

Serial Protocol for WandererBox Pro V3

Baud rate: 19200

Data bits: 8

Parity: None

Stop bits: 1

Action		Command	Example
Current sense calibration		66300744	
DC3-4 (Adjustable regulated output)	ON	101	
	OFF	100	
Set voltage for DC3-4 (5V to 13.2V)		20000+voltage*10	20132 for 13.2 V output
DC5 (255 levels PWM)	ON	5000+PWM level	5255 for fully on
	OFF	5000	
DC6 (255 levels PWM)	ON	6000+PWM level	6255 for fully on
	OFF	6000	
DC7 (255 levels PWM)	ON	7000+PWM level	7255 for fully on
	OFF	7000	
DC8-9	ON	201	
	OFF	200	
DC10-11	ON	211	
	OFF	210	
USB3.1-1	ON	111	
	OFF	110	
USB3.1-1	ON	121	
	OFF	120	
USB3.1-1	ON	131	
	OFF	130	
USB2.0 1-3	ON	141	
	OFF	140	
USB2.0 4-6	ON	151	
	OFF	150	

WandererBox Pro V3 continues transmitting status info to the COM port, this also helps users to identify whether the COM port belongs to the WandererBox Pro V3. The status info has the following format:

ZXWBProV3A*****A****A****A****A****A****A****A****A****A****A**A**A**A**A**A****A***A***A**A***A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

The definition are as follows:

	Definition	Remark
1	Firmware version	
2	Temperature reading from temperature probe 1	The value is -127 when the probe is not connected
3	Temperature reading from temperature probe 2	The value is -127 when the probe is not connected
4	Temperature reading from temperature probe 3	The value is -127 when the probe is not connected
5	Humidity reading from DHT22 sensor	It shows "nan" when sensor not connected
6	Temperature reading from DHT22 sensor	
7	Total input current (A)	
8	19V regulated output current (A)	
9	5-13.2V adjustable regulated output current (A)	
10	Input voltage (V)	
11	USB3.1-1 status	1 for ON and 0 for OFF
12	USB3.1-1 status	1 for ON and 0 for OFF
13	USB3.1-1 status	1 for ON and 0 for OFF
14	USB2.0 1-3 status	1 for ON and 0 for OFF
15	USB2.0 4-6 status	1 for ON and 0 for OFF
16	DC3-4 status	1 for ON and 0 for OFF
17	DC5 status	0-255
18	DC6 status	0-255
19	DC7 status	0-255
20	DC8-9 status	1 for ON and 0 for OFF
21	DC10-11 status	1 for ON and 0 for OFF
22	DC3-4 voltage set	Voltage*10

EXAMPLE 1:

**ZXWBProV3A20231004A34.56A33.28A33.72A55.20A20.30A
12.32A4.08A3.91A12.44A1A1A1A1A1A255A0A80A1A1A132A**

It indicates that the firmware version is 202301004, the temperature from the probe 1 is 34.56°C, the temperature from the probe 2 is 33.28°C, the temperature from the probe 3 is 33.72°C, humidity from DHT22 sensor is 55.20%, temperature from the DHT22 sensor is 20.30°C, input current is 12.32A, 19V regulated output current is 4.08A, 5-13.2V adjustable regulated output current is 3.91A, input voltage is 12.44V, all USB ports are ON, DC3-4 is on, DC5 is set to PWM level of 255 (fully on), DC6 is OFF, DC7 is set to PWM level of 80, DC8-9 is ON, DC9-10 is ON, and the output voltage for DC3-4 is set to 13.2V.

EXAMPLE 2:

**ZXWBProV3A20231004A-127A-127A-127AnanAnanA
0A0A0A12.35A0A0A0A0A0A0A0A0A0A0A0A75A**

It indicates that the firmware version is 202301004, all temperature probes and the DHT22 sensor are not connected, all current measurements are 0A, input voltage is 12.35V, all USB ports and controllable DC outputs are OFF, and the output voltage for DC3-4 is set to 7.5V.