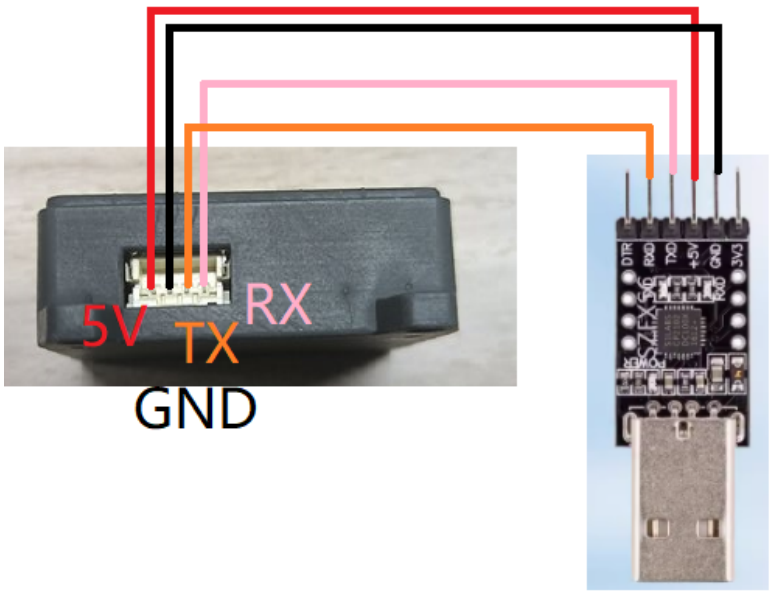
Preparation(ReadMe)

This document explains the usage settings of the image transmission module on the ROS2 system

- The newly acquired ROS version of the image transmission module is a complete module, and the IP proxy stored in ROS2 may not be an IP address from the existing network.
- Follow the steps below to obtain the relevant configuration and successfully use it on the ROS2 system

Operation steps

1. First, connect the image transmission module to CH340

CH340	WiFi camera
RX	TX
TX	RX
GND	GND
VCC	VCC
As shown in the figure:	

2. Open the serial port assistant and configure the serial port to the following options
   Baud rate 115200, no parity check, no hardware flow control, 1-bit stop bit
   And when sending instructions, **remove** and automatically send new lines (additional bits)
3. WiFi for 2.4GHz networks that can be found by connecting to a mobile phone
   The serial assistant inputs the following commands:
   1. First, configure the mode to connect to WiFi

```
wifi_mode:2
```

Click send and wait for the serial assistant to return a restart message or an OK response

2. Send the name of the wifi you want to connect to

```
sta_ssid:The name of the connected WiFi
```

Click send and wait for the serial assistant to return a restart message or an OK response

3. Send the wifi password you want to connect to

```
sta_pd:WiFi password for connection
```

4. Search for the system IP address to connect to ROS2 (enter ifconfig on the terminal to search for it). If you don't understand, you can go to **ROS2 to watch the camera screen** tutorial for operation, which will not be explained in this document.

```
ros2_ip:Found the IP address of ROS2 system
```

4. At this point, the configuration of the ROS image transmission module has been completed, and its agent can be started based on the configured ROS2 system. Must be a hub version of ROS2
   Attention needs to be paid：

- **When the IP address of the host connected to ROS2 changes or the WiFi connection changes**, it needs to be reconfigured.
- The ROS2 system and ROS image transmission module should be connected to the same local area network.
- If you don't want to use a serial port assistant to configure it, you can also use a microcontroller to configure it. You need to have a certain basic programming ability. According to the protocol in **Serial Port Configuration WiFi Instructions** this document, you can implement your own DIY. This material will not explain it too much.