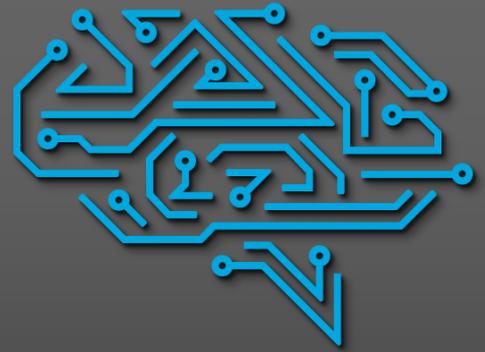


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C N C P R O M

User manual Mach3

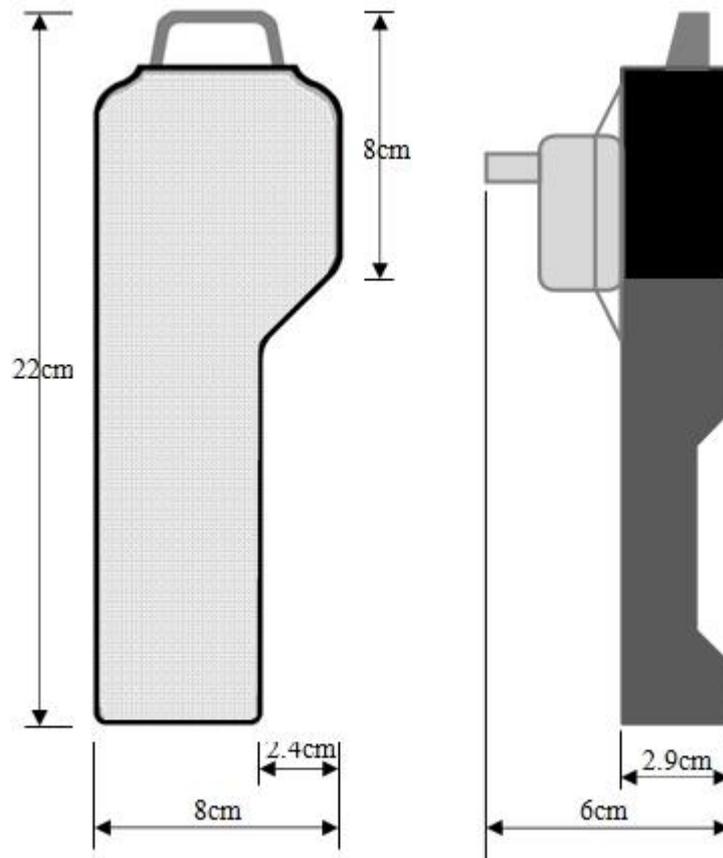




General Connection Diagram

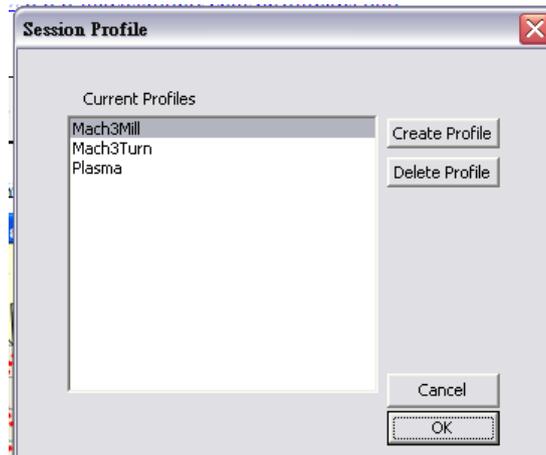


Dimension

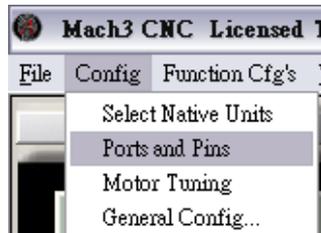


Mach3 Parameters Setting

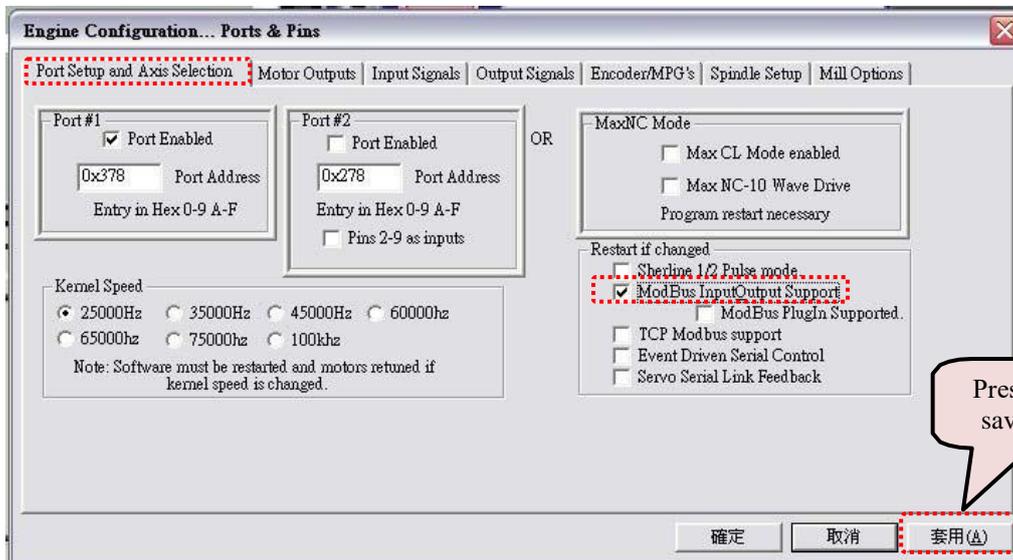
1. Select “Mach3Mill”



2. Select “Ports and Pins” under “Config”



3. Set the **ModBus InputOutput Support** under the **Port Setup and Axis Selection**.



4. Select the “Setup Serial ModBus Control” under “Function Cfg’s”.

ModBus Status & Control

Comm Port: [1] Status: No error [Test ModBus]

Port Num: [1] Restart Mach3 if change is made to protocol

Baud Rate: [19200] [8-1-N] Use RTS for transmit (R5485) Timeout: [50] ms

AutoPolling Option

On	Slave Addr	Start Reg	# Registers	Input	Output
<input checked="" type="checkbox"/>	[1]	[1150]	[7]	<input checked="" type="radio"/> Input	Mapped to Inputs pin 0 - 63
<input type="checkbox"/>	[0]	[0]	[0]	<input type="radio"/> Input	Mapped to Inputs pin 64-127
<input type="checkbox"/>	[1]	[1040]	[2]	<input type="radio"/> Holding	Mapped to outputs 0 - 63
<input type="checkbox"/>	[0]	[0]	[0]	<input type="radio"/> Holding	Mapped to outputs 64-127

Update Frequency [20] Hz

MODIO Device Support

MODIO ModBus Card Config

Auto bit timing in effect 0 mode MPG #1 MPG #2

Special Control

Use each input word as [16] bits of Bitmapped Input instead of mapped inputMax of 64 bits.

Map outputs 1-64 as [16] bits of Bitpacked output instead of mapped outputMax of 64 bits.

OEM Control code incoming on Register # [0] of the mapped IO from pins 64-127

[OK] [Apply]

Annotations:

- Select the ComPort Number
- Enter “19200”
- Put “Tick”
- Enter “1”
- Enter “1150”
- Put “Tick”
- Do not use
- Select “MPG #1”
- Enter “7”
- Select “Input”
- Select “8-1-N”
- No error: Handwheel Connected with the PC properly
- Receive Timeout: Check the connection between them
- CRC Error: Check the following setting
- Do not use
- Press “OK” to save and exit

5. Select “Ports and Pins” under “Config”

Ports and Pins

Encoder/MPG's

Signal	Enabled	A - Pin #	B - Pin #	B - Port #	B - Pin #	Counts/Unit	Velocity
Encoder1	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000
Encoder2	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000
Encoder3	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000
Encoder4	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000
MPG #1	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	360.000000
MPG #2	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000
MPG #3	<input checked="" type="checkbox"/>	0	0	0	0	1.000000	100.000000

確定 取消 套用 (A)

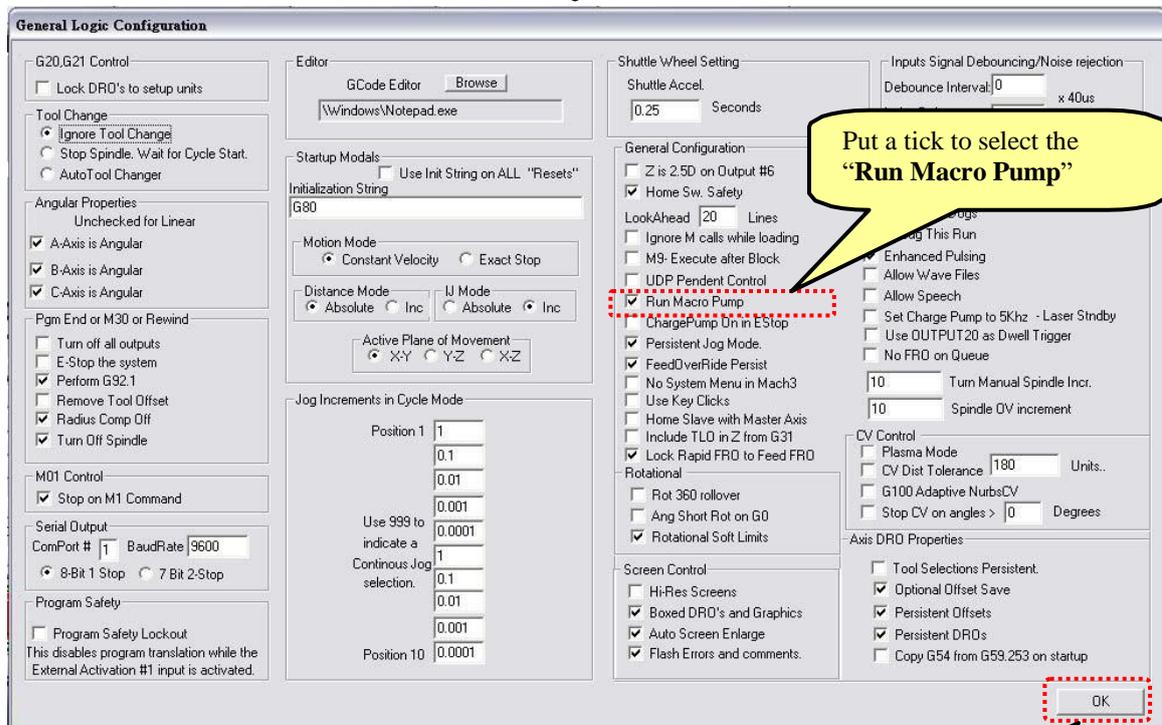
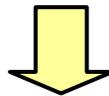
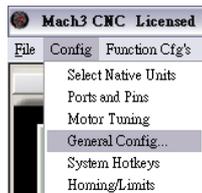
Annotations:

- Counts/Unit is corresponded to the Motion Step of the handwheel. If the value is set to 1, the Motion Step is 0.01. The selected axis will be moved 0.01 when you turn one step of the handwheel’s knob. If the value is set to 2, the Motion Step is 0.01. The selected axis will be moved 0.01 when you turn two steps of the handwheel’s knob.
- Put “Tick”
- The Value of the velocity increases, the motion speed of each step is decrease.
- Press “OK” to save and exit

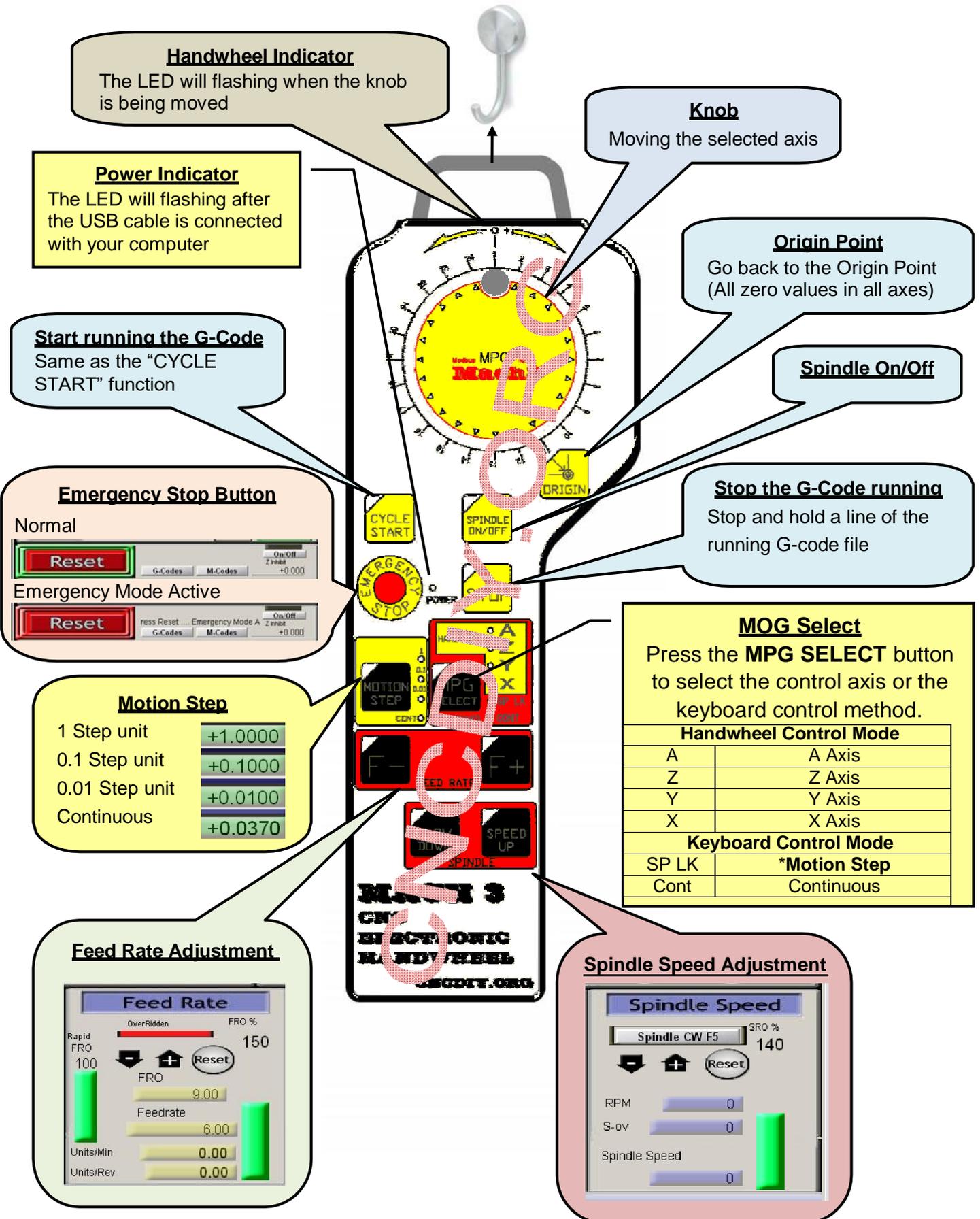
6. Put the “Macropump.m1s “ into the C:\Mach3\macros\Mach3Mill



7. Select the “General Config” under “Config”.



Function Key Descriptions



Handwheel Indicator

The LED will flashing when the knob is being moved

Knob

Moving the selected axis

Power Indicator

The LED will flashing after the USB cable is connected with your computer

Origin Point

Go back to the Origin Point (All zero values in all axes)

Start running the G-Code

Same as the "CYCLE START" function

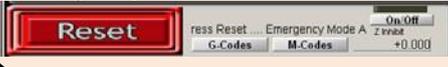
Spindle On/Off

Emergency Stop Button

Normal



Emergency Mode Active



Stop the G-Code running

Stop and hold a line of the running G-code file

Motion Step

1 Step unit	+1.0000
0.1 Step unit	+0.1000
0.01 Step unit	+0.0100
Continuous	+0.0370

MOG Select

Press the **MPG SELECT** button to select the control axis or the keyboard control method.

Handwheel Control Mode

A	A Axis
Z	Z Axis
Y	Y Axis
X	X Axis

Keyboard Control Mode

SP LK	*Motion Step
Cont	Continuous

Feed Rate Adjustment



Spindle Speed Adjustment

