Setup and Use a Wireless Canon Camera with RightBooth

In this document, many of the steps shown relate to the Canon Camera Model EOS M50 Mark II. If you are using a different wireless Canon camera model, the steps (and the menu images) may differ slightly from those shown in this document.

1 - Set Up

Note: You will usually only need to perform Steps 1.1 thru 1.4 once.

1.1 Obtain the latest Camera Control API from Canon

The first thing you need to do is to activate the Camera Control API (CCAPI) function on your camera. For reasons unknown, Canon have decided that this function is not available by default on all wireless cameras that they sell. The only way you can activate the CCAPI is by obtaining the CCAPI development tools which contain an app (the CCAPI Activation tool) that you can then use to activate the CCAPI on your camera. To obtain this tool you must:

• Register and join the free Canon Developer Program using the Canon Developer Portal. Canon provide a number of Developer Portal websites targeting various world regions, so you should choose the portal that is specific to your region. At the time of writing, these websites are:

Europe: https://developers.canon-europe.com/s/

USA: https://developercommunity.usa.canon.com

Asia: https://asia.canon/en/campaign/developerresources/camera

Middle East: https://en.canon-me.com/business/imaging-solutions/sdk/

Note: There may be other regions.

• Once you have joined the Canon Developer Program, you must then request access to the Camera SDKs. This screenshot is taken from the European Portal:



• Once Canon have granted you access to the Camera SDKs (you will receive a confirmation email) and you can then access and download the latest CCAPI from the Developer Portal, in this European Portal screenshot it is CCAPI version 1.1.0h, released on 26/07/2022:

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• Download and save the CCAPI folders and files on your computer.

1.2 – Activate the Camera Control API (CCAPI) on the camera

Once you have obtained the latest CCAPI files on your computer, you can then activate the Camera Control API on your camera as follows:

• Connect your wireless Canon camera to the PC using a USB lead:



- Turn the camera on.
- Make sure the camera is recognised by Windows.
- Make sure that the PC is connected to the Internet.
- Make sure that RightBooth is NOT running.

• Run the 'CCAPI Activation Tool', which you will find in the Windows sub folder of the CCAPI as shown in this screenshot:

Home Shiere	View			×
Carmera Uploads Public Videos	PC > DATA (D) > Canon CCAPII.1.0h > C	CAPI Activation Tool + Windo Date modified 29/03/2022 02:37 29/03/2022 02:37	Type AppScation	Site 54.KB
This PC 30 Objects Desktop Documents	IPEMCOM.dll	29/03/2822 02:37	Application exten	160 KB

• When the CCAPI Activation Tool is running, click the 'Execute Activation' button:

EXecute Actividuum	Evente	And and an
	EXECUTE	ACTION

• Accept the terms and conditions and click Next:



• If everything is OK, the CCAPI activation process will complete:



• Your camera will now have its Camera Control API option activated for use.

Note that once you have activated the Camera Control API on your camera, you will not need to perform this step again.

1.3 – Create a Camera Wi-Fi Connection

You can now use the Camera Control API option on your camera to allow you to create a WiFi connection between your camera and your computer. This is done as follows:

- Ensure your camera is **NOT connected** to the PC. You no longer need to use a USB cable.
- Turn your camera on and access its onboard Menu.
- On your Camera Menu, choose 'Wireless settings'...



• On the sub-menu, choose 'Wi-Fi settings' ...

2	NETWORK.
Wi-Fi/Bluetooth con	nection
Airplane mode	Off
Wi-Fi settings	Enable
Bluetooth settings	Enable
Nickname	E05M50m2_E20703
GPS settings	
	MENU 5

• On the sub-menu, enable the WiFi...

Wi-Fi	Enable
Password	Required
Connection history	Show
Auto send images to	computer
Send to smartphone	after shot
Camera Control API	

• Choose the new option: 'Camera Control API'. Note that this menu option will only appear if you have successfully activated the CCAPI (as described in the previous sections)...

Password	Required
Connection history	Show
Auto send images to	computer
Send to smartphone	after shot
Camera Control API	
MAC address	

• On the sub menu, choose 'Add connection'...

Connect	
Add connection	
Check/edit connect	tions
Account settings	
Auto connect	Disable
Port No.	08080

• On the sub menu, choose 'Add with wizard'...

Add connection	
Add with wizard	
Add manually	
	province and a second
	MENU D

• On the sub menu, choose 'Camera access point mode'...

Refresh	
Camera access point	mode
Connect with WPS	
VM8334831	a 1ch
Use the camera as an	n access
point for devices to a	connect to

The camera will now be broadcasting its WiFi network and it will show an SSID and a password for wireless connection. Example:

Connect device t	ect o camera using
SSID E0SM50m2_J Password	E2D703-059_Canon0A 9u2XNEGb
Cancel	Switch network

• On your computer, open the Network connections panel from the Windows Taskbar and connect to the camera's WiFi network using the password shown on the camera...

臣	VM8334831 Connected		
°€.	EOSM50m2_E2D Secured	103-005_Canon	A
		21	Connect
•	VM8334831		
°/.	SKY45584		
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Netw	ork & Internet se	ettings sking a connectio	n metered.
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When the PC is connected to the camera WiFi, the camera will automatically display a **Connection address URL** for the Camera Control API...

Connect d URL below	evice to camera /)
nttp://19	2.168.1.2:8080/cca
	Cancel

The address is likely to be the following URL:

http:/	/192.168.1.2:8080	/ccapi
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Make a note of this address as you may need to check it later in RightBooth. Note that this address will remain the same between all subsequent camera sessions.

1.4 - Access the Camera Control API and check the RightBooth Connection Settings

Your camera is now waiting for another app (in our case RightBooth) to connect to and access the Camera Control API, so...

- Run RightBooth.
- On the main screen, click the 'Settings' button.
- On the Cameras → Main camera tab, select the 'DSLR camera' option for both videos and photos:

Cameras	Prin	nters	User input	Overlays/Props	Text/Language	Security	Social me
Main cam	era	Web	cam video	Webcam audio	Webcam photo	DSLR	GoPro
					The second second second		
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			 Webca 	em	O DSLR camera		

Next, go to the Cameras → DSLR section. Tick the 'Canon' option and also tick the 'Wireless' checkbox:



• Your camera will now automatically show: 'Connection established'...

Connection established
connection established

- Now in RightBooth, click the '**CCAPI'** button.
- On the CCAPI panel, ensure the **Connection address URL** matches the one that was shown on the camera. If this does not match, type the correct address into the text box.
- Click the 'Check' button.
- RightBooth will then display a list of commands available on the camera:



Everything is now set up correctly for using your wireless camera in RightBooth.

2 – Set Up required before each Camera Session

These steps are required each time you turn on your PC or your camera and you are going to use the camera for a wireless session in RightBooth.

Note: This section assumes that you have previously performed the one time set up in Sections 1.1 to 1.4 (above).

- Ensure your camera is **NOT connected** to the PC. Do not use a USB cable.
- Turn the PC on.
- Turn your camera on and access its onboard Menu.
- On the Camera Menu, choose 'Wireless settings'...



• On the sub-menu, choose 'Wi-Fi settings'...

(19) Wireless settings	
1 2	HE WORLD
Wi-Fi/Bluetooth con	nection
Airplane mode	Off
Wi-Fi settings	Enable
Bluetooth settings	Enable
Nickname	E05M50m2_E20703
GPS settings	
	MENU D

• On the sub-menu, choose: 'Camera Control API'...



• On the sub menu, choose: 'Connect'...



• On the sub menu, you will now see the previously configured WiFi connection (as created in Section 1.3) . Select this connection...



The camera will now be broadcasting its WiFi network.

• On your computer, open the Network connections panel from the Windows Taskbar and connect to the camera's WiFi network. You should not need to re-enter the password...



When connected, the camera will again display the Connection address for the Camera Control API (as described in Section 1.3)...



• While your camera is sat waiting for a connection, run RightBooth. When RightBooth starts running, it will automatically connect with the camera and the camera will show the 'Connection established' message:

Connection established
connection established

Note: This automatic connection by RightBooth will only happen if you have previously configured RightBooth to use a wireless Canon camera (as described in section 1.4).

You are now ready to use your wireless camera in your RightBooth video recording and photo capture events.

Summary: Everyday Set up steps

- Turn your PC on
- Turn your Camera on
- On the Camera menu, choose the saved CCAPI WiFi Network
- The camera now broadcasts its CCAPI WiFi network
- On the PC Networks panel, connect to the CCAPI WiFi Network
- Run RightBooth
- RightBooth automatically connects to the CCAPI WiFi Network
- The camera shows 'Connection established'
- RightBooth can now use the camera wirelessly

Problems with using the camera and connecting to the Camera WiFi?

Try the following:

- Make sure your camera is running the latest firmware.
- Make sure your camera has a well charged battery.
- Make sure you are using a compatible SD card in your camera.
- Reformat the SD card so that it does not contain any files.
- Power the camera down, remove the battery, wait a while, re-insert the battery and power it back on.
- Set the correct Date and Time on your camera.
- Make sure your PC, laptop or tablet is **NOT** set to power down or go into Sleep mode, as this will cause connections to be dropped.
- Make sure the Firewall on your PC is not enabled OR alternatively add the RightBooth.exe into your Firewall app's exemption list.
- Make sure there are no other applications running that are automatically trying to switch to a different WiFi network. For example if you have a web browser running (such as Google Chrome) and you have a Gmail account open in a browser tab, Gmail will try and switch your PC to use a network that has Internet access, which will then cause problems with your Camera WiFi connection.
- In RightBooth DSLR Settings, make sure it is possible to write files to the 'Temporary folder for transferring files from camera'
- In RightBooth DSLR Settings, increase the **Wait time for photos** to **8 seconds** and increase **the Wait time for videos** to **400**.