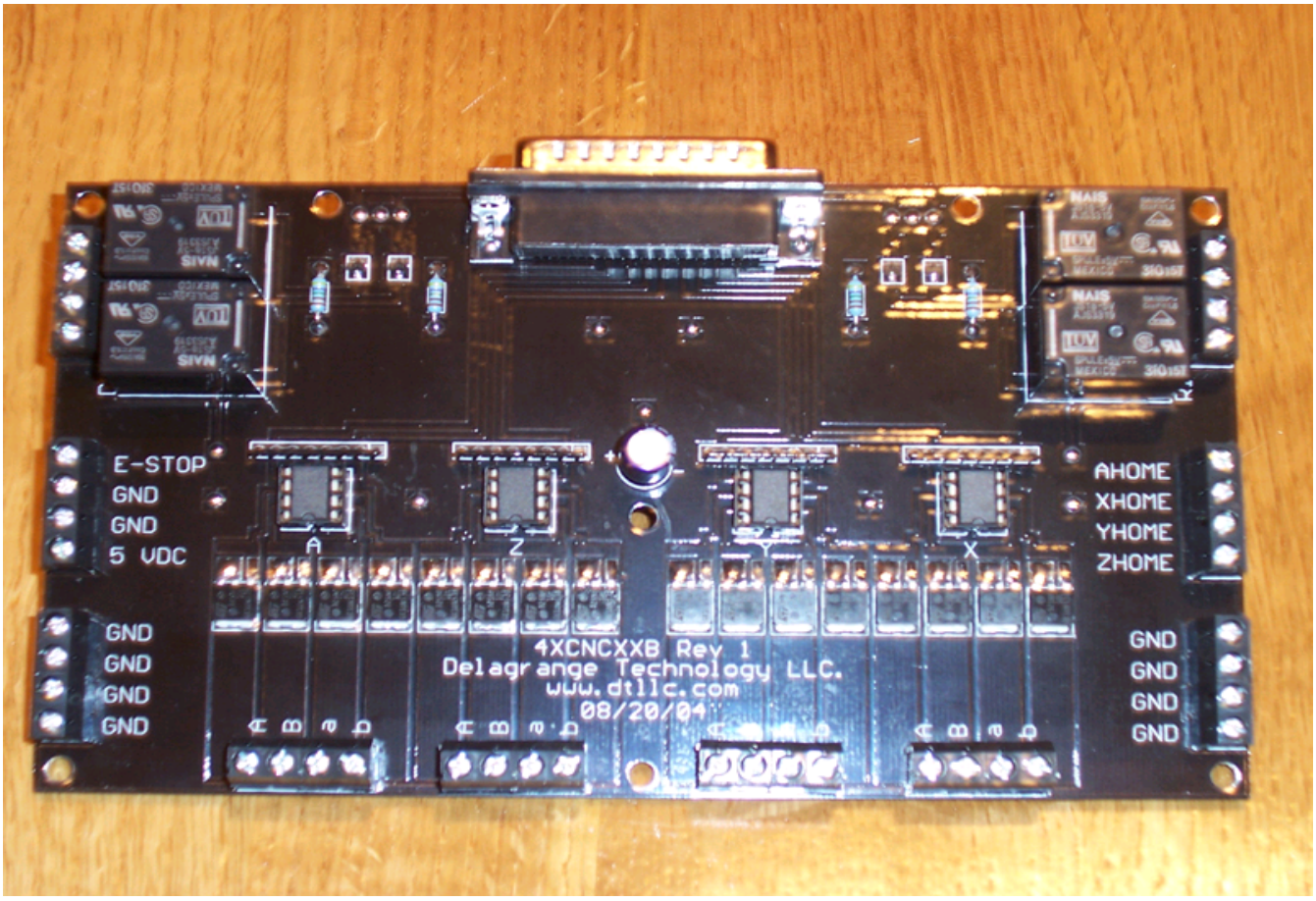
4XCNC10B
10 AMP CNC INTERFACE



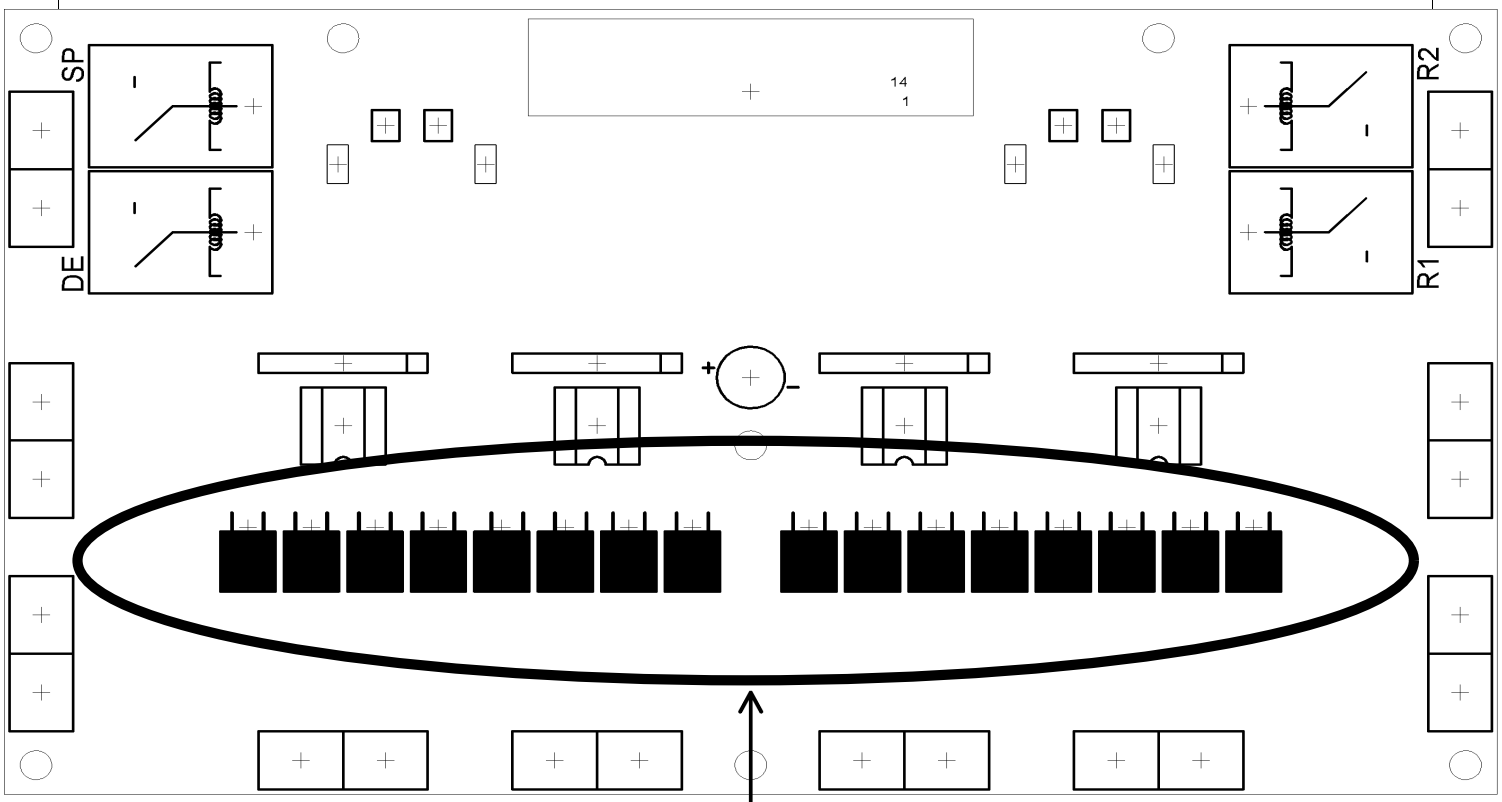
DELAGRANGE TECHNOLOGY LLC
4024 FAIRFIELD AVENUE
FORT WAYNE, IN 46807
(260)-557-9280 M-F 4:30PM-9:00PM
admin@dtllc.com
WWW.DTLLC.COM

!!WARNING!!

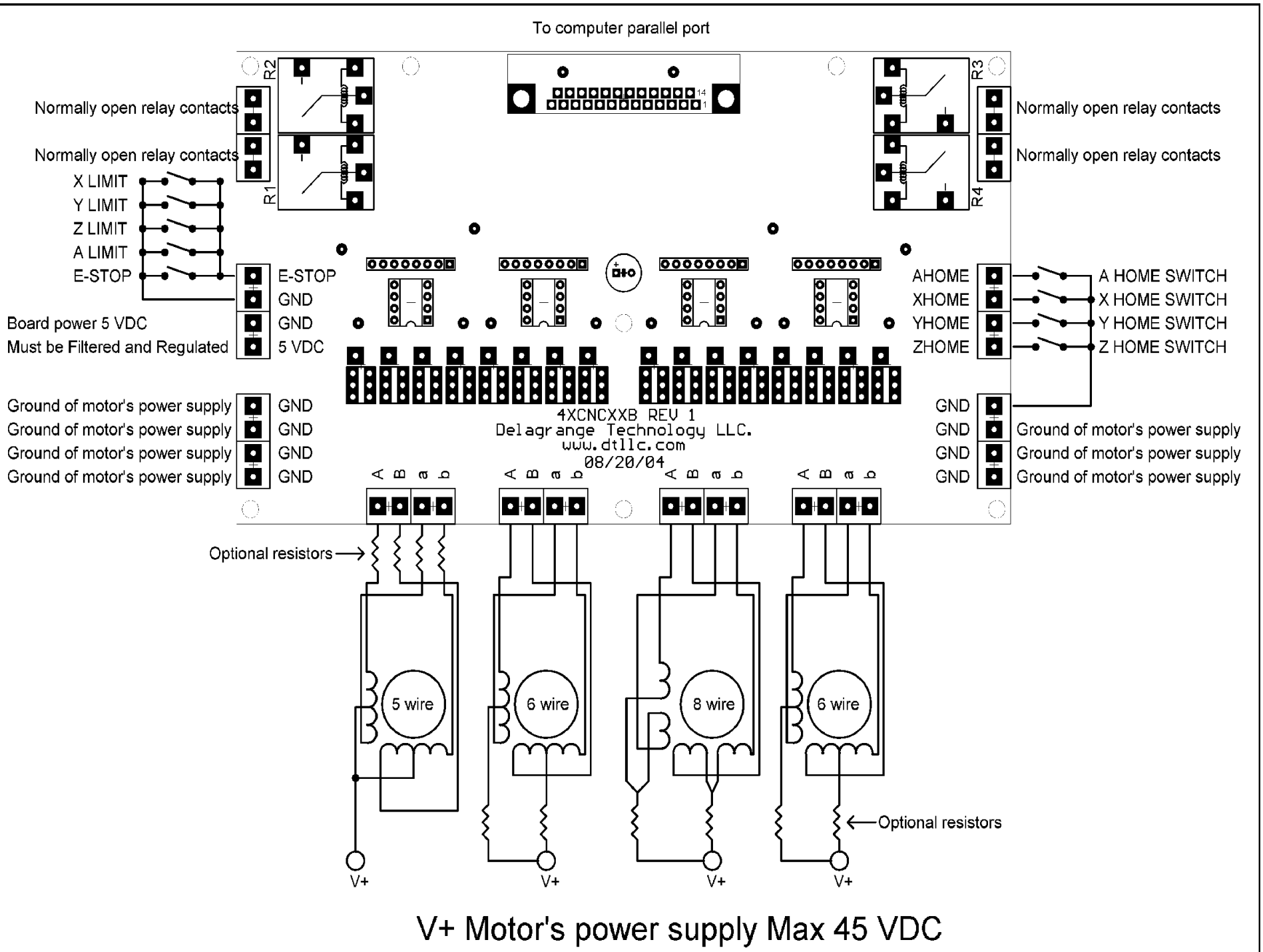
If this board is used to control dangerous or potentially harmful equipment, Delagrange Technology LLC will not be held responsible for any injuries that result. Use at your own risk.

!!WARNING!!

It is necessary that you run a cooling fan on this area of the board if you are using motors rated at 5 amps or more.



COOL THESE PARTS!!


To computer parallel port
R2
R1
R3
R4
Normally open relay contacts
Normally open relay contacts
Normally open relay contacts
Normally open relay contacts
X LIMIT
Y LIMIT
Z LIMIT
A LIMIT
E-STOP
E-STOP
GND
Board power 5 VDC
Must be Filtered and Regulated
GND
5 VDC
AHOME
XHOME
YHOME
ZHOME
A HOME SWITCH
X HOME SWITCH
Y HOME SWITCH
Z HOME SWITCH
Ground of motor's power supply
Ground of motor's power supply
Ground of motor's power supply
Ground of motor's power supply
GND
GND
GND
GND
GND
GND
GND
GND
Ground of motor's power supply
Ground of motor's power supply
Ground of motor's power supply
4XCNCXXB REV 1
Delagrange Technology LLC.
www.dtllc.com
08/20/04
A B a b
A B a b
A B a b
A B a b
Optional resistors
5 wire
6 wire
8 wire
6 wire
Optional resistors
V+
V+
V+
V+
V+ Motor's power supply Max 45 VDC

How to hookup the board as a L/R Drive to run at higher then motors rated voltage for better performance

Motors Rated Resistance = Motors Rated Voltage / Motors Rated Current

Motors Rated Current = Motors Rated Voltage / Motors Rated Resistance

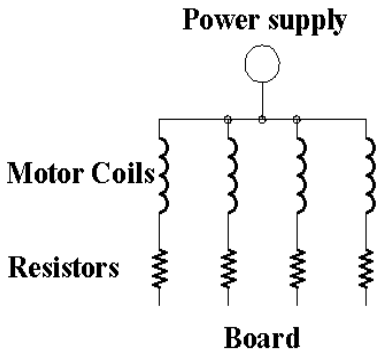
Motors Rated Voltage = Motors Rated Current x Motors Rated Resistance

Total Resistance = Voltage of Power supply / Motors Rated Current

Resistor's Value = Total Resistance - Motors Rated or Measured Resistance

Resistor's Voltage Drop = Motors Rated Current x Resistor's Value

Resistor's Power Rating = (Resistor's Voltage Drop / Motors Rated Current) x 2



DB25 Pinout

1 (relay 1) a high on this pin closes contacts

2 (x Direction) High / Low changes direction of x stepper

3 (x Step) number of pulses = number of steps for x stepper

4 (y Direction) High / Low changes direction of y stepper

5 (y Step) number of pulses = number of steps for y stepper

6 (z Direction) High / Low changes direction of z stepper

7 (z Step) number of pulses = number of steps for z stepper

8 (a Direction) High / Low changes direction of a stepper

9 (a Step) number of pulses = number of steps for a stepper

10 E-Stop/Limits when this pin is grounded software stops all motion can be configured for a high instead of low in the software.

11 (X home) home switch for the x axis can be low or high depends on software settings

12 (y home) home switch for the y axis can be low or high depends on software settings

13 (z home) home switch for the z axis can be low or high depends on software settings

14 (Relay 2) a high on this pin closes contacts

15 (a home) home switch for the a axis can be low or high depends on software settings

16 (Relay 3) Spindle a high on this pin closes contacts

17 (Relay 4) Drive enable a high on this pin closes contacts

18 Gnd

19 Gnd

20 Gnd

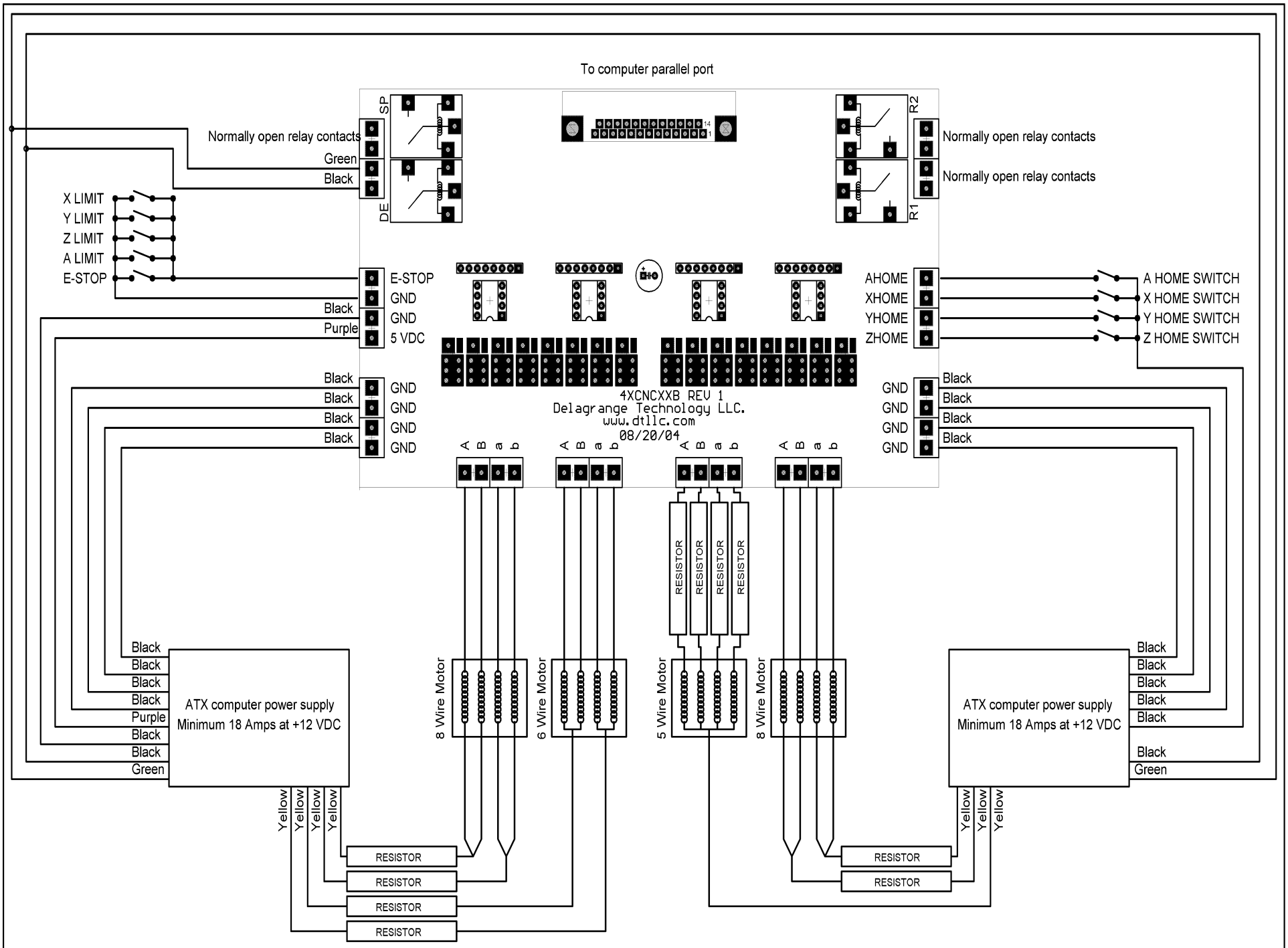
21 Gnd

22 Gnd

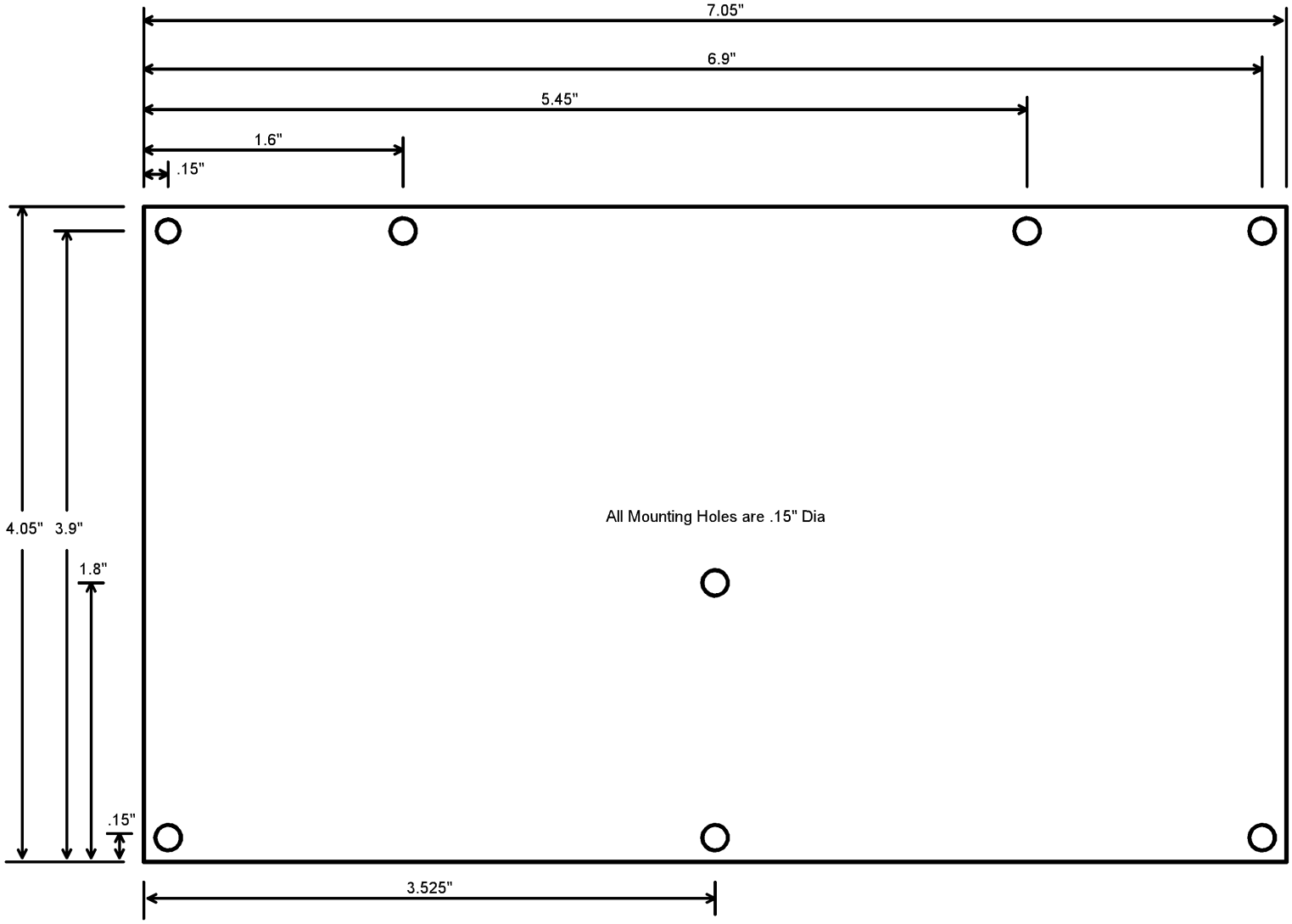
23 Gnd

24 Gnd

25 Gnd



Easy system hook-up of 8, 6, and 5 wire stepper motors using computer power supplies


7.05"
6.9"
5.45"
1.6"
.15"
4.05"
3.9"
1.8"
.15"
All Mounting Holes are .15" Dia
3.525"