DIE-0502-000

# Canon

# Wireless File Transmitter WFT-E6 / WFT-E8

# Guide for the Canon EOS C300 models

# About this Guide

You can attach a WFT-E6 or WFT-E8 Wireless File Transmitter to a Canon camcorder to connect the camcorder to a Wi-Fi network. This will allow you to operate the camcorder remotely from any device connected to the Wi-Fi network using Wi-Fi Remote, a Web browser application. This guide will explain how to attach the transmitter to a camcorder and configure it for use with a camcorder \*

For specifications and additional information about the WFT-E6 or WFT-E8, refer to the transmitter's instruction manual. For details about compatible camcorders and how to use Wi-Fi Remote to operate the camcorder, refer to the camcorder's Instruction Manual.

\* Some of the functions described in this guide may not be available for your camcorder.

#### Assumptions

- The instructions in this guide assume you already have a correctly configured and working wireless network. For details on configuring these settings, refer to the documentation provided with the respective Wi-Fi equipment.
- The instructions in this guide assume you are already familiar with basic camcorder operations, such as accessing and changing menu settings or displaying status screens. If necessary, refer to the camcorder's Instruction Manual.

#### Conventions used in this guide



Warnings to avoid potential problems.



Supplemental information.

- Reference page number.
- "Camcorder" refers to Canon digital cinema cameras and HD camcorders compatible with this accessory.
- "Access point" refers to a Wi-Fi network's access point or wireless router.
- For brevity's sake, throughout this guide the WFT-E6 or WFT-E8 Wireless File Transmitter will be referred to simply as the "transmitter".
- This guide uses illustrations and screenshots from the Canon EOS C300 camcorder.

Setting up the wireless file transmitter and configuring the Wi-Fi Remote application requires adequate knowledge about configuring Wi-Fi networks. Canon cannot provide support for configuring Wi-Fi networks.

Note that Canon shall not be liable for any loss of data or damage to the transmitter resulting from incorrect Wi-Fi network configuration or settings. Additionally, Canon shall not be liable for any loss or damage caused by the use of the transmitter.

# Contents

Intr	oduction	2
	About this Guide Attaching to a Camcorder	2 4
1	Wi-Fi and Camcorder Settings	7
	Connecting to a Wi-Fi Network	8 10 11 12 14 17 18 19
	User Settings for Camcorders With Multi-User Support Camcorder Settings for Camcorders Without Multi-User Support	20 22
2	Remote Operation Using Wi-Fi Remote	25
2	Remote Operation Using Wi-Fi Remote         Selecting a Configuration Number         Starting Wi-Fi Remote         Wi-Fi Remote: [Advanced Control]         Wi-Fi Remote: [Basic Control]         Wi-Fi Remote: [Metadata Input]	25 26 27 30 31 32
2	Remote Operation Using Wi-Fi Remote         Selecting a Configuration Number	25 26 27 30 31 32 <b>33</b>
3	Remote Operation Using Wi-Fi Remote         Selecting a Configuration Number.         Starting Wi-Fi Remote.         Wi-Fi Remote: [Advanced Control]         Wi-Fi Remote: [Basic Control].         Wi-Fi Remote: [Metadata Input].         Managing Settings Information         Checking Settings         Changing Settings	25 26 27 30 31 32 33 33 34 35
3	Remote Operation Using Wi-Fi Remote         Selecting a Configuration Number	25 26 27 30 31 32 33 34 35 37

# Attaching to a Camcorder

Turn off the camcorder before attaching the transmitter. The transmitter is powered by the camcorder. Make sure the camcorder's battery pack is sufficiently charged before using the transmitter.



- Turn the tightening screw in the direction of the arrow until it stops to securely attach the transmitter (②).
- You may find the WFT terminal easier to access if you remove the camcorder's grip unit.

# Attach the supplied WFT Attachment Bracket.

• Position the bracket so it covers the transmitter's attachment pin and tighten the screw.



# 5

#### Turn on the camcorder.

 If the transmitter was correctly attached, the Y icon will appear in the rear panel, next to the remaining battery icon.

#### Removal

- Turn off the camcorder.
- Loosen the WFT attachment bracket's screw and remove the WFT attachment bracket.
- Loosen the transmitter's tightening screw until it spins freely.
- Remove the transmitter from the camcorder's WFT terminal and close the WFT terminal's cover.



# Wi-Fi and Camcorder Settings

Complete the Wi-Fi and camcorder settings using the camcorder's menu screens.

# **Connecting to a Wi-Fi Network**

Before using the Wi-Fi Remote application to remotely control the camcorder, you need to wirelessly connect the camcorder (with the transmitter attached) to a Wi-Fi network via an access point (wireless router). There are six ways to do so, and the method you use will depend on the ype and specifications of the access point or device you want to use. Note that using an unprotected Wi-Fi network can expose your data to monitoring by unauthorized third parties. Be aware of the risks involved.

### [WPS: Button]



If your wireless router supports Wi-Fi Protected Setup (WPS), setup will be easy and require minimal configuring and no passwords. To check if your wireless router has a WPS button and for details about how to activate the Wi-Fi protected setup, refer to the instruction manual of your wireless router.

### [WPS: PIN Code]

Even if your wireless router does not have a dedicated WPS button, it may support WPS using a PIN code instead. For setup using a PIN code, you will need to know in advance how to activate the wireless router's WPS function. For details refer to the instruction manual of your wireless router.

# [Connection Wizard]

If your wireless router does not support Wi-Fi Protected Setup (WPS), or if you prefer to manually configure settings or use an Ad Hoc connection to a Wi-Fi enabled device, you can use one of the four options offered by the Connection Wizard.

#### **Searching for Access Points**

If your access point does not support the WPS function or you cannot activate it, you can have the camcorder search for access points in the area.

#### Manual Setup

If the access point you want to use has stealth mode activated and it cannot be automatically detected by the camcorder, you can enter all the necessary settings manually. This requires more advanced knowledge of Wi-Fi and network settings.

#### AP Mode

When shooting in a location where there are no access points available, the camcorder can serve as a wireless access point\*. Wi-Fi enabled devices will be able to connect to the camcorder directly and operate it through the Wi-Fi Remote application. This mode can only be used with compatible camcorders.

\* Limited only to the connection between the camcorder and supported Wi-Fi enabled devices. The functionality is not the same as that of commercially available access points.

#### Ad Hoc Connection

When shooting in a location where there are no access points available, you can connect the camcorder directly to a single Wi-Fi enabled device. This connection can only be used with camcorders that are not compatible with AP mode.

Depending on the country/region of use, some restrictions on outdoor use or AP mode/Ad Hoc mode use may apply when operating the IEEE802.11a/n/ac wireless standard in the 5 GHz band. For details see Areas of Use and Restrictions (separate leaflet supplied with the transmitter).

# Wi-Fi Protected Setup (WPS) - Button

Wi-Fi Protected Setup (WPS) is the easiest way to set up the Wi-Fi network. However, it may not work correctly if there are several active access points in the area. In such case try using the **[WPS: Pin Code]** ( $\square$  11) or **[Connection Wizard]** ( $\square$  12) option.



#### WI-Fi Remote Set Up New WPS: Button Press mai hold the sceasy point is but ton to activate WPS and point the SET button within 2 minutes OK

Wi-Fi Remote	Set Up New	
	WPS: Button	
	Connecting	
	Cancel	

### Open the [Set Up New] submenu.

[✔ Other Functions] [Wi-Fi Remote] [Set Up New]

# Select [WPS: Button] and then press SET.

# Press and hold the WPS button on the wireless router.

• The length of time required to hold down the WPS button depends on the wireless router. Refer to the instruction manual of your wireless router and make sure the wireless router's WPS function is activated.

# Within 2 minutes, press SET on the camcorder.

- While [Connecting] appears on the screen, you can press SET or the CANCEL button to cancel the operation.

# Wi-Fi Protected Setup (WPS) - PIN Code

In this setup mode, the camcorder will issue an 8-digit PIN code that you then need to enter in the wireless router setup screen. Even if there are multiple access points active in your area, this is a relatively reliable method of establishing a connection using a shared PIN code. It may take about one minute to establish connection.

Wi-Fi Remote	Set Up New	
	Select the setup method	
	Connection Wizard	
	WPS: Button	
	WPS: PIN Code	
		Cancel 🖆 SET OK
Wi-Fi Remote	Set Up New	
	WPS: PIN Code 02257	

Enter the PIN code above into the access point's setup screen and push the SET button within 2 minutes

# Open the [Set Up New] submenu. [✤ Other Functions] ♦ [Wi-Fi Remote] ♦ [Set Up New]

# Select [WPS: PIN Code] and then press SET.

• The camcorder will generate and display an 8-digit PIN code.

# Enter the PIN code from step 2 into the wireless router's WPS (PIN code) setup screen.\*

- \* For most wireless routers, you must use a Web browser to access the setup screen.
- For details about how to access your wireless router's settings and activate the Wi-Fi Protected Setup (WPS) using a PIN code, refer to the instruction manual of your wireless router.



# Within 2 minutes, press SET on the camcorder.

- While [Connecting] appears on the screen, you can press SET or the CANCEL button to cancel the operation.

# **Searching for Access Points**

The transmitter will detect active Wi-Fi networks in your area and you can select the desired access point (SSID) from the list. Then, follow the instructions on the screen to complete the connection wizard.



- Type of Wi-Fi network: Infrastructure (wireless router) or Ad Hoc (Wi-Fi enabled portable device)
- Encrypted access point
- ③ Network name (SSID)
- ④ Current access point/Total number of active access points detected

## **Encrypted Access Points**

If the access point is encrypted (a), you will need to enter the encryption key (password). To find out the encryption key, refer to the instruction manual of the access point (wireless router) or consult the network administrator. If the access point is not encrypted, continue directly with the procedure to configure the IP address assignment (
17).





Wi-Fi Remote	Set Up New Encryption Key	
******	****	
.@-/::!	?()[]<>*#.+;	= \$%&'"{}
abcdefgi ABCDEFGI	ijklmnopqr IJKLMNOPOR	stuvwxyz STUVWXYZ
0123456	5789\^_ ~	++++4

### [WEP]/[Shared Key]

#### Select the WEP index key.

 This step is only necessary if the Wi-Fi network's authentication method is set to [Shared Key] or if the encryption method is set to [WEP].

### Select [Input] and the press SET to open the keyboard screen and enter the encryption key.

### Use the joystick or turn the SELECT dial to select a character and then press SET to add it.

- After a moment, the character you entered will change to "

   to protect the password.
- Use the arrows ( ↑ / ↓ / ↓/ ↓) to change the position of the cursor and the backspace character ( ) to delete the last character entered.
- Repeat this step as necessary to enter the encryption key.



### After entering the encryption key, select [OK] and then press SET.

### Select [OK] and press SET to send the encryption key.

 Continue with the procedure to configure the IP address assignment (11 17).

Valid encryption keys vary depending on the encryption method. 64-bit WEP encryption:

5 ASCII characters or 10 hexadecimal characters.

128-bit WEP encryption: 13 ASCII characters or 26 hexadecimal characters.

AES / TKIP encryption: 8-63 ASCII characters or 64 hexadecimal characters.

\* Note: ASCII characters include the numbers 0 to 9, the letters a to z and A to Z and some punctuation marks and special symbols. Hexadecimal characters comprise the numbers 0 to 9 and the letters a to f and A to F.

# Manual Setup/AP Mode/Ad Hoc Connection

If you prefer, you can enter manually the details of the Wi-Fi network you want to connect to or you can connect directly to a Wi-Fi enabled device. Follow the instructions on the screen to complete the connection wizard.

After step 2 in the Searching for Access Points procedure (D 12):

Wi-Fi Remote Set Up New Select the setup method Automatic Manual Wi-Fi Remote Set Up New Select the wireless connection mode AF 11b/g/a AF 11b/g/a AF 11b/g/a		
Select the setup method Automatic Manual Wi-Fi Remote Set Up New Select the wireless connection mode Interstitution AP 11b/a/n AP 11b/a/n	Wi-Fi Remote	Set Up New
Select the setup method Automatic Manual Wi-Fi Remote Set Up New Select the wireless connection mode Infastructure AP 11b/g/n AP 11b/g/n AP 11b/n		
Automatic Manual Wi-Fi Remote Set Up New Select the wireless connection mode Interstitutions AP 11b/g/m AP 11a/n		Select the setup method
Automatic Manual Wi-Fi Remote Set Up New Select the wireless connection mode Infastructure AP 11b/p/n AP 11a/n		
Minimum Manual Wi-Fi Remote Set Up New Select the wireless connection mode Infortuncture AP 11b/c/n AP 11a/n		Automatic
Wi-Fi Remote Set Up New Select the wireless connection mode Infrastructure AP 11b/p/n AP 11b/n		Manual
Wi-Fi Remote Set Up New Select the wireless connection mode Interstructure AP 11b/e/n AP 11b/e/n		Manuar
Wi-Fi Remote Set Up New Select the wireless connection mode Infrastructure AP 11b/p/n AP 11b/n		
Wi-Fi Remote Set Up New Select the wireless connection mode Interstitution AP 116/ar/n AP 116/n		
Wi-Fi Remote Set Up New Select the wireless connection mode Infrastructure AP 11b/p/n AP 11b/n		
Wi-Fi Remote Set Up New Select the wireless connection mode Interstitution AP 11b/or/n AP 11a/n		
Wi-Fi Remote Set Up New Select the wireless connection mode Infrastructure AP 11b/p/n AP 11a/n		
Select the wireless connection mode interstitution AP 116/er/n AP 116/n	Wi-Fi Remote	Set Up New
Select the wireless connection mode in frastructure AP 11b/g/n AP 11a/n		
AP 11b/g/n AP 11b/g/n AP 11a/n	s	elect the wireless connection mode
AP 11b/g/n AP 11b/g/n AP 11a/n		
AP 11b/g/n AP 11b/n		
AP 116/9/n AP 11a/n		Intrastructure
AP 11a/n		AP IID/9/N
		AP 11a/n
Cancel *> [SET OK		Cancel * SET OK

# 2 Select the wireless connection mode and then press SET.

Select [Manual] and then press SET.

[Infrastructure]:	Configure manually a connection to a Wi-Fi network via a wireless router.
[AP 11b/g/n]*:	Direct connection in AP mode to a
	Wi-Fi enabled device using the
	2.4 GHz band.
[AP 11a/n]*:	Direct connection in AP mode to a
	Wi-Fi enabled device using the
	5 GHz band.
[Ad Hoc 11b/g]**:	Direct Ad Hoc connection to a
	Wi-Fi enabled computer or other
	device using the 2.4 GHz band.
[Ad Hoc 11a]**:	Direct Ad Hoc connection to a
	Wi-Fi enabled computer or other
	device using the 5 GHz band.
* Only camcorders	compatible with AP mode.

\*\* Only camcorders not compatible with AP mode.

#### Enter the Wi-Fi network's name (SSID).

- Select [Input] and then press SET to open the keyboard screen.
- Use the joystick or turn the SELECT dial to select a character and then press SET to add it. Repeat as necessary to enter the SSID.
- After entering the SSID, select [OK] and then press SET.
- Select [OK] and then press set.



#### **AP Mode Connections**



### Ad Hoc Connections

Wi-Fi Remote

Wi-Fi Remote

# Set Up New

Auto ch

#### Select the channel and then press SET.

 Available channels will be different for 11b/g/n and 11a/n connections

#### Select the AP mode's encryption method and then press SET.

• If you selected [Open/No encryption], skip to step 8; if you selected [WPA2-PSK/AES], continue with step 7.



### Select the channel and then press SET.

Available channels will be different for 11b/g and 11a connections.



 If you selected [WEP], continue with step 6; if you selected [No encryption], skip to step 8.

#### Infrastructure Connections

No encryption

Set Up New Select the encryption method



#### Select the Wi-Fi network's authentication method and then press SET.

 If you selected [Shared Key], continue with step 6; if you selected [WPA, WPA-2-PSK], skip to step 7.

#### Select the Wi-Fi network's encryption method and then press SET.

 You can select [WEP] and continue to step 6, or [No encryption] and skip to step 8.



[WEP]/[Shared Key]

Select the WEP index key.

Enter the encryption key as described in the previous section (steps 2-3, 13).

Continue with the procedure to configure the IP address assignment (
 (
 17).

# Configuring Network (TCP/IP) Settings





# Select [Automatic] or [Manual] and then press SET.

 If you selected [Automatic], IP settings will be assigned automatically. Continue with the procedure to review and save the configuration (
18).

# Enter the network's TCP/IP settings manually.

- Enter the IP address assigned to the camcorder, and the network's subnet mask, and default gateway.
- Push the joystick up/down or turn the SELECT dial to select a value for the first field and press SET to move to the next field. After completing the four fields of an address, select [Set] and press SET to enter the address.
- For details about the network's settings, consult the network administrator.

# Saving the Configuration



Wi-Fi Remote	Set Up New
Select the no	twork configuration number
No. 1 : (NC	
	Gancal 🕁 (SET) OK

• • • • • • • • • • • • • • • • • • •	STBY
50 mm	

# Review the access point's configuration and then press SET.

 The first screen shows the access point's SSID and the type of connection. Push the joystick up/ down or turn the SELECT dial to review additional settings before pressing SET.

#### Save the current configuration.

- Select the desired configuration number and then press SET. You can save up to 5 different network configuration profiles on the camcorder. If you select a configuration number that was already in use, the previous configuration will be overwritten by the new.
- Select [OK] and then press SET. When the confirmation screen appears, press SET.
- Connections via an access point (Infrastructure): The camcorder will connect to the network using the configuration just saved. The Wiff icon will appear on the upper left of the screen, first in yellow while connecting and then in white when the connection is established. In the rear panel, the bars of the Yil icon indicate the strength of the Wi-Fi signal.
- AP mode/Ad Hoc connections: After the Wi-Fi icon turns white, the camcorder is ready to connect directly to the Wi-Fi enabled device. Perform the following procedure to connect the device.

# Connecting a Device to the Camcorder (AP Mode/Ad Hoc Connections)

- 1 On the Wi-Fi enabled device, select the SSID that was set on the camcorder.
- 2 If you selected [WPA2-PSK/AES] for the encryption method, enter the password to connect the device.
  - Enter the same encryption key (password) set in step 7 (
     16).

# Camcorder Settings for Camcorders With Multi-User Support

You can set a unique camcorder identification code and designate the port that the Wi-Fi Remote application should use when accessing the transmitter through the Wi-Fi network. The Wi-Fi connection will be disabled while you change these settings.

[Port No.]

[Camera ID]

The port number (HTTP protocol) used by Wi-Fi Remote. This is usually set to port 80, but you can change it if necessary. Set a unique camcorder identification code that will appear on the Wi-Fi Remote screen. This is convenient if you are using a multicamera shooting setup.



- Open the [Camera Settings] submenu. [✔ Other Functions] [Wi-Fi Remote] [Camera Settings]
- Select the desired setting and then press SET.
- Enter the desired value as described below.
  - If necessary, repeat steps 2 and 3 to change both settings. When you finish changing the settings, select [5], press SET and then close the menu.
  - When you close the menu after changing the camcorder's settings, the camcorder will reconnect to the Wi-Fi network using the new settings.

### [Port No.]

- 1 Push the joystick up/down or turn the SELECT dial to select a value for the first field and then press SET to move to the next field.
- 2 After completing all the fields, select [Set] and press SET to enter the port number.

### [Camera ID]

- 1 Use the joystick or turn the SELECT dial to select a character and then press SET to add it.
  - Repeat this step as necessary to enter the desired text.
- 2 After entering the desired text, select [OK] and then press SET.

# User Settings for Camcorders With Multi-User Support

A user name and password are required before the Wi-Fi Remote application (Wi-Fi enabled device connected to the Wi-Fi network) can access the transmitter in order to operate the camcorder. Depending on the camcorder used\*, you can set up to three different users and select whether you want to allow single-user operation (only User 1) or multi-user operation (Users 2 and 3). The Wi-Fi connection will be disabled while you change these settings.

- [User 1] Can access all 3 Wi-Fi Remote screens: [Advanced Control], [Basic Control] and [Metadata Input].
- [User 2] Can access only the [Advanced Control] screen. This would be the main operator controlling the camcorder.
- [User 3] Can access only the [Metadata Input] screen. This would be the person in charge of keeping the clip information up to date.

\* Some camcorders are not compatible with multi-user operation. In that case, only one user can be set (122).



### Open the [User Setting] submenu.

- [ ★ Other Functions] [Wi-Fi Remote] [User Setting]
- 2 Select one of the [User Name] fields and then press SET. Enter the user name as described following this procedure.
- Select the corresponding [Password] field and then press SET. Enter the password as described following this procedure.
  - If necessary, repeat steps 2 and 3 to set up additional users. When you finish setting up all the users, select [c] and press SET.
- From the same [Wi-Fi Remote] submenu, select [Select User] and press SET.
- Select [User 1] (single-user operation) or [Users 2&3] (multi-user operation), press SET and then close the menu.

#### [User Name], [Password]

- 1 Use the joystick or turn the SELECT dial to select a character and then press SET to add it.
  - Repeat this step as necessary to enter the desired text.
- 2 After entering the desired text, select [OK] and then press SET.

# Camcorder Settings for Camcorders Without Multi-User Support

and password.

A user name and password are required before the Wi-Fi Remote application (Wi-Fi enabled device connected to the Wi-Fi network) can access the transmitter in order to operate the camcorder. Additionally, you can set a unique camcorder identification code and designate the port that Wi-Fi Remote should use. The Wi-Fi connection will be disabled while you change these settings.

[User Name]\*, [Password]\*

[Port No.]

[Camera ID]

The port number (HTTP protocol) used by Wi-Fi Remote. This is usually set to port 80, but you can change it if necessary. Set a unique camcorder identification code that will appear on the Wi-Fi Remote screen. This is convenient if you are using a multicamera shooting setup.

Protect the remote operation of the camcorder with a user name

\* Required settings.



- Open the [Camera Settings] submenu. [✔ Other Functions] ♦ [Wi-Fi Remote] ♦ [Camera Settings]
- 2 Select the desired setting and then press SET.
- Enter the desired value as described below.
  - If necessary, repeat steps 2 and 3 to set additional settings. When you finish changing the settings, select [5], press SET and then close the menu.
  - When you close the menu after changing the camcorder's settings, the camcorder will reconnect to the Wi-Fi network using the new settings.

### [User Name], [Password], [Camera ID]

- 1 Use the joystick or turn the SELECT dial to select a character and then press SET to add it.
  - Repeat this step as necessary to enter the necessary text.
- 2 After entering the desired text, select [OK] and then press SET.

#### [Port No.]

- 1 Push the joystick up/down or turn the SELECT dial to select a value for the first field and then press SET to move to the next field.
- 2 After completing all the fields, select [Set] and press SET to enter the port number.

# Remote Operation Using Wi-Fi Remote

After completing the preparations in the previous chapter, you can use any computer or other Wi-Fi enabled device that has a Web browser and is connected to the same Wi-Fi network to remotely operate the camcorder using the Wi-Fi Remote application.

# Selecting a Configuration Number

You can save up to 5 different network configuration profiles. You can select which one to use depending on where you plan to use the camcorder. If you just saved a new network configuration ( $\square$  18), the camcorder will automatically connect to that Wi-Fi network and this procedure is not required.

BY

### Open the Wi-Fi [Select] submenu.

[Y Other Functions] ♦ [Wi-Fi Remote] ♦ [Select]

# 2 Select the desired configuration number and then press SET.

- Connections via an access point (Infrastructure): The camcorder will connect to the network using the configuration just saved. The Wiff icon will appear on the upper left of the screen, first in yellow while connecting and then in white when the connection is established. In the rear panel, the bars of the Yil icon indicate the strength of the Wi-Fi signal.
- AP mode/Ad Hoc connections: After the Wi-Fi icon turns white, the camcorder is ready to connect directly to the Wi-Fi enabled device. Perform the procedure to connect the device (11 18).

# **Starting Wi-Fi Remote**

After establishing a connection between the camcorder and Wi-Fi network (the white Wi-Fi icon appears on the upper left of the screen<sup>1</sup>), you can start the Wi-Fi Remote application on any Wi-Fi enabled device<sup>2</sup> that has a Web browser<sup>3</sup> and is connected to the same Wi-Fi network. Refer also to the instruction manual of the Wi-Fi enabled device used.

- <sup>1</sup> For AP mode/Ad Hoc connections, you need to actively connect the device ( 18) directly to the camcorder.
- <sup>2</sup> For details about compatible devices, operating systems, Web browsers, etc. please visit your local Canon Web site.
- <sup>3</sup> A Web browser is required that supports JavaScript and is enabled to accept cookies.

### Checking the Camcorder's URL

- 1 Press the STATUS button.
- 2 Push the joystick up/down or turn the SELECT dial to display the [Wi-Fi Remote 3/4] status screen.
  - Check the IP address assigned to the camcorder. If necessary, write it down.



3 Press the STATUS button again to close the status screen.

### **Starting Wi-Fi Remote**

You can specify the port number

Camcorder's IP address from the Status screen

ò	To view thi on 192.16 Wi-Fi Rem Your passwo	is page, you must log in to this area 8.0.2:80: ote rd will be sent unencrypted.
	Name:	CANON
	Password:	•••
	Remem	ber this password in my keychain
		Cancel Log In

Example of the login screen. The screen may differ depending on the Web browser and version used.

# Start the Web browser on the computer or other Wi-Fi enabled device.

#### Enter the camcorder's URL.

- Enter the IP address you checked previously into the Web browser's address bar, adding the prefix "http://".
- If the you chose a port other than "80", you can specify it by adding ":nnn" at the end of the URL. For example "http://192.168.0.80:095".

# Enter the user name and password and press [OK].

- Be sure to enter the same user name and password you set on the camcorder (1 20, 22). If necessary, consult the administrator who configured the camcorder's settings.
- When using a camcorder that supports multi-user operation, log in with the user information of User 1 if [Select User] was set to [User 1], or with the user information of User 2 or User 3 if [Select User] was set to [Users 2&3].
- The Wi-Fi Remote screen will appear. When using a camcorder that supports multi-user operation, the screen displayed will differ depending on the user information used to log in.
- While Wi-Fi Remote is correctly connected to the camcorder, the •••• above the time code will turn on one by one and then turn off in an endless loop.
- If set, the camcorder's ID will appear on the Wi-Fi Remote screen while live view is not activated. In the [Metadata Input] screen, it appears at the bottom of the screen.



Screen selection tabs appear only for [User 1]/single-user operation



#### Select the language for Wi-Fi Remote.

 Press the [▼] next to the language button and select the desired language from the list. Most buttons and controls emulate physical controls on the camcorder and are labeled in English only, regardless of the language selected.

# Wi-Fi Remote: [Advanced Control]

Single-user operation/[User 1]/[User 2] only

When using a laptop computer, netbook, tablet computer or other Wi-Fi enabled devices with larger screens, the [Advanced Control] screen offers more shooting controls to operate the camcorder. For details about how to control the recording or change the various settings, refer to the relevant section in the camcorder's instruction manual.



1	Live view screen	14	SLC
2	Focus controls <sup>2</sup>	15	ND
3	ONE-SHOT AE (temporary autofocus once) button <sup>2</sup>	16	Wh
-	Wi-Fi Remote screen selection tabs	17	Ap
4	(single-user operation/[User 1] only)	18	Sh
5	Language selection	19	ISC
6	Double slot recording <sup>1</sup>		gai
7	Recording operation	20	OK
0		21	$\checkmark$
0	WI-FI connection indicator'	22	Iris
9	Time code <sup>1</sup>		SH
10	RAW RAW video indicator <sup>3</sup>	23	(ad
11	Key lock button (Wi-Fi Remote buttons only)	24	PUS
12	Approximate remaining battery <sup>1</sup>	25	LIV
13	CF card selection and remaining recording time	26	ST

14	SLOT SELECT (CF card slot selection) button
15	ND +/- buttons and ND filter display
16	White balance buttons
17	Aperture value <sup>2</sup>
18	Shutter mode and value
19	ISO button/Gain button and ISO speed/ gain value
20	MARK (add M mark) button
21	MARK (add M mark) button
22	Iris controls <sup>2</sup>
23	SHOT MARK1/SHOT MARK2 (add <b>🗹 / 🖸</b> mark) buttons
24	PUSH AUTO IRIS (temporary automatic aperture) button <sup>2</sup>
25	LIVE VIEW ON/OFF button
26	START/STOP button

<sup>1</sup> Shaded items cannot be changed using Wi-Fi Remote. <sup>2</sup>Only for camcorders with a Canon EF lens mount.

<sup>3</sup> Only for camcorders that can shoot RAW video.

Depending on the Wi-Fi network used and the conditions of the wireless signal, you may notice some delays in refreshing the live view image and other settings.

# Wi-Fi Remote: [Basic Control]

Single-user operation/[User 1] only

When using a smartphone or other Wi-Fi enabled device with a smaller screen, you can use the [Basic Control] screen that offers only the most important shooting controls (focus, iris, START/STOP, live view, all types of marks and Wi-Fi Remote button lock) but will fit in the screen without scrolling. For details about how to control the recording or change the various settings, refer to the relevant section in the camcorder's instruction manual.



#### Open the [Basic Control] screen.

• From the [Advanced Control] screen press the [Basic Control] tab.



Depending on the Wi-Fi network used and the conditions of the wireless signal, you may notice some delays in refreshing the live view image and other settings.

# Wi-Fi Remote: [Metadata Input]

Single-user operation/[User 3] only

Using Wi-Fi Remote you can create, edit and transfer to the camcorder a metadata profile that includes the User Memo information (clip title, creator, location and description), as well as GPS information. For details about how to set and transfer the metadata, refer to the relevant section in the camcorder's instruction manual.



1	[(() Activate] button (activate metadata
	control from Wi-Fi Remote)
2	Metadata transfer mode selection buttons
3	User Memo fields
4	GPS information fields
5	Wi-Fi Remote screen selection tabs
6	Language selection

7	Recording operation
8	Wi-Fi connection indicator
9	Key lock button (Wi-Fi Remote buttons
	only)
10	Approximate remaining battery
11	[Clear] buttons (clear current data)
12	Camcorder ID

\* Shaded items cannot be changed using Wi-Fi Remote.

Using Wi-Fi Remote ([((♥)) Activate] button) you can give priority to metadata sent through the application. However, you cannot return the priority back to the SD card. To use a user memo file saved on the SD card you will need to set [♥ Other Functions] ♥ [Set Metadata] ♥ [Setting] to [SD Card] on the camcorder itself.

# Managing Settings Information

# **Checking Settings**

You can check the current Wi-Fi network settings using the camcorder's status screens.



#### Press the STATUS button.

Push the joystick up/down or turn the SELECT dial to display the four [Wi-Fi Remote] status screens.



1	Network configuration name
2	Network name (SSID) and type of
~	connection
3	Channel used (AP mode/Ad Hoc
5	connection)
4	Authentication and encryption method
5	IP address assignment method
6	IP address assigned to the camcorder
7	Subnet mask
8	Default gateway

9	MAC address
10	Port
11	Camera identifier
12	User selection
	User name and password protection for
13	users 1 to 3 (actual password is not
	shown)
* F	or camcorders that do not support multi-user
0	peration, only one set of [User Name] and

[Password] is shown and the items are displayed in a slightly different order.

# **Changing Settings**

You can edit the Wi-Fi network settings even after the initial setup. Changing settings manually requires more advanced knowledge of Wi-Fi and network settings. The Wi-Fi connection will be disabled while you change these settings. After completing the changes, the camcorder will connect to the Wi-Fi network using the new configuration.



35

Select [5], press SET and then close the menu.

#### **Changing Settings**



# If you selected [Manual], select a setting you want to change and then press SET.

- Push the joystick up/down or turn the SELECT dial to select a value for the first field and press SET to move to the next field. After completing the four fields of each address, select [Set] and press SET to enter the address.
- Repeat this step to change other TCP/IP settings as necessary. When you finish changing the settings, select [5], press SET and then close the menu.
- For details about the network's settings, consult the network administrator.

#### **Renaming the Configuration Profile**

Each network configuration setup is stored under a configuration number ([No. 1] to [No. 5]). You can rename it with a more familiar name to make it easier to distinguish between various Wi-Fi networks you use.



# Troubleshooting

# Troubleshooting

Check this section if you encounter problems connecting to the Wi-Fi network or operating the camcorder remotely from a Wi-Fi enabled device. If the problem persists, consult a Canon Service Center (listed on the back cover of the camcorder's instruction manual).

#### **Check This First**

- Are the wireless router (access point), the camcorder and the computer or other Wi-Fi enabled device all turned on?
- Is the transmitter correctly attached to the camcorder's WFT terminal?
- Is the Wi-Fi network working and correctly configured?
- Is the computer or other Wi-Fi enabled device correctly connected to the same Wi-Fi network as the camcorder?
- Are there any obstructions between the camcorder and the wireless router or between the computer/Wi-Fi device used and the wireless router that could be weakening the wireless signal?

#### Cannot start the Wi-Fi Remote application on the computer or other Wi-Fi enabled device

- The camcorder is not connected to the Wi-Fi network.
- Make sure the camcorder is connected to the same Wi-Fi network as the computer or other Wi-Fi enabled device.
- The URL entered into the Web browser's address bar is incorrect.
- Check the [Wi-Fi Remote 3/4] status screen and make sure to use the IP address assigned to the camcorder as the URL (
   34).
- The user name or password is incorrect.
- Make sure to enter the user name and password set on the camcorder (12 20, 22).
- ▶ For your protection, when the camcorder's settings are saved on an SD card, the encryption key/WEP index key in the wireless LAN setup and the password(s) in the user/ camcorder settings are not saved. If you just restored the camcorder's settings from an SD card, edit the [LAN Setup] and reenter the encryption key (□ 35) and edit the [User Setting] (camcorders that support multi-user operation) or [Camera Settings] (camcorders that do not support multi-user operation) and reenter the password(s) (□ 20, 22).

#### The Wi-Fi Remote screen is not displayed correctly

- You are using a computer or other Wi-Fi enabled device, operating system or Web browser that is not compatible with Wi-Fi Remote.
- For the latest information about system requirements, please visit your local Canon Web site.
- The Web browser version used does not support JavaScript.
- ▶ Use a Web browser or a version of the Web browser that supports JavaScript.
- Cookies are not enabled on the Web browser used.
- Your Web browser must be enabled to accept cookies. For details, refer to the Web browser's Help pages.

# About Wi-Fi Networks

When using the transmitter with a Wi-Fi network, try the following corrective actions if the transmission rate drops, the connection is lost, or other problems occur.

# Location and Antenna Position of the Wireless Router or Wi-Fi Enabled Device

- When using the transmitter indoors, place the wireless router in the same room where you are shooting.
- Place the wireless router in an open, unobstructed location, where people or objects do not come between it and the camcorder.
- Place the wireless router as close as possible to the camcorder. In particular, note that during outdoor use in poor weather, rain may absorb radio waves and disrupt the connection.

#### **Nearby Electronic Devices**

If the transmission rate over a Wi-Fi network drops because of interference from the following electronic devices, switching to the 5 GHz band or to a different channel may solve the problem.

- The transmitter communicates over Wi-Fi networks via IEEE 802.11b/g/n using radio waves in the 2.4 GHz band. For this reason, the transmission rate may drop if there are nearby microwave ovens, cordless telephones, microphones, or similar devices operating on the same frequency band.
- If an access point operating on the same frequency band as the transmitter is used nearby, the transmission rate may drop.

#### **Using Multiple Transmitters**

- If multiple transmitters are connected to a single wireless router (access point), be careful
  not to use duplicate camera IP addresses.
- Note that the transmission rate drops when multiple transmitters access a single wireless router (access point).
- To reduce radio wave interference when there are multiple wireless access points using IEEE 802.11b/g or IEEE 802.11n (in the 2.4 GHz band), leave a gap of four channels between each wireless LAN channel. For example, use channels 1, 6, and 11, channels 2, 7, and 12, or channels 3, 8, and 13.

When IEEE 802.11ac/n/a can be used, switch to IEEE 802.11ac/n/a (in the 5 GHz band) and specify a different channel.

#### Security

Wi-Fi communications can be easily intercepted. For this reason, we recommend
activating encrypted communication in the wireless router (access point) settings.

# **Error Messages**

Refer to this list when an error message is displayed on the camcorder's screen. Messages are listed alphabetically.

If the problem persists, consult a Canon Service Center (listed on the back of the camcorder's instruction manual).

Another user is already accessing the camcorder. Try again later.

- The camcorder is already connected to the same user on another instance of Wi-Fi Remote on another Web browser.
- A single user cannot log in to control the camcorder from multiple devices. Check the Wi-Fi devices connected to the Wi-Fi network.

#### Multiple access points detected. Try the operation again.

- Wi-Fi Protected Setup (WPS) was activated simultaneously on multiple access points.
- Wait a moment or cancel the WPS operation on the access point(s) you do not want to connect to and then try again.

#### No access points found

- The connection wizard searched for active Wi-Fi networks (access points) in the area but none were found.
- Make sure the access point is working correctly and try connecting again.
- The Wi-Fi network is operating in stealth mode.
- Deactivate the stealth function in the wireless router (access point) settings.
- The connection wizard may not be able to find the Wi-Fi network if MAC address filtering is activated.
- Check the [Wi-Fi Remote 3/4] status screen (1 34) and make sure to add the transmitter's MAC address to the list of approved wireless devices in the wireless router (access point) settings.

#### Unable to complete WPS.

- The access point's encryption method is set to [WEP]. Wi-Fi Protected Setup (WPS) cannot connect to access points set to this encryption method.
- Change the access point's encryption method or use the [Connection Wizard] (11).

#### Unable to complete WPS. Try the operation again.

- More than 2 minutes passed between activating WPS on the access point and selecting [OK] on the camcorder.
- Start over the WPS procedure from the beginning.
- The WPS button was not held down long enough.
- Refer to the instruction manual of your wireless router. When using WPS to make a wireless connection, keep the WPS button held down until the wireless router's WPS function is activated.

#### WFT's temperature too high. Cannot use Wi-Fi.

- Wi-Fi functions have been turned off because the transmitter's temperature is too high.
- Turn off the camcorder, remove the transmitter from the camcorder and let it cool down before attaching it again.

#### Wi-Fi connection terminated

- An error occurred on the access point or the computer or other Wi-Fi enabled device.
- Check the Wi-Fi enabled device and access point and try connecting again.
- The Wi-Fi signal became too weak and the wireless connection was lost.
- Wait a moment or turn off other devices in the area that may be interfering with the Wi-Fi signal and then try connecting again.

#### Wi-Fi error. Incorrect encryption key.

- The authentication/encryption method is set to an option other than [Open/No encryption] and the password entered is incorrect.
- Check the access point's password and try entering the password again (11 13).

#### Wireless communication cannot be used

- The transmitter has malfunctioned.
- Consult a Canon Service Center (listed on the back cover of the camcorder's instruction manual).

#### Wireless communication cannot be used WFT error

- The channel specified in the [LAN Setup] settings of the network configuration selected cannot be used in accordance with the restrictions on countries/regions of use of the attached transmitter model.
- Change the [LAN Setup] settings (1 35). For details see Areas of Use and Restrictions (supplied with the transmitter).

#### Wireless communication cannot be used while the wireless microphone is attached

- The transmitter cannot be used while an optional WM-V1 Wireless Microphone is attached to the camcorder.
- Disconnect the WM-V1 from the camcorder and turn it off.

#### Wireless communication is not working correctly

- There's a hardware problem with the camcorder's Wi-Fi-related circuitry.
- Try turning the camcorder off and the on again. If the problem persists, consult a Canon Service Center.

# Index

### Α

Access point	2, 1	2
Ad Hoc	9, 1	4
Advanced Control screen	3	0
AP mode	9, 1	4
Area of use Areas of Use and Restric	tion	s
Attaching to a camcorder		4
Authentication	1	5

### в

Basic Control screen	31
Button connection mode	10

### С

Camcorder ID	19, 22
Camcorder settings	19, 22
Channel Areas of Use and Res	strictions
Connection	14
Connection Wizard	8, 12

## Е

Encryption	. 13,	15

### G

Gateway	y	17

### I

#### IEEE 802.11a/b/g/n

Areas of Use and	Restrictions
Infrastructure	14
IP address	17, 35

### Μ

MAC address	34, 40
Messages	
Metadata input	

### Ν

Network		. 8,	39
Network configuration	18,	26,	36

### Ρ

Password 20	, 22, 28
PIN code connection mode	11
Port number	. 19, 22

### R

Router	 8,	39

# S

Settings information	33
Shared key	15
SSID	12, 14
Stealth functions	14
Subnet mask	17

#### Т

TCP/IP settings	17,	34,	35
Troubleshooting			38

#### U

URL			27
User name 20	),	22,	28

### W

Web browser
Wi-Fi Remote
Wi-Fi specification
Areas of Use and Restrictions
WPA, WPA2-PSK 15
WPS (Wi-Fi Protected Setup) 8, 10, 11

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- WPS as used on the camcorder's settings, onscreen displays and in this manual signifies Wi-Fi Protected Setup.
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The information in this guide is current as of December 2016. For information on using the transmitter with accessories introduced after this date, contact your nearest Canon Service Center.