

# Instruction Manual

## For MCR-30 DC Motor Speed Control

### INTRODUCTION

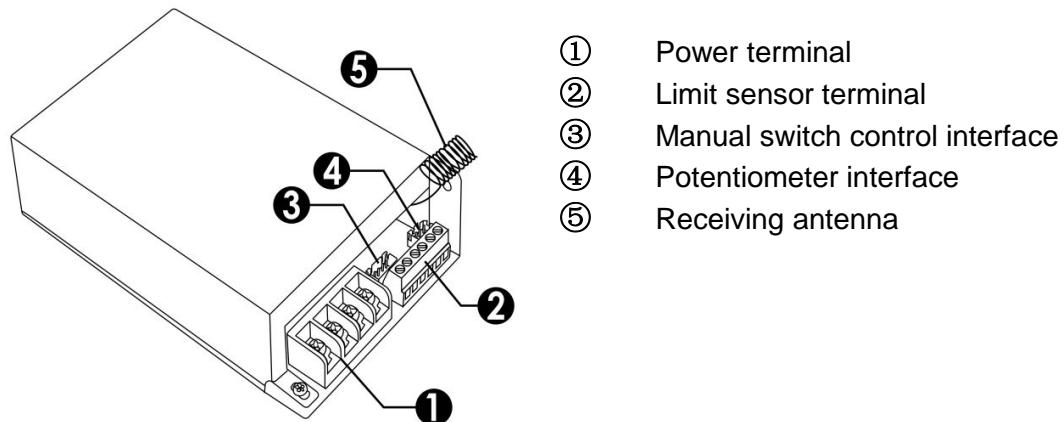
MCR-30 DC Motor Speed Controller can achieve simple automatic functions. It can adapt to a wide DC low voltage operating range and it's suitable for SCM, PLC and other upper control.

### TECHNICAL PARAMETERS

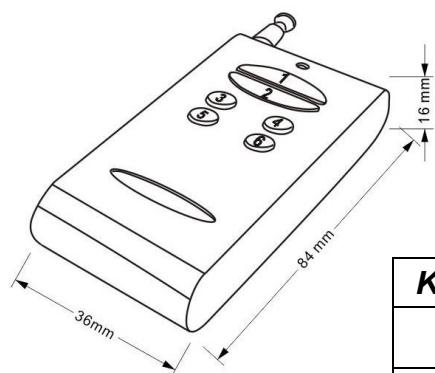
- Input supply voltage:12V-30VDC
- The output power:12V:250W(max) ; 24V:350W(max);
- The maximum output current: 30A (contain 30A fuse).

### PRODUCT STRUCTURE DIAGRAM

- Controller



- Remote Control Key Function



| KEY | FUNCTION | KEY | FUNCTION   |
|-----|----------|-----|------------|
| 1   | Positive | 2   | Reverse    |
| 3   | Stop     | 5   | Blank      |
| 4   | Speed Up | 6   | Speed Down |

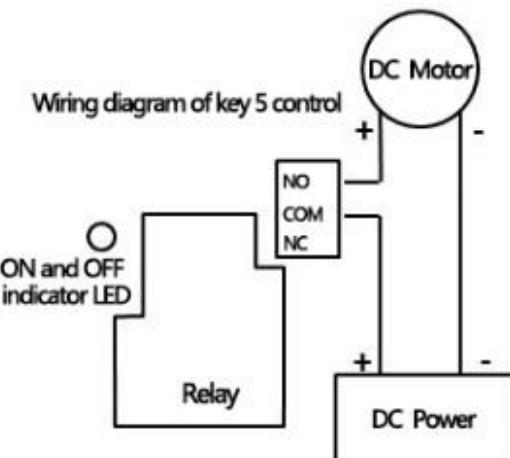
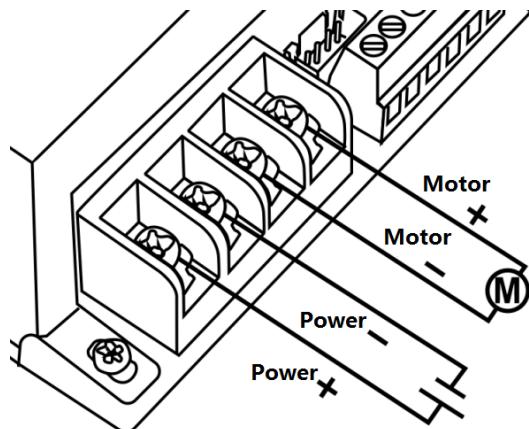
## OPERATING INSTRUCTION

### ● Remote controller

Use to remote control speed and direction of motor

Battery size: 23A 12V.

### ● Power and motor wiring diagram

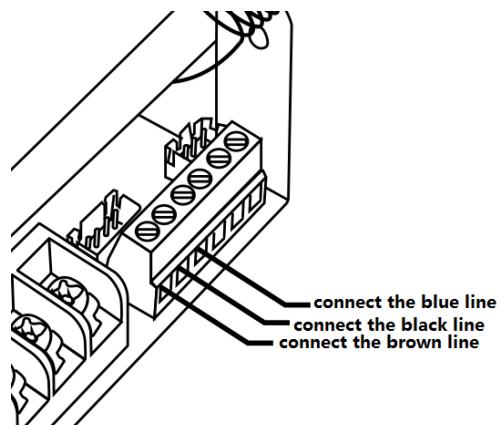
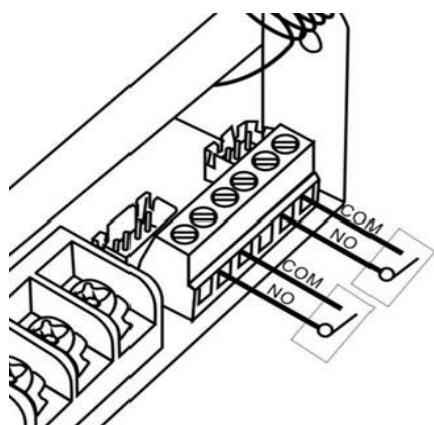


### ● Limit sensor control

Motor working, corresponding sensor or switch is closed, then motor stop.

#### 1. Mechanical stroke switch wiring diagram

#### 2. 12-30V NPN sensor wiring diagram (normally open type sensor)



### ● Manual switch control

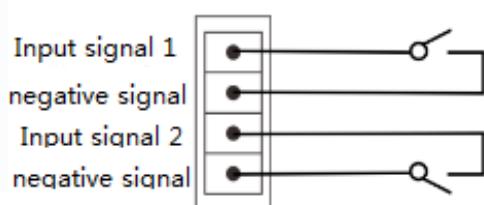
Connect two manual switches.

Turn on the power, motor remotes on the corresponding direction.

When reach the limit switch, motor stops.

In manual working process, the remote controller is invalid.

#### manualswitchcontrol port



- **Potentiometer**

Control the speed of the motor. The value of the potentiometer is 10K or 100K.

Adjust the initial speed of the system. When the system starts, the position of the potentiometer determines the initial speed.

Press the remote controller to speed up and down the motor. When adjust the potentiometer over 15 degree angle, recovery potentiometer to control speed.

- **Indicator LED lights**

System starts normally, the two LEDs flash at the same time.

When the motor is in stop status, the LED D3 flashes once per second.

In operation, push Key 1 or Key 2 of remote control (control direction of motor), the LED D4 or D3 lights up.

## **IMPORTANT NOTES:**

- An appropriately rated fuse (rated a little higher than the maximum current you expect to draw) is recommended to ensure safe operation.
- The controller is NOT reverse-polarity protected and it will be damaged if connect the supply voltage with wrong polarity. Double check all connections before applying power and always turn off the power supply before making any wiring changes

Federal Communications Commission (FCC) Statement. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received,

including interference that may cause undesired operation. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide Reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by **Guangzhou Meimotor Electronic Technology Co.,Ltd** may void the FCC authorization to operate this device. Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

**RF exposure statement:**

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The device is installed and operated without restriction.