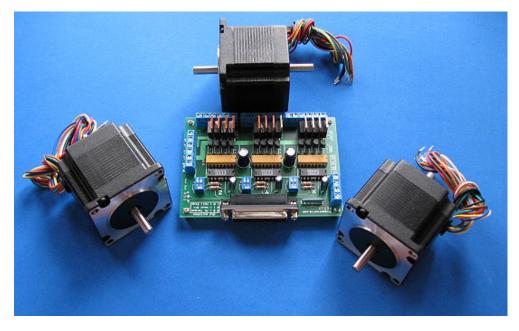


# **STEPPERWORLD SPECIAL \$269 Complete System!**

Model FET-3/Hobbyist

# **Complete 3 Axis Stepper System**



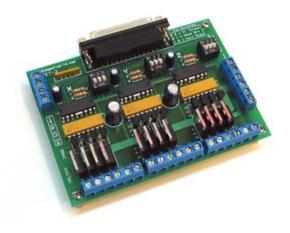
**Introducing the FET3/Hobbyist** Here's our powerful FET-3 controller bundled with NEMA 23 motors, power supply, and everything you need to get started. A complete mid-level system, at an unbeatable price!

Here's what you get...

FET-3 Controller and Parallel Cable
3 Dual-Shaft NEMA 23 Stepper Motors (NEW!)
Power Resistors
Power Supply
Software on CD
Documentation and Stepper Tutorials

#### **FET-3 Controller and Parallel Cable**

Stepperworld FET-3 controller, assembled and Tested. For information about the FET-3... <u>Click Here</u>



## 3x NEW NEMA 23 Dual-shaft 110 oz in Stepper Motors



Three NEW NEMA 23 motors, with 1/4" dual-shaft. Motors run smoothly without resonance in the full operational range. Rated 110 oz. in. Top speed is approx 48,000 pulses per minute, which equals 250 rpm, no load condition. Torque is excellent all the way up to top speed. Motors can be run from 5v without power resistors, or 12v with power resistors (resistors for 12v operation are included).

#### **Power Resistors**



Hi Torque at Top Speed is achieved by over-voltaging the motors with current-limiting power resistors to keep current at the desired level. The resistors do get hot and must be mounted to a heat sink. (Heat sink is not included, a simple sheet of metal will do.) These aluminum frame resistors include mounting holes.

#### **Power Supply**



**Heavy Duty** Power Supply included. The power supply has both 5v and 12v voltage sources with enough current to drive 3 motors in HI TORQUE mode simultaneously. AC power cord included. Power Supply is International (Input voltage range 100VAC to 240VAC)

#### Software on CD

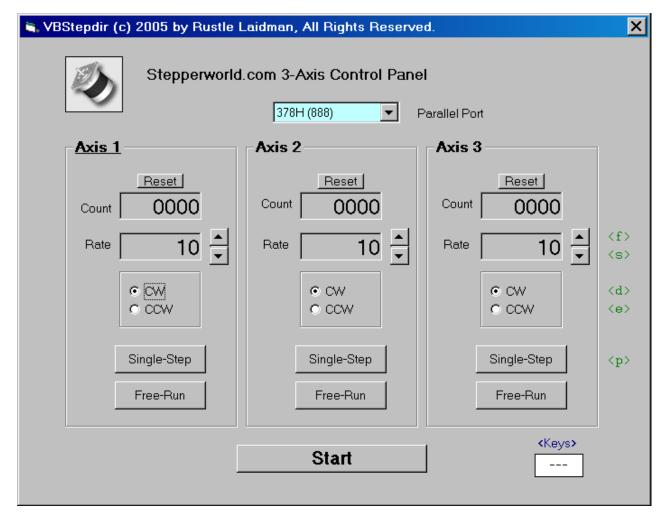
Uses a step/direction interface compatible with 3rd party Stepper/CNC software.

This project comes with an assortment of software on CD, including Stepperworld programs to exercise the system and Demo/Shareware versions of popular CNC/g-code software.

- QBASIC Source Code
- VB6 Windows Control Panel
- 3rd Party CNC Software

#### **QBASIC Source Code**

The QBASIC software allows you to control the motors using the keyboard or gameport joystick. Easy to follow, written with the beginning programmer in mind. Original software written by Stepperworld. You can single-step the motors, one pulse at a time both forward and reverse, or run them continuously (forward and reverse). The rate of revolution is smoothly variable - QBasic software allows sample rates up to 600+ Hz (depending on the clock speed of your PC's cpu).



### VBStepDir.exe - 3 Axis Control Panel

#### **VB6 Windows Control Panel**

In addition to the free QBasic source code described above, you receive a 3-Axis Stepper Control Panel, which allows you to control your 3 axis system from Windows 95/98/2000/XP. Select the Parallel Port address and click Start/Stop. You can change the rate, and direction of rotation from this panel using the mouse or keyboard. Stepping is synchronized to a high-resolution millisecond timer.

**OPTIONAL:** Source to the VB6 Windows Control Panel is an additional \$20. (The source is not required to run the Windows control panel.) This application demonstrates Stepper Control, Port I/O, and a High-Resolution Millisecond timer.

## **Documentation and Stepper Tutorials**

Documentation includes connection diagram, setup & interface information, and a tutorial on Stepper Motors. <u>Click here to view the entire set of Stepperworld Online Tutorials</u>. Covers stepper motor basics, tips for identifying a variety of unipolar stepper motors, current-limiting, and a simple procedure for finding the correct firing order of an un-labeled motor. This project focuses on the **Unipolar** Stepper Controller with Step/Direction Input. (Other Projects available.)

#### **Options**

MOSFET upgrade: (upgrade all MOSFETs on FET-3): \$18 Visual Basic Source Code to VBStepDir Control Panel: \$20

## Visit the <u>www.Stepperworld.com</u> web site