# 시리얼(TTL-UART)제어 7~25V/1.2A 스텝핑모터 드라이버 모듈(P2980) 프로토콜

# 1. The product description:

- 1) the serial port communication Format: 9600 baud, no parity, 8 data bits, 1 stop
- 2) Note: Data is twos complement.

## 2. Stepper motor control command write

#### Send command:

Head (1byte)	Command	Control command	And parity	
	(1byte)	(1byte)	(1byte)	
вон	61H	00H	11H	

- (1) Control commands: 0 = Stop; 1 = start; 2 = stop; 3 = undriven.
- (2) and parity: The parity bit checksum data front, the lower 8 bits of data retention.

## Response command:

Head (1byte)	Command (1byte)	and parity (1byte)
ВОН	61H	11H

Note: The correct response to the above command is received instruction; receive the proper instruction sent, does not respond to any commands.

# 3. Written to the stepper motor

## Send command:

Head (1byte)	Command	Set pulse length	Setting	Set acceleration	And parity
	(1byte)	(4byte)	rotational	progression	(1byte)
			speed (2byte)	(1byte)	
вон	62H	00Н,00Н ,00Н,00Н	00H,00H	00H	12H

- (1) Set pulse length: 8 by the high and the low 8-byte integer binary number composed of a maximum set frequency 10KHZ.
- (2) setting rotational speed: 8-bit binary number is composed by a single byte of data, setting range from 1 to 99 corresponding to the duty cycle of 1% to 99%.
- (3) Set accelerated progression: Stepper motor accelerates progression (point 9).
- (4) and parity: The parity bit checksum data front, the lower 8 bits of data retention.

### **Response command:**

Head (1byte)	Command (1byte)	And parity (1byte)
вон	62H	12H

Note: The correct response to the above command is received instruction; receive the proper instruction sent, does not respond to any commands.

# 4. Stepper motor control data read-out

#### Send command:

Head (1byte)	Command (1byte)	And parity (1byte)	
вон	63H	13H	

(1) and the parity: The parity bit checksum previous data, retaining the low 8 bits of data.

## **Response command:**

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Head	version	instruction is	Accumulated pulse	real-time	accelerated	And
(1byte)	number	executed	length (4byte)	speed (2byte)	progression	parity
	(1byte)	(1byte)			(1byte)	(1byte)
вон	A1H	00H	00Н,00Н ,00Н,00Н	00H,00H	00H	51H

- (1) Version: module version number arranger
- (2) Run the command: host computer to execute instructions given module.
- (3) Accumulated pulse length: stepper motor accumulated pulse length.
- (4) real-time speed: Real stepper motor speed (pulses / sec).
- (5) Accelerated progression: Stepper motor accelerates progression (of 9).

Note: The correct response to the above command is received instruction; receive the proper instruction sent, does not respond to any commands.