

DRV-1(X) DRIVER

The DRV-1 is a 1 amp, bi-polar microstepping driver designed to meet O.E.M. requirements for reliable, cost effective operation. The DRV-1 offers six resolution settings, from full step to 1/32 step. Features include:

- *Low cost - small size*
- *Heatsink mounted*
- *31.25 Khz step clock*
- *Step resolution to 6,400 steps/rev.*
- *1.2 amp (peak) output current*
- *Over current protected*
- *Mating connectors included*
- *Optional program control (DRV-1X)*

A single unregulated DC power supply, between 12 and 34 volts, is all that is required to generate a drive current output of 1.2 amp per phase.

Output Current Adjustment

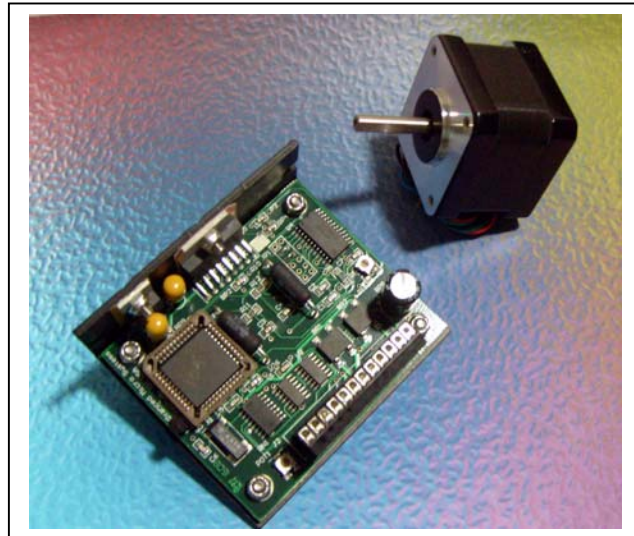
A potentiometer is used to set the DRV-1's output current. Turning the potentiometer clockwise increases the current and counterclockwise decreases the current.

Fault Protection

The DRV-1 is internally protected against over current conditions. If a peak output current exceeds the rated current, a latch is set and the phase associated with the over current condition is shut off. The next step pulse will sample the over current condition and, if it no longer exists, will reset the latch. Otherwise the latch will remain set until the next step pulse.

DRV-1X

For continuous mode operation, i.e., no changing of parameter settings, the DRV-1X includes a microprocessor that can be pre-programmed at the factory to accept a Go, Limit Switch or other inputs to initiate up to four unique motion profiles, based on your specifications. This feature is especially useful for high volume users who want "plug and play" operation.



Microstep Resolution Select Table

The number of microsteps per step is selected by locating shunts on pins 2, 4 and 6 of connector JP1.

Shunt M0 (Pin 1 to Pin 2)	Shunt M1 (Pin 3 to Pin 4)	Shunt M2 (Pin 5 to Pin 6)	Resolution	Steps/Rev.
In	In	In	Full	200
In	In	Out	1/2	400
In	Out	In	1/4	800
In	Out	Out	1/8	1,600
Out	In	In	1/16	3,200
Out	In	Out	1/32	6,400

Electrical Specifications

Parameter	Min	Typ	Max	Unit
Supply Voltage	12		34	Vdc
Supply Current			1.0	Amp
Output Current/Phase (Peak)			1.2	Amp
Motor Chop Frequency		31.25		Khz

Mechanical Specifications: inches (cm)

