

## QWAY-WITRN-PDC002 Usage and HID Upgrade Instructions

All QWAY WITRN WEB devices sold by Juwei are pirated, please report

### Overview:

PDC002 is a miniature TYPE-C interface to DC interface decoy line with PD decoy function launched by WITRN

### Parameter performance:

Input interface: PDC002 uses TYPE-C interface input

Output interface: DC5.5 tuning fork interface output

Support voltage: up to 20V (DC)

Support current: up to 5A

### Function Description:

Factory default built-in application highest voltage firmware

Support PPS, PD2.0, PD3.0, QC4, QC4+ and other charging devices that comply with PD specifications

Decoy voltage output

The default application for the highest voltage firmware supports the PPS charging head, but it will automatically skip when encountering a PPS message, and automatically apply for a fixed message the highest voltage group of

### Indicator light description:

Power on: fast colorful flashing

The charging head does not have the PD function, or the PD application fails: the red light flashes

PD voltage application is successful: different color indicator lights indicate

color	representative value	Represents the voltage range (unit: V)	
		scope	Typical value
red	1	$V < 6.0$	5
	2	$6.0V < 7.5$	7
	3	$7.5V < 9.5$	9
	4	$9.5V < 11.5$	10
	5	$11.5V < 13.5$	12
	6	$13.5V < 17$	15
yellow green blue purple white	7	$17V$	20

Safety warning: Inserting the decoy line will output high voltage, please ensure that the external device can withstand high voltage!

USB HID driver-free upgrade instructions:

WITRN-PDC002 miniature decoy line supports USB HID driver-free firmware replacement. For example, the factory needs voltage

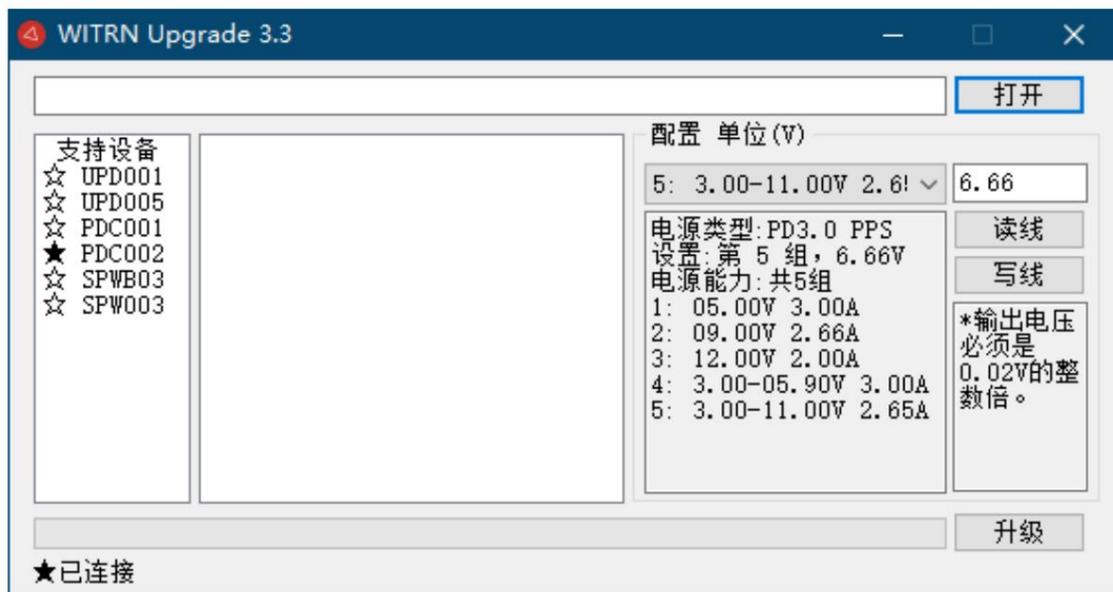
polling firmware, some users need to apply for fixed voltage firmware when using soldering irons, notebooks and other devices

At this point, you can quickly replace the internal firmware through the HID drive-free interface

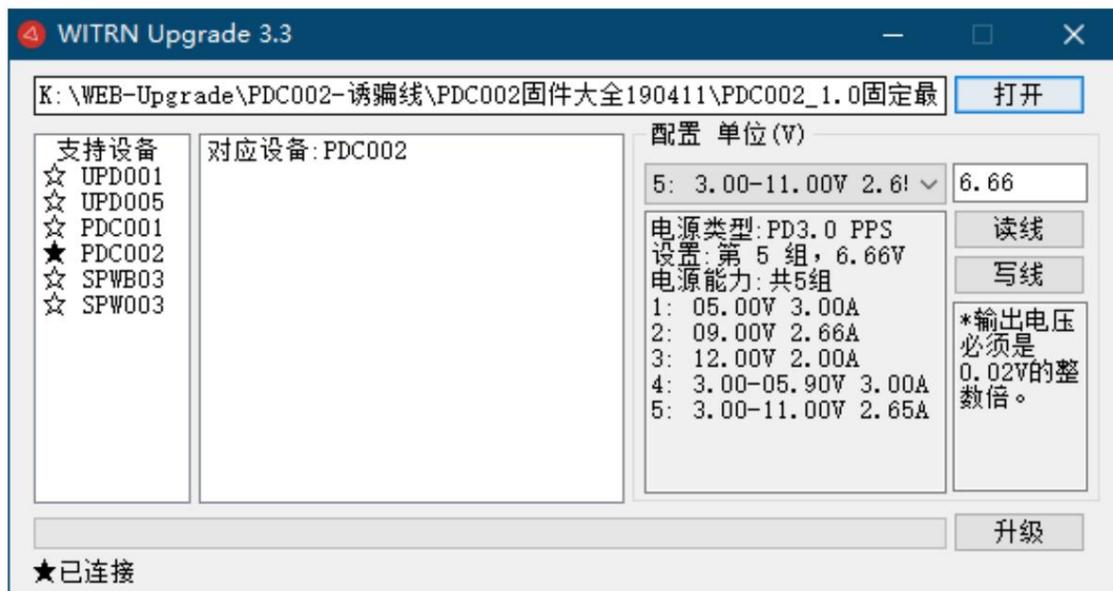
To upgrade the firmware, you need to use the PDC DFU adapter board to connect to the computer. The function of the

upgrade adapter board is to convert the TYPE-C interface into a USB-A interface that can be directly inserted into the computer for online upgrade.

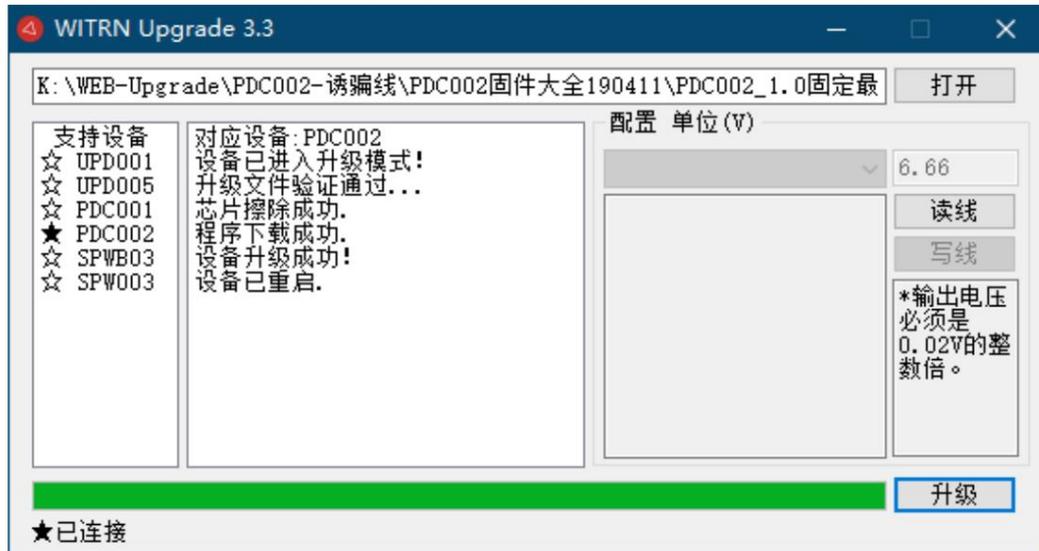
When the PDC002 decoy line enters the connection mode, if the connection to the computer is successful, the blue indicator light will flash slowly



Download and upgrade the software from the group file, plug in the decoy line first through the adapter board, and do not connect the decoy line to any device except the adapter board. After the connection is successful, the lower left corner of the software will display "Connected", which proves that the connection is successful.



At this point, you can press the "Open" button in the upper right corner to open the firmware that needs to be burned, and then press the "Start" button to burn.



Note: Connecting or unplugging the PD spoofing cable from the computer needs to be unplugged or plugged in together with the adapter board

Please download the corresponding firmware in the group file, QQ group number: 660597526 Group password: your Taobao order number

Firmware function description:

color	representative value	Represents the voltage range (unit: V)	
		Range typical	
red	1	V<6.0	5
yellow	2	6.0~7.5	7
green	3	7.5~9.5	9
cyan	4	9.5~11.5	10
blue	5	11.5~13.5	12
purple	6	13.5~17	15
yellow green blue purple white	7	17~V	20

(Table 1)

PDC002_1.0固定5V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定7V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定9V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定10V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定12V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定15V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定20V.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定最高不闪烁.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0固定最高闪烁.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0轮询不闪烁.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.0轮询闪烁.pd1s	2019/4/11/星期...	PD1S 文件
PDC002_1.1联机不闪烁.pd1s	2019/7/2/星期二 ...	PD1S 文件
PDC002_1.1联机闪烁.pd1s	2019/7/2/星期二 ...	PD1S 文件

**Fixed voltage firmware:** automatically apply for the specified voltage, if the charger does not have this voltage, it will automatically jump back to 5V and flash red

**Maximum voltage firmware - normal version (not flashing):**

Automatically apply for the highest fixed voltage of the PD charger, and the colors of the colorful lights indicate the voltage value of the PDO broadcast (Table 1)

**Maximum voltage firmware - smart version (flashing):**

Automatically apply for the highest fixed voltage of the PD charger, and the colorful lights flash 3 times per cycle, representing the following information

Flashes for the first time: The color represents the total number of power supply voltage groups of this PD fast charge, that is, how many groups of PDOs there are (eg: blue represents 5 groups of voltage outputs)

Blinks for the second time: the color represents the current output voltage is the power supply voltage of the group (eg: green represents the third group of PDO output is being applied for)

Flashes for the third time: the color represents the current output voltage range (eg: purple represents the voltage of this group of PDOs is in the range of 13.5V~17V, typically 15V)

**Polling Firmware - 3 Seconds Standard (No Blink):**

Automatically poll the voltages of all groups applying for PD chargers, only apply for fixed groups, skip PPS groups

The application interval for each group is 3 seconds, and the colors of the colorful lights indicate the voltage value of the PDO broadcast (Table 1)

**Polling Firmware - 5 Seconds Super Smart Version (flashing):**

Automatically poll all groups applying for PD chargers, **only apply and display fixed groups, skip PPS groups**

The application interval for each group is 5 seconds, and the colorful lights flash 3 times per cycle, representing the following information

Flashes for the first time: The color represents the total number of power supply voltage groups of this PD fast charge, that is, how many groups of PDOs there are (eg: blue represents 5 groups of voltage outputs)

Blinks for the second time: the color represents the current output voltage is the power supply voltage of the group (eg: green represents the third group of PDO output is being applied for)

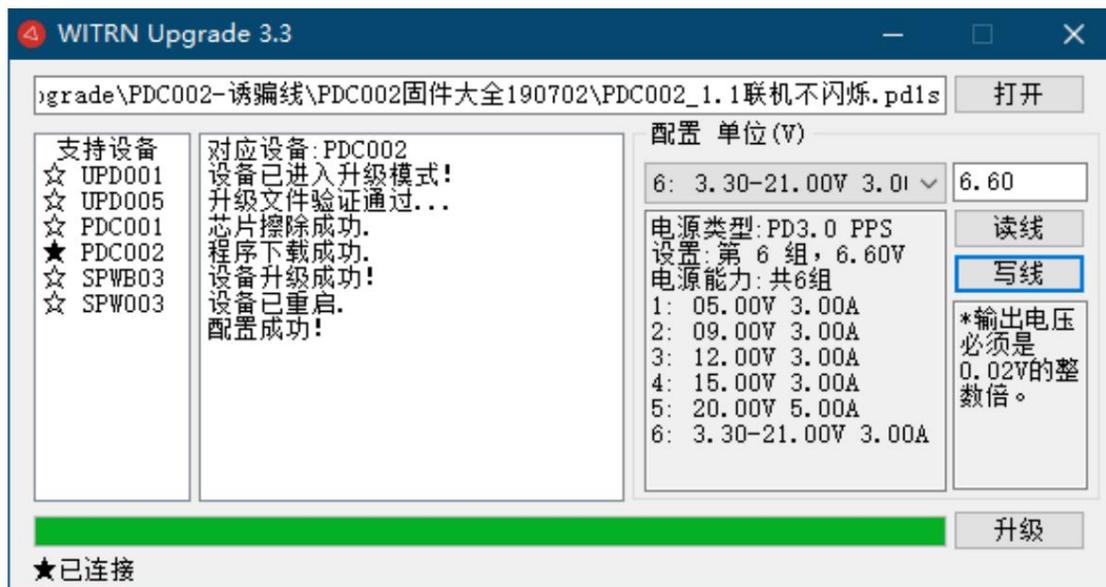
Flashes for the third time: the color represents the current output voltage range (eg: purple represents the voltage of this group of PDOs is in the range of 13.5V~17V, typically 15V)

## PPS programmable arbitrary voltage description

PPS arbitrary voltage programming requires the charging device to have a PPS gear

 PDC002_1.1联机不闪烁.pd1s	2019/7/2/星期二 ...	PD1S 文件
 PDC002_1.1联机闪烁.pd1s	2019/7/2/星期二 ...	PD1S 文件

After the above two firmwares are flashed into the PD decoy line, the decoy line can support the PPS voltage level



Usage introduction:

1. Flash PPS dedicated firmware (online firmware)
2. PDC002 The decoy line is inserted into the PD charging head to read the PDO information (the charging head cannot be changed in the middle)
3. Connect the PDC002 decoy line to the computer, run the software, press the "read line" button, and read the PDO voltage value of the charging head 4) Through the configuration software, observe what voltage output the charging head has and select the specific voltage \*Note 1 5. After selecting the required voltage, press the "Write Line" button to write the voltage value to be applied into the PD decoy line. Note 1: The PPS firmware can choose a fixed voltage gear, or the PPS gear can also be configured as: Power-on application Highest voltage mode, lowest voltage, polling mode, more flexible

PPS-specific firmware cannot completely replace ordinary firmware

Reason: When the PD decoy line is inserted into the charging head, it will automatically read and record the PDO voltage output list of the charging head.

Therefore, after the PD decoy line is flashed into the PPS firmware, it only supports the voltage configuration of the last inserted PD head. The PD decoy line of the charging head, insert a new B charging head, the PD decoy line will think that the charging head has changed, so it will not do high voltage action, only let the charging head work in the pd safe state, that is, output the lowest voltage gear ( Usually 5V)