copying the data. (A memory card of at least 8 GB is needed to copy the map data for all the regions.)

- When a memory card is formatted (initialised), all data, including the map data, is deleted.

Preparation: Insert the supplied disc in your computer drive before starting the copying procedure.

- ① Insert the memory card into a card reader/writer (commercially available)
- ② Start "LUMIX Map Tool" installed in your computer
Windows:
Click [Start] → [All Programs] → [Panasonic] → [LUMIX Map Tool] → [LUMIX Map Tool]
Mac:
Double-click [LUMIX_Map_Tool] in [Applications] (Applications)
- ③ Select a card from the pull-down menu
- ④ Click the checkbox to select a region to be copied
- ⑤ Click [Execute]
Perform the rest of the steps in accordance with the instructions displayed on the computer screen.
- ⑥ After copying is finished, click [Close] and remove the memory card from the computer

