About the Chart: V1.0 2/2/2021 17:36:43

Supply types have their connectors defined in columns

The dark outlines define discrete connectors for each supply type (column)

The colors match the color of connectors for that supply type

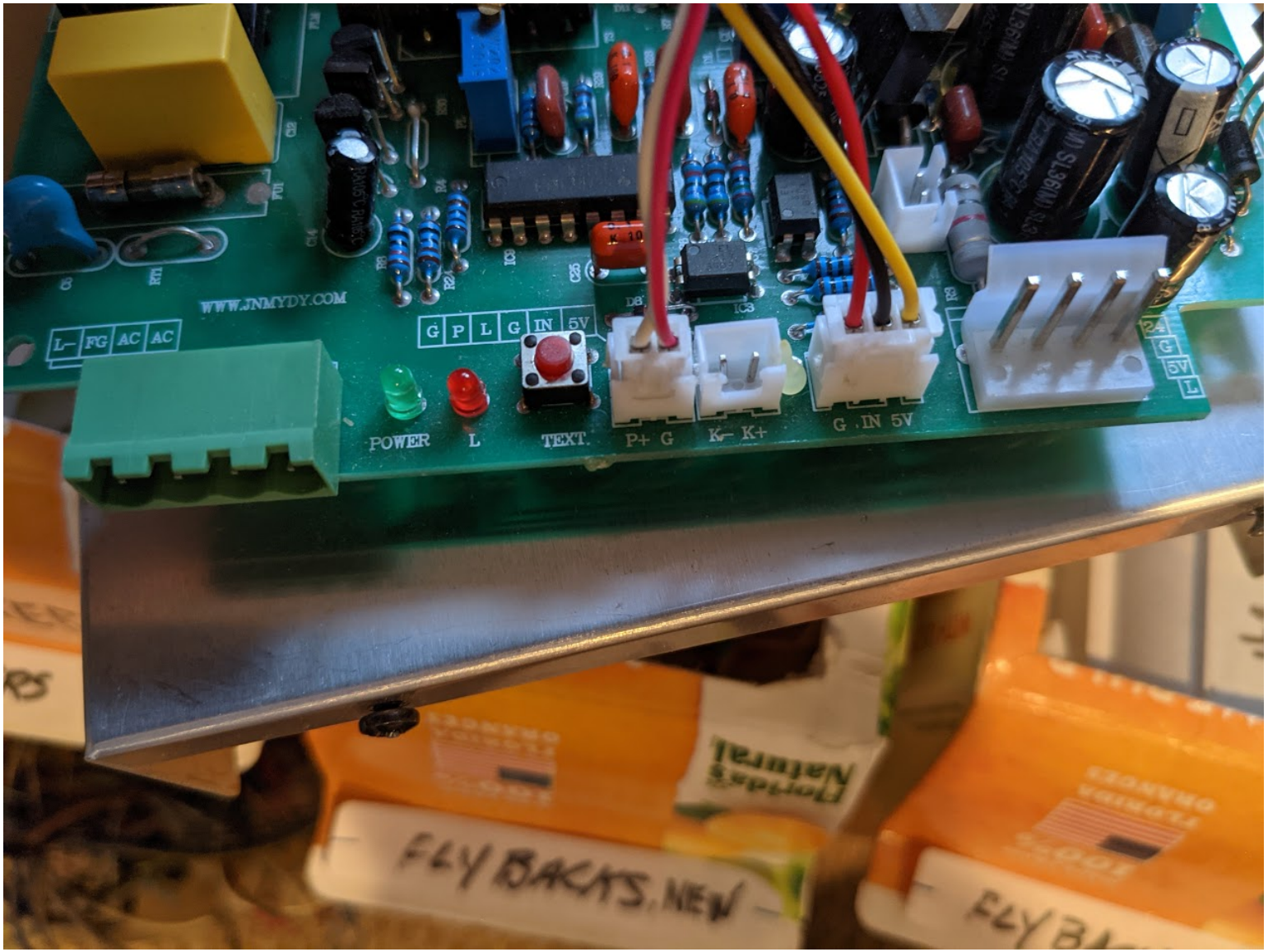
The order and position of the pins inside the discrete connector outlines may or may not be in their actual order

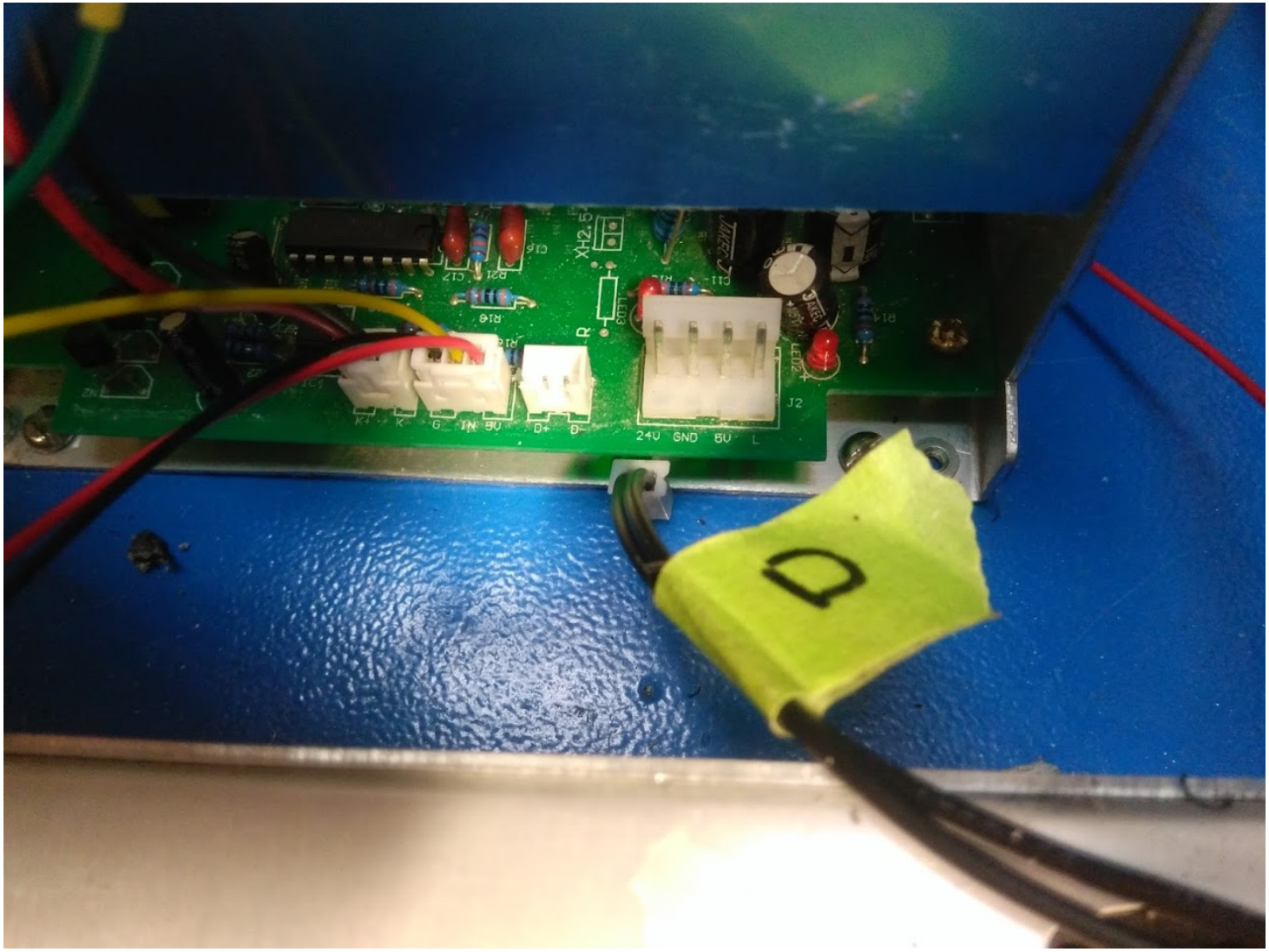
The colums left or right of a given column describe an equivalent signal and function

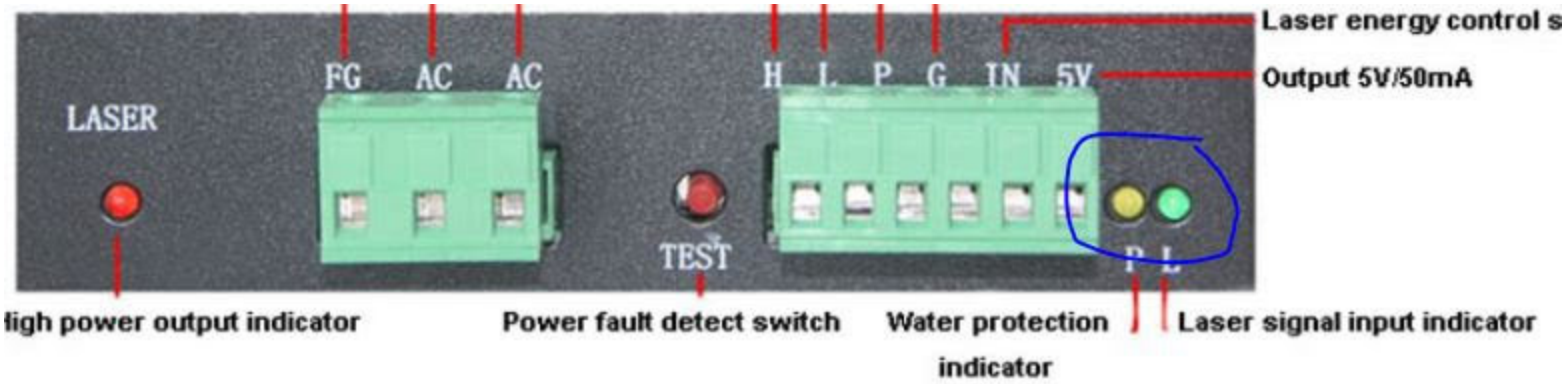
	Instructions for using the LPS Configuration Chart	
	How to use this chart for LPS conversions	**How to use this chart for verifying the control functions of your supply**
1	Find the column that best fits the signals on your current supply	Pick the column that best fits the signals on your supply
2	Find a column that best fits your new supply	Go to the "Verification" column and for each signal use the instructions to check its function
3	Take the wire from the current supply and connect it to the equivalent signal, function & pin of the new supply	

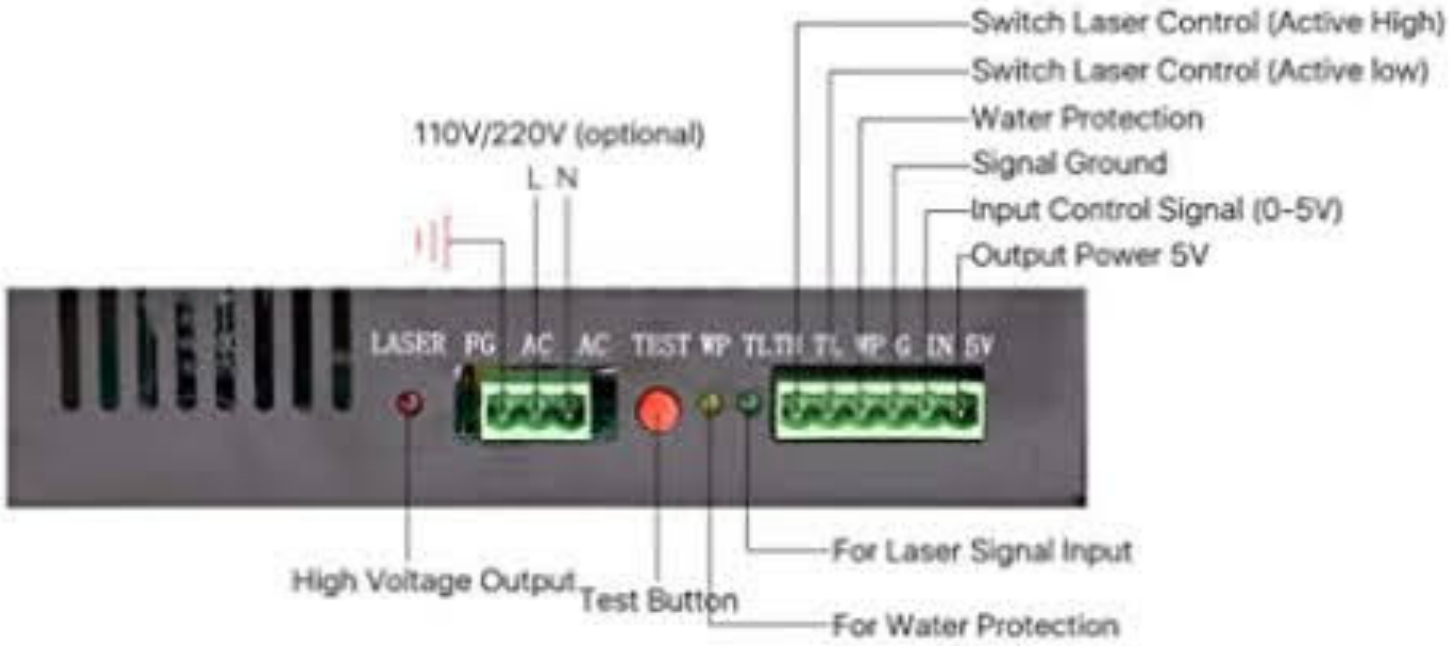
				Connector Configuraton for Various K40 Laser Power Supply Models						
			Tab >>>>>	A	B	C	D	E	F	G
Function	VERIFICATION [Note: 8]	Connection if Analog Panel Installed	Connection if digital panel	Standard	D variant		MYJG 150		HY-50	
Job control of laser power	0-5V proportional to Power setting from job	From controller L signal	From controller L signal	L	L			L [Note: 5]		L
DC power to controller	5V	5V to controller (NANO) [Note: 6]	5V to controller (NANO) [Note: 6]	5V	5V	Not supported	Not supported	5V	Not supported	5V
Ground refererence	0V	GND to controller	GND to controller	G	G			G		G
Motor power to controller	24VDC	24V to controller [Note: 6]	24V to controller [Note: 6]	24V	24V			24V		24V
DC power for panel	5V	To Pot [Note: 7]	CN7-5V	5V	5V	5V	5V	5V	5V	5V
Manual analog control of power	0-5V proportional to pot position. Full CW =Max = 5V	From Pot wiper	CN7-IN	IN	IN	IN	IN	IN	IN	IN
Ground reference	0V	To other side of pot	CN7-G	GND	GND	GND	GND [Note:2]	GND	GND	GND
						H				
Fires the laser if Laser Switch ON	0V when button pushed	To "Laser Test" Button	CN7-P+	K+	K+	L [Note: 3}	TH	L [Note:5]	T Note: 3	TL
GND reference	0V	From other pole of Laser Test Button	n/c	K-	K-	n/a	[Note:1]	n/a	Note: 1	Note:4
						n/a	TL Note:3	n/a	L Note: 3	
GND reference	0V	From other pole of "Laser Switch"	n/c	Gnd	D-	GND		GND		GND
Enables the laser	0V when switch "ON"	To "Laser Switch" [Note: 8]	n/c IN is not asserted if Laser Switch is off	P+	D+	P+	WP	P+	P	WP
Mains power from main swith	May be 120 or 220V Input, check Voltage Switch on side of supply	AC Mains Line	AC Mains Line	AC	AC	AC	AC	AC	AC	AC
		AC Mains Neutral	AC Mains Neutral	AC	AC	AC	AC	AC	AC	AC
Safety Ground	0V	Frame Ground	Frame Ground	FG	FG	FG	FG	FG	FG	FG
Returns cathode current to LPS	0V	To - side of laser current meter	To - side of laser current meter	L-	L-	L-		L-		L-

Chart Notes:	
1. Connect the other side of switch to 5V	6. 1A capacity
2. Insure LPS GND connected to controller GND	7. 50ma capacity
3. Connect the controller PWM signal here	8. Add interlocks in series with this circuit
4. Connect other side of switch to GND	9. With the (-) black lead of the DVM on a GND pin read the DVM voltage on the associated signal
5. The L pins are connected together internally	10. CN7 is the connector on digital panel


WWW.JNMYDY.COM
L FG AC AC
G P L G IN 5V
POWER
L
TEXT
P+ G
K- K+
G IN 5V
G
5V
L
FLY BACKS. NEW


XH2.5
J2
24V GND 5V L
K+ K- G IN 5V D+ D-


FG
AC
AC
H
L
P
G
IN
5V
LASER
TEST
Laser energy control s
Output 5V/50mA
ligh power output indicator
Power fault detect switch
Water protection indicator
Laser signal input indicator


Switch Laser Control (Active High)
Switch Laser Control (Active low)
Water Protection
Signal Ground
Input Control Signal (0-5V)
Output Power 5V
110V/220V (optional)
L N
LASER PG AC AC TEST WP TL TL WP G IN 5V
High Voltage Output
Test Button
For Laser Signal Input
For Water Protection

Test LPS:
Connect red wires as shown below
Plug in P3 wired to mains and safety ground

TURN POWER ON!

Laser should fire if either:
1. Ground L on P1
2. Ground L on P2

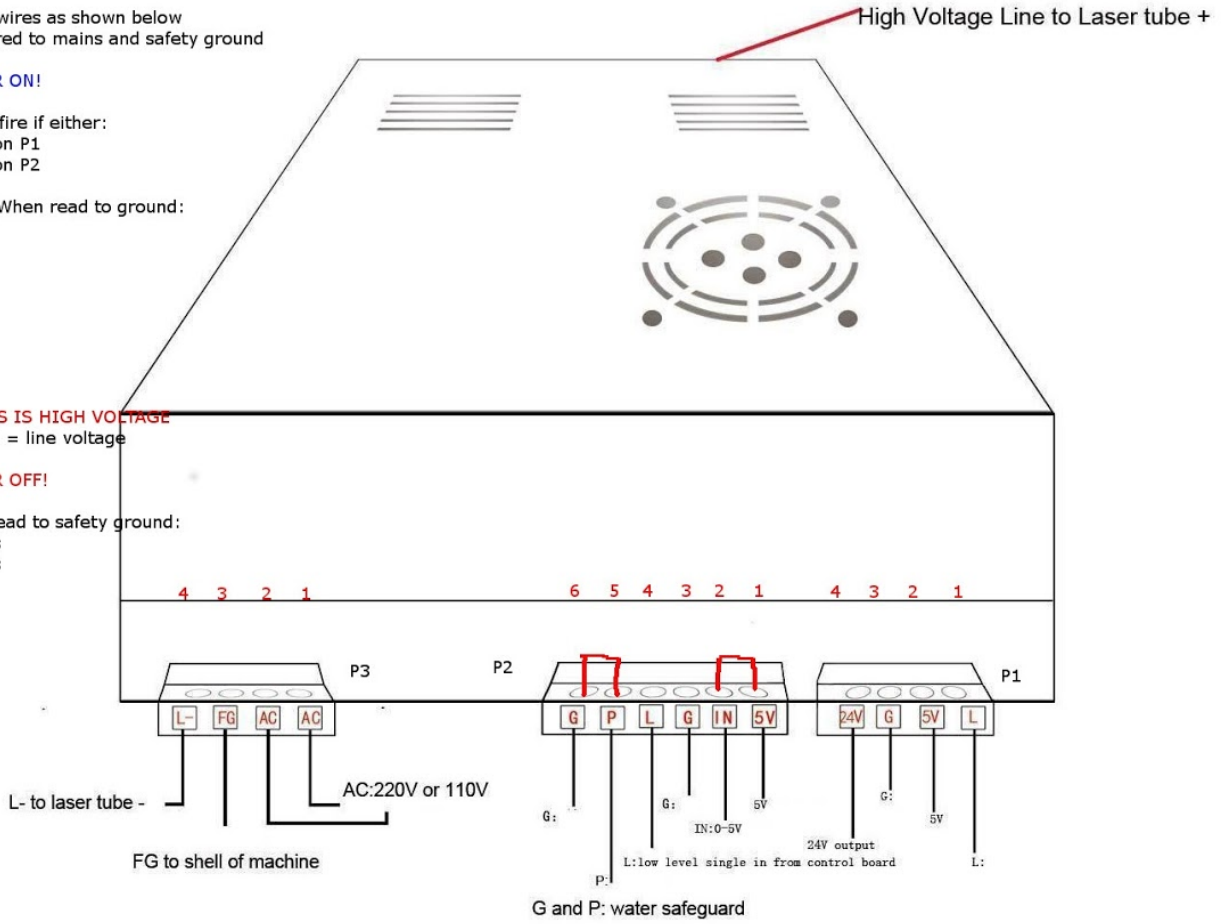
DC Voltages When read to ground:
P1-2: 5vdc
P1-3: 0vdc
P1-4: 24vdc

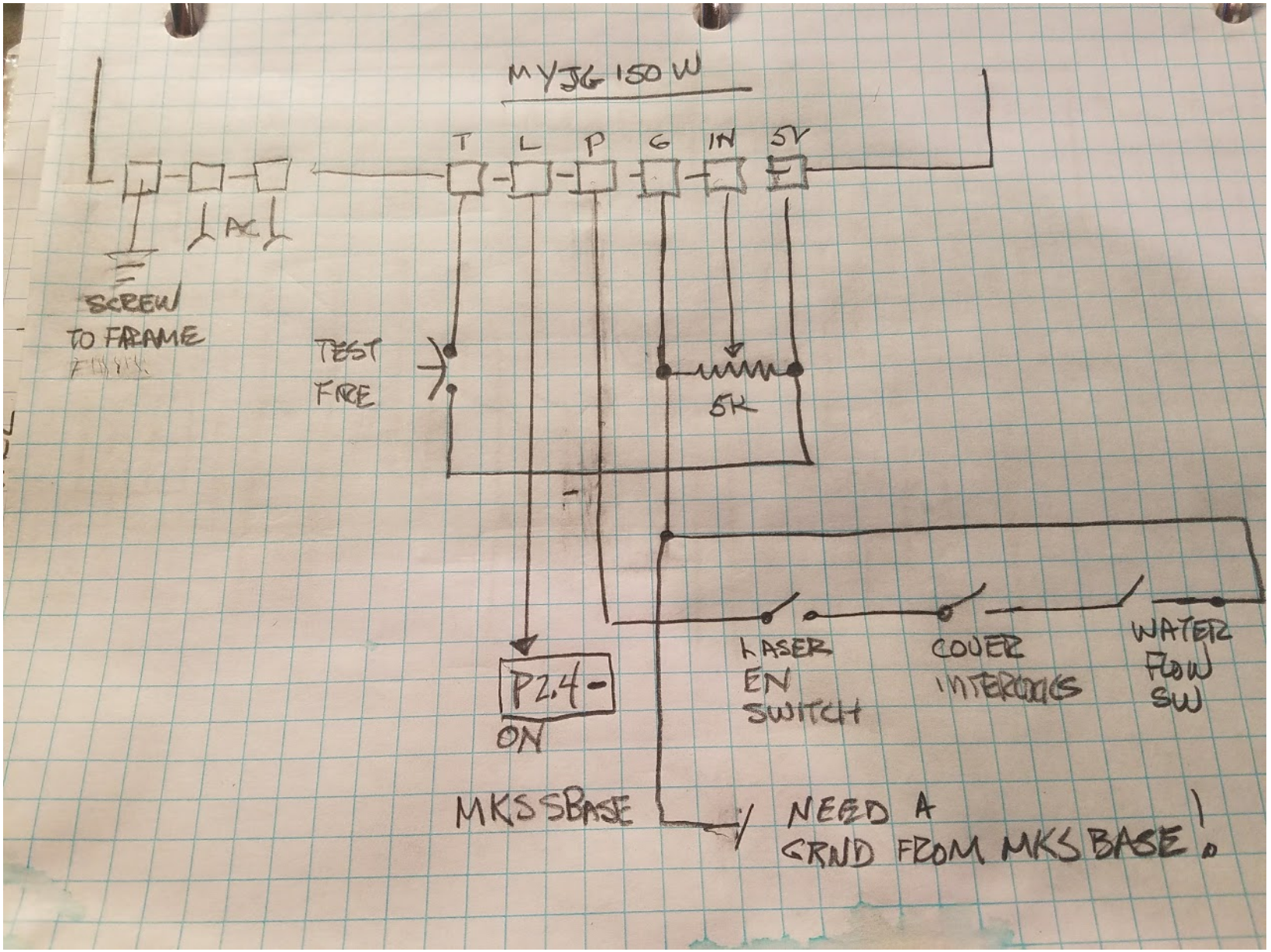
P2-1: 5vdc
P2-3: 0vdc
P2-5: 0vdc
P2-6: 0vdc

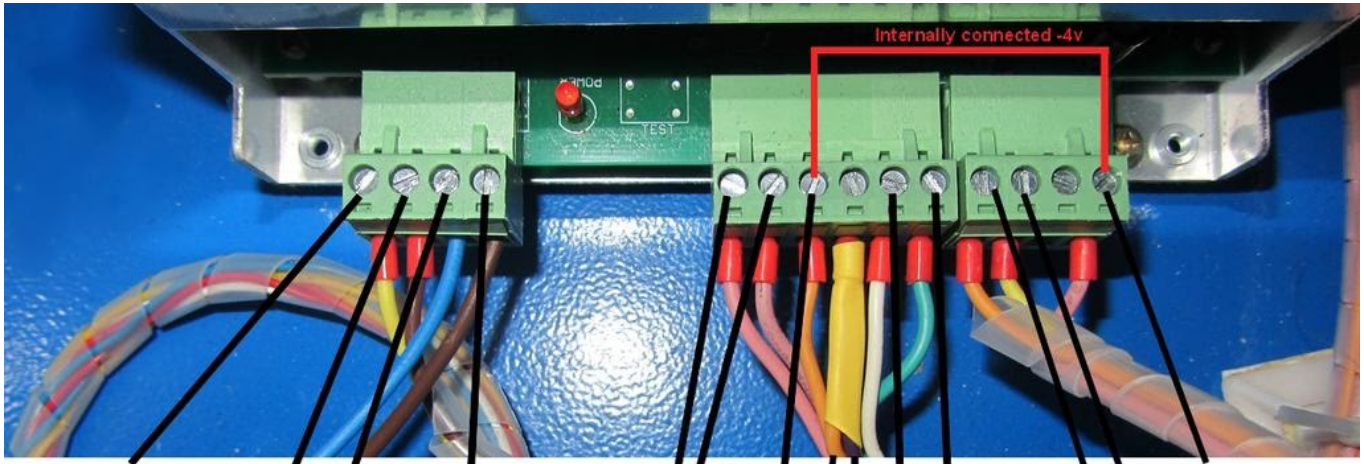
DANGER THIS IS HIGH VOLTAGE
P3-1 to P3-2: = line voltage

TURN POWER OFF!

Read ohms read to safety ground:
P3-3: 0 ohms
P3-4: 0 ohms




MYJG 150W
T
L
P
G
IN
5V
AC
SCREW
TO FRAME
TEST
FIRE
5K
P2.4-
ON
MKSSBASE
LASER
EN
SWITCH
COVER
INTERLOCKS
WATER
FLOW
SW
NEED A
GRND FROM MKS BASE!



Laser- (connected to output end of laser tube via mA meter on front panel)

Ground (ground on chassis then to 3rd pin on mains connector)

Neutral (To power switch on front panel then to N side of mains power connector)

Live (To power switch on front panel, the fuse on chassis, then to L side of mains power connector)

Laser Switch (To front panel laser switch, also good for lid sensor, water flow sensor etc)

TTL -4v active low (To test fire button on front panel, 0v when pressed)

GND Orange (To test fire button on front panel)

GND purple (To one side of laser power pot)

IN (To central "wiper" pin on pot)

5V (To one side of laser power pot)

24v (To 24v on Moshi board)

Ground (To G on Moshi board)

L -4v (To Laser on Moshi board. 0v when fired)

Please note that the Neutral/Live wires were both orignally Red from the power supply to the front panel switch and then blue to the power connector on the rear. I tapped into that mains feed to power some LEDs so thats why the wires are now Blue/Brown

The white wire or **"IN" above is controlling the laser power from the potentiometer. **This is your PWM**