

MG360 Driver Installation & User Manual

Supervised by MILLITRONIC Co., LTD

January, 2019

Version:5

Introduction

Thank you for purchasing this MILLITRONIC product.

You can visit our website: http://millitronic.com.tw

MG360 is the first portable of WiGig USB3.0 network adapter in the world, which is compatible with IEEE 802.11ad spec.

Trademarks

™ MILLITRONIC CO., LTD Logo are owned by MILLITRONIC CO., LTD Any non MILLTRONIC trademarks are used for reference purposes only.

Outline

Introduction	2
Overview	5
Product Description	5
Product Features	5
Adapter Specification	6
Chapter 1 - Driver Installation	7
Step 1 – Plug MG360 into Your Laptop	7
Step 2 - Start to install	8
Step 3 -Install Peraso Driver	9
Step 4 -Installation Complete	10
Chapter 2 – User Manual	11
Effective Area	11
MG360 Connect to the router	12
Appendix: Light Signals	14
In USB 3.0 Port	14
In USB 2.0 Port	14
Appendix2: Safety Information	15
Appendix 3: Frequently Asked Question	16
Question: Where can I position the router?	16
Question: How can I connect to others Wi-Fi with MG360?	16
Question: How could I do when It shows "No Wi-Fi networks found" as below?	17
Question: What It means It shows without Wi-Fi icon at "Network & Internet settings" panel insert MG360 device?	
Question: How do I check the installation of the MG360 driver?	18
Question: How to Uninstall Our Driver?	20
Question: How to set the router for 60GHz WiGig works	22
Trouble shooting	26
Check LED of the dongle	26
Check Device Manager	26
Check the position of the router	28

Overview

Product Description

MG360 receives high-speed,60 GHz WiGig 802.11ad wireless connectivity for the router devices with up to 2.0 Gbps connection to the router.

Complemented by a Wi-Fi router supports 802.11ad, it enables wire-equivalent user experience for wireless usage. This adapter that supports the fastest Wi-Fi technology for networking accessibility.

Product Features

- Accessibility for 60GHz networking
- 360-degree wireless coverage
- 10x faster than Wi-Fi
- Easy to plug and Play
- Compatible with
 - o a. TP-Link Talon AD7200
 - b. NetGear Nighthawk X10 R9000
 - o c. NetGear Nighthawk Pro Gaming XR700



Wireless		
IEEE 802.11ad compliance		
Adaptive 360 Degree Beamforming		
60GHz Radio, 2.0 Gbps		
Dimension		
Size: 110.3 x59.3 x17.3 mm		
Weight: 65 g		
DRIVER SUPPORT		
Windows 10, 64-bit only		
CONNECTION INTERFACE		
USB 3.0 Type A		

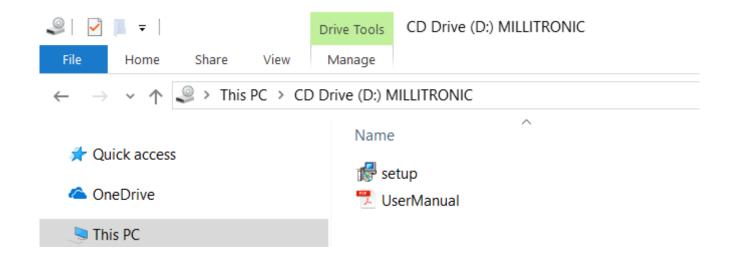
Chapter 1 - Driver Installation

Step 1 – Plug MG360 into Your Laptop



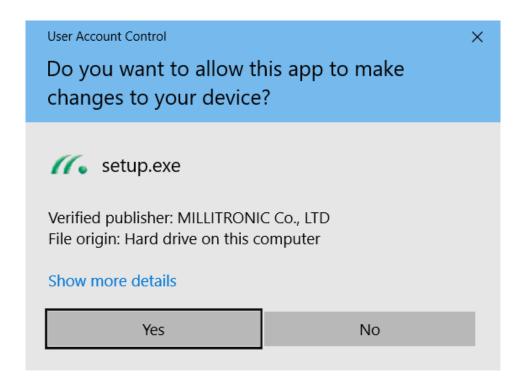
The MG360 driver had pre-load to internal storage

When MG360 has been inserted to the laptop, the USB driver should enable and display the storage automatically, then you can follow the steps mentioned below. If not, please check the "CD Drive" in "This PC". When your laptop displays the storage and displays it as below, please double clicks "setup" for the next step.

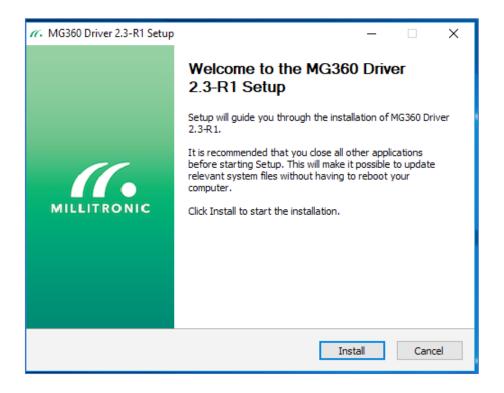


After executing "setup.exe", it will guide you to install the WiGig driver.

Click "Yes" to continue the installation.



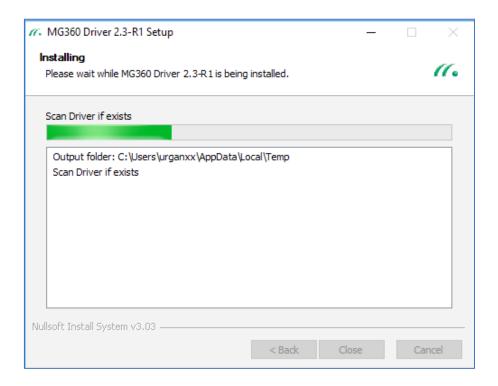
Please Click "Install" to start the installation.



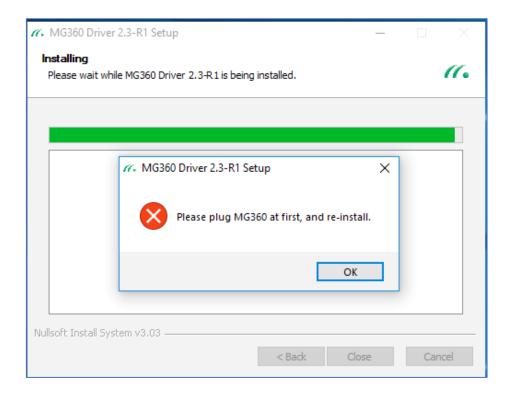
Step 3 -Install Peraso Driver

This is to install the WiGig driver when we ensured the existence of MG360. The installer would check if you had installed previous versions before this driver installed.

Please be patient with completing installation.

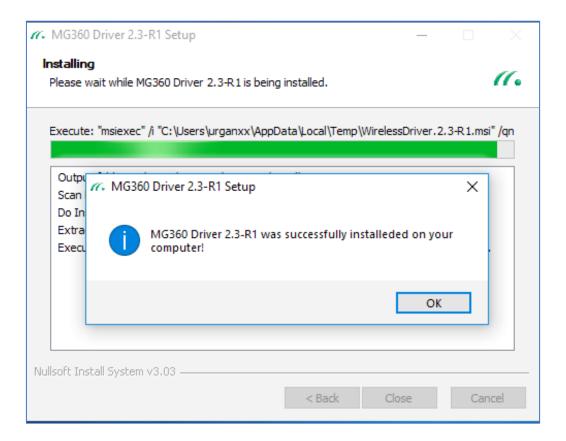


Warning: The installer would check our dongle if plugging on your machine.



Step 4 -Installation Complete

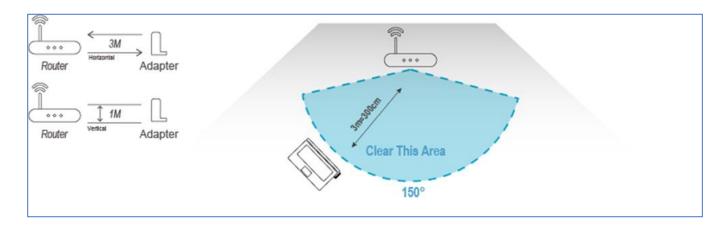
Click " \mathbf{OK} " to close this window and complete the installation.



Chapter 2 – User Manual

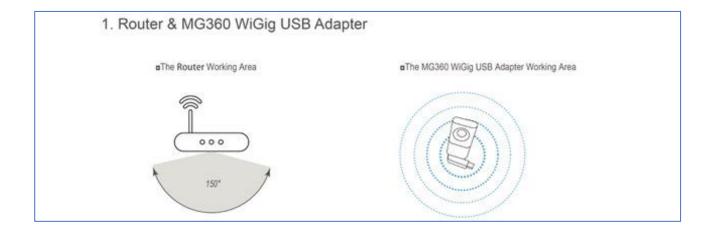
Effective Area

The effective range between MG360 USB adapter and WiGig router is shown in the following figure. Please keep MG360 in the fan area, which has a radius is 3 meters and field of view 150-degree from the center of router on the horizontal plane and under 1-meter difference on the vertical plane.



Warning: Please keep the space between MG360 and router clear, especially, avoid placing any metal objects to block wireless channel.

No matter if the adapter is plugged into the left side or right side of the notebook computer, it can connect to the router in the range of the radius. The adapter will stay connected in the effective area of the router, but the network connect session would drop until it disconnects over the time from the router setting.



This is an example for using MG360 to connect to the NetGear router. At first, Click the icon () in the bottomright corner, then the "Wi-Fi" panel would appear. Select your router from the list of available devices.



- 2.1: Click "Wi-Fi" panel, and confirm Wi-Fi has turned on. If so, MG360 will scan the vicinity.
- 2.2: If any hotspot exists, it will be listed. Select the SSID of the NetGear router.





METGEAR21-60G 60 GHz, Secured PerasoAP 60 GHz, Secured wlx70b3d553b02a 60 GHz, Open Network & Internet settings

Fig.2.1 Fig.2.2

- 2.3: Click "Connect"; It needs a password to connect in secured mode, but not in open mode.
- 2.4: If you can see "Connected" as below, it means that it has connected.





Fig.2.3 Fig.2.4

In USB 3.0 Port

Green	Blue	Red	Gray
Ready to Use	Connecting	Error	No power

In USB 2.0 Port

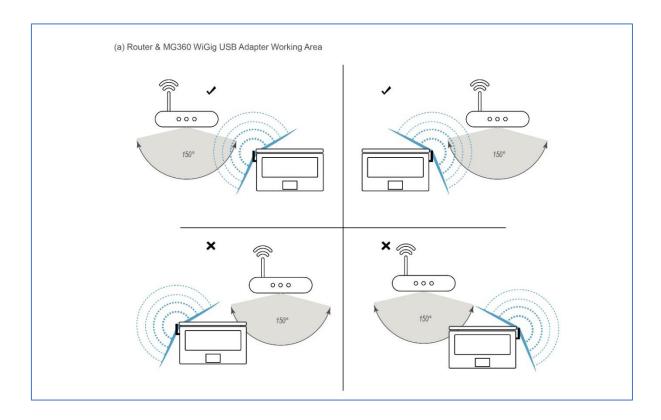
2 Green + Red	2 Green + Blue
Ready to Use	Connecting

Appendix2: Safety Information

- (1) This product can only be used in rooms at 26 degrees Celsius (Fahrenheit 78.8), please do not use the product in a non-ventilated place.
- (2) Avoid covering the machine covered when the machine is in use.
- (3) Pull out from the bottom when removing the dongle

Question: Where can I position the router?

Answer: Follow "Effective Area" and then check your router and MG360 placed as below:



Question: How can I connect to others Wi-Fi with MG360?

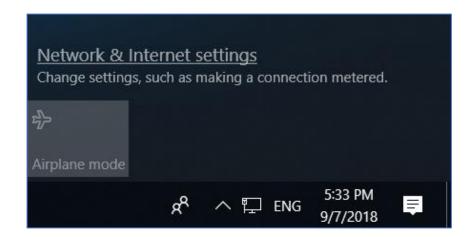
Answer: Yes, but you have to notice the radio of Wi-Fi you want to connect. The radio of some Wi-Fi devices is 2.4Ghz or 5GHz and the radio of MG360 is 60GHz. MG360 is compatible with the same radio of the routers

Question: How could I do when It shows "No Wi-Fi networks found" as below?



Answer: Please check the installation of the MG360 driver and follow "**Chapter 2**". Also make sure the light signal is the green light.

Question: What It means It shows without Wi-Fi icon at "Network & Internet settings" panel as below after I insert MG360 device?



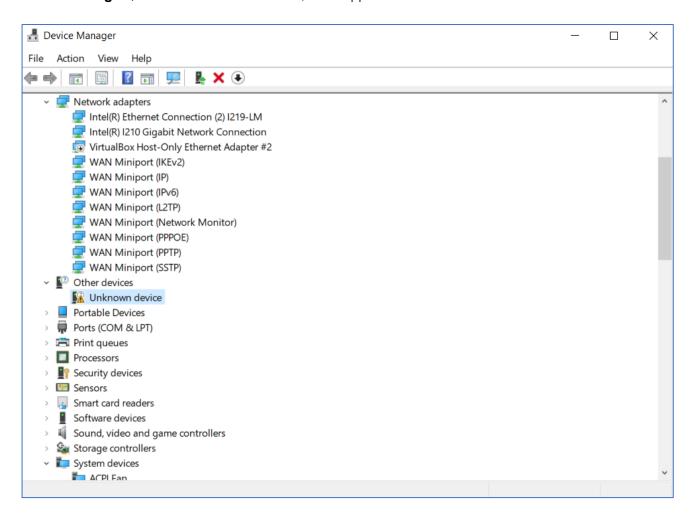
Answer: Please check the installation of the MG360 driver and follow "**Chapter 2**". Also make sure the light signal of MG360 is the green light.

Question: How do I check the installation of the MG360 driver?

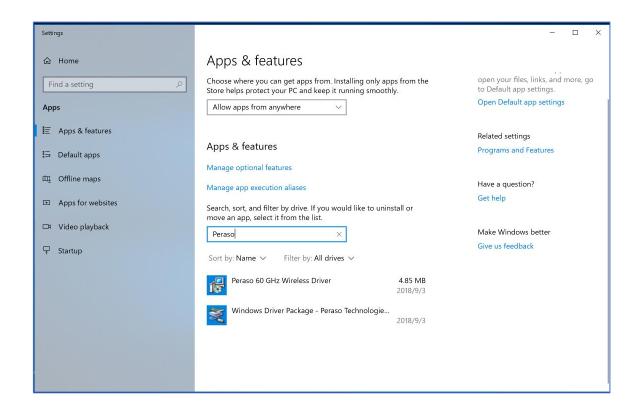
Answer: Recommend two options to check the installation by "Device Manager" or "Apps and Features". Both of them are listed on the same menu which appeared you move your mouse hovered on Microsoft's Flag and then click right-button of your mouse. You will see the sub-menu as below. And then choose "Device Manager" or "Apps and Features".



In "Device Manager", If the driver is not installed, it will appear "Unknown device" on the list.

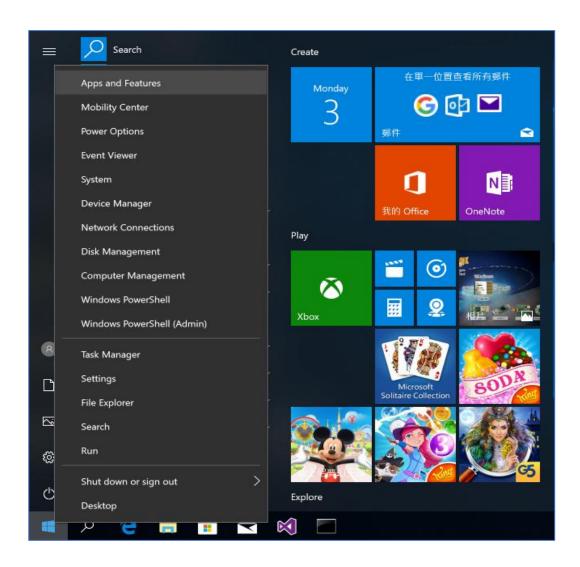


In "Apps & features", key in "Peraso" in search-bar field, you will see the result as below. If the driver is installed, two items of the result will appear on the list.

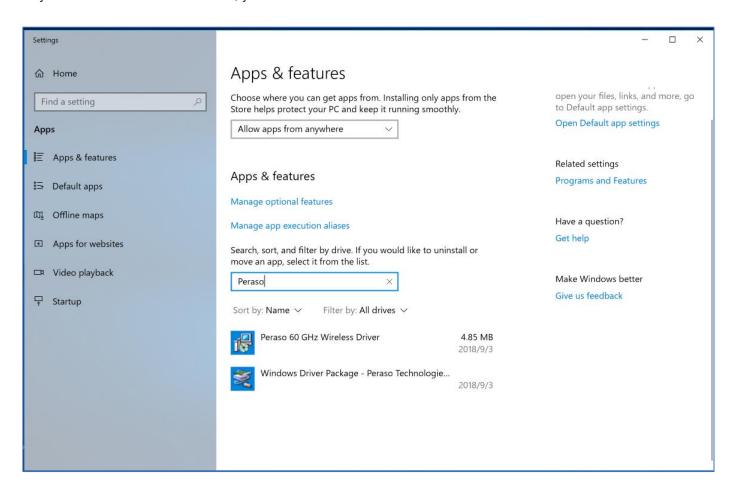


Question: How to Uninstall Our Driver?

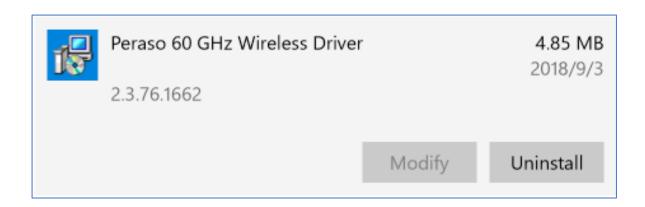
Answer: Open "**App and Features**" Panel. When your mouse hovered on Microsoft's Flag, the menu will appear as below. Click right-button of your mouse, you will see the sub-menu. Then choose "**Apps and Features**".



Key in "Peraso" in search-bar field, you will see the result as below:



Select "Peraso 60 GHz Wireless Driver", and click "Uninstall". After it has been done, you will see both of them have been removed.



Question: How to set the router for 60GHz WiGig works

Answer: For example, there is the following instruction for NetGear R9000 router

1. Connect Cat6 cable to wan port (yellow) of R9000 and ethernet



2. Turn on the switch of led

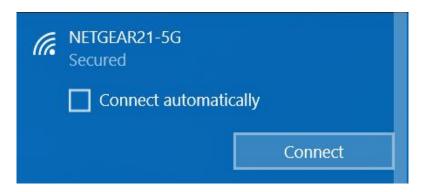


3. Check signal (flashing)

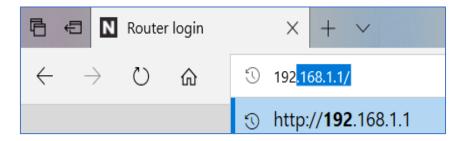




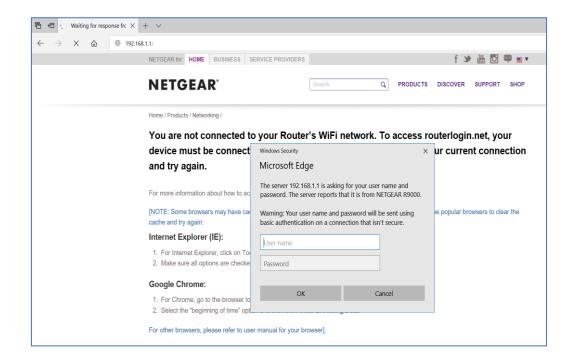
4. Connect the router with Wi-Fi (2.4GHz or 5GHz) or ethernet cable, and check connection



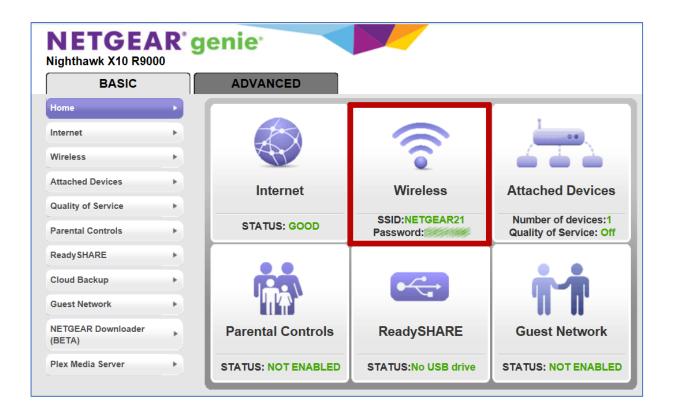
Launch a web browser and type http://www.routerlogin.com or http://www.routerlogin.com or "#192.168.1.1". A login window of Netgear opens.. Refer to https://kb.netgear.com/980/How-do-I-log-in-to-my-NETGEAR-home-router for detail. Please note that, if your router is set into AP mode, you may fail to access the login page. Please refer to https://community.netgear.com/t5/General-WiFi-Routers-Non/Can-t-access-routerlogin-net-routerlogin-com-or-default-IP/td-p/1165660



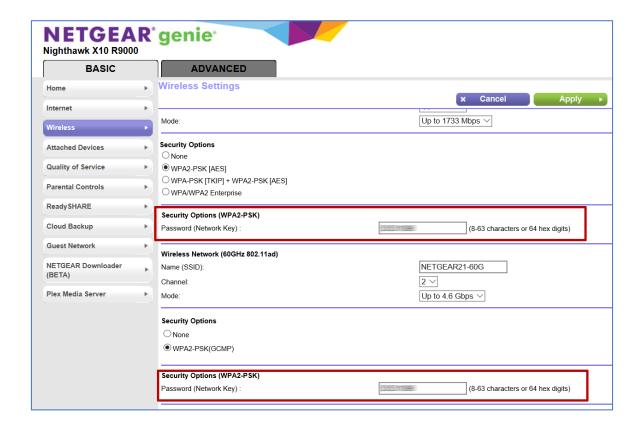
Make sure you have NetGear R9000 USERNAME and PASSWORD
(Default Username: admin, Default password: password. If you don't set it up yet, turn to 11.)



7. Click "Wireless" section at home page



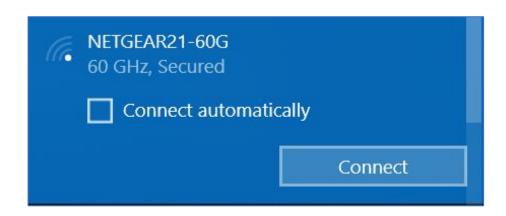
8. You can see the information of "60GHz 802.11ad". Check and save the password of WPA2-PAK in 60GHz information.



9. After MG360 WiGig driver installation for your laptop, you will be able to scan the 60GHz signal of the router automatically



10. Click the "Connect" button and enter the password shown in 60GHz WPA2-PSK of NetGear R9000



11. If you are the first time to login your router, please refer to https://kb.netgear.com/12923/Router-Initial-Setup-FAQ

Trouble shooting

- 1. Connect the dongle to the PC
- 2. Check LED of the dongle
- 3. Check Device Manager
- 4. Check the position of the router
- 5. Check the setting of the router

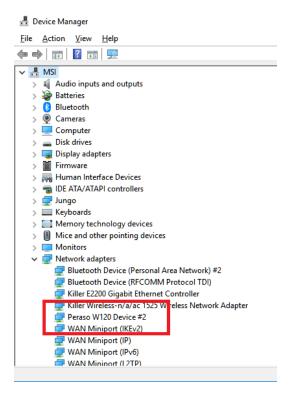
Check LED of the dongle

Refer to <u>Appendix: Light Signals</u>. If it is red or NO LED, please re-plug in the dongle. If it still does not work. Connect the dongle to USB3.0 **self-power** hub and connect the hub to the PC.

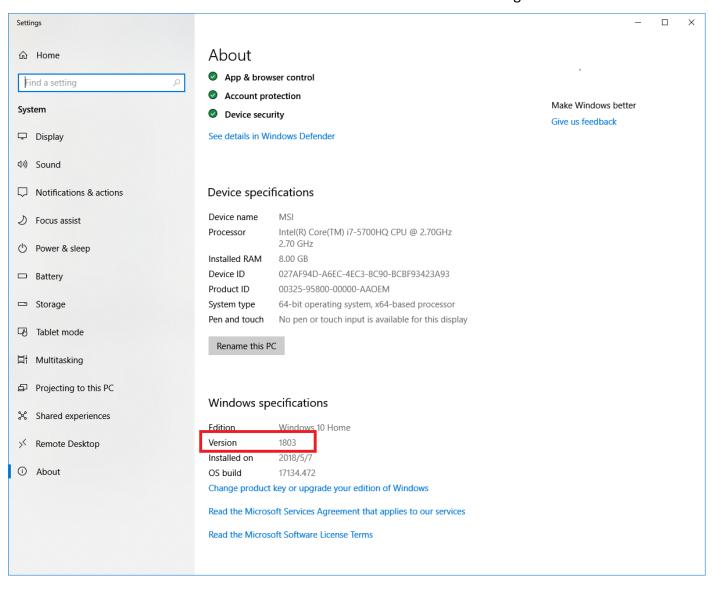
Check Device Manager

Check http://www.millitronic.com.tw/support/ and Question: How do I check the installation of the MG360 driver for driver update.

Make sure there is Peraso device in Device Manager.



Make sure the Win10 version is 64bit and Rastone3 1709 later. As the following



Check the position of the router

Refer to <u>Question: Where can I position the router</u>. Let the dongle face to the front(yellow part of the image below) of the Netgear R9000. Ensure that no objects are between the router and the dongle.



Check the setting of the router

Refer to Question: How to set the router for 60GHz WiGig works.