STOP!
READ THIS FIRST!

Xylotex XS3525/8S-4 (4 Axis) and **Xylotex XS3525/8S-3** (3 axis)
Read all of the info below and on the back, as well as the datasheet: http://www.xylotex.com/PDFS.htm
If you have any questions regarding the setup or functionality of the board, you can contact: support@xylotex.com

The reverse side of this sheet has a setup procedure. Please use it!

Failure to read and follow the directions for setup is THE #1 cause of drive destruction

Improper wiring of motor and power to the drive is a MAJOR cause of drive failure (a "pop" accompanied with black smoke is one symptom of a mis-wired drive or short, the onboard red LED flashing (when using a switching power supply) is another). **All drives are tested before shipping.** They are warranted against manufacturing defects; they are **not** warranted against mis-wires, overvoltage conditions (Back EMF, wire breaks/disconnects; symptom: blinking LED, smoke from device) or overheating.

Double check your wiring BEFORE applying power to the system. If you are not sure how something should be wired, ask.

The drive is shipped in 1/8th step mode (jumper selectable), ENAbled and with Vref set to 0V.

NEVER apply power to the drive board by switching the DC voltage (Vbb) to the board. Turn power on/off to the board by switching the AC power that goes to the power supply instead.

Your stepper motors should spin easily with finger touch pressure. There will be a small amount of "bumpiness" associated with the detent torque. Used motors should be checked before installing into a system. Bad motors can cause board failure. Do not rely on second hand motor schematics. Use an ohm meter to verify proper wiring. Do NOT drive the motors with more than their rated current, and never set the Vref for a current over 2.5A/phase.

Use a cooling fan on the heatsinks for amperages above 1.5A/phase. If the board is placed inside an enclosure, consider using 2 fans: One to bring in cool outside air, and another blowing directly over the heatsinks. Excessive drive board heating lowers the life expectancy of the drive. Watch the temperature levels of the heatsink. They should never get too hot to touch. To assist in cooling, allow airflow under the drive board by mounting it on plastic standoffs.

When fastening the board down using the four mounting holes, use washers to protect the board (non-metallic!). If you do use metallic fasteners, make sure they do not extend past the outside of the mounting hole ring, and do not "thread" into the hole. They must be smaller than the mounting hole. The mounting holes are isolated and do not need grounding.

Keep coolant, dust and chips away from the board. Small metalic "dust" and chips can easily be pulled in by a fan and deposited on the board, shorting it out! Never drill, cut, solder or glue anything to the board. Doing so voids the warranty. If you are using a vacuum system, the system MUST be properly grounded to dissipate static build-up.

There is a program to test the drive & just spin the steppers from a PC parallel port in the yahoo FILES section:
http://groups.yahoo.com/group/Xylotex/files/
steptest.exe
(you will need to sign-up to Yahoo to access this location)
This program should allow you to get the motors spinning without having to setup (and know) the various initialization requirements for a full CNC package (TurboCNC or Mach2/3). It will not run in WinXP/2K or higher though.

A **Mach3** Setup file for the Xylotex board can be found here:
`http://groups.yahoo.com/group/Xylotex/files/`
`McFadden's Mach 3 Setup`
Start with LOW values for acceleration and speed in software parameters, then increase as warranted by machine functionality.

The drive board has nothing to do with I/O signals such as Home Switches, Limit Switches, STOP switches, or relay outputs like spindle or coolant pumps. It does provide all unused parallel port I/O at screw terminals. How these I/O are used depends on your software setup and the switches you use. See your software for recommended setup of the various I/O

The drive boards uses pluggable 4-pin connectors for the axes motor power. Make sure these are properly aligned (all 4 pins on the posts) if you have unplugged them. If you plan on shipping a system after assembly, you may want to use a small amount of silicone sealer to help keep the connector securely on the posts during transit (doing this will not void your warranty) as heavy, moving motor cables can loosen the connection..

Save your Xylotex invoice in case you need to return the product for any reason.