

[Troubleshooting] The Connection of Wi-Fi Adapters or Bluetooth Devices Is Unstable or Disconnected

Wireless adapters or Bluetooth devices may become unstable, disconnected or show the Code 10 error in Device Manager (error message: this device cannot start) if there is a change being made to the device (e.g. running Windows Update). If wireless adapters or Bluetooth devices ever run into the situations mentioned above, please refer to the following for the troubleshooting steps.

Before starting

Uninstall the following applications if they had installed on the laptops since they might cause potential conflicts when installing the drivers.

1. Software used for optimizing the system settings
2. Applications that can automatically search for and install drivers

Troubleshooting Steps

1. Download and save the drivers for the wireless adapters and Bluetooth devices

	Wi-Fi Driver	Bluetooth Driver
Intel Wireless Adapters	v21.60.2 or download the latest version from Intel website	v21.60.0 or download the latest version from Intel website
Killer Wireless Adapters	v2.2.1403 or download the latest version from Killer website and the Killer Uninstaller	download the latest version from Intel website

2. Run “Windows Update” Manually
Go to Settings > Update and Security > Windows Update. Run Windows Update until there is no new update or optional update
3. Disconnect from the Internet until the rest of the steps are finished
4. Perform a complete shutdown (Left-click on the Windows icon > Select **Power** > Press **SHIFT** and select **Shut down** at the same time)
5. Please perform the [EC reset](#)

To confirm whether the EC reset is complete, press the power button and make sure that the system will not power on. If the system boots up after pressing the power button, do the EC reset again.

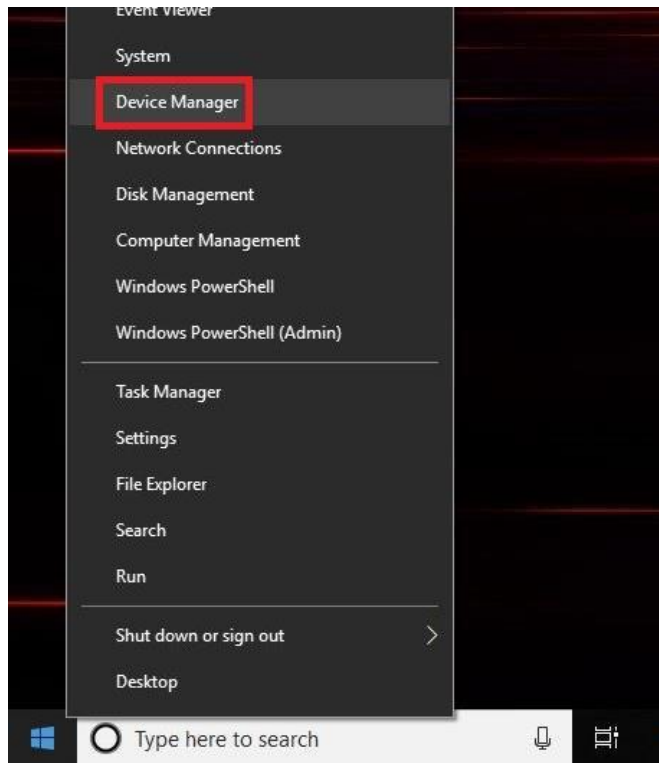
Note: Laptop should not plug in the AC adapter during confirmation

6. Plug in the AC adapter and press the power button to power on the laptop

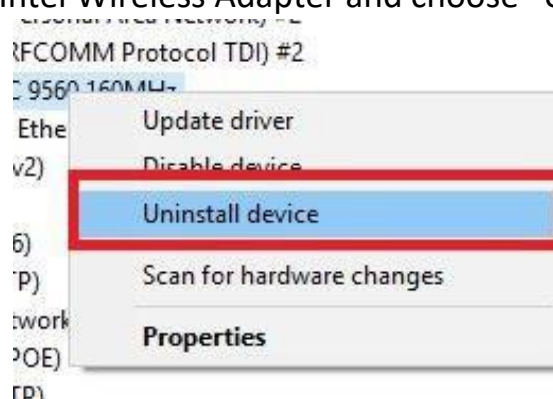
7. Uninstall drivers for wireless adapters

For Intel Wireless Adapters:

- A. Go to Settings > Apps > Apps and features and uninstall “Intel PROSet/Wireless Software”
- B. On the desktop, right-click the Windows icon and select Device Manager



- C. In **Device Manager > Network adapters** find the Intel Wireless Adapter
- D. Right-click the Intel Wireless Adapter and choose “Uninstall device”



- E. Select the option saying “Delete the driver software for this device” and click “Uninstall”



- F. Reboot the laptop
 G. Repeat Step C and Step F until the option “Delete the driver software for this device” in Step E does not show up again

*If the device disappears from its original location after the reboot, please check if there’s a new device showing up in the “Other devices” section (this device doesn’t have to be uninstalled again), or select **Action > Scan for hardware changes** and check if the device shows up in Device Manager

- H. Remove and reset all connected devices

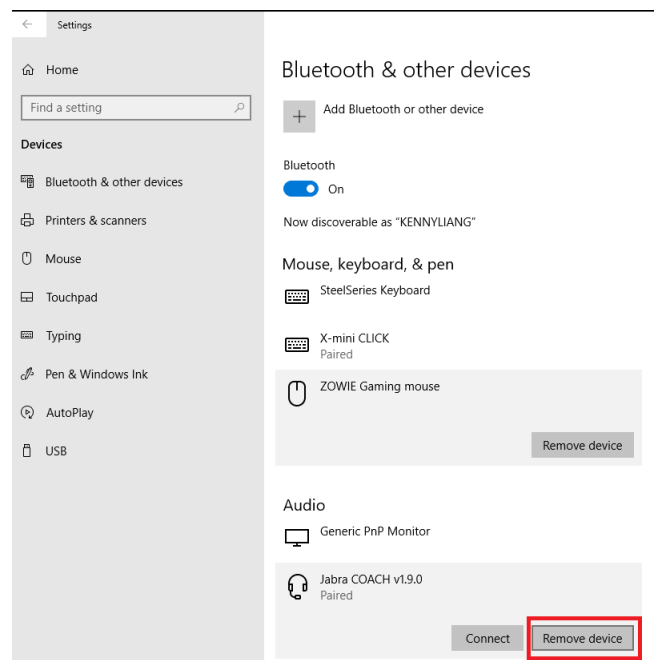
- For connected networks, please follow below steps to perform network reset

- 1) Select the Start button, then select Settings > Network & Internet > Status > Network reset
- 2) On the Network reset screen, select Reset now > Yes to confirm

*Note: After using network reset, you might need to reinstall and set up other networking software you might be using, such as VPN client software or virtual switches from Hyper-V (if you are using that or other network virtualization software)

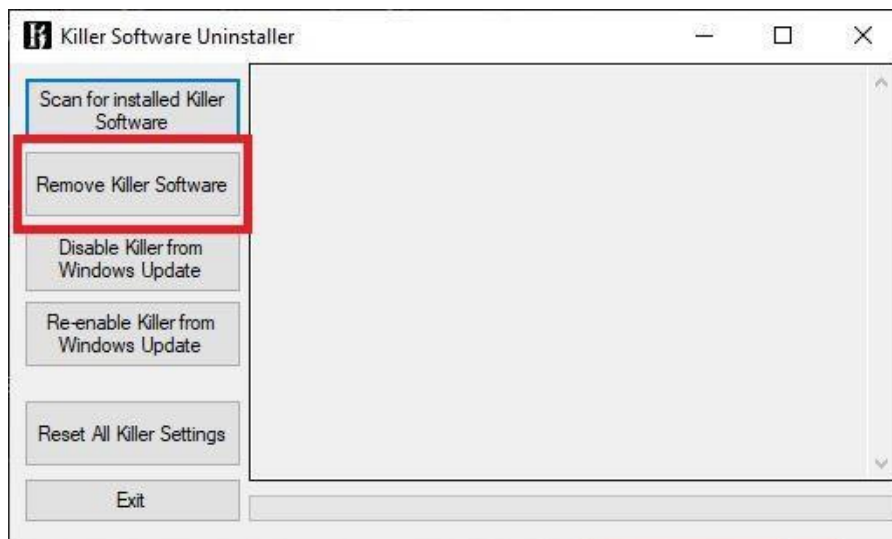
- For connected Bluetooth device, please follow below step until all connected device are removed

- 1) Select the Start button, then select Settings > Devices > Bluetooth & other devices
- 2) Select the paired device and select Remove device > Yes to confirm



For Killer Wireless Adapters:

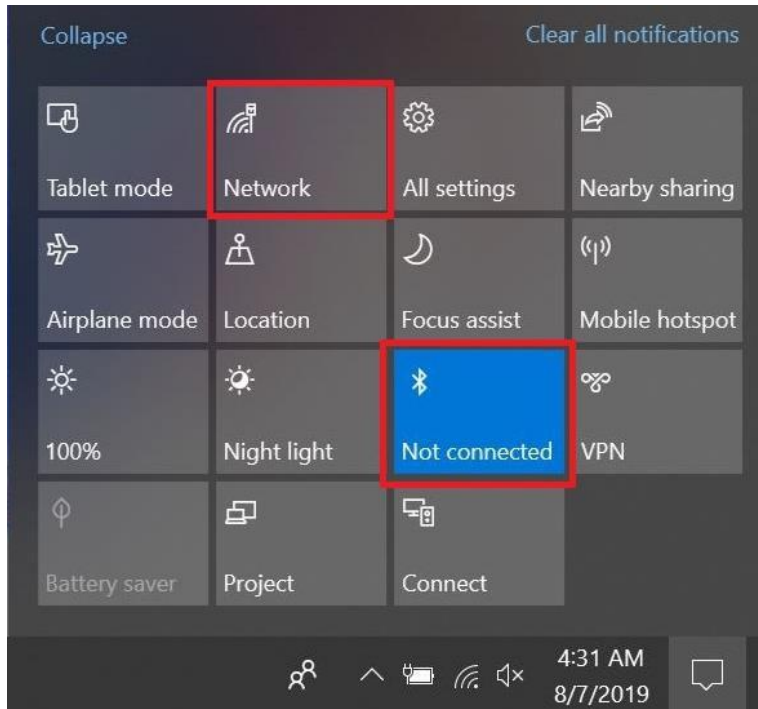
- A. Launch [Killer Uninstaller](#)
- B. Run the tool and select “Remove Killer Software”



- C. After the removal, Killer Uninstaller will require the laptop to reboot (a message saying “RESTART REQUIRED” will show up)
- D. Remove and reset all connected devices (refer to Intel Wireless Adapters uninstall step H)

8. Uninstall Intel Bluetooth driver. Please follow the instructions in Step 7 (refer to Intel Wireless Adapters uninstall steps from Step B to G) to perform a clean install for the Bluetooth driver

9. Reboot the laptop and install the recommended version of drivers (both Wireless and Bluetooth) downloaded in Step 1
10. Check the driver versions of the wireless adapter and the Bluetooth device in Device Manager to make sure the drivers installed successfully and both the Wi-Fi function and the Bluetooth function are enable in Microsoft ActionCenter



11. (Optional Step) Apply the [Recommended Settings for Wireless Connectivity](#) from Intel under the Device Manager

Default/recommended settings

Property	Value
Channel Width for 5GHz	Auto (AP determines width)
Roaming Aggressiveness	Medium
Throughput Booster	Disabled
Transmit Power	Highest
802.11a/b/g Wireless Mode or Wireless Mode	Dual Band 802.11a/b/g or 802.11a/b/g
802.11n/ac Wireless Mode or HT Mode	802.11ac or VHT Mode

