

## Communication Protocol

### 1. Communication Interface and Definition

USB Interface Type: USB

2. 9600bps Baud Rate: 9600bps

3. Serial port control command (ASII code, "X" in the table stands for figure), valid character is lowercase letters, figures, and line break 0x0a.

4. End mark is the line break 0x0a

Send Command Word	Perform Operation	Read-back Command Word	Read-back Analysis
a + line break (Hereafter, every command must take 0x0a as the line break to over, ignore the following)	Back to device model	Like "3203"	Device model
		N	Communication fail
suXXXX	CH1 preset output voltage, units V; e.g. 1200 stands for 12.00V	OK	Preset success
		N	Communication fail
siXXXX	CH1 preset output current, units A; e.g. 2500 stands for 2.500A	OK	Preset success
		N	Communication fail
saXXXX	CH2 preset output voltage, units V; e.g. 1200 stands for 12.00V	OK	Command Accepted
		N	Communication fail
sdXXXX	CH2 preset output current, units A; e.g. 2500 stands for 2.500A	OK	Command Accepted
		N	Communication fail
O0	Output indicator light switch-off	OK	Command Accepted
		N	Communication fail
O1	Output indicator light switch-on	OK	Command Accepted
		N	Communication fail
O2	Parallel, series, trace, output indicator light switch-off	OK	Command Accepted
		N	Communication fail
O3	Series, trace, output indicator switch-off; Parallel indicator light switch-on	OK	Command Accepted
		N	Communication fail
O4	Parallel, trace, output indicator switch-off; Series indicator light switch-on	OK	Command Accepted
		N	Communication fail
O5	Parallel, series, output indicator switch-off; Trace indicator light switch-on	OK	Command Accepted
		N	Communication fail
O6	CH1 indicator light switch-on	OK	Command Accepted
		N	Communication fail
O7	CH2 indicator light switch-on	OK	Command Accepted
		N	Communication fail

O8	CH3 3.3V indicator light switch-on	OK	Command Accepted
		N	Communication fail
O9	CH3 5V indicator light switch-on	OK	Command Accepted
		N	Communication fail
Oa	CH3 2.5V indicator light switch-on	OK	Command Accepted
		N	Communication fail
rv	Read the measured voltage of CH1	XXXX	e.g. 0200 stands for 2.00V
ra	Read the measured current of CH1	XXXX	e.g. 0020 stands for 0.020A
ru	Read the preset voltage of CH1	XXXX	Stand for XX. XX V
ri	Read the preset current of CH1	XXXX	Stand for X. XXX A
rh	Read the measured voltage of CH2	XXXX	e.g. 0200 stands for 2.00V
rj	Read the measured current of CH2	XXXX	e.g. 0020 stands for 0.020A
rk	Read the preset voltage of CH2	XXXX	Stand for XX. XX V
rq	Read the preset current of CH2	XXXX	Stand for X. XXX A
rm	Read the device working mode	00	No working mode
		01	Parallel mode
		10	In series mode
		11	Trace mode
rl	Read lock state	00	No lock
		01	Lock
rp	Read CH2 state	00	No output from CH2
		01	CH2 is in CV state
		10	CH2 is in CC state
rs	Read CH1 state	00	No output from CH1
		01	CH1 is in CV state
		10	CH1 is in CC state
rb	Read CH3 state	00	
		01	CH1 is in CV state