



RoverC-Pro

I2C Control Protocol



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1、 Communication Protocol Structure

1.1 Communication Protocol Parameters

Uses I2C communication interface.

The recommended communication speed is 100-400KHz.”

2、 Control Registers

2.1 Motor Speed(00H)

- Function: Motor Speed Control.
- Register Address: 00H

Address	R/W	Length	Parameters
00	R/W	1 byte	Motor1 Speed (-127 ~ 127)
01	R/W	1 byte	Motor2 Speed (-127 ~ 127)
02	R/W	1 byte	Motor3 Speed (-127 ~ 127)
03	R/W	1 byte	Motor4 Speed (-127 ~ 127)

- Input Parameters:

Speed (1byte):

± 127: Forward and reverse rotation

0: Stop

2.2 Servo Angle Control(10H)

- Function: Servo rotation angle control
- Register Address: 10H

Address	R/W	Length	Parameters
10	R/W	1 byte	Servo1 Angle (0 ~ 180)
11	R/W	1 byte	Servo2 Angle (0 ~ 180)

- Input Parameter:
Angle (1byte):
0~180: 180° servo rotation angle

2.3 Servo Pulse Control(20H)

- Function: Servo rotation angle control
- Register Address: 20H

Address	R/W	Length	Parameters
20	R/W	1 byte	Servo1 Pulse High Byte
21	R/W	1 byte	Servo1 Pulse Low Byte
22	R/W	1 byte	Servo2 Pulse High Byte
23	R/W	1 byte	Servo2 Pulse Low Byte

- Input Parameter:
Pulse (2byte):
500~2500: Pulse input width range: The default servo control parameter is 50Hz, with a pulse range of 500~2500us corresponding to a servo rotation angle of 0~180° .