

# USB TO 4CH RS485

From Waveshare Wiki  
Jump to: navigation, search

## Overview

### Specification

USB TO 4CH RS485



(<https://www.waveshare.com/usb-to-4ch-rs485.htm>)

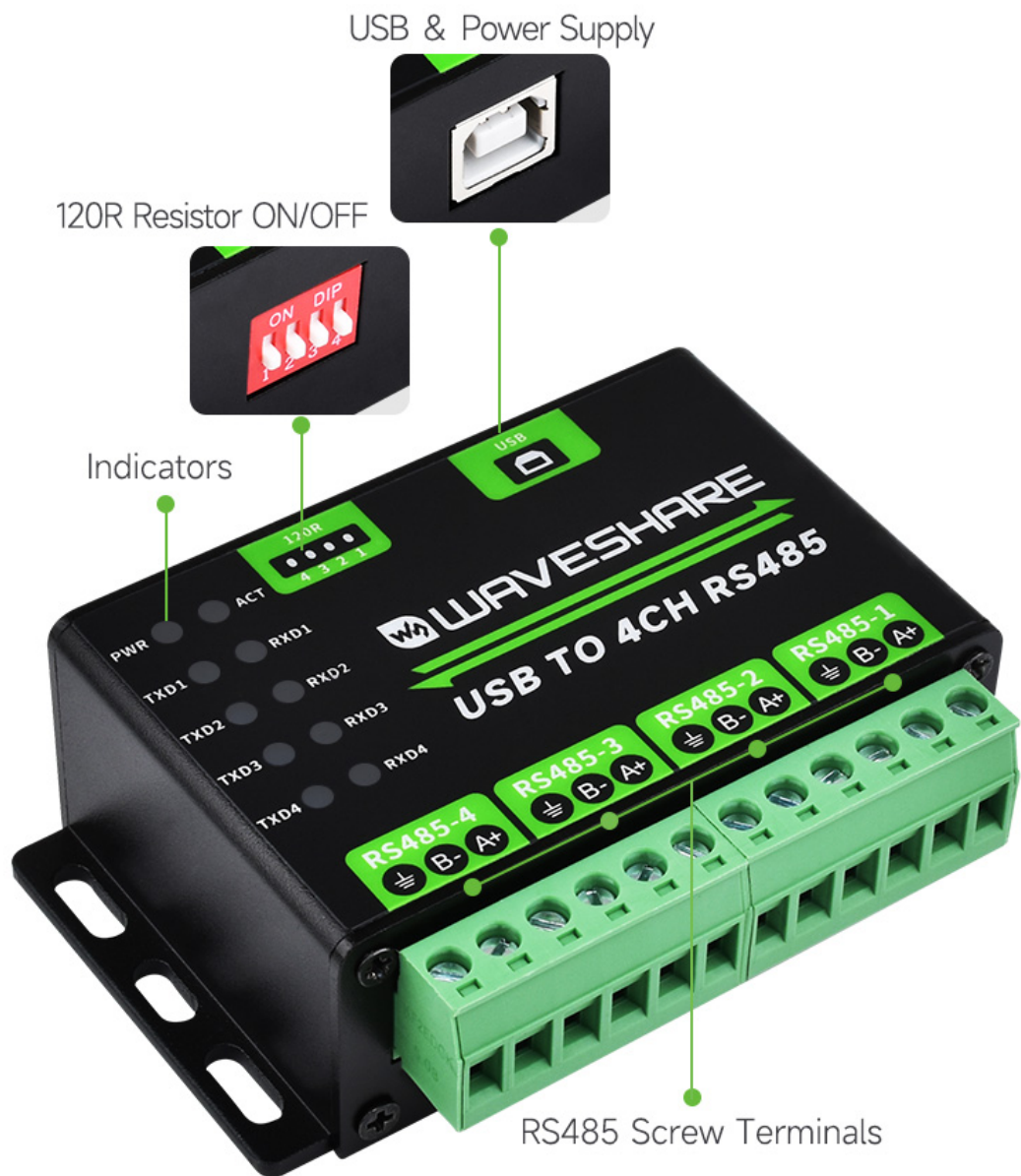
RS485, USB

86.2mm x 48mm x 27.2mm

Parameter Name	Parameter
Model	Industrial USB to RS485 Converter
Power Supply	5V
Operating Current	23.6mA
Baudrate	1200bps ~ 460800bps
Operating Temperature	-40°C~85°C

Operating System	Mac OS, Linux, Windows 11 / 10 / 8.1 / 8 / 7, Android
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## Interface Description



(/wiki/File:USB\_TO\_4CH\_RS485\_02.jpg)

## Function Description

The USB TO 4CH RS485 is an industrial-grade USB to 485 non-isolated converter. It incorporates the CH344L and SP485EEN original chips, providing enhanced stability and compatibility. It features built-in lightning protection, a resettable fuse, ESD, and TVS protection circuits, all enclosed in an aluminum alloy casing design. Operating it is simple,

offering automatic transmit-receive conversion. It boasts characteristics such as high-speed, stable, reliable, and secure communication. This converter is suitable for various industrial control equipment or applications with demanding communication requirements.

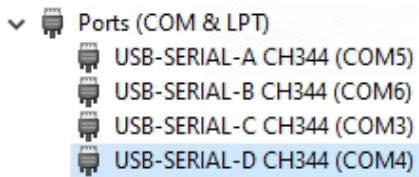
# How to Use

## Windows

### CDC Driver

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The default driver for your computer is the CDC driver, which can be viewed through the device manager.

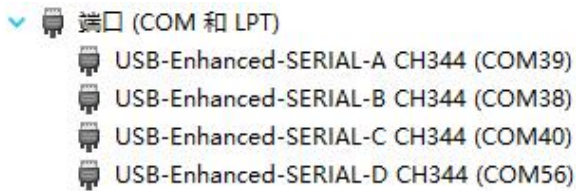


(/wiki/File:USB\_TO\_4CH\_TTL\_winEN01.png)

### VPC Driver

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The VCP driver is a manufacturer-specific driver that needs to be manually installed by the user. After installation, you can view it through the Device Manager.



(/wiki/File:USB\_TO\_4CH\_TTL\_win02.jpg)

## Linux/RPI

Take RPI as an example, you can use the default driver, and after connecting the device, you can use it by querying the serial device name through the following command:

```
ls /dev/tty*
```

```

pi@raspberrypi:~$ ls /dev/tty*
/dev/tty      /dev/tty18  /dev/tty28  /dev/tty38  /dev/tty48  /dev/tty58  /dev/ttyACM1
/dev/tty0     /dev/tty19  /dev/tty29  /dev/tty39  /dev/tty49  /dev/tty59  /dev/ttyACM2
/dev/tty1     /dev/tty2   /dev/tty3   /dev/tty4   /dev/tty5   /dev/tty6   /dev/ttyACM3
/dev/tty10    /dev/tty20  /dev/tty30  /dev/tty40  /dev/tty50  /dev/tty60  /dev/ttyAMA0
/dev/tty11    /dev/tty21  /dev/tty31  /dev/tty41  /dev/tty51  /dev/tty61  /dev/ttyprintk
/dev/tty12    /dev/tty22  /dev/tty32  /dev/tty42  /dev/tty52  /dev/tty62  /dev/ttyS0
/dev/tty13    /dev/tty23  /dev/tty33  /dev/tty43  /dev/tty53  /dev/tty63
/dev/tty14    /dev/tty24  /dev/tty34  /dev/tty44  /dev/tty54  /dev/tty7
/dev/tty15    /dev/tty25  /dev/tty35  /dev/tty45  /dev/tty55  /dev/tty8
/dev/tty16    /dev/tty26  /dev/tty36  /dev/tty46  /dev/tty56  /dev/tty9
/dev/tty17    /dev/tty27  /dev/tty37  /dev/tty47  /dev/tty57  /dev/ttyACM0
pi@raspberrypi:~$

```

(/wiki/File:USB\_TO\_4CH\_TTL\_Linux1.jpg)

For example, to open the UART using minicom, enter the command line:

```
minicom -D /dev/ttyACM0
```

For example: use minicom ([https://www.waveshare.com/wiki/Raspberry\\_Pi\\_Tutorial\\_Series:\\_Serial](https://www.waveshare.com/wiki/Raspberry_Pi_Tutorial_Series:_Serial)) to open UART0, then the command line input.

```
minicom -D /dev/ttyACM0
```

## MacOS

- Please download and install the driver ([https://files.waveshare.com/upload/0/04/CH34XSER\\_MAC.7z](https://files.waveshare.com/upload/0/04/CH34XSER_MAC.7z)) first.
- Click to learn how to install the driver ([https://files.waveshare.com/upload/1/1a/CH34X\\_DRV\\_INSTALL\\_INSTRUCTIONS.pdf](https://files.waveshare.com/upload/1/1a/CH34X_DRV_INSTALL_INSTRUCTIONS.pdf)).
- After installation, please open the assistant. (The serial debugging assistant can be downloaded directly by MAC.)

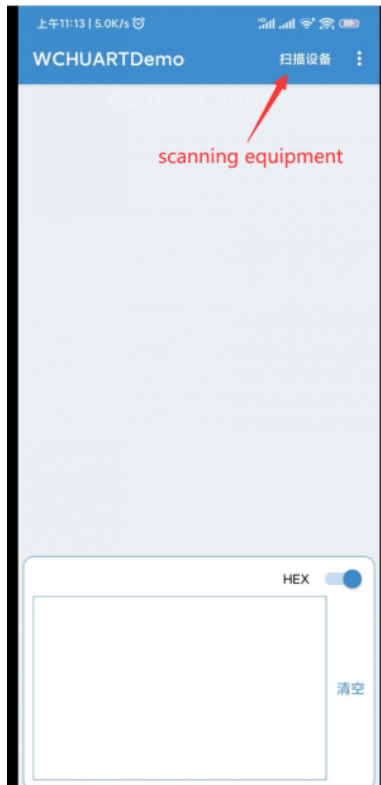
## Android

- The Android software ([https://files.waveshare.com/upload/2/22/WCHUARTDemo\\_V1.3.7z](https://files.waveshare.com/upload/2/22/WCHUARTDemo_V1.3.7z)), download and decompress it and install it.

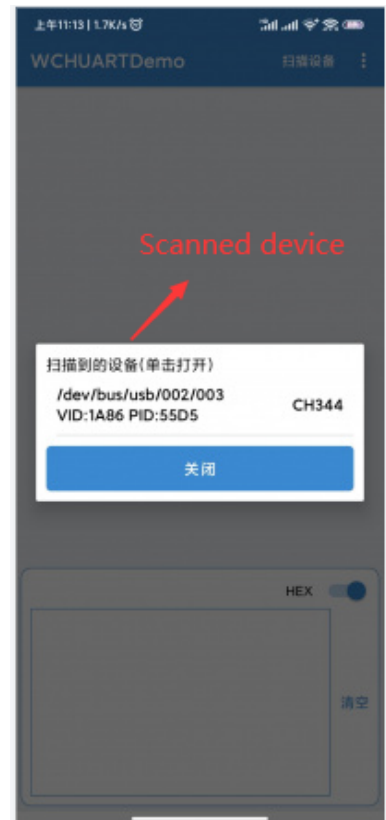
1. Open the APP and click Scan Device.  
parameters to use.

2. Click the scanned device.

3. Set the



(/wiki/File:USB\_TO\_4CH\_TTL\_0.png)





(/wiki/File:Scanned1.png)

(/wiki/File:CH343G\_Android2.png)

## Resource

### Datasheet

- CH344 Datasheet (<https://files.waveshare.com/upload/3/35/CH344DS1.PDF>)

### Software

- SSCOM software (<https://files.waveshare.com/upload/5/5f/Sscom.7z>)
- CH343 VCP driver for Windows (<https://files.waveshare.com/upload/f/f1/CH343SER.7z>)
- Android APP ([https://files.waveshare.com/upload/2/22/WCHUARTDemo\\_V1.3.7z](https://files.waveshare.com/upload/2/22/WCHUARTDemo_V1.3.7z))
- MAC Driver ([https://files.waveshare.com/upload/0/04/CH34XSER\\_MAC.7z](https://files.waveshare.com/upload/0/04/CH34XSER_MAC.7z))

## Support

### Technical Support

If you need technical support or have any feedback/review, please click the **Submit** **Now** button to submit a ticket, Our

support team will check and reply to you within 1 to 2 working days. Please be patient as we make every effort to help you to resolve the issue.

Working Time: 9 AM - 6 AM GMT+8  
(Monday to Friday)

Submit Now (<https://service.waveshare.com/>)

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([https://www.waveshare.com/w/index.php?title=USB\\_TO\\_4CH\\_RS485&oldid=70446](https://www.waveshare.com/w/index.php?title=USB_TO_4CH_RS485&oldid=70446))"*

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