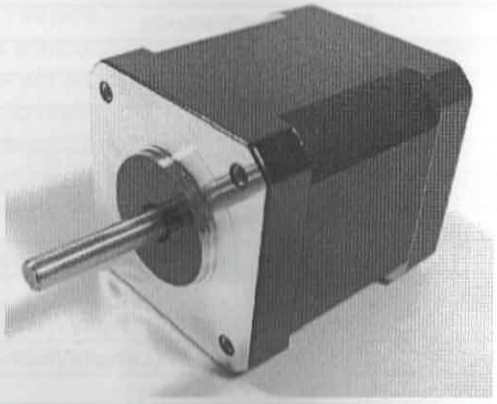
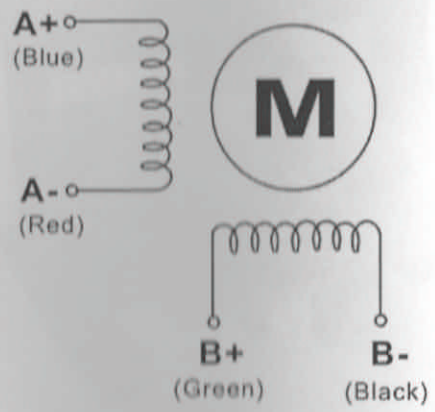
◆ **Stepper motor Specifications**



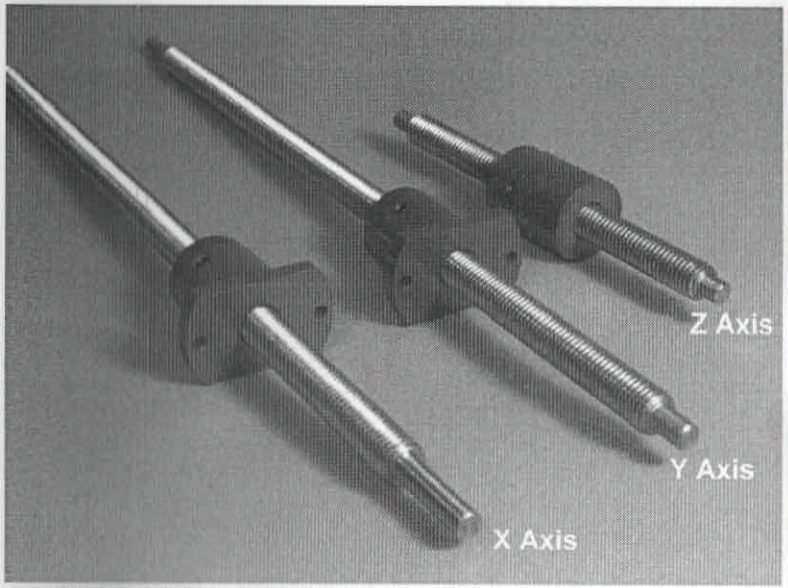
Stepper motor Specifications	
Step Angle	1.8 degree (2 Phase)
Current	1.68A/ Phase
Voltage	2.8v
Resistance	1.65/ Phase
Inductance	2.8mh / Phase
Holding Torque	4.8 kg.cm (70OZ-IN)
Rotor inertia	68 g-c m^2

Wiring Diagram:



◆ **Lead screws Feature**

For most router screw to remove backlash is open the two nuts by using spring, In fact this method, backlash remains, backlash occurs when nuts take excessive spring preload, cause measure error during engraving, In order to prevent it happens must strengthen preload, definitely the higher the load at the screw/nut interface , the higher the required toque to drive the nut on the screw , the more drive motor capacity lost on the screw , the less efficiency Similar to ball screw.



Panther CNC RouteR use new design to avoid above mentioned happen , we use screw without spring preload , low drag force and little lost capacity when spinning.

◆ **Adjustments screw backlash**

Adjust screw backlash required After using for a period of time (Attrition depends on processed material) , screw regain original accuracy.
(*When adjust clearance do not remove the screw form machine, adjust clearance with screw attached to machine*)