

USB2.0 Network Interface Card Multi-platform Installation and Use Instructions

WCH USB2.0 high speed NIC (hereinafter referred to as NIC) supports Ethernet MAC+PHY for 10M/100M networks with built-in QingKe RISC-V processor and complies with IEEE802.3 and IEEE802.3az-2010 protocol specifications. Support multi-platform systems, such as Windows/ Linux/ macOS/ iOS/ Android, etc., adapt to all kinds of desktop computers, laptops, tablet PCs, game consoles and other standard USB host interface.



1. Windows platform

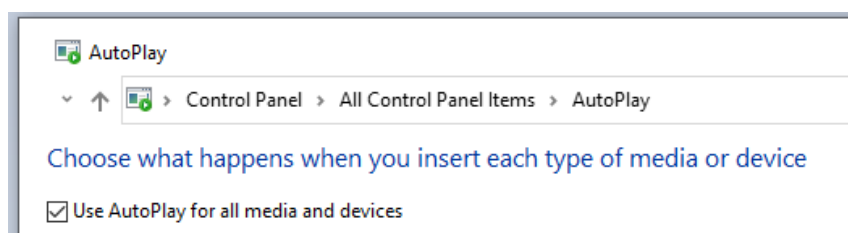
1.1 NIC installation

NIC will install the driver automatically after 10 seconds when it is plugged into the USB port of the compute.

A) If it is not installed automatically, the system will pop up "CD drive" or "Install or run program" prompt, you can double click "CD drive CH9152DRV" or click "Run PSETUP.EXE" to install.

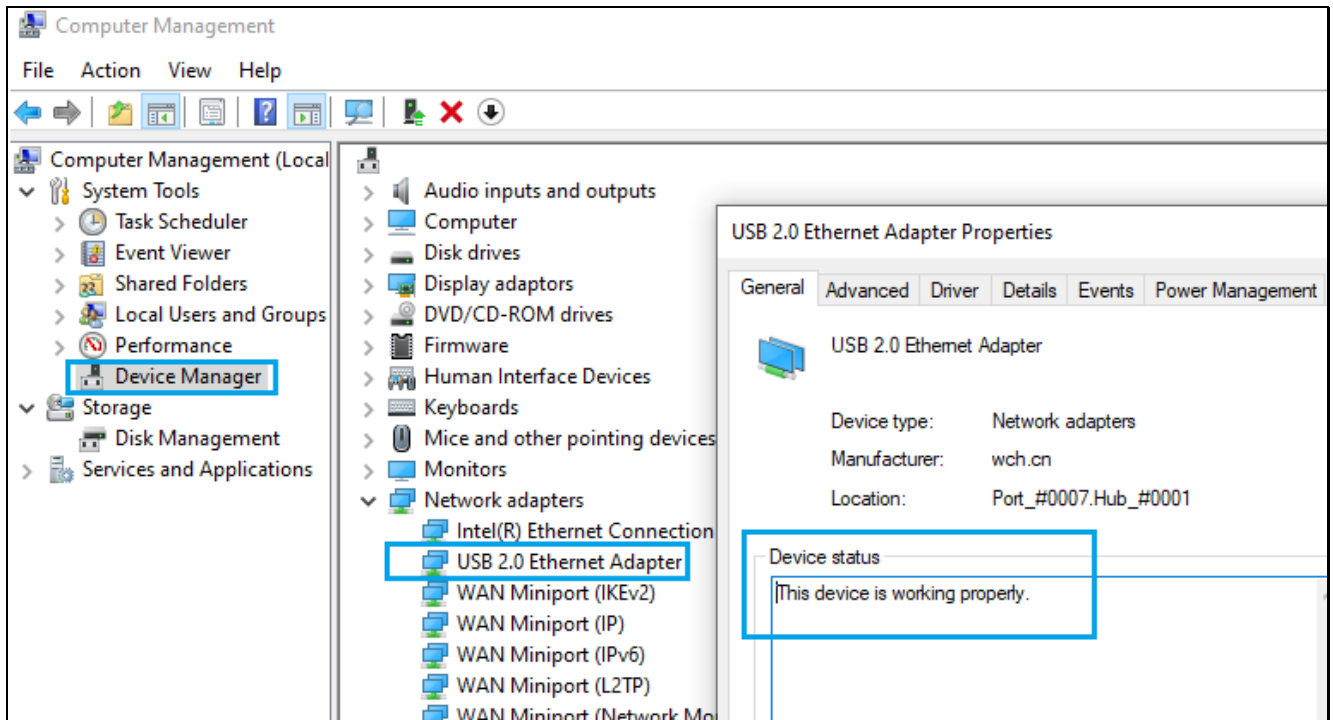


B) If the driver in the CD is not installed automatically, you can check the system "AutoPlay" setting, and then check the option as shown below to achieve automatic installation.

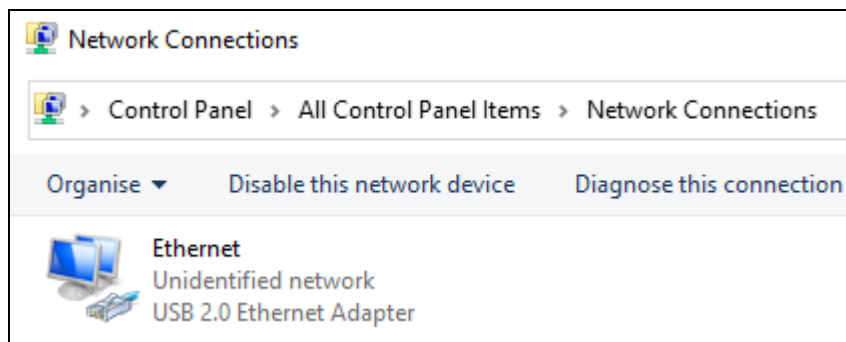


1.2 View NIC status

NIC device status can be viewed in "Device Manager" -> "Network Adapter", the name is: USB2.0 Ethernet Adapter, the device status is normal as shown below



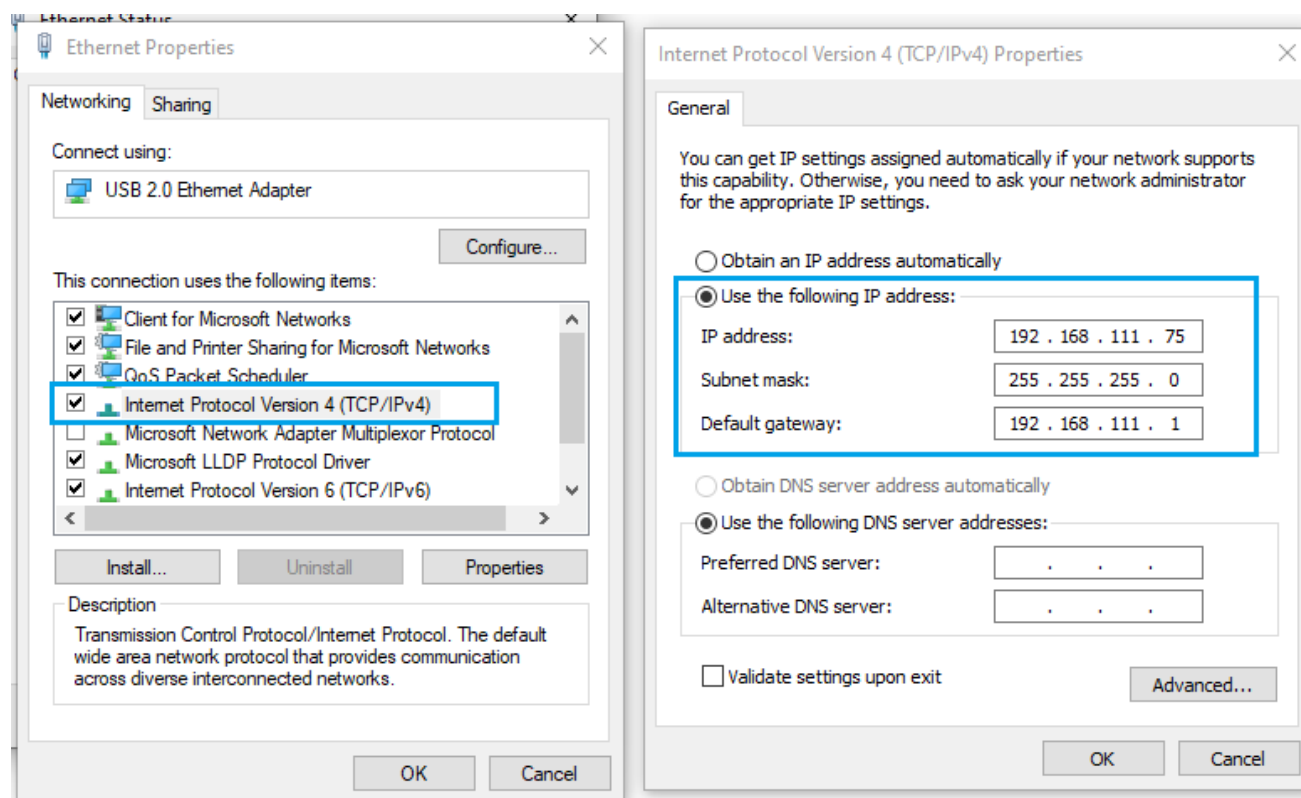
NIC networking status can be viewed in "Control Panel" -> "Network Connections", you can view the network connection status by icon and description, the network connection is normal as shown below:



1.3 View and set IP

A) If connecting to a WAN, you can use "Obtain IP address automatically" or "DHCP" to assign it automatically.

B) If you need to connect to the specified network, double-click NIC to bring up the property page, select "intel protocol version 4 (IPv4)" -> "Use the following IP address", enter the IP address and subnet mask you need to set, and then click OK to finish the setting.



2. Linux platform

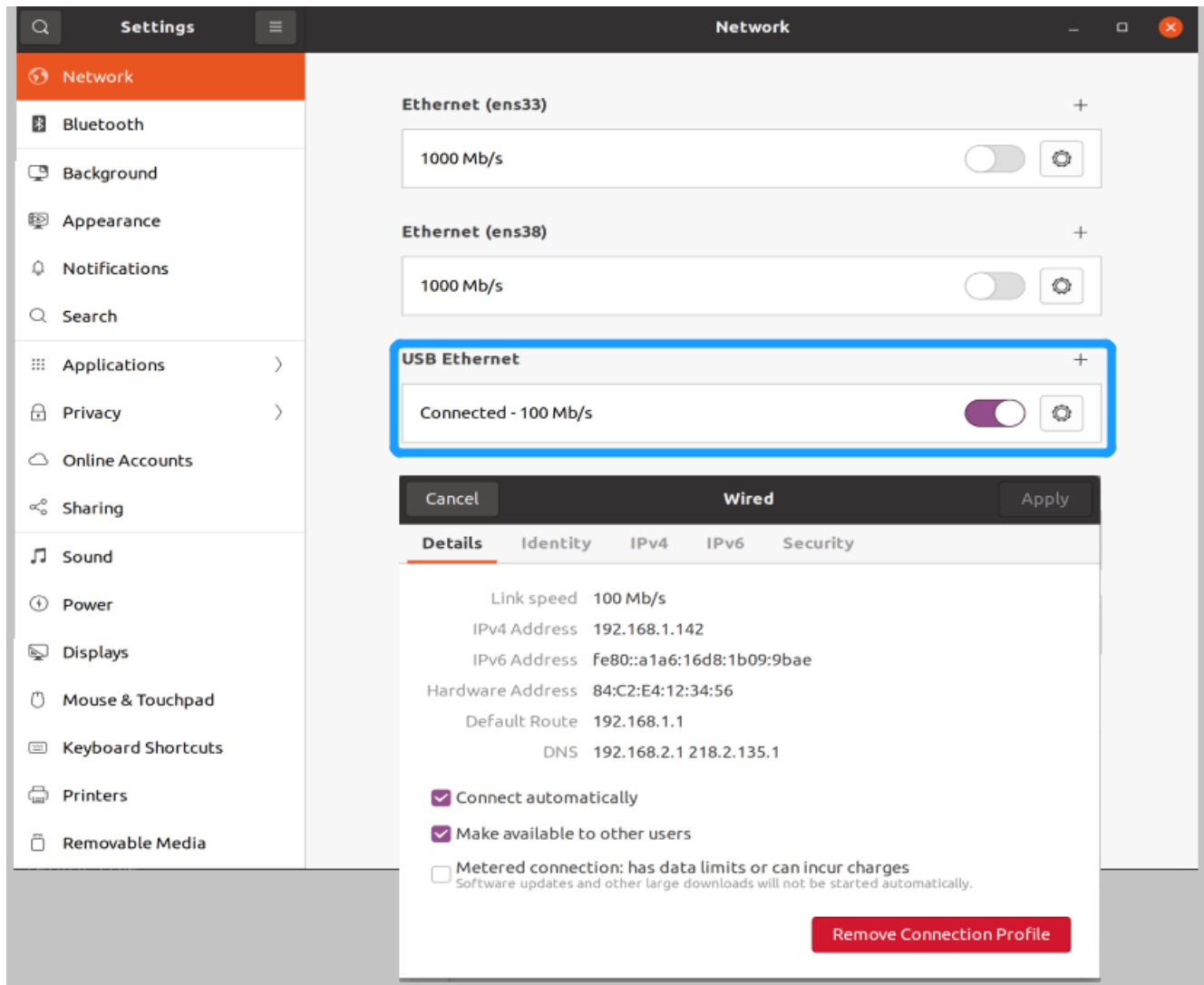
2.1 NIC installation

NIC uses the system's built-in ECM/NCM driver to achieve "drive-free installation" on Linux systems.

2.2 View NIC status

In the system settings page "Wired Network" or "Network" option, check the current NIC connection status, the NIC connection status is normal as shown below:

(Note: The physical address 84:c2:e4:12:34:56 in the figure below is only a test address, the actual address is based on the actual device.)



You can also use the command "ifconfig" to view the NIC information to see the new network device information added after the device is plugged in.

(Example: The enx84c2e4123456 added in the figure below is the CH9152 NIC)

```

enx84c2e4123456: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
ether 84:c2:e4:12:34:56 txqueuelen 1000 (Ethernet)
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 0 bytes 0 (0.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

Use the command "ethtool" to view the network status of the NIC connection, if "Link detected" shows "yes", then the connection is successful:

```

~$ ethtool enx84c2e4123456
Settings for enx84c2e4123456:
    Supported ports: [ ]
    Supported link modes:   Not reported
    Supported pause frame use: No
    Supports auto-negotiation: No
    Supported FEC modes: Not reported
    Advertised link modes:  Not reported
    Advertised pause frame use: No
    Advertised auto-negotiation: No
    Advertised FEC modes: Not reported
    Speed: 100Mb/s
    Duplex: Half
    Auto-negotiation: off
    Port: Twisted Pair
    PHYAD: 0
    Transceiver: internal
    MDI-X: Unknown
    netlink error: Operation not permitted
    Current message level: 0x00000007 (7)
                                drv probe link
    Link detected: yes

```

2.3 View and set IP

- A) If connecting to a WAN, you can use the system to automatically assign an IP;
- B) If connecting to the specified network, you can use the command “ifconfig” to modify the IP address of the NIC.
(Example: The modified IP is 192.168.10.10) :
- ① The modified NIC IP address is 192.168.10.10 and the mask is modified to 255.255.255.0;
 - ② Run the command, where enx84c2e4123456 is the name of the NIC:

```
sudo ifconfig enx84c2e4123456 192.168.10.10 netmask 255.255.255.0
```

```

enx84c2e4123456: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::f6e4:8c5b:6827:496b prefixlen 64 scopeid 0x20<link>
    ether 84:c2:e4:12:34:56 txqueuelen 1000 (Ethernet)
    RX packets 7593 bytes 922634 (922.6 KB)
    RX errors 0 dropped 6 overruns 0 frame 0
    TX packets 213 bytes 24619 (24.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

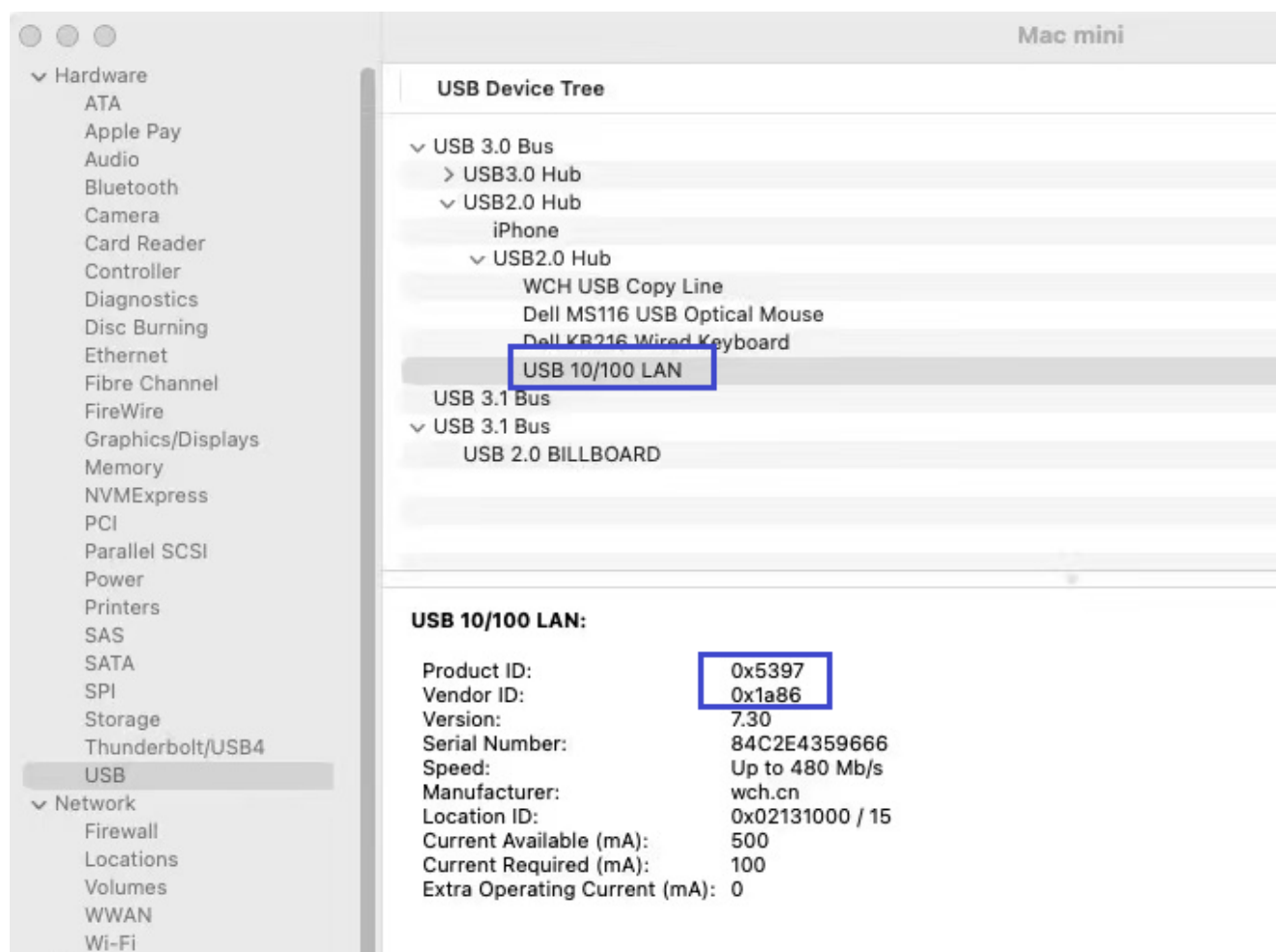
3. macOS platform

3.1 NIC installation

NIC uses the system's built-in NCM driver to achieve "drive-free installation" on macOS systems.

3.2 View NIC status

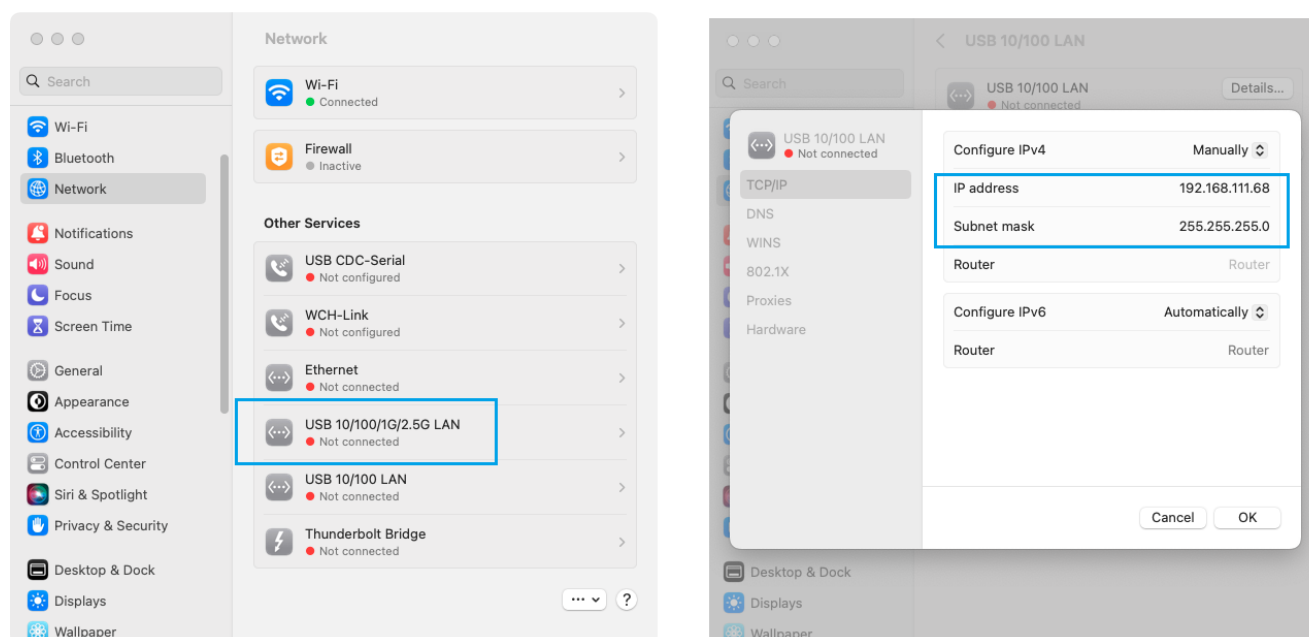
Click the Apple logo on the top left corner of the desktop, click "About this machine" -> "System Report" (macOS 13.0 click More Info, then scroll down to the bottom to enter this portal). If the device is successfully identified, a new device will be added under Ethernet, with the name USB10/100 LAN.



3.3 View and set IP

You can click "System Settings" -> "Network", click "USB10/100 LAN" to enter the "Details" page of the device to view the IP information of the NIC.

- If connecting to a WAN, wait for the system to automatically assign it after plugging in the network cable.
- If connecting to the specified network, you can manually set the IP address and perform the relevant configuration. After successful connection, the web interface will display the connection status of the device.



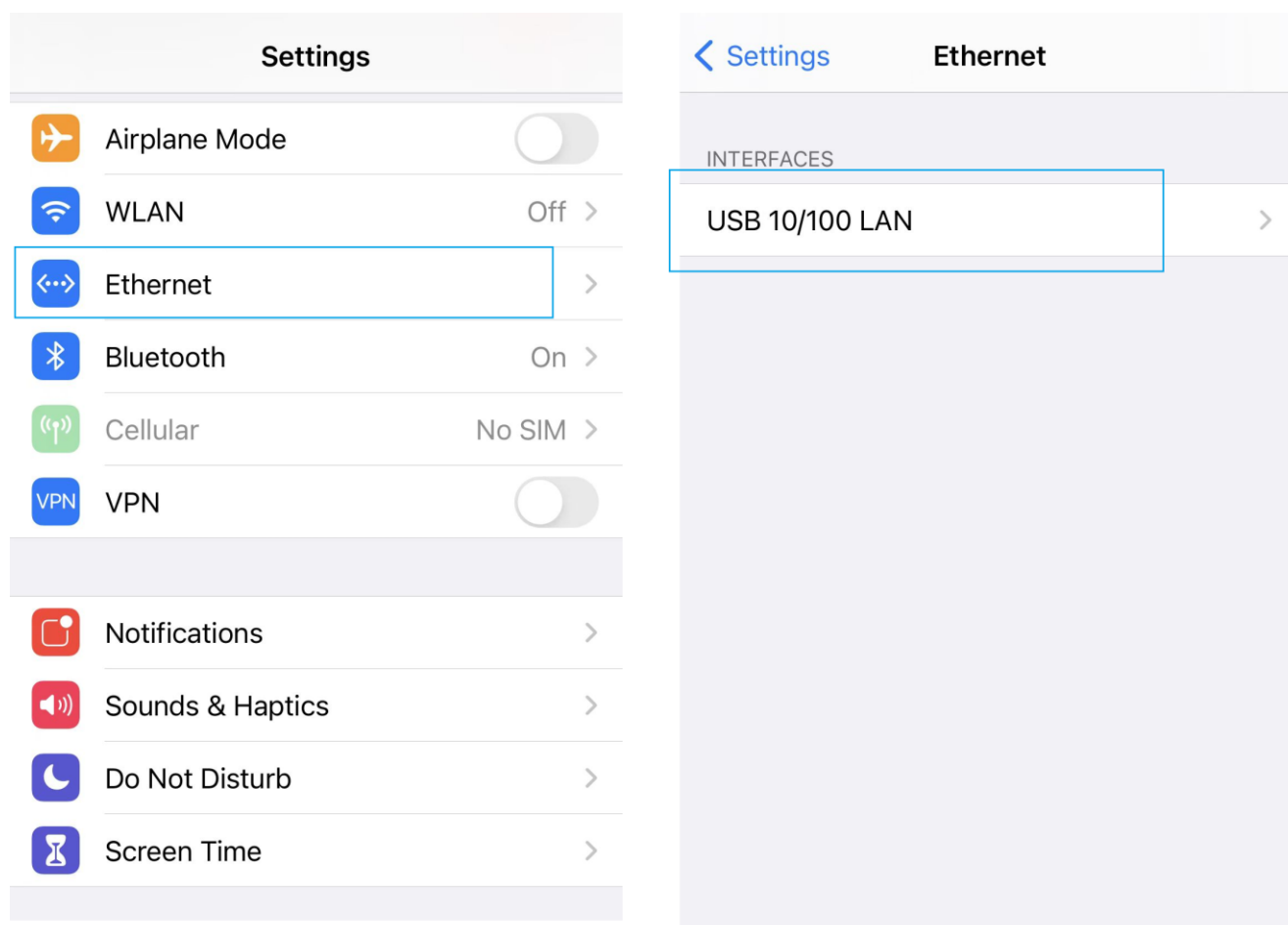
4. iOS platform

4.1 NIC installation

NIC uses the system's built-in NCM driver to achieve "drive-free installation" on iOS systems.

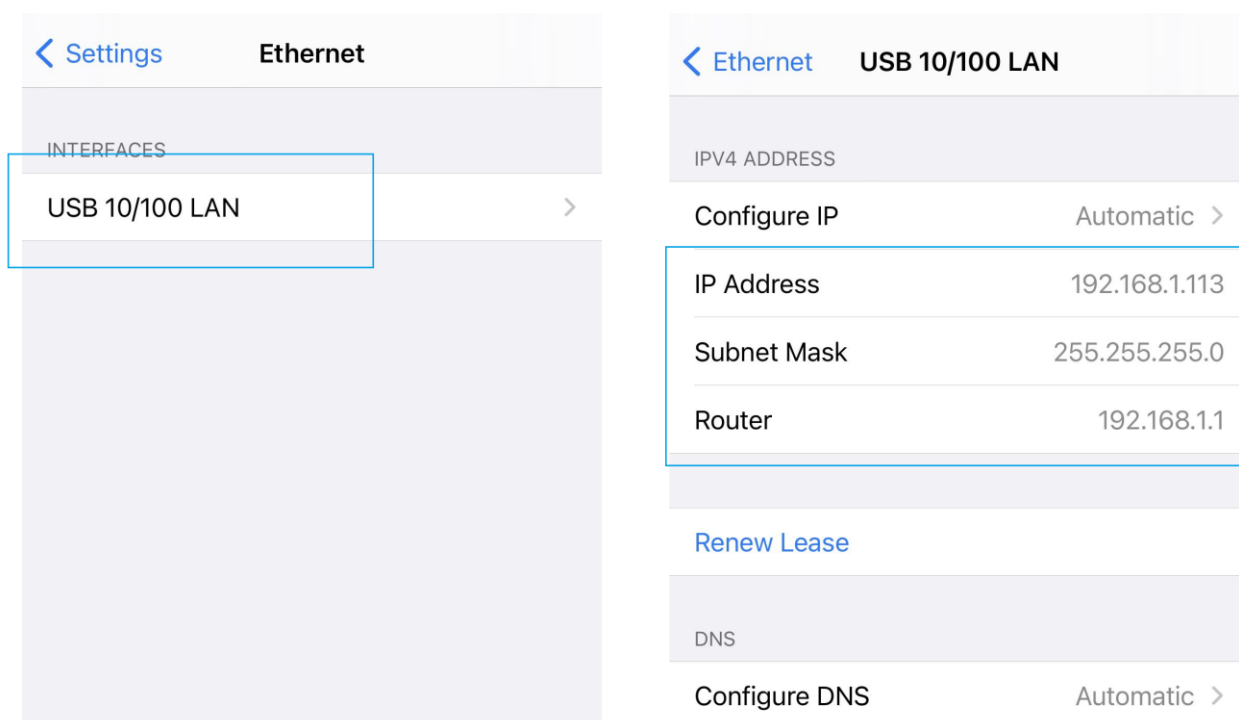
4.2 View NIC status

Click "Settings", after inserting the NIC, "Ethernet" will be added to the settings menu, click to display the NIC device.



4.3 View IP

To view the IP address of the NIC, you can click the information related to the device configuration and save it, turn off the wifi and cellular network, and open the safari browser to check whether the network is successful. (The cell phone does not support modifying and configuring IP)



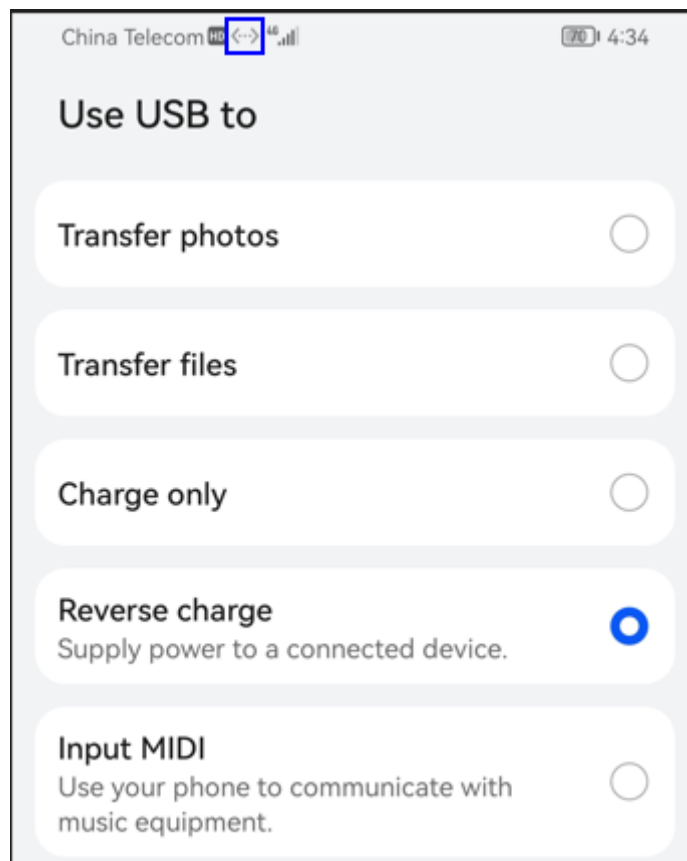
5. Android platform

5.1. NIC installation

NIC uses the system's built-in ECM driver to achieve "drive-free installation" on Android systems.

5.2. View NIC status

After inserting the NIC, the USB connection method will be displayed in the notification bar, and the status bar will show the networkable logo after the NIC device is plugged into the network cable. If the network logo does not appear or is accompanied by an exclamation mark "!", it means the network cannot be connected.



5.3. View IP

To view the IP address of the NIC, open "Settings" -> "About phone" -> "Status information" -> "IP Address" to view the current automatically assigned IP address. (The cell phone does not support modifying and configuring IP).

