

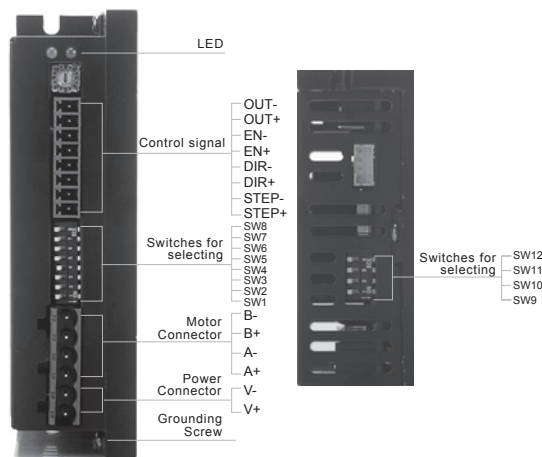
SR4-Plus

Step Motor Drive

Requirements

To use the SR4-Plus Step Drive, the following items are needed:

- A power supply (24 - 48 VDC)
- Pulse & Direction signal
- A compatible step motor



Connect to the Power Supply

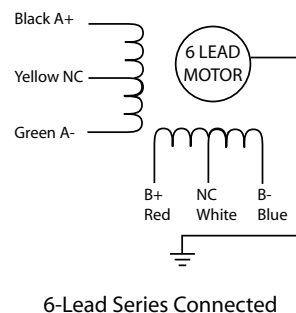
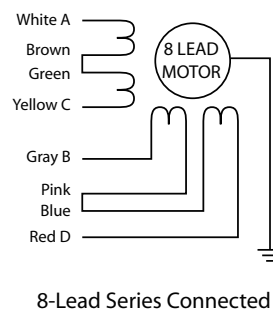
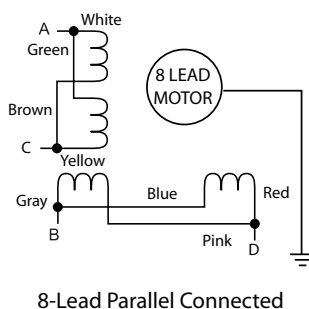
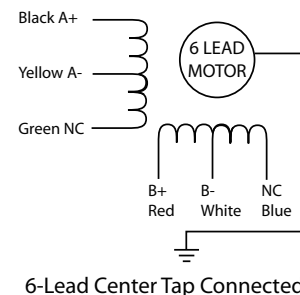
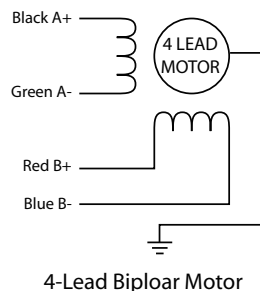
If the power supply does not have a fuse on the output or some kind of short circuit current limiting device, a 4 amp fast acting fuse should be installed in line with the “+” power supply lead.

Connect the motor power supply “+” terminal to the drive terminal labeled “V+”. Connect the power supply “-” to the drive terminal labeled “V-”.

Be careful not to reverse the wires.

Connecting to a Motor

Connect the drive to the motor. Four lead motors can be connected in only one way. If using a non MOONS' motor, consult the motor specs for wiring information.

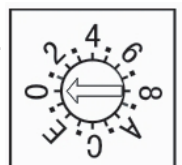


Selecting the Motor

Each position of the 16-bit rotary switch selects a different motor, and automatically sets the configuration parameters in the drive. The SR4-Plus drive comes programmed with up to 8 typical motors as factory defaults. Drives can be customized with specially selected motors when required. Available options are on the drive label.

The switch also selects a low or high inertia for each motor to allow for various load conditions. The low setting is 1:1, and the high setting is 10:1. Each motor in the loaded database has unique settings to optimize the anti-resonance.

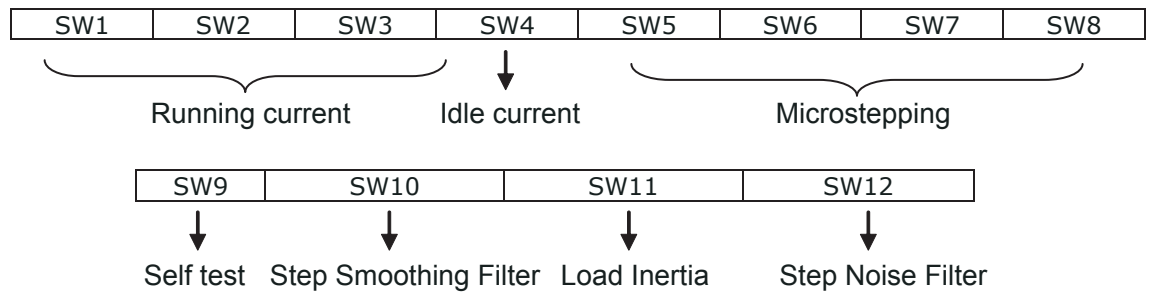
If the motor selection is changed, the drive power supply will need to be cycled.



Selection

Switches

Many operational parameters of the SR8-Plus can be set or changed by position switches - either by a single switch or a combination of ON/OFF settings of 2 or more switches.



Running current - 3 switches for a total of 8 settings:

| Peak | SW1 | SW2 | SW3 |
|------|-----|-----|-----|
| 1.0A | ON | ON | ON |
| 1.5A | OFF | ON | ON |
| 1.8A | ON | OFF | ON |
| 2.2A | OFF | OFF | ON |
| 3.0A | ON | ON | OFF |
| 3.5A | OFF | ON | OFF |
| 4.0A | ON | OFF | OFF |
| 4.5A | OFF | OFF | OFF |

Idle Current (**SW4**) - ON for half current, OFF for 90% current

Self test (**SW9**) - ON to enable, OFF to disable

Step Smoothing Filter (**SW10**) - ON to enable, OFF to disable

Load Inertia (**SW11**) - ON to high, OFF to low

Step Noise Filter(**SW12**) - ON for 150 KHz, OFF for 2 MHz

Microstepping - 4 switches for a total of 16 settings:

| Microstep(step/rev) | SW5 | SW6 | SW7 | SW8 |
|---------------------|-----|-----|-----|-----|
| 200 | ON | ON | ON | ON |
| 400 | OFF | ON | ON | ON |
| 800 | ON | OFF | ON | ON |
| 1600 | OFF | OFF | ON | ON |
| 3200 | ON | ON | OFF | ON |
| 6400 | OFF | ON | OFF | ON |
| 12800 | ON | OFF | OFF | ON |
| 25600 | OFF | OFF | OFF | ON |
| 1000 | ON | ON | ON | OFF |
| 2000 | OFF | ON | ON | OFF |
| 4000 | ON | OFF | ON | OFF |
| 5000 | OFF | OFF | ON | OFF |
| 8000 | ON | ON | OFF | OFF |
| 10000 | OFF | ON | OFF | OFF |
| 20000 | ON | OFF | OFF | OFF |
| 25000 | OFF | OFF | OFF | OFF |

Safety Instructions



- Only qualified personnel should assemble, install, operate, or maintain this equipment.
- Read all available documentation before assembly and operation.
- It is vital to ensure that all system components are connected to earth ground.
- This product contains electrostatically sensitive components that can be damaged by incorrect handling.