

Engine Configuration... Ports & Pins

Port Setup and Axis Selection | Input Emulation | Input Signals | Input Pins | Output Signals | Output Pins | Encoder Pins

Multiple signals may be assigned to particular pins in some cases. (ex. Limit and home)

- | | | | |
|--|-------------------------------------|--|--|
| <input type="checkbox"/> Limit X ++ | <input type="checkbox"/> Limit X -- | <input type="checkbox"/> Home X | <input type="checkbox"/> Encoder #1 (2 Pins req.) |
| <input type="checkbox"/> Limit Y ++ | <input type="checkbox"/> Limit Y -- | <input type="checkbox"/> Home Y | <input type="checkbox"/> Encoder #2 Per encoder |
| <input type="checkbox"/> Limit Z ++ | <input type="checkbox"/> Limit Z -- | <input type="checkbox"/> Home Z | <input type="checkbox"/> Encoder #3 |
| <input type="checkbox"/> Limit A ++ | <input type="checkbox"/> Limit A -- | <input type="checkbox"/> Home A | <input type="checkbox"/> Torch Height Control (2 Pins req.) |
| <input type="checkbox"/> Limit B ++ | <input type="checkbox"/> Limit B -- | <input type="checkbox"/> Home B | |
| <input type="checkbox"/> Limit C ++ | <input type="checkbox"/> Limit C -- | <input type="checkbox"/> Home C | |
| <input type="checkbox"/> Digitize | <input type="checkbox"/> Input 1 | <input type="checkbox"/> OEM Trigger 1 | |
| <input type="checkbox"/> Index Pulse | <input type="checkbox"/> Input 2 | <input type="checkbox"/> OEM Trigger 2 | |
| <input type="checkbox"/> Timing Pulse | <input type="checkbox"/> Input 3 | <input type="checkbox"/> OEM Trigger 3 | |
| <input type="checkbox"/> Limits OverRide | <input type="checkbox"/> Input 4 | <input type="checkbox"/> OEM Trigger 4 | |
| | | <input type="checkbox"/> OEM Trigger 5 | |
| | | <input type="checkbox"/> OEM Trigger 6 | |
- ☒ Emergency Stop (Mandatory)

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Note: Signals not selected in the Input Signals tab are greyed out.

Active Low	Port #	Pin #	Active Low	Port #	Pin #	Active Low	Port #	Pin #
<input type="checkbox"/> Limits OverRide	1	15	<input checked="" type="checkbox"/> Home X	1	13	<input type="checkbox"/> Emergency Stop	1	15
<input checked="" type="checkbox"/> Limit X Plus	1	17	<input checked="" type="checkbox"/> Home Y	1	12	<input checked="" type="checkbox"/> OEM Trigger1	1	12
<input checked="" type="checkbox"/> Limit X Minus	1	17	<input checked="" type="checkbox"/> Home Z	1	11	<input type="checkbox"/> OEM Trigger 2	1	12
<input checked="" type="checkbox"/> Limit Y Plus	1	17	<input type="checkbox"/> Home A	1	15	<input type="checkbox"/> OEM Trigger 3	1	10
<input checked="" type="checkbox"/> Limit Y Minus	1	17	<input type="checkbox"/> Home B	1	15	<input type="checkbox"/> OEM Trigger4	1	10
<input checked="" type="checkbox"/> Limit Z Plus	1	17	<input type="checkbox"/> Home C	1	15	<input type="checkbox"/> OEM Trigger 5	1	10
<input checked="" type="checkbox"/> Limit Z Minus	1	17	<input type="checkbox"/> Input #1	1	15	<input type="checkbox"/> OEM Trigger 5	1	10
<input type="checkbox"/> Limit A Plus	1	0	<input type="checkbox"/> Input #2	1	15	<input type="checkbox"/> Torch height On	1	10
<input type="checkbox"/> Limit A Minus	1	0	<input type="checkbox"/> Input #3	1	15	<input type="checkbox"/> Torch up	1	11
<input type="checkbox"/> Limit B Plus	1	0	<input type="checkbox"/> Input #4	1	15	<input type="checkbox"/> Torch Down	1	12
<input type="checkbox"/> Limit B Minus	1	0	<input type="checkbox"/> Index	1	10			
<input type="checkbox"/> Limit C Plus	1	0	<input type="checkbox"/> Timing Mark	1	10			
<input type="checkbox"/> Limit C Minus	1	0						
<input type="checkbox"/> Digitize/ Skip	1	10						

Checking an "Active Low" box indicates the signal is active when low. (0VDC)

Printer Ports

Enter the Port and Pin number of your signals
Pin numbers must be 10,11,12,13, and 15 only!!
Port numbers must be 1 or 2 only!!!

USB

If using USB Mode , Enter the Input number in the Pin# data box. Port numbers will be ignored.

OK

Cancelar

Aplicar

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Check box to indicate signal will be used

☐ Digitize Trigger
☐ Enable Line 1
☐ Enable Line 2
☐ Enable Line 3
☐ Enable Line 4
☐ Enable Line 5
☐ Enable Line 6
☐ Charge Pump Safety Line
☐ Charge Pump Safety #2

Relay activation signals
☒ Output #1
☐ Output #2
☐ Output #3
☐ Output #4
☐ Output #5
☐ Output #6

Engine Configuration... Ports & Pins

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Note: Signals not selected in the "Output Signals" tab are greyed out.

Active Low	Port #	Pin #	Active Low	Port#	Pin#	Active Low	Port#	Pin#
<input checked="" type="checkbox"/> Enable line 1	1	14	<input type="checkbox"/> X Axis Step	1	2	<input type="checkbox"/> Digitize Trigger	0	0
<input type="checkbox"/> Enable line 2	0	0	<input type="checkbox"/> X Axis Direction	1	3	Charge Pump Safety	1	16
<input type="checkbox"/> Enable line 3	0	0	<input type="checkbox"/> Y Axis Step	1	6	Charge Pump #2	2	17
<input type="checkbox"/> Enable line 4	0	0	<input type="checkbox"/> Y Axis Direction	1	7			
<input type="checkbox"/> Enable line 5	0	0	<input type="checkbox"/> Z Axis Step	1	8			
<input type="checkbox"/> Enable line 6	0	0	<input type="checkbox"/> Z Axis Direction	1	9			
<input type="checkbox"/> Output #1	1	1	<input type="checkbox"/> A Axis Step	1	0			
<input type="checkbox"/> Output #2	1	14	<input type="checkbox"/> A Axis Direction	1	0			
<input type="checkbox"/> Output #3	1	16	<input type="checkbox"/> B Axis Step	0	0			
<input type="checkbox"/> Output #4	1	1	<input type="checkbox"/> B Axis Direction	0	0			
<input type="checkbox"/> Output #5	1	14	<input type="checkbox"/> C Axis Step	0	0			
<input type="checkbox"/> Output #6	1	16	<input type="checkbox"/> C Axis Direction	0	0			
<input type="checkbox"/> Spindle Step	0	0						
<input type="checkbox"/> Spindle Dir	0	0						

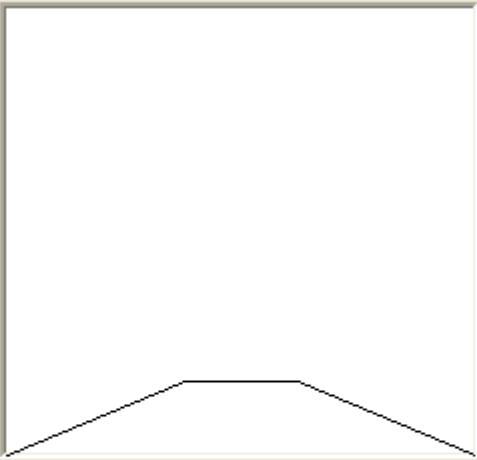
Checking an "Active Low" box indicates the signal is active when low. (OVDC)

Printer Ports
Pin numbers must be one of 1,2,3,4,5,6,7,8,9,14,16,17

USB
If using USB Mode , Enter the Input number in the Pin# data box. Port numbers will be ignored.

Motors Setup Velocity/Acceleration

Current Units = MM's



Velocity
70.125
Units/Sec

Accel
948.75
Units/Sec^2

Spindle

X-Axis

Y-Axis

Z-Axis

A / U -Axis

B / V -Axis

C / W -Axis

Steps per Unit
66.666

Current Axis = X

SAVE AXIS TUNING

Use sliders to adjust for optimum Maximum speed performance
During Tuning use the UP and DOWN arrows keys to move axis.

Minimum Pulse Width 10 uSec (Danger of Lockup)

Direction PreChange 0 uSec (If set greater than 15)

OK Cancel

Logic Configuration

G20,G21 Control

☐ Lock DRD's to setup units

Z - Inhibit

☐ Z - Inhibit On

Max Depth 0 Units

☐ Persistent

Tool Change

☐ Ignore Tool Change

☒ Stop Spindle, Wait for Cycle Start.

☐ AutoTool Changer

PwMBase Freq. 5

☐ Laser Mode, freq by Feedrate %

☐ Use Spindle Feedback for Feeds

☐ Persistent DRD's

☒ Disable Gouge/Concavity Checks

Input Debounce Interval: 100

0

Index Debounce

Angular Properties

☐ A-Axis is Angular

☐ B-Axis is Angular

☐ C-Axis is Angular

Unchecked for Linear

Pgm End or M30 or Rewind

☐ Turn off all outputs

☐ E-Stop the system

☒ Perform G92.1

☐ Remove Tool Offset

☐ Radius Comp Off

☐ Plasma Mode

☐ No Angular Discrimination

☐ FeedOverride Persist

☐ Allow Wave Files

☐ Allow Speech

M01 Control

☒ Stop on M1 Command

Program Safety

☐ Program Safety Lockout

This disables program translation while the External Activation #1 input is activated.

PWM Pulley Control

Current Pulley Set	Max Speed	Minimum Speed
<input type="radio"/> Pulley Ratio #1	1000	0 %
<input type="radio"/> Pulley Ratio #2	2000	
<input type="radio"/> Pulley Ratio #3	80000	
<input checked="" type="radio"/> Pulley Ratio #4	25000	

RPM

☐ G04 Dwell param in MilliSeconds instead of Seconds

Windows\Notepad.exe Browse Editor

Serial Output

ComPort # 1 BaudRate 9600

☐ 7-Bit 2 stop bits

OK

Initial State Settings

Modal States

Motion Mode

☒ Constant Velocity

☐ Exact Stop

Distance Mode

☒ Absolute

☐ Inc

IJ Mode

☐ Absolute

☒ Inc

Active Plane of Movement

☒ X-Y

☐ Y-Z

☐ X-Z

Backlash

☒ Off

☐ On

Initialization String

G80

☒ Use Init String on ALL "Resets"

☐ Persistant Jog Mode.

☐ Persistant Offsets

☐ Enhanced Pulsing

☐ Optional Offset Save

☒ Auto Screen Enlarge

☒ Copy G54 from G59.253 on startup

Jog Increments in Cycle Mode

Position 1

0.0001

0.001

0.01

0.1

999

0.0001

0.001

0.01

0.1

Use 999 to indicate a Continuous Jog selection.

0.0001

0.001

0.01

0.1

Position 10

1

Reference Switch Loc.

X

0

Y

0

Z

0

A

0

B

0

C

0

OK