## SR2-Plus

## Step Motor Drive

## Requirements

To use the SR2-Plus Step Drive, the following items are needed:

- A power supply (12-48 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 " $\mathrm{V}+$ ". 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

## Selection

Switches
Many operational parameters of the SR2-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 |
| :---: | :---: | :---: | :---: |
| 0.3 A | ON | ON | ON |
| 0.5 A | OFF | ON | ON |
| 0.7 A | ON | OFF | ON |
| 1.0 A | OFF | OFF | ON |
| 1.3 A | ON | ON | OFF |
| 1.6 A | OFF | ON | OFF |
| 1.9 A | ON | OFF | OFF |
| 2.2 A | 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.

