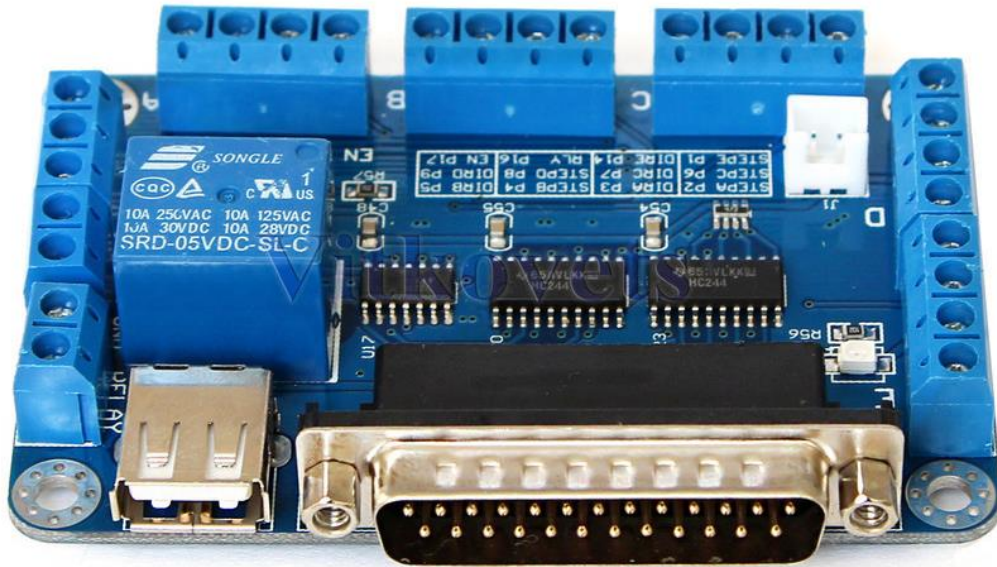


# Breakout board V5 user manual



INFO

## **Instruction:**

- It can most connection 5pcs driver and control 5pcs motor in the same time
- It is with 5-wire limit switch to insure our safty movement
- It is with relay port to contro the cnc spindle
- Working voltage is 5VDC and support with MACH3,EMC2,KCAM4 software

# DB25 parallel port definition

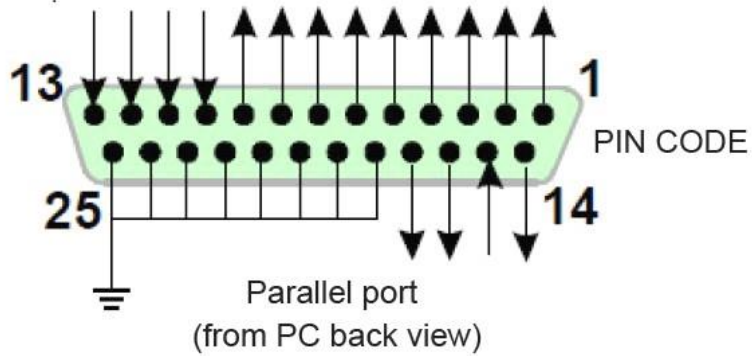


Fig 5.1

## Parallel port output PIN definition:

PIN1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8	PIN9	PIN10
EN	STEPX	DIRX	STEPLY	DIRY	STEPZ	DIRZ	STEPA	DIRA	IN1
All axis enable	X axis PUL	X axis DIR	Y axis PUL	Y axis DIR	Z axis PUL	Z axis DIR	A axis PUL	A axis DIR	Limit 1

PIN11	PIN12	PIN13	PIN14	PIN15	PIN16	PIN17	PIN18-25
IN2	IN3	IN4	RELAY	IN5	STEPB	DIRB	GND
Limit 2	Limit 3	Limit 4	RELAY	Limit 5	B axis PUL	B axis DIR	GND

# Mach3 software setting :

## MACH open :



Fig 1

Open MACH3 software, select mach3MILL then click OK

INFO

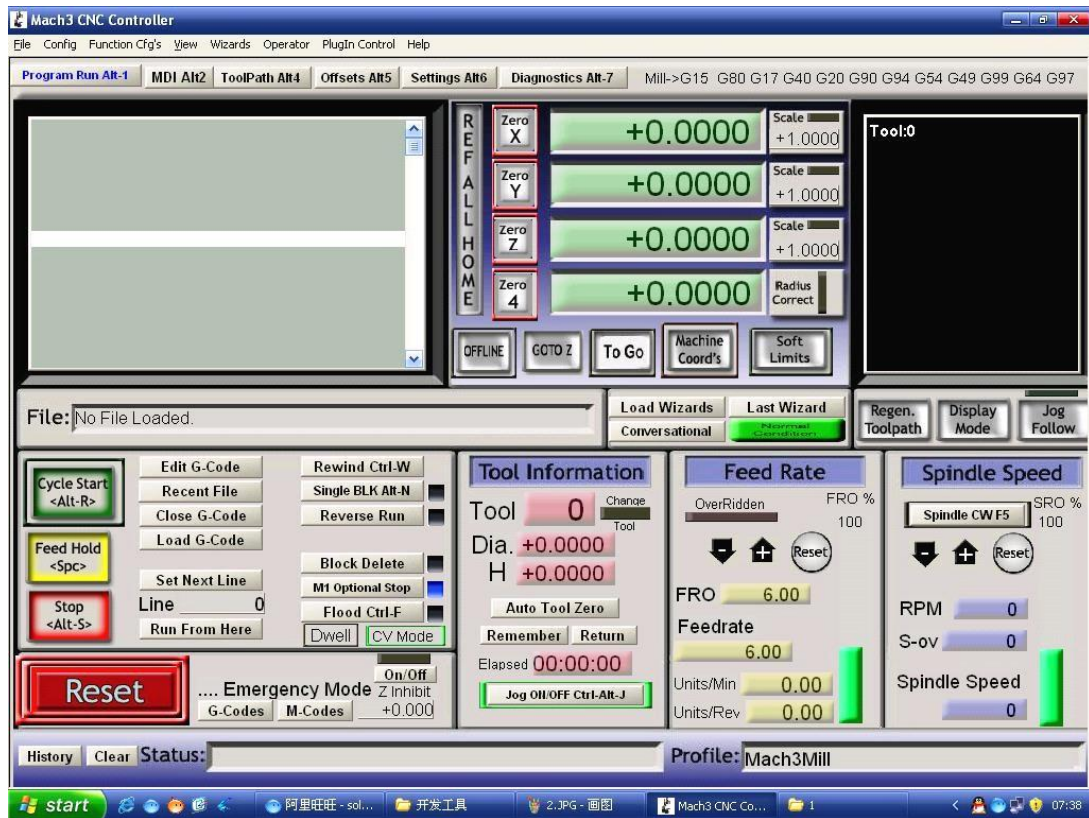


Fig 2 MACH3 interface

## Driver MACH3 setting :

See Fig 3, Open the PORT & PINS menu of config menu

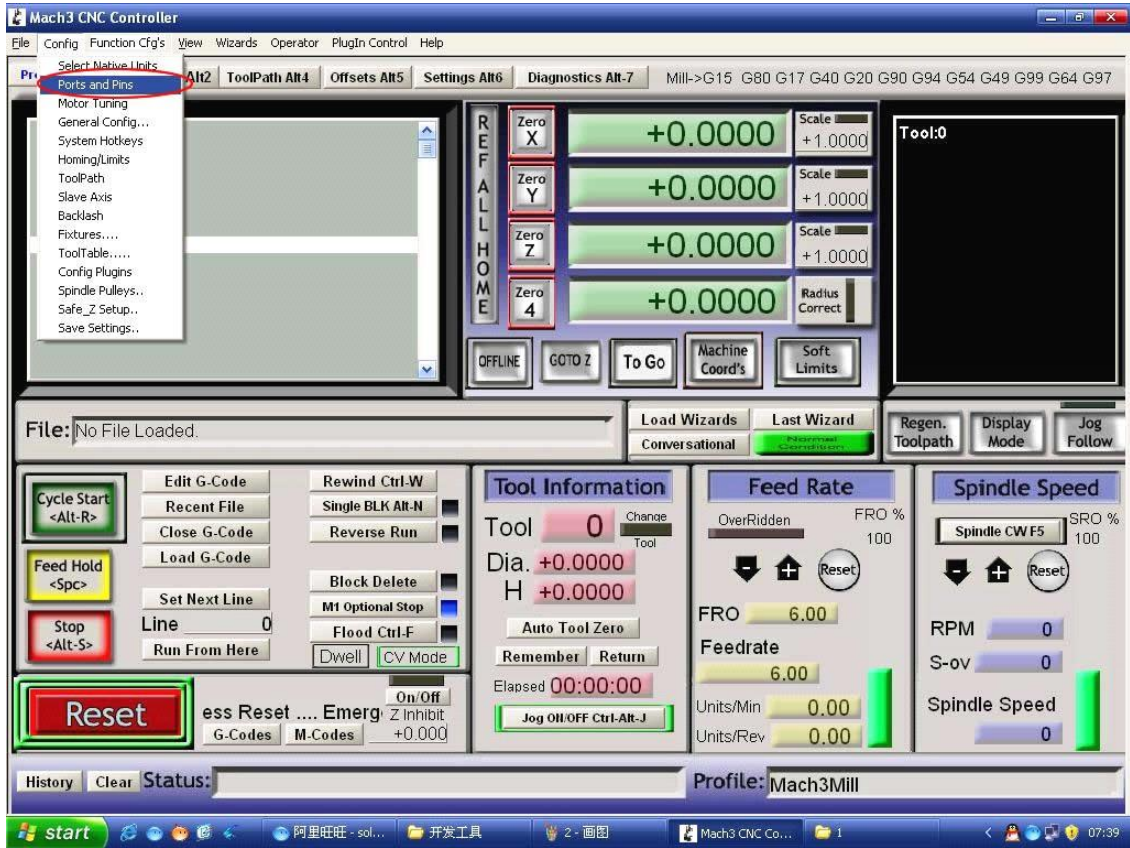


Fig 3

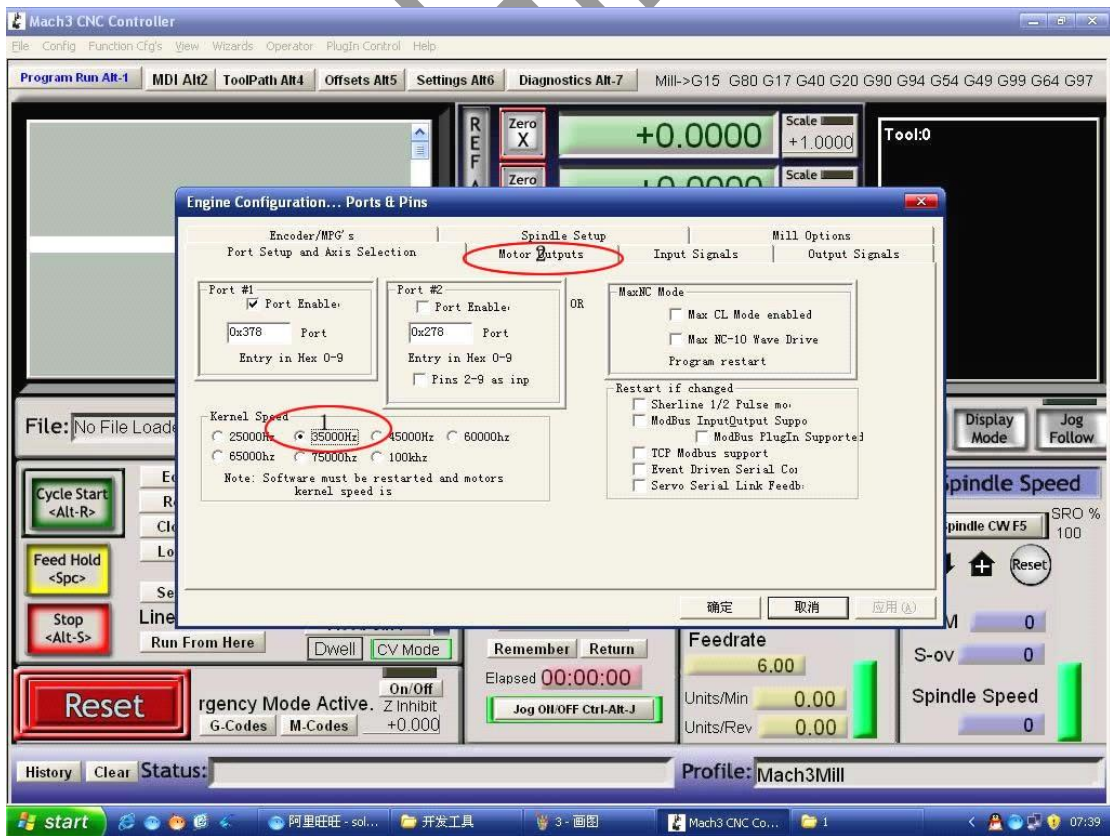


Fig 4

Set up the circle 1 of Fig4 for the frequency which influence the stepper motor speed, then set up the circle 2 as below Fig 5 for PIN

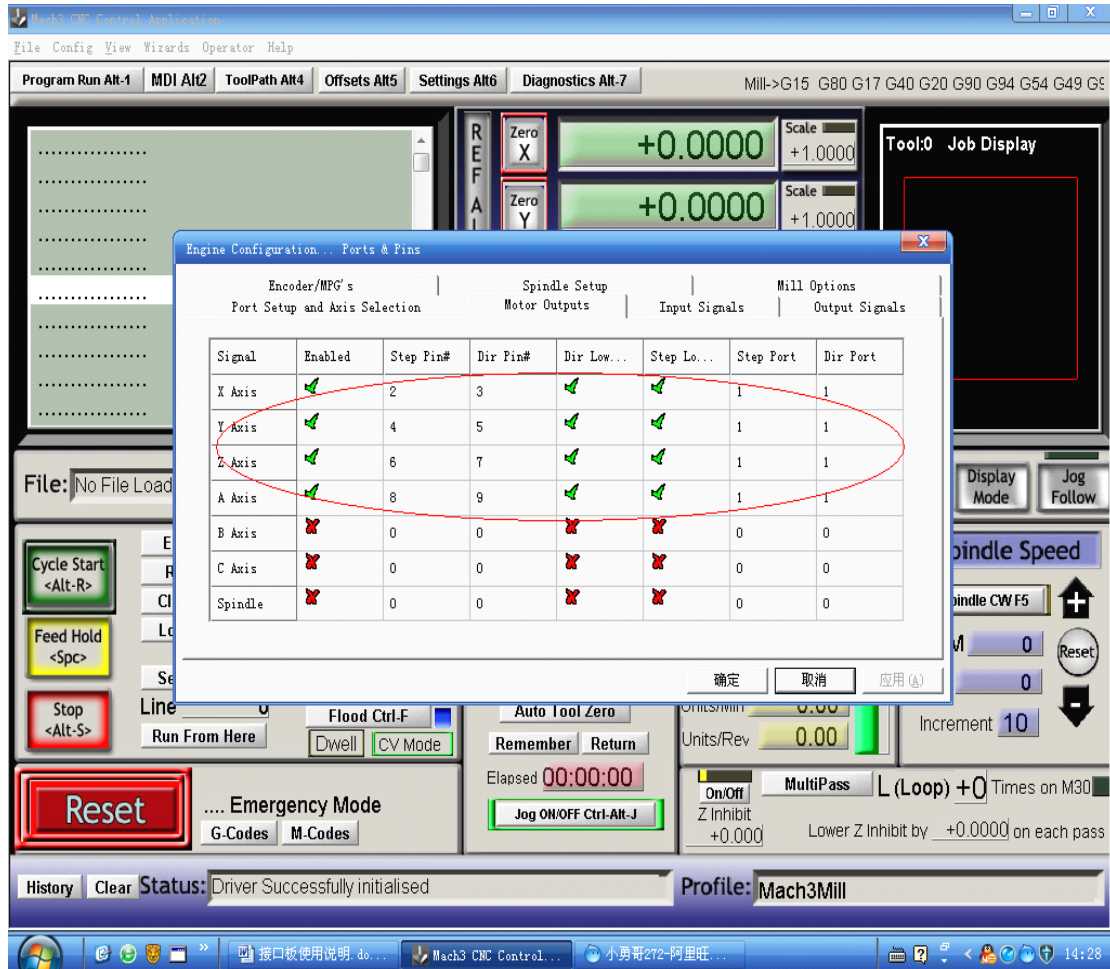


Fig 5

Pls setting the software as above according to our definition of breakout PIN

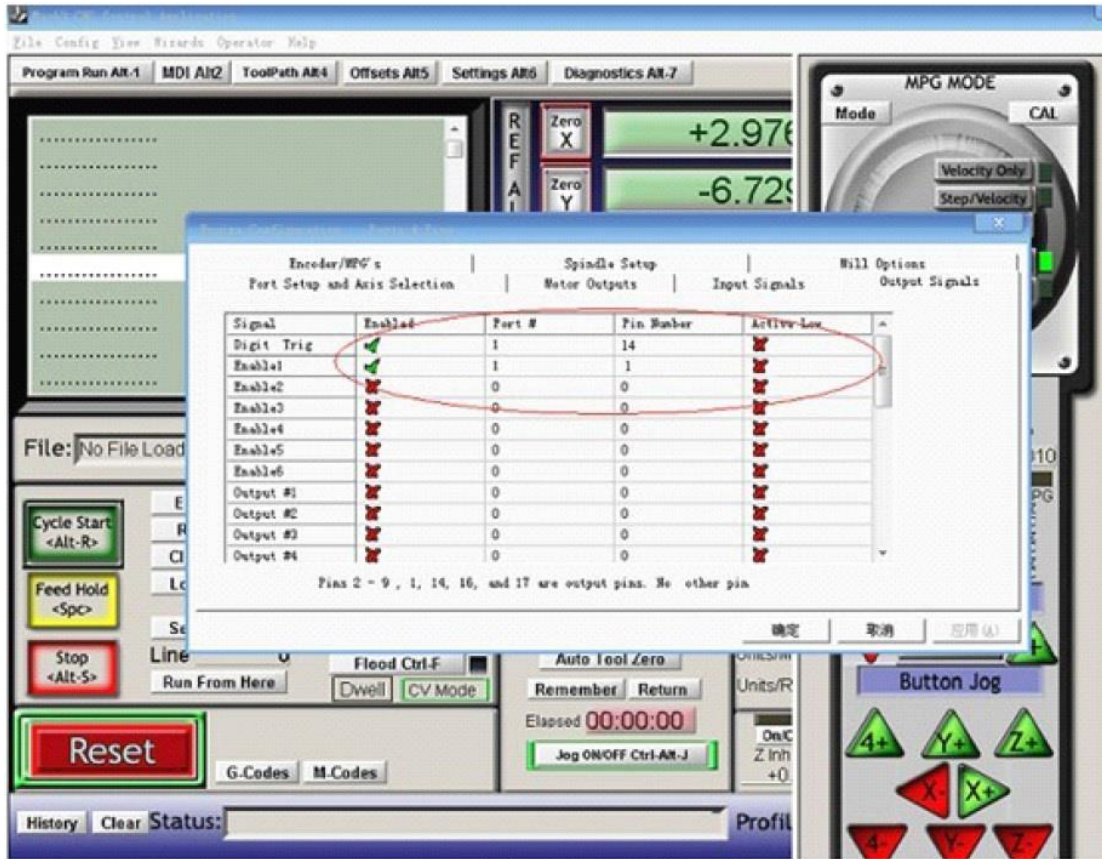


Fig 6

The select “output signals” as Fig 6, set up the pin numer as 14 and 1.

## Limit switch MACH3 setting :

Click “input signal” to setting as below Fig 7



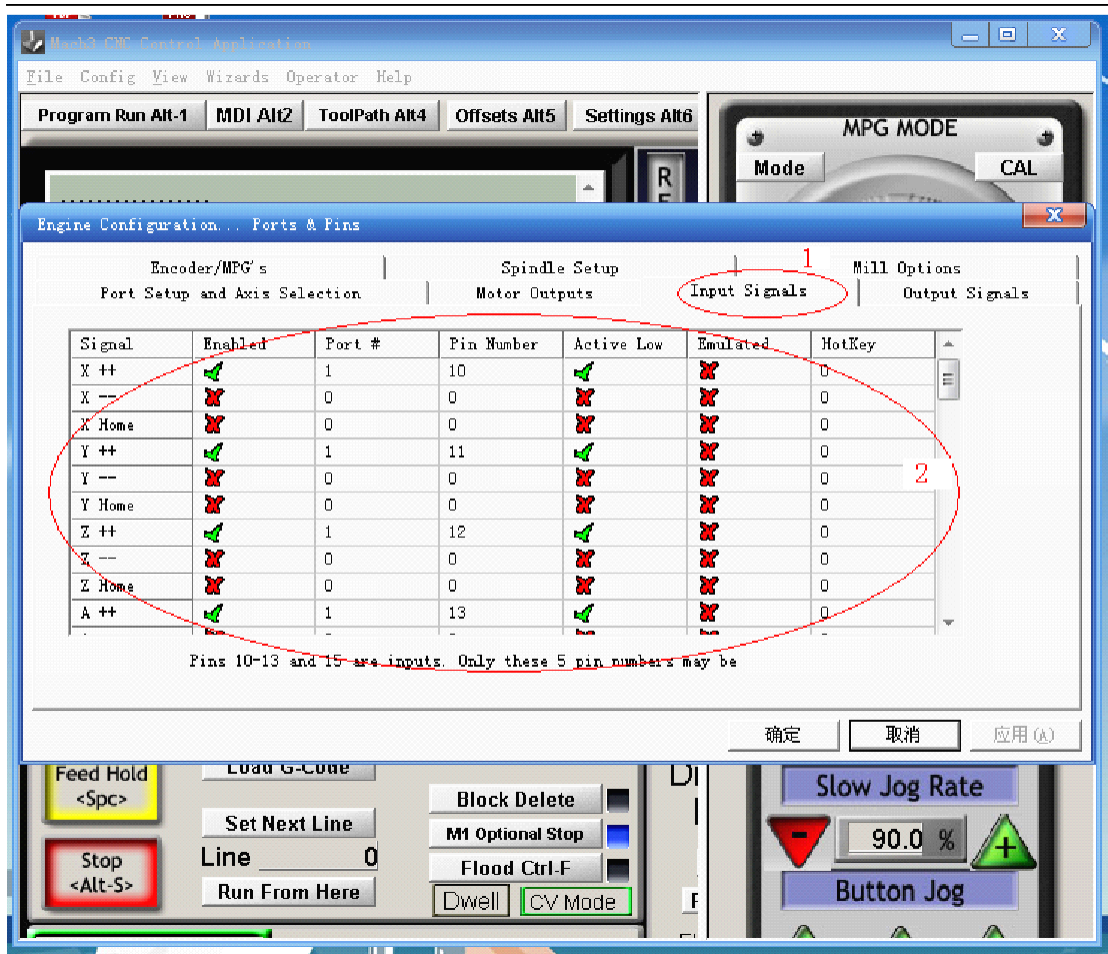


Fig 7

## Run of the G code :

See Fig 8, open the G code menu

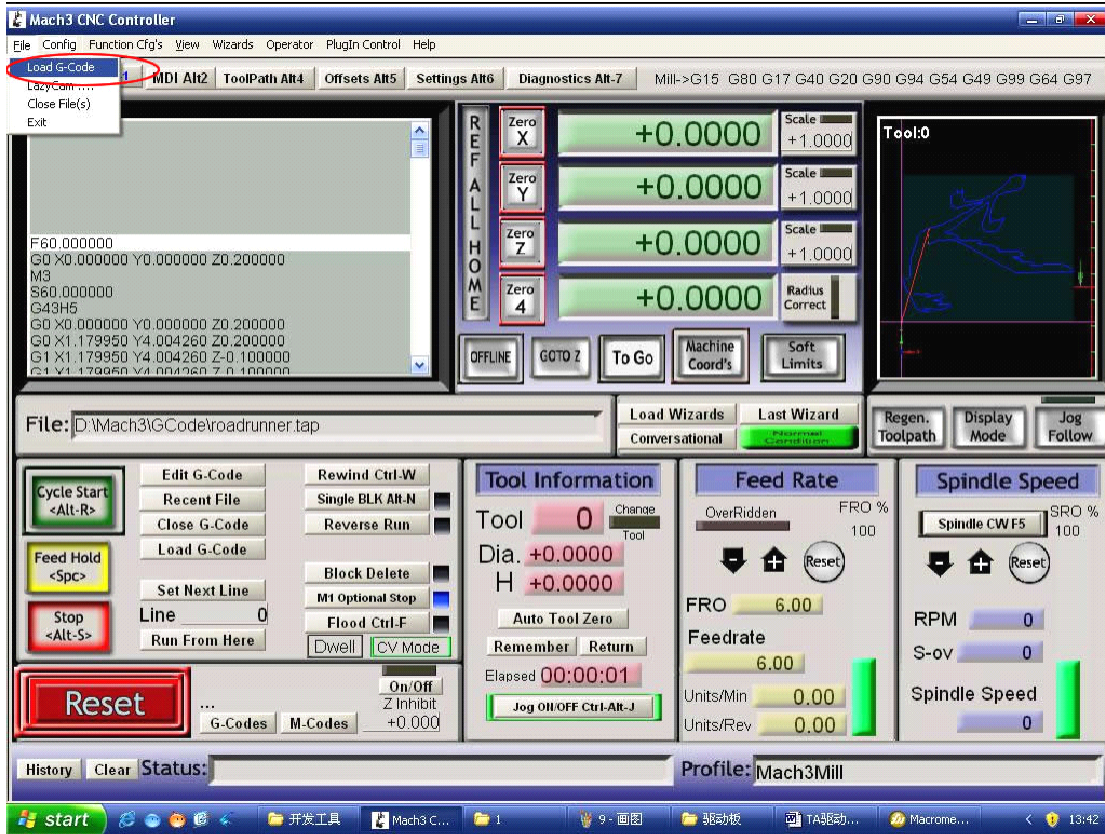


Fig 8

Find your G code, then open as Fig 9:

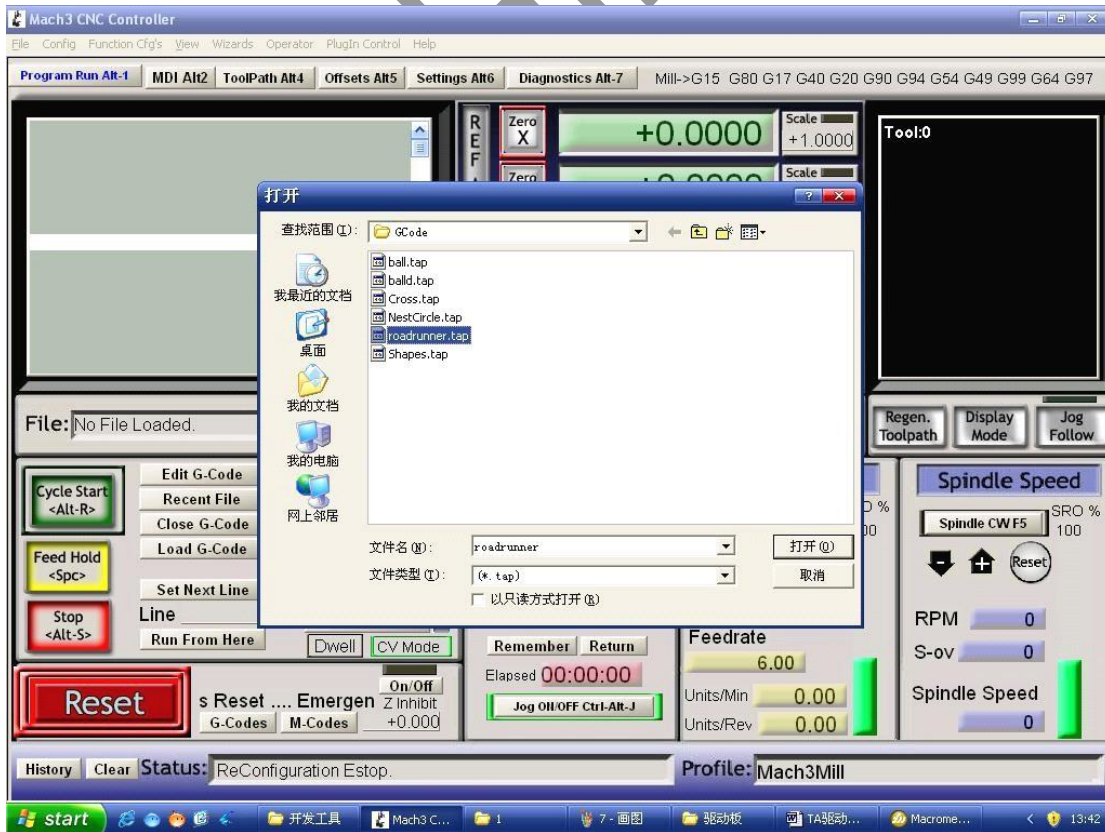


Fig 9

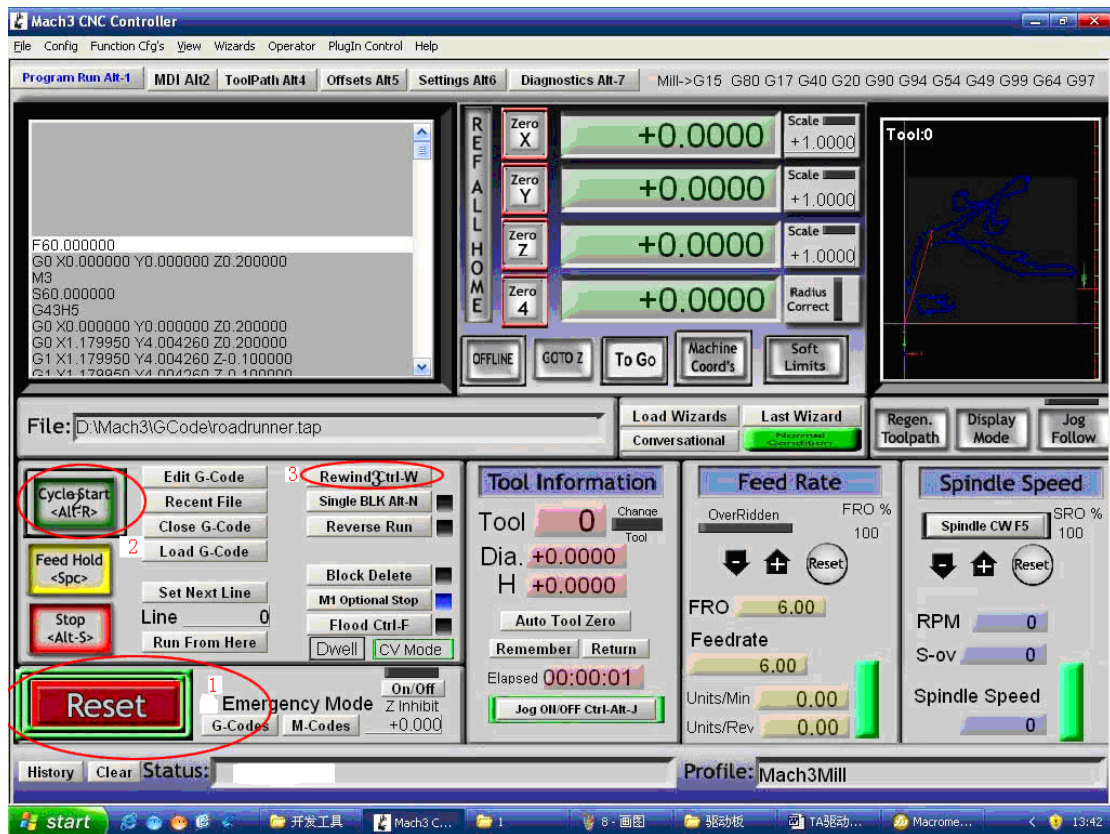


Fig 10

You will see “RESET” flicker after open the G code,you can click it to stop flicker,then run the circle2 “CYCLESTART”  
 in addition if you need manual control,you can press the TAB of keyboard,the manual control interface as below Fig 11

INFO SH

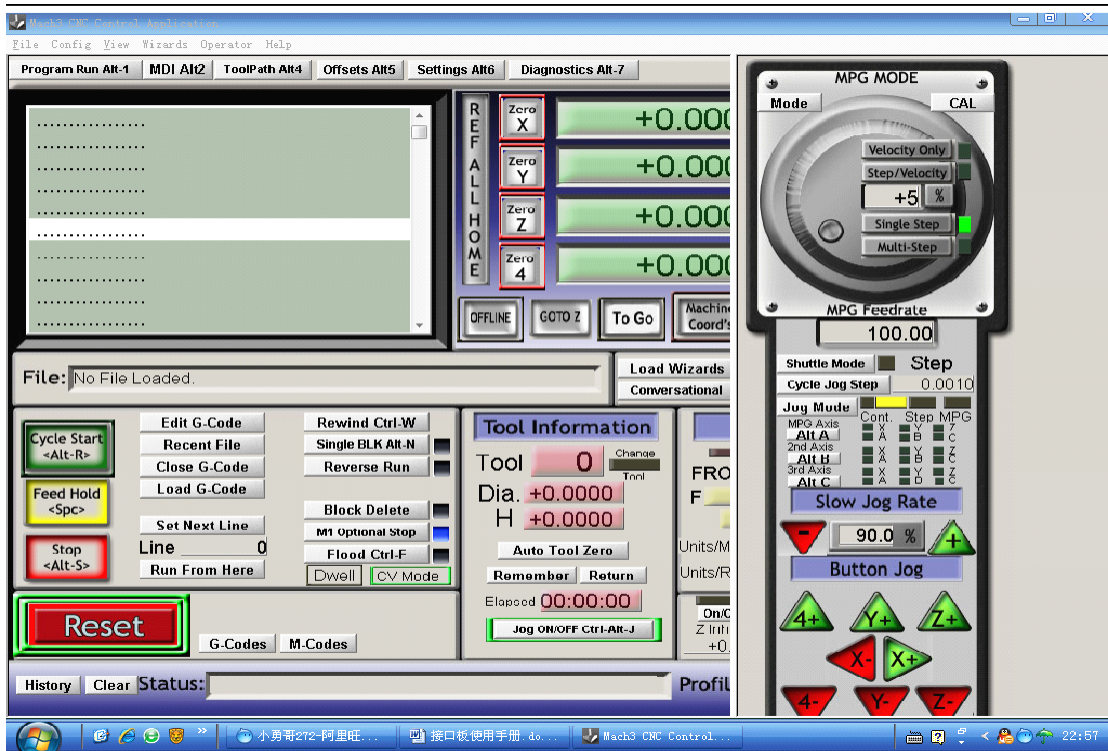


Fig 11

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