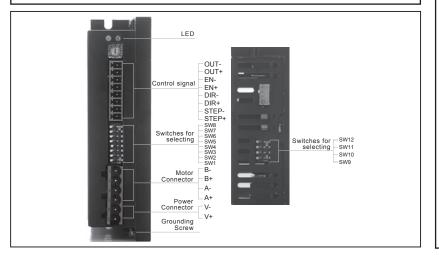
# **SR8-Plus**

## Step Motor Drive

#### Requirements

To use the SR8-Plus Step Drive, the following items are needed:

- A power supply (24 75 VDC)
- Pulse & Direction signal
- A compatible step motor



### **Quick Set-Up Guide**

#### **Connect to the Power Supply**

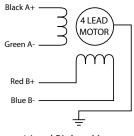
If the power supply does not have a fuse on the output or some kind of short circuit current limiting device, a 4 amp fast acting fuse should be installed in line with the "+" power supply lead.

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

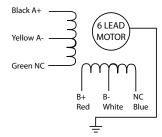
Be careful not to reverse the wires.

#### **Connecting to a Motor**

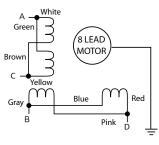
Connect the drive to the motor.
Four lead motors can be connected in only one way. If using a non MOONS' motor, consult the motor specs for wiring information.



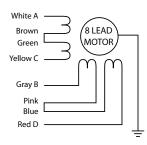
4-Lead Biploar Motor



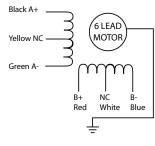
6-Lead Center Tap Connected



8-Lead Parallel Connected



8-Lead Series Connected



6-Lead Series Connected

#### **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 SR8-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.

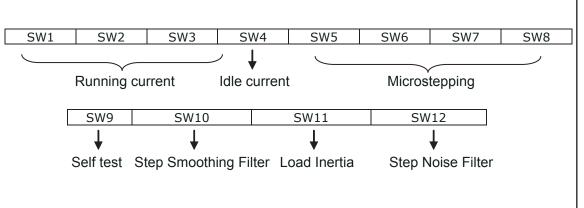
The switch also selects a low or high inertia for each motor to allow for various load conditions. The low setting is 1:1, and the high setting is 10:1. Each motor in the loaded database has unique settings to optimize the anti-resonance.

2.4.6

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
2.4A	ON	ON	ON
3.0A	OFF	ON	ON
3.8A	ON	OFF	ON
4.5A	OFF	OFF	ON
5.6A	ON	ON	OFF
6.4A	OFF	ON	OFF
7.0A	ON	OFF	OFF
7.8A	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.



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