

# Driver Installation Method

Serial port is also a kind of computer communication interface, usually used for the computer and other equipment (such as modem, sensor, printer, microcontroller, etc.) for data transmission, USB serial port is our most commonly used communication interface.

Generally, after the initial installation of Arduino IDE software, you need to install the serial port drive to transfer the edited program to the controller board.

Connect the controller board to the computer with a USB cable, and the drivers are automatically installed on the MacOS and Windows systems. If the driver installation fails, you need to install the driver manually.

This tutorial provides two ways to install drivers on the Windows and MacOS systems.

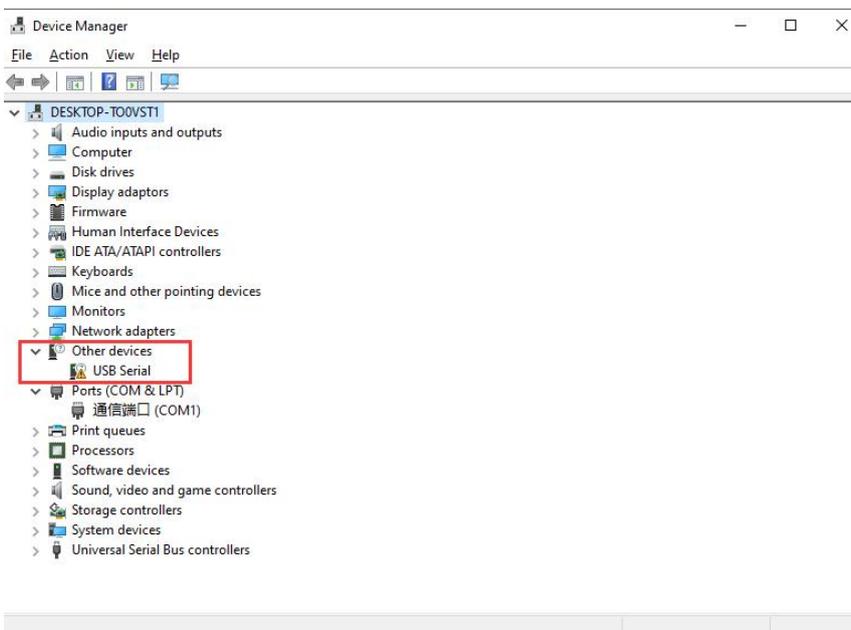
## I .Install the CH340 serial port driver in Windows

The driver installation can be downloaded online, or you can find the folder named "USB\_Drive\_CH341\_3\_1" in the resource package we provide, select the corresponding installation package according to the type of your computer system, and then install it according to the following steps.

### 1.Check if the CH340 serial port drive is installed (skip if installed)

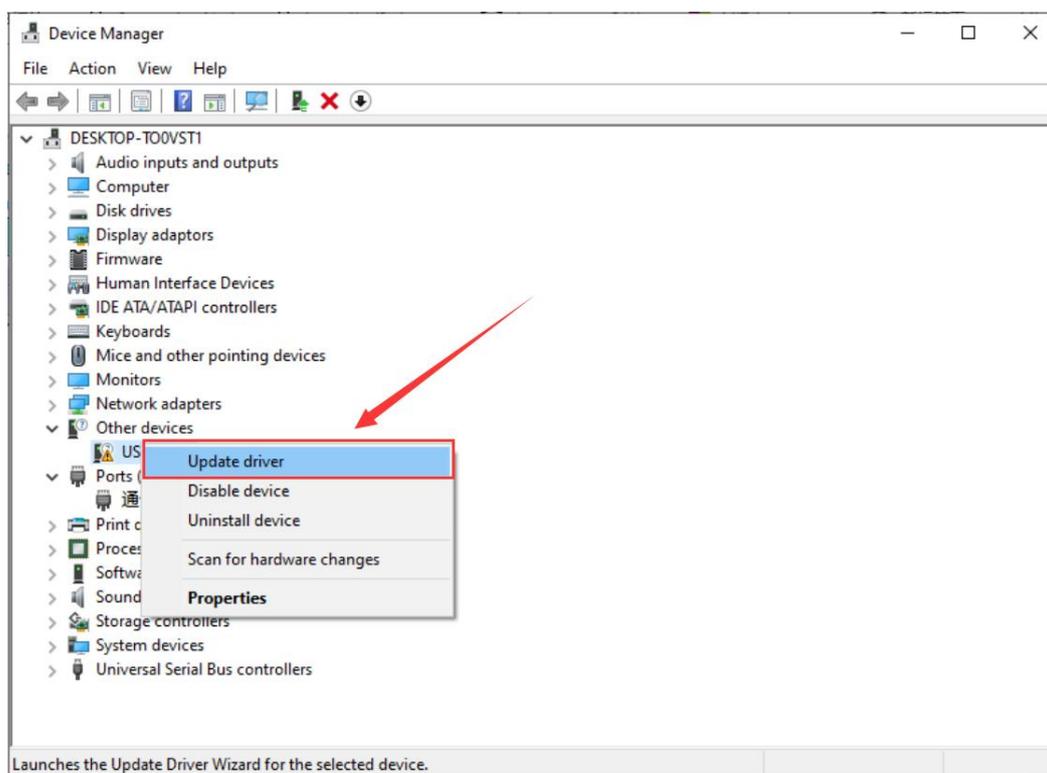
①Insert one end of the USB cable into the ESP32 controller board and the other end into the USB interface on the computer.

②The first time you connect the ESP32 controller board to your computer, right-click "My Computer" -> "Properties" -> Click "Device Manager," under "Other Devices, you see" USB-Serial "or" Unknown Device."

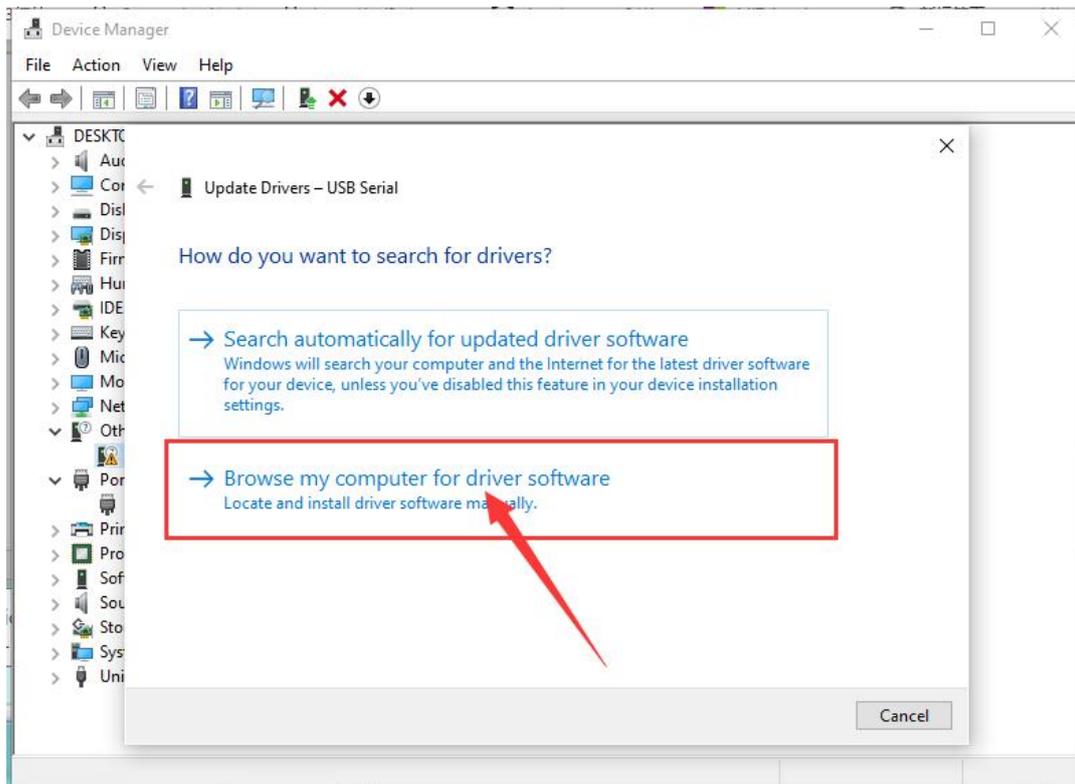


## 2. Install the CH340 serial port drive

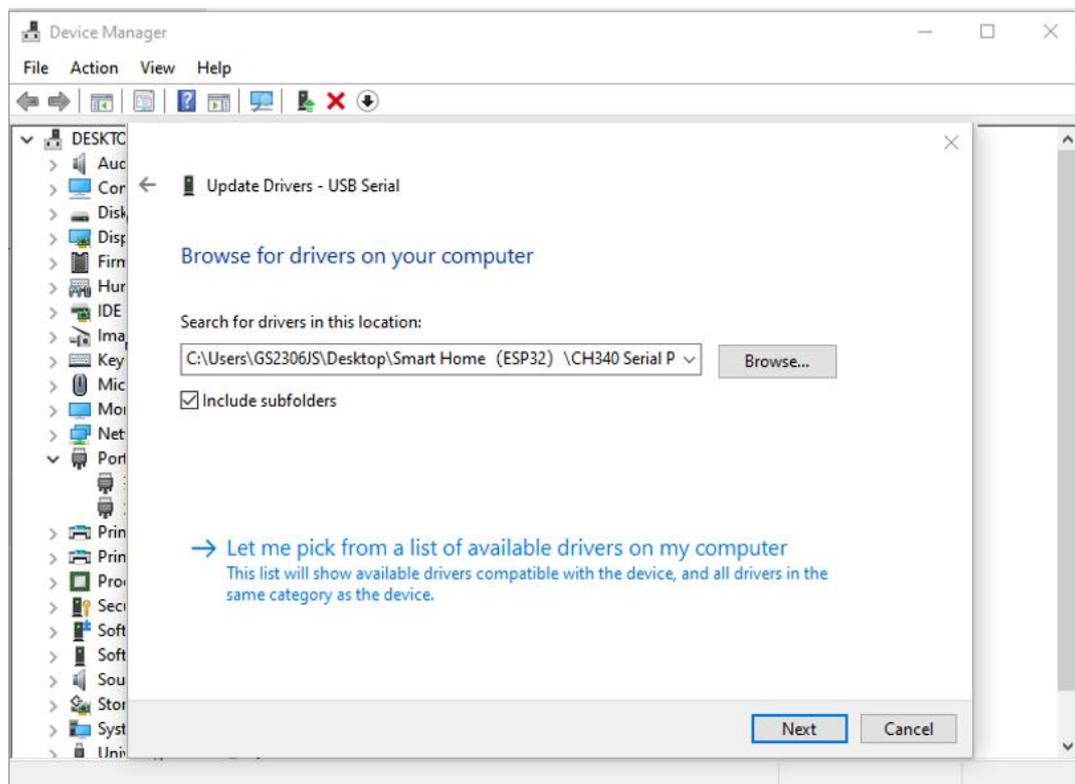
① Right-click the device and select the top menu option (Update Driver Software) as shown in the figure below.



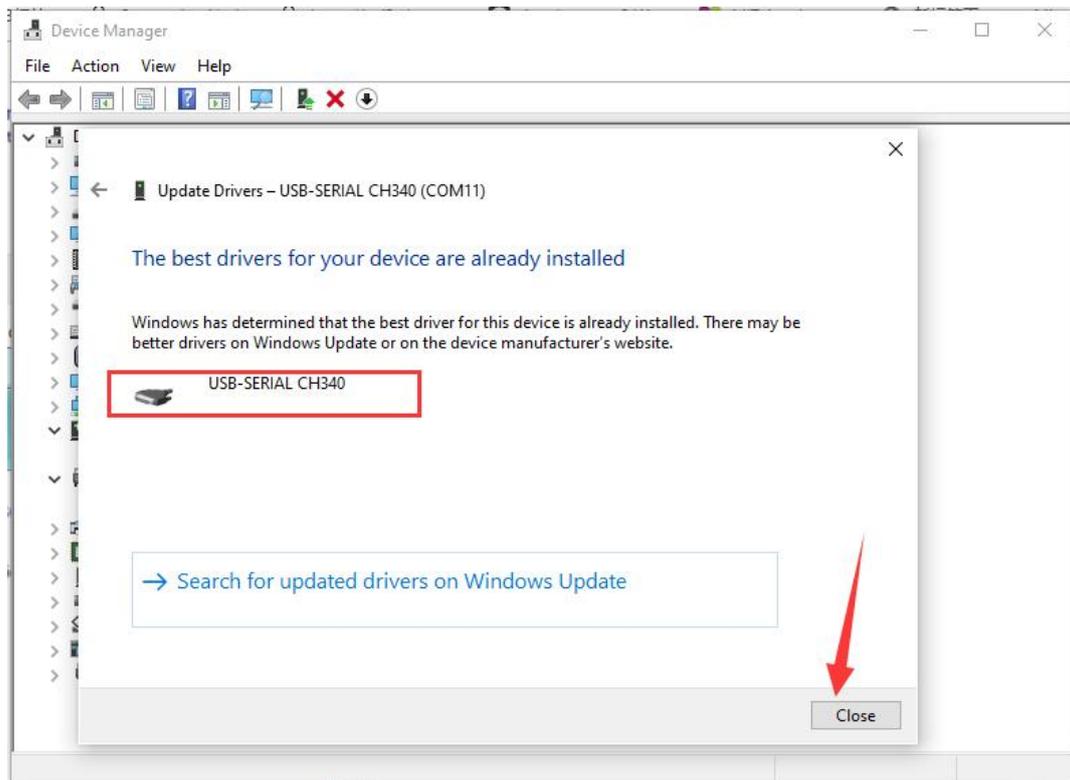
② It is then prompted to "automatically search for updated driver software" or "browse my PC to find driver software", as shown below, on this page, select "Browse My PC to Find Driver Software".



③ Then, add the path to the driver file.

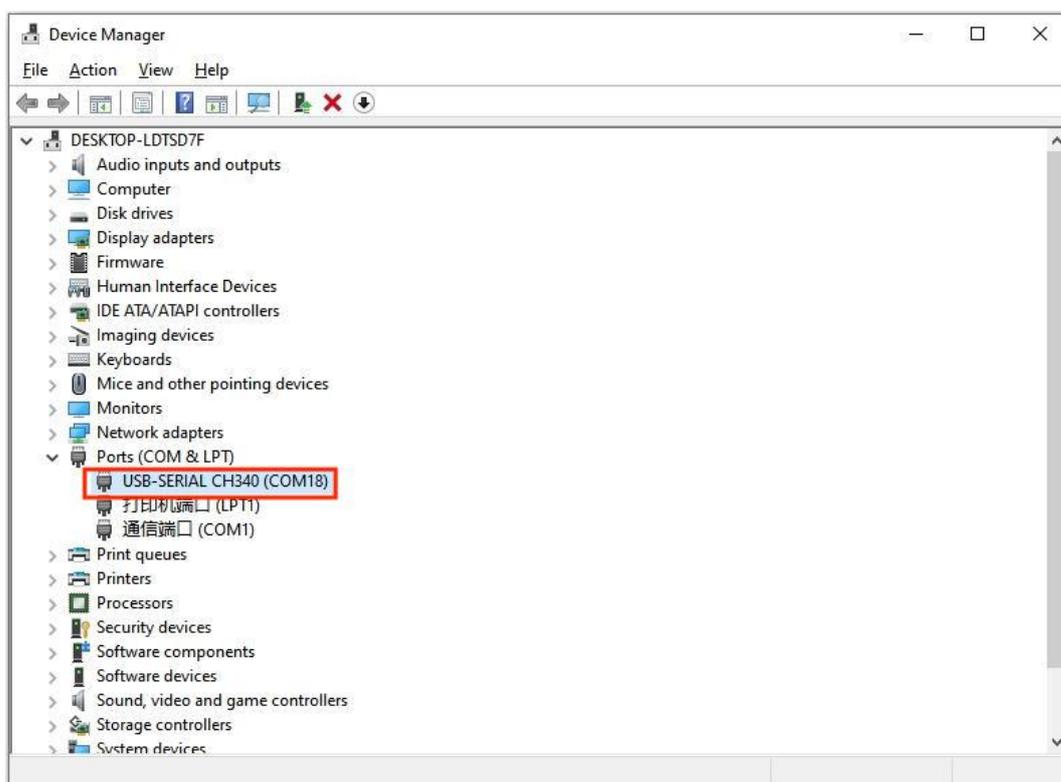


④ After the software installation is complete, you will receive a confirmation message and then click "Close".



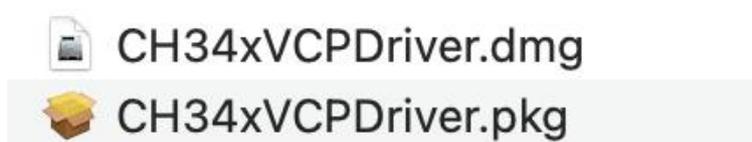
### **3. Confirm that the CH340 serial port drive was installed successfully**

Insert one end of the USB cable into the ESP32 controller board and the other end into the USB interface on the computer. Right-click "My Computer" -> "Properties" -> Click Device Manager, and after connecting to the upper controller board, the installation is successful.

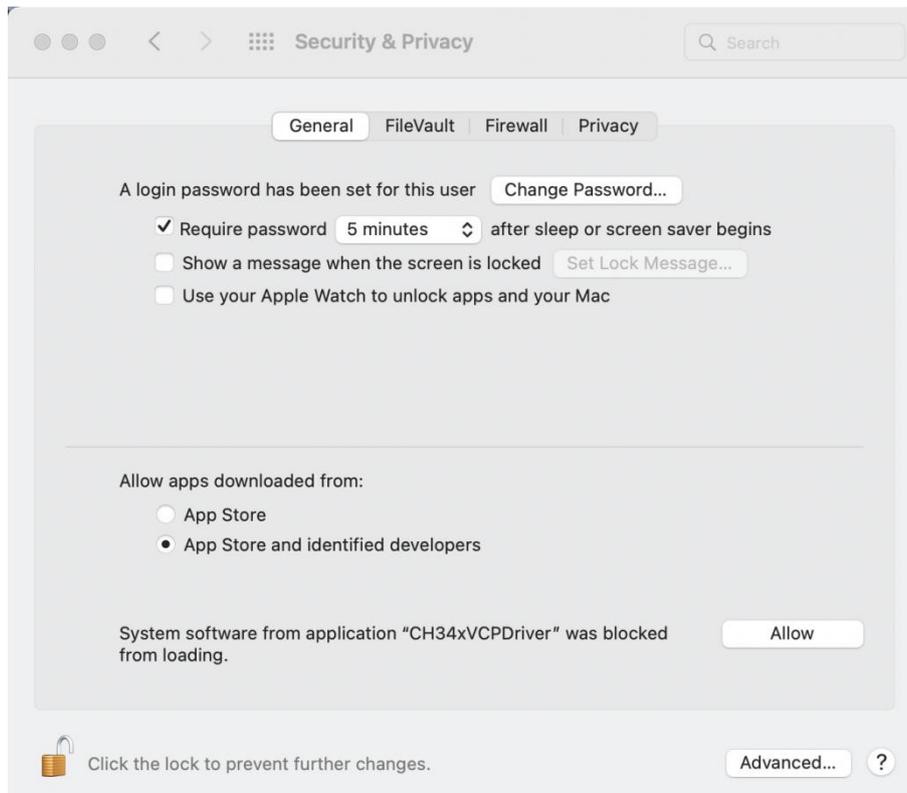


## II .Install the CH340 serial port driver in MacOS

Open the "CH340 Driver File-MAC" folder to see the driver installation file we provide. In general, pkg format drivers are installed by default, and if OS X 11.0 or later does not support Rosetta, install dmg format drivers.

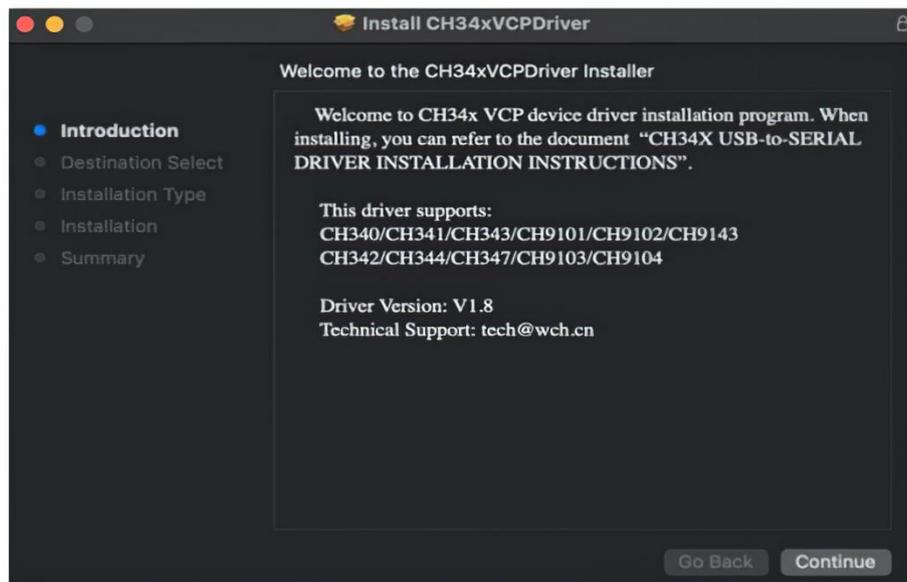


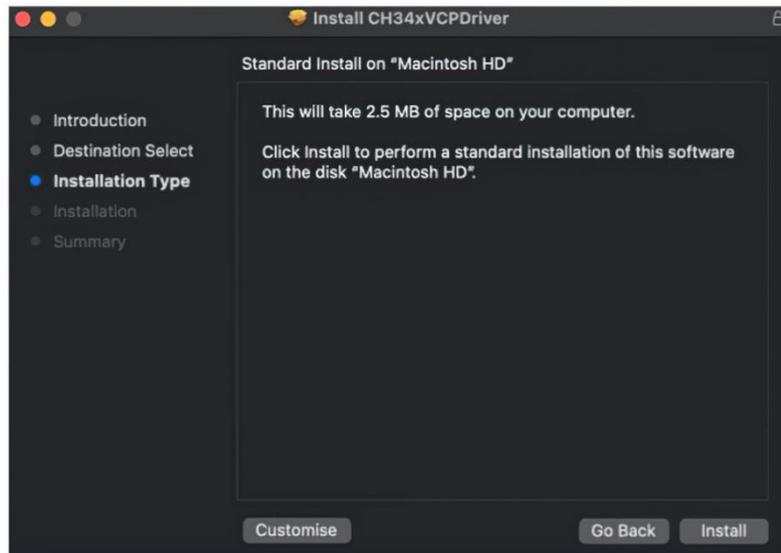
Before installation, go to the "System Preferences" -> "Security and Privacy" -> "General page under the title " select-> "Mac App Store and the identified developer" so the driver will work.



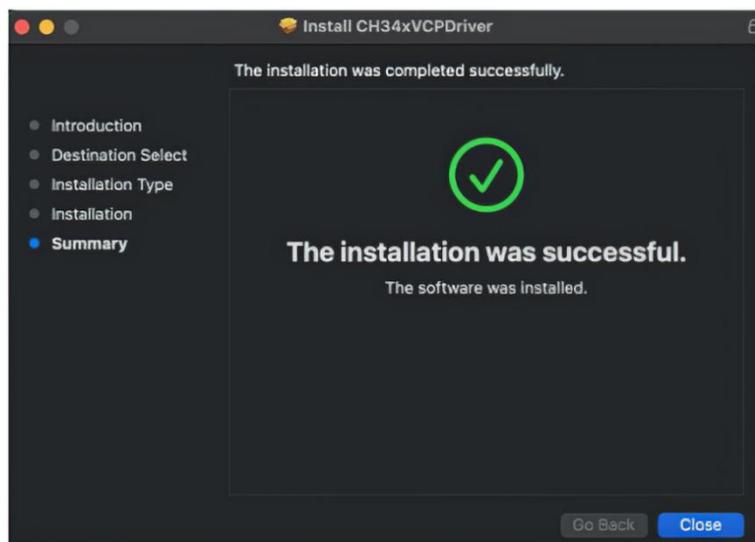
## 1. Install the drivers in the pkg format

① Click on the driver file-> Continue-> Install.

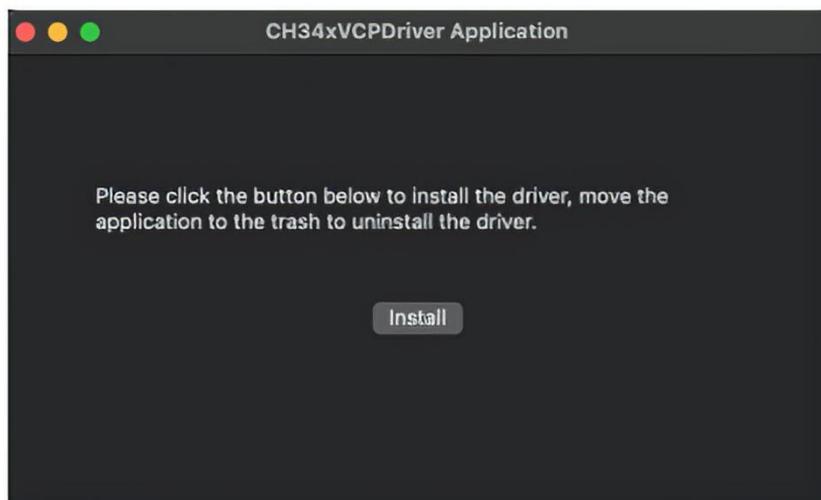




② installed successfully.



③ Install the pkg format driver on OS X 11.0 and later: open "LaunchPad" -> "CH34xVCPDriver" -> Install.

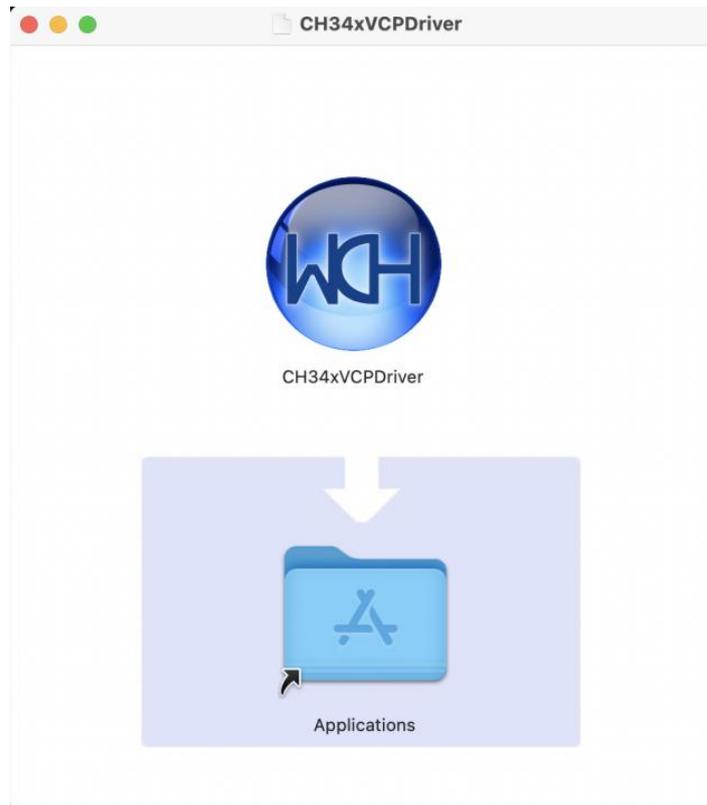


④ When using OS X 10.9 to OS X 10.15, click "Restart" to restart the computer, and perform the following steps after the reboot.

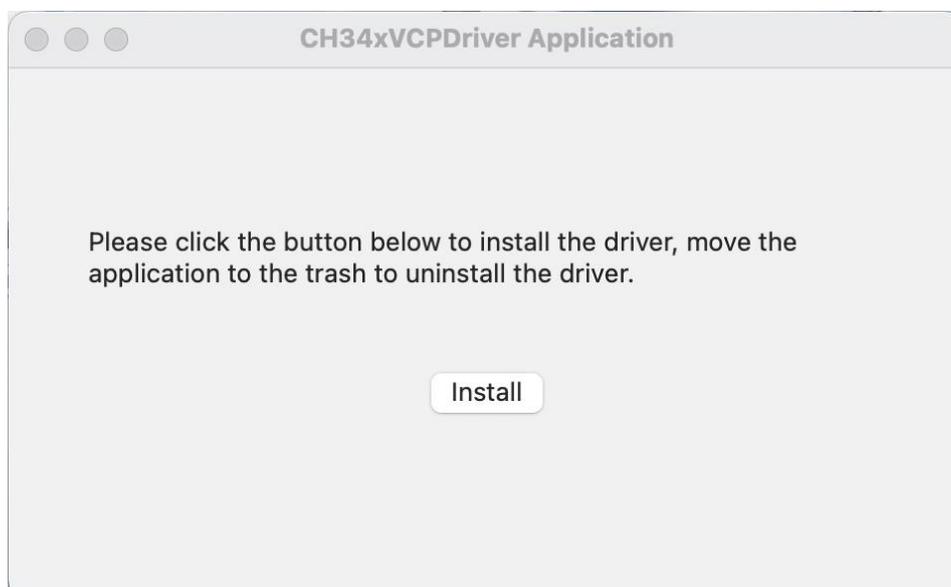


**2. Install the dmg format driver (Attention: If step 1 has been successfully installed, skip this step.)**

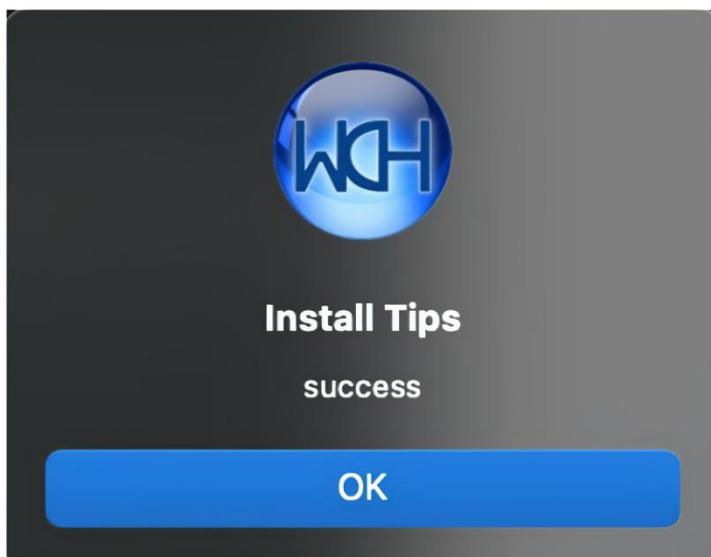
① Install the dmg driver, click the dmg file and drag "CH34xVCPDriver" to the application folder of the operating system.



②Then open "LaunchPad" -> "CH34xVCPDriver" -> installation.



③ installed successfully.



### 3. Check whether the CH340 serial port drive is fully installed

When you insert the dashboard into the USB port, open the System Report-> Hardware-> USB. USB device. If the USB device works properly, a device with "Vendor ID" [0x1a86] can be found.

