

## N467D01 1CH RS485 2A Multi-function DC Motor Controller Manual

### Features:

- 1 Working voltage: 1A version 8-24V; 2A version 8-16V
- 2 Standby current: 6mA
- 3 Supports the following MODBUS RTU function codes: write 06/16, read/03
4. The motor can be controlled to rotate forward/reversely/stop through instructions, and the delay time and number of cycles can be set.
- 5Support under-voltage lockout protection/support short-circuit protection/support over-temperature shutdown circuit/automatic fault recovery
6. You can set the parameters in registers 0-6 at one time and run automatically next time you power on. You can also control the motor in real time through the 128 registers
- 7 Super long delay 0.01-42949672.95 seconds (0-497 days)
- 8 In MODBUS command mode, up to 247 devices can be supported in parallel.
- 9The default baud rate is 9600BPS, which can be configured to support baud rates of 1200 2400 4800 9600 19200 38400 57600 115200, no/even/odd parity
- 10 Size: 37\*37\*12MM
- 11 Weight: 12 grams

1A version, working voltage 8-30V, suitable for DC 12V/24V motors with rated current within 1A and starting current within 1.5A

2A version, working voltage 8-16V, suitable for DC 12V motors with rated current within 1.5A and starting current within 2.5A

It can run independently after setting the 0-6 register parameters.

Note: Excessive current may cause damage to the driver chip

### Notice:

- 1 The motor output port cannot be used as a constant voltage and constant current power supply. When connected to a non-motor load, the output will be automatically turned off.
- 2 The power supply power must be more than 3 times greater than the load power.
- 3 When using it for the first time, the 0X0006(6) register must be set to a value greater than 0 to start the motor.

Please refer to "N467D01 MODBUS RTU Command" for how to set parameters.

This is the small version. If your motor current reaches a maximum current of more than 2A, please choose the relay version(N477E02).

### Typical Application:

Printers and office automation equipment

Sweeping robot

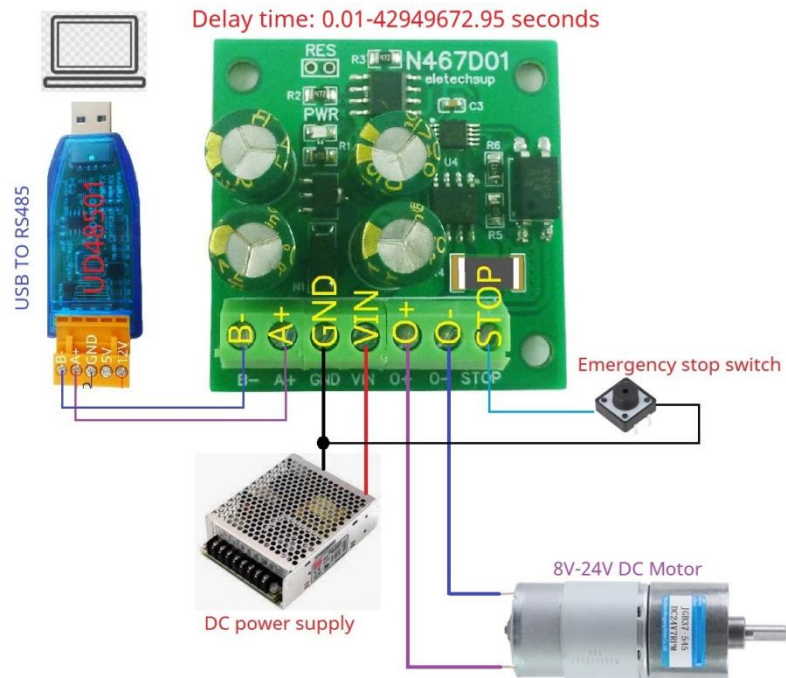
Small household appliances, children's toys

industrial equipment

home automation, smart home

PTZ IP camera

Wiring diagram:



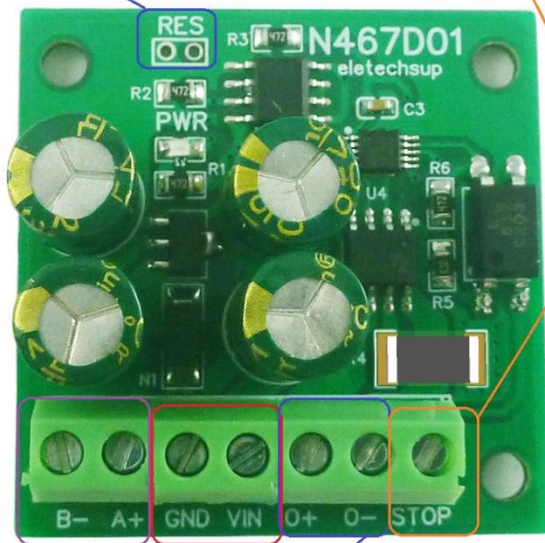
1A version, Working voltage 8-30V, suitable for DC 12V/24V motors with rated current within 1A and starting current within 1.5A

2A version, Working voltage 8-16V, suitable for DC 12V motors with rated current within 1.5A and starting current within 2.5A

**Note:** Excessive current may cause damage to the driver chip

Emergency stop interface (low pulse trigger)  
After triggering, it needs to be powered on again to work normally.

Short the RES jumper on the board for 5 seconds  
to restore the factory settings

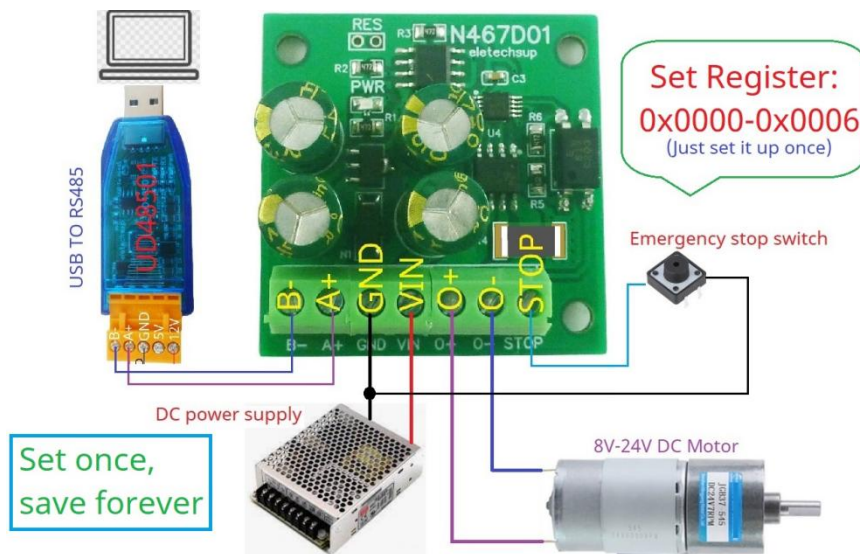


RS485 bus interface  
(Setting parameters)

Power supply  
interface

Motor control output

Note: The motor control output port cannot be used as a constant voltage and constant current power supply. When connected to a non-motor load, the output will be automatically turned off.



Control the Forward and Reverse rotation of the motor through the 0x0000-0x0006 (0-6) register(This parameter is saved after power-off and will be run again after power-on).

Example : The motor transmits Forward for 120 seconds, Reversely transmits for 100 seconds, Stops for 2 seconds in the middle, and works in a cycle 99 times

Write the following data:

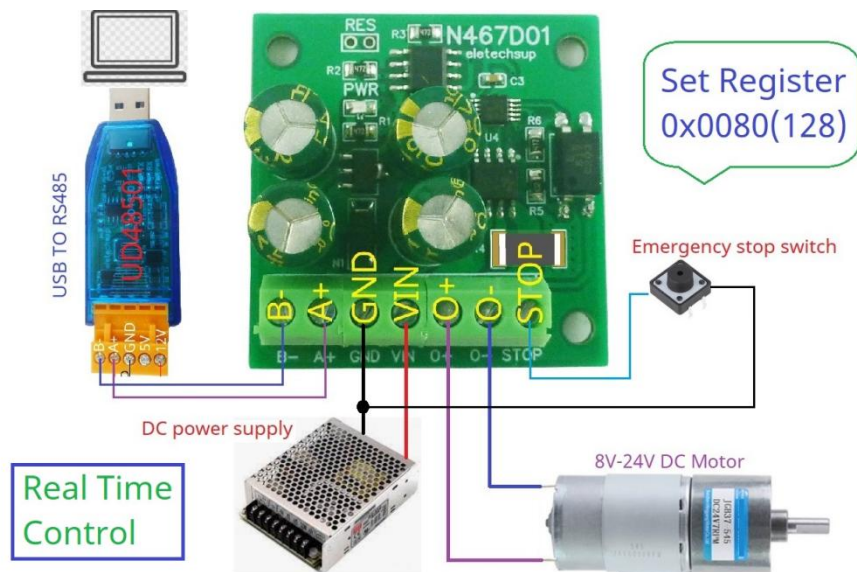
Register 0x0000-0x0001(0-1): 0x00002EE0(12000,120 seconds)

Register 0x0002-0x0003(2-3): 0x00002710(10000,100 seconds)

Register 0x0004-0x0005(4-5): 0x000000C8(200,20 seconds)

Register 0x0006(6): 0x0063 (cycle 99 times)

Send data: 01 10 00 00 00 07 0E 2E E0 00 00 27 10 00 00 00 C8 00 00 00 63 89 A9  
Stop Working: 01 06 00 06 00 00 69 CB



Simple real-time control of motor Forward and Reverse rotation through 0x0080(128) register

(This parameter is not saved when power is off. Before operating this register, set the 0x0006(6) register to 0).

|                                 |                           |
|---------------------------------|---------------------------|
| Forward rotation                | : 01 06 00 80 10 00 85 E2 |
| Reverse                         | : 01 06 00 80 20 00 91 E2 |
| Stop                            | : 01 06 00 80 00 00 88 22 |
| Forward rotation for 10 seconds | : 01 06 00 80 30 0A 1C 25 |
| Reverse rotation for 5 seconds  | : 01 06 00 80 40 05 79 E1 |

Size : 37\*37\*12MM      Weight : 12g



The maximum drive current can be changed by modifying the value of the R4 resistor

$$I_{max}(A) = 0.5 / R4(\Omega)$$

| Resistor package | R4     | I <sub>max</sub> |
|------------------|--------|------------------|
| 2512             | 1 Ω    | 0.5A             |
|                  | 0.5 Ω  | 1A               |
|                  | 0.33 Ω | 1.5A             |
|                  | 0.25 Ω | 2A               |
|                  | 0.16 Ω | 3A               |

