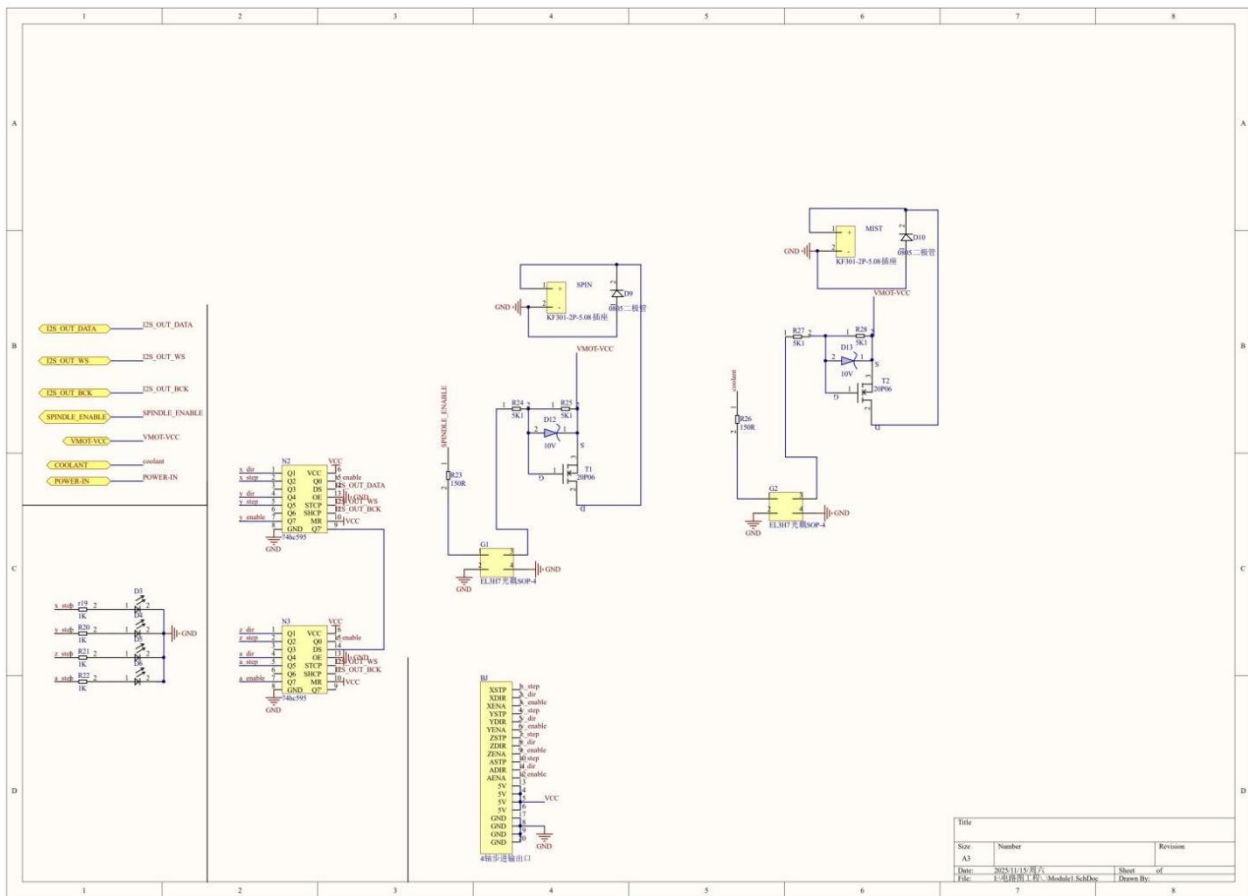
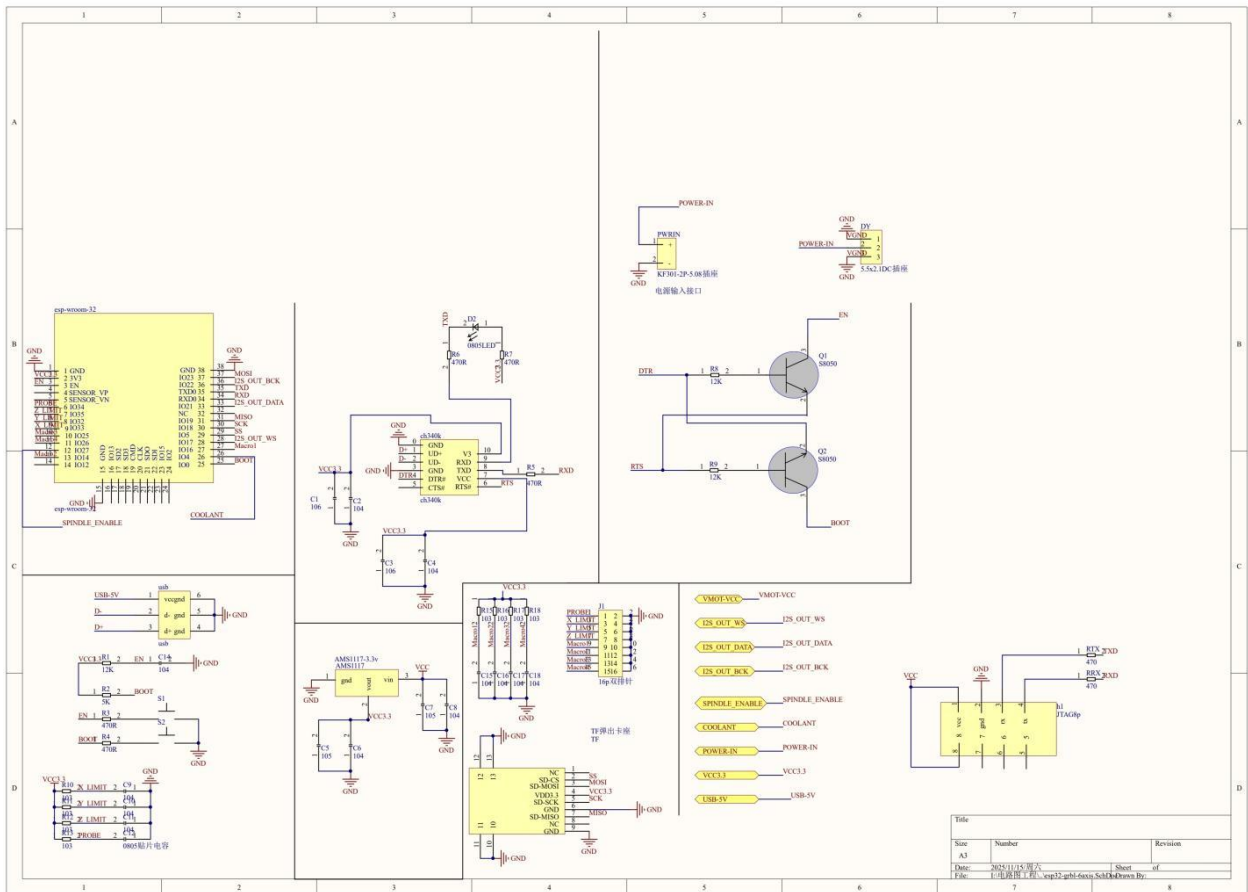


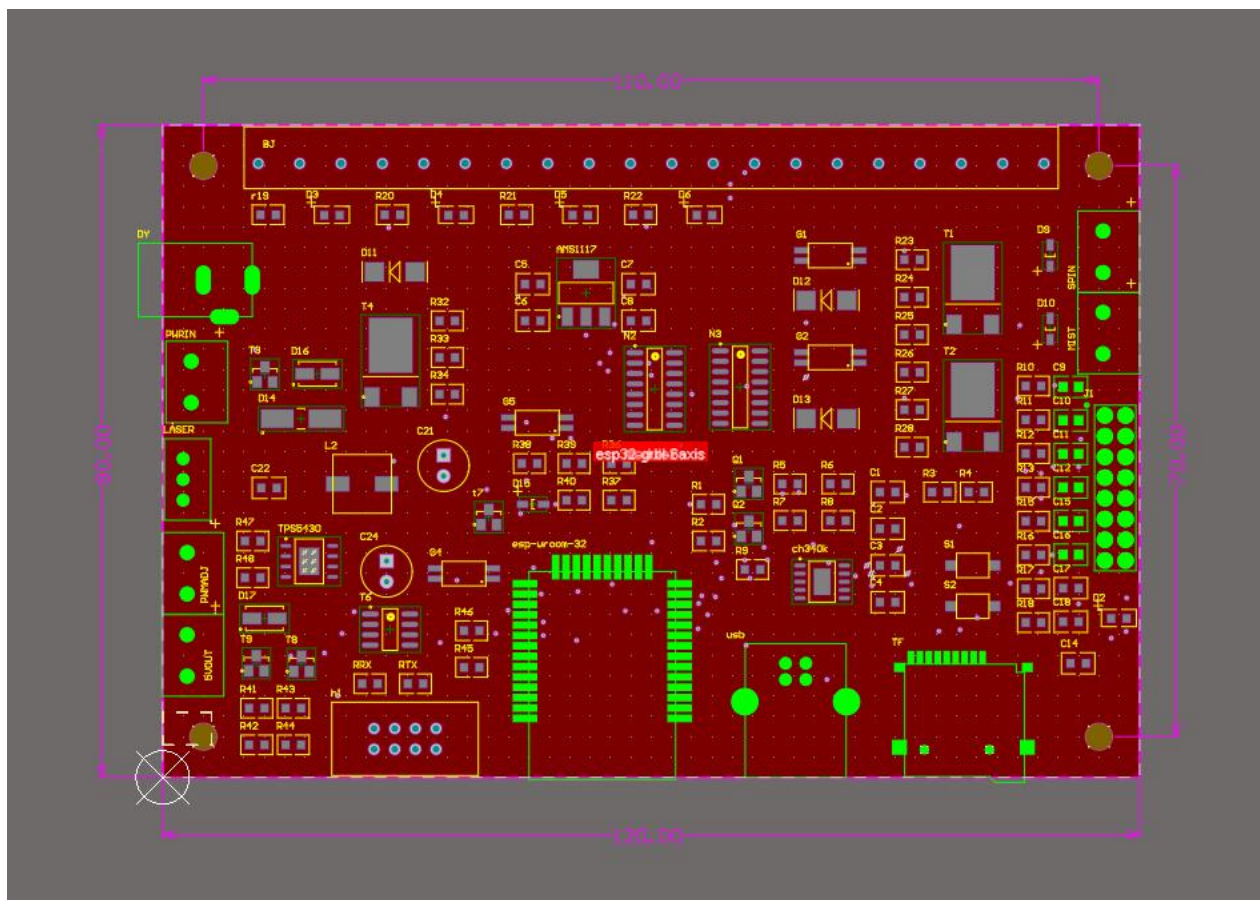
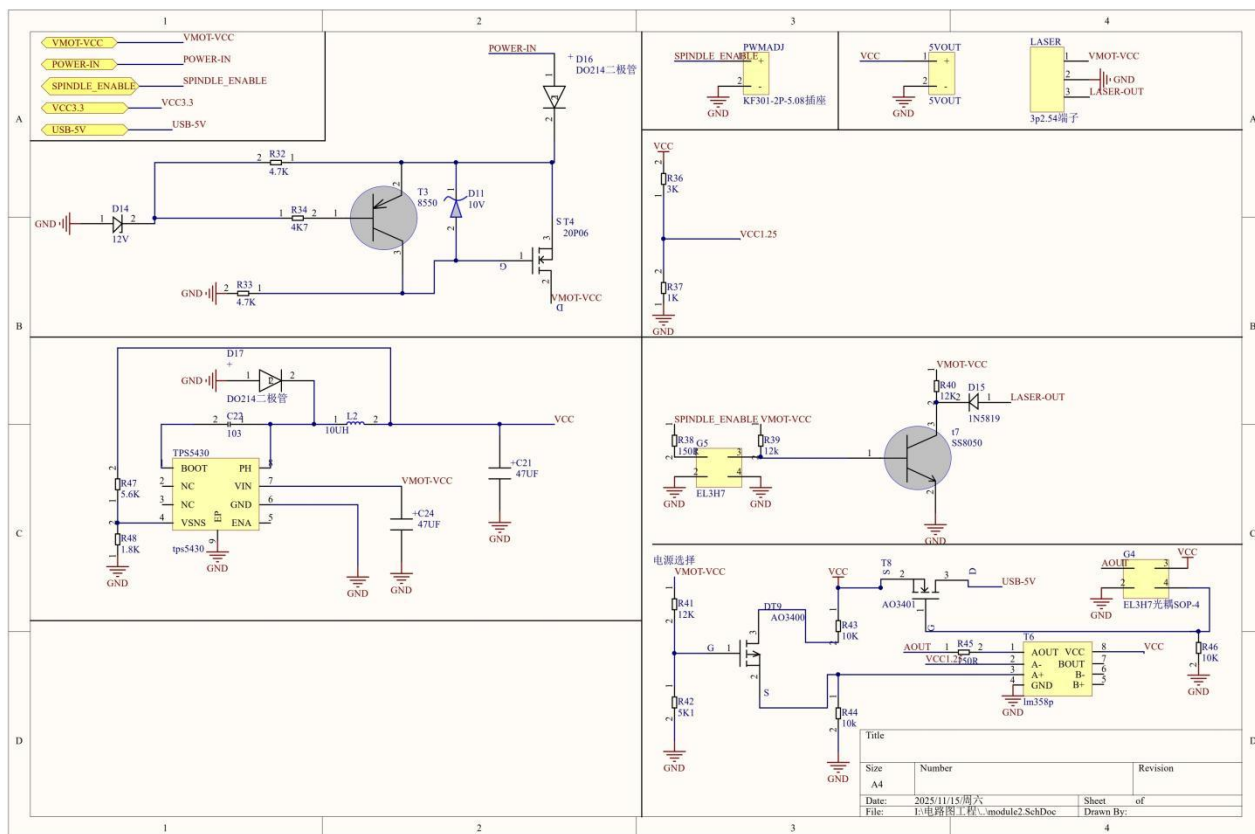
## Features

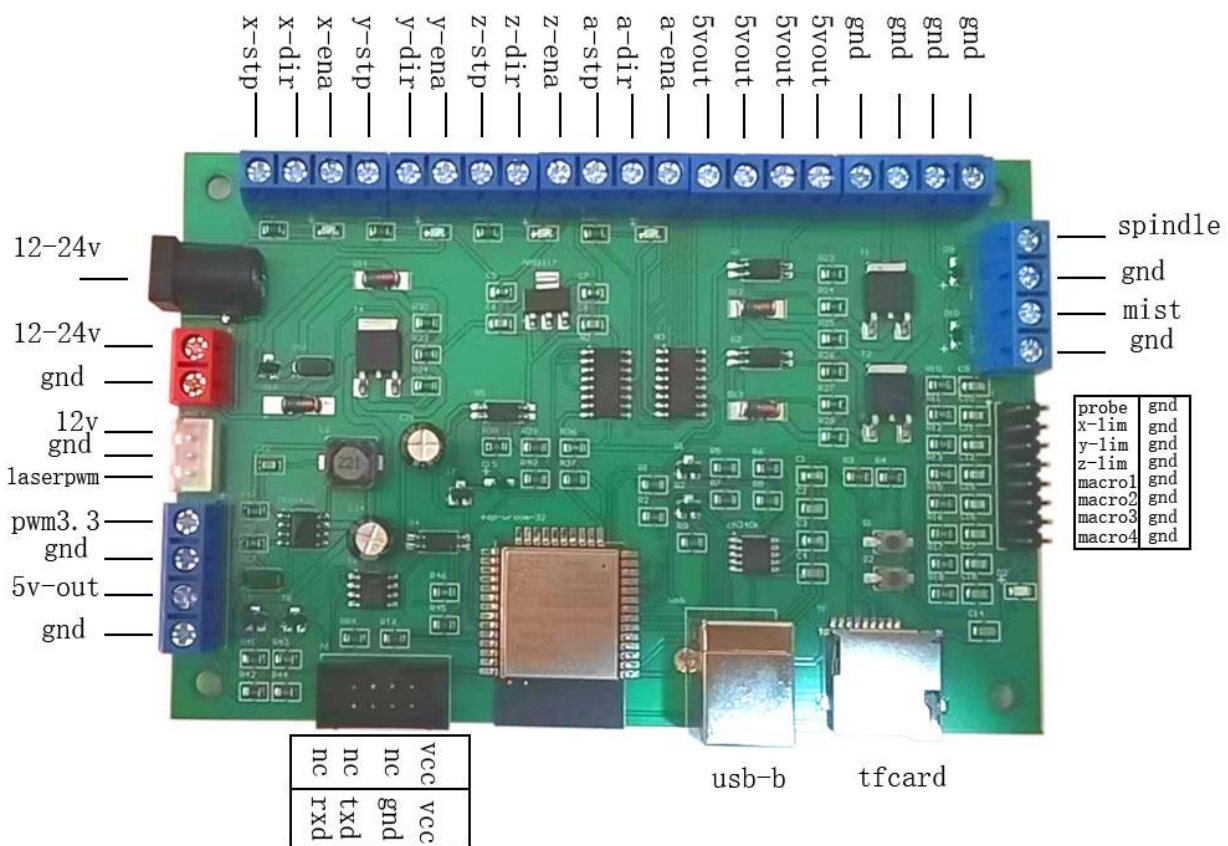
- ❖ Adopting dual-core ESP32 32-bit high-speed processor
- ❖ Compatible with Candle,Bcnc,CNC3D COMMANDER...
- ❖ Support four stepper drivers,including X,Y,Z,A axis.
- ❖ Support Homing,software/hardware endstop,Z probe.
- ❖ Support hotspot,Wifi wireless to control
- ❖ Support 3pin laser. PWM output.
- ❖ Support 12-24V DC

Auto-cut off power when voltage exceeding 30V.

Automatically select external power supply as the main control input power,  
and prevent reverse power transmission,protect USB port.

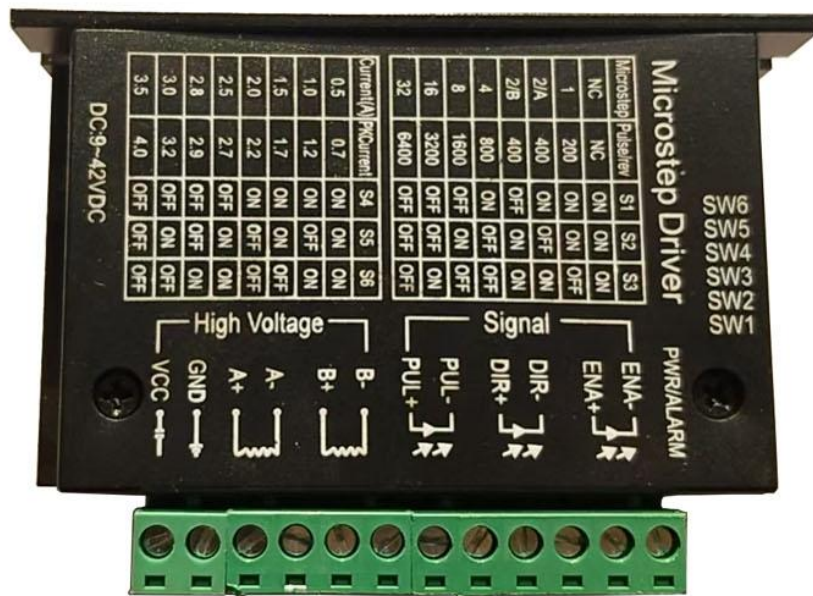






PROBE	Z-probe
X-LIM	X limit,NO
Y-LIM	Y limit,NO
Z-LIM	Z limit,NO
GND	XYZ axis com,Z probe
PWM-OUT	PWM output
GND	PWM ground
5vout	5v output
GND	All drivers PUL-,EAN-,DIR-
X-STEP	X-PUL+
X-EAN	X-ENA+
X-DIR	X-DIR+

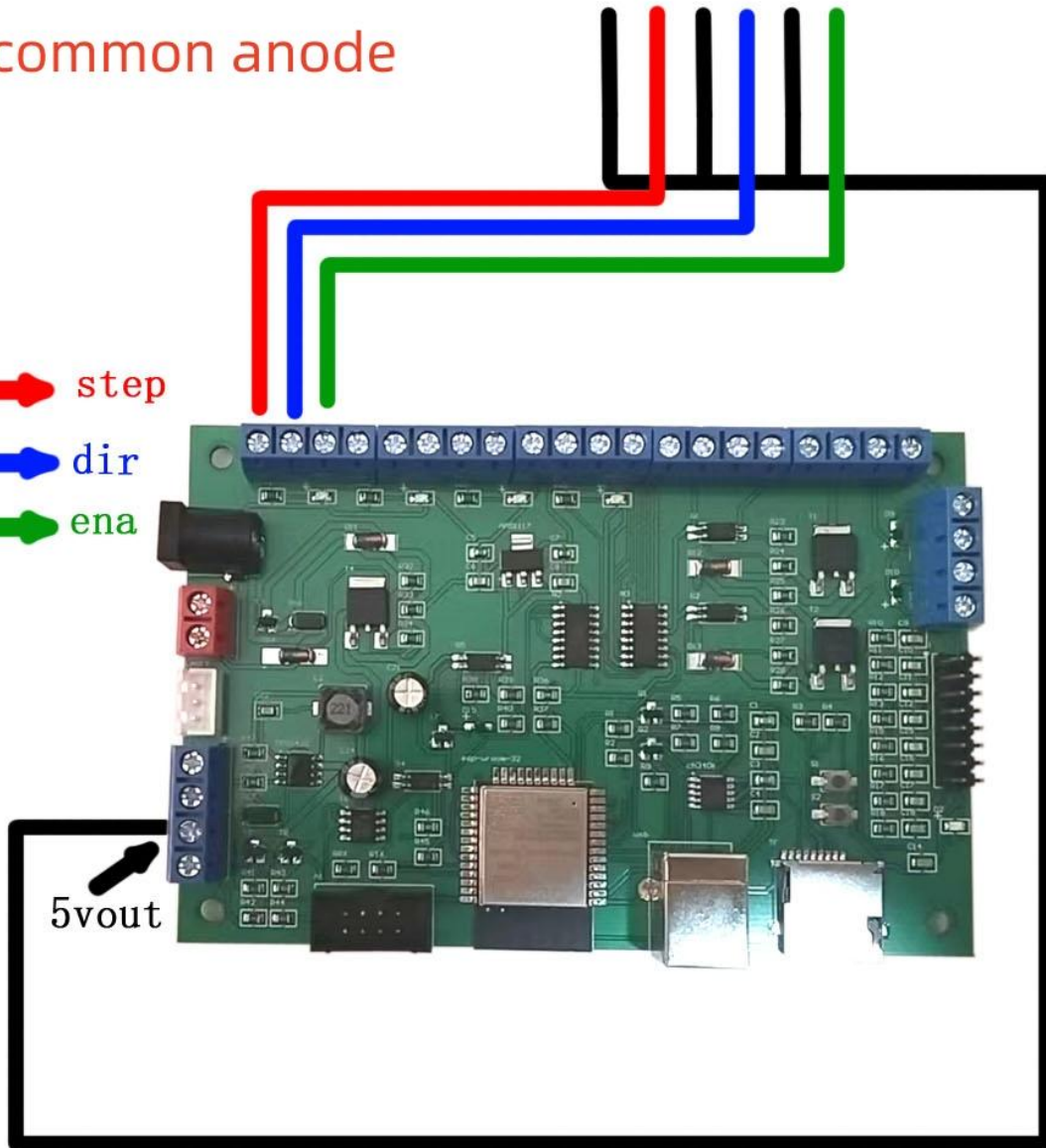


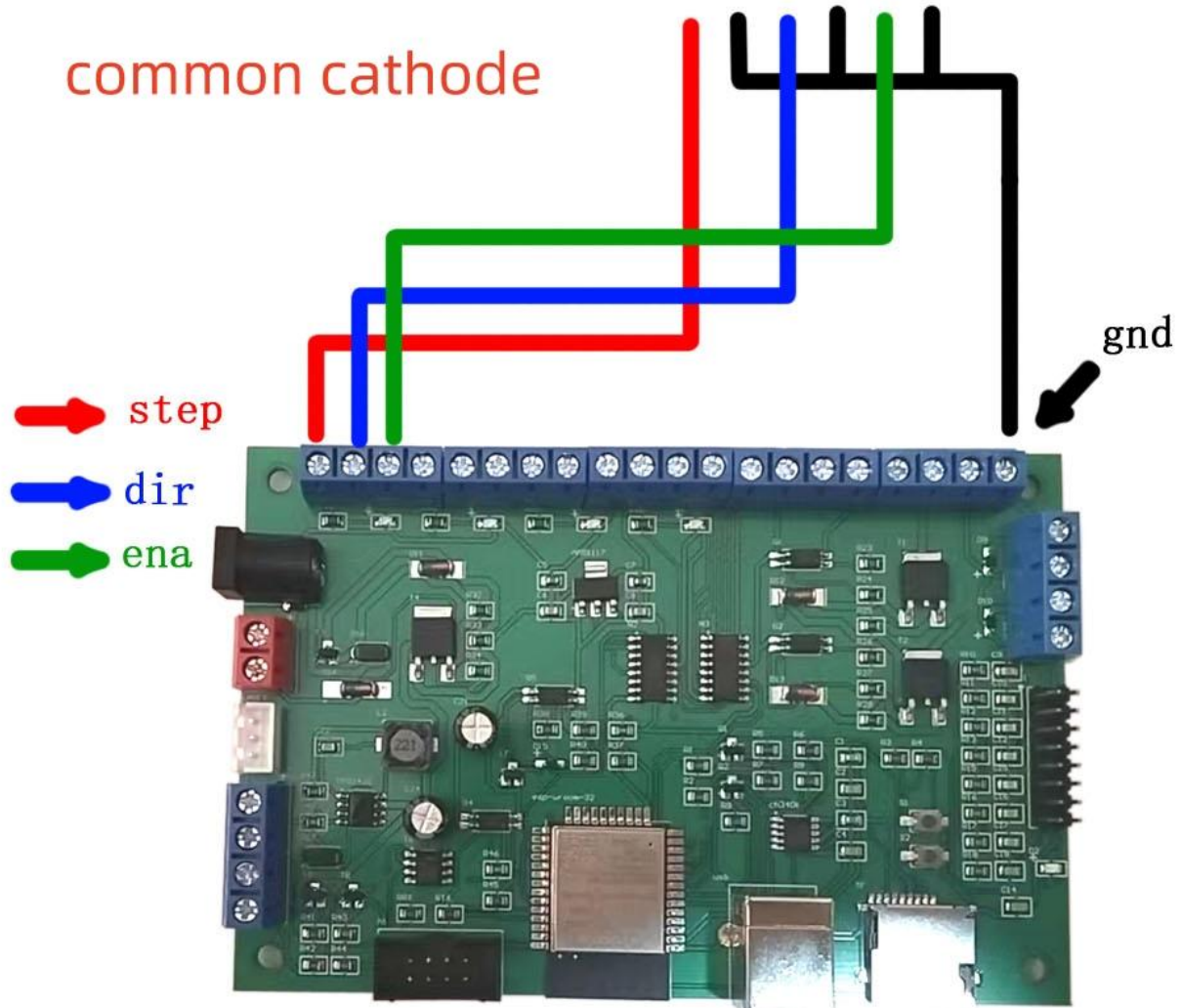
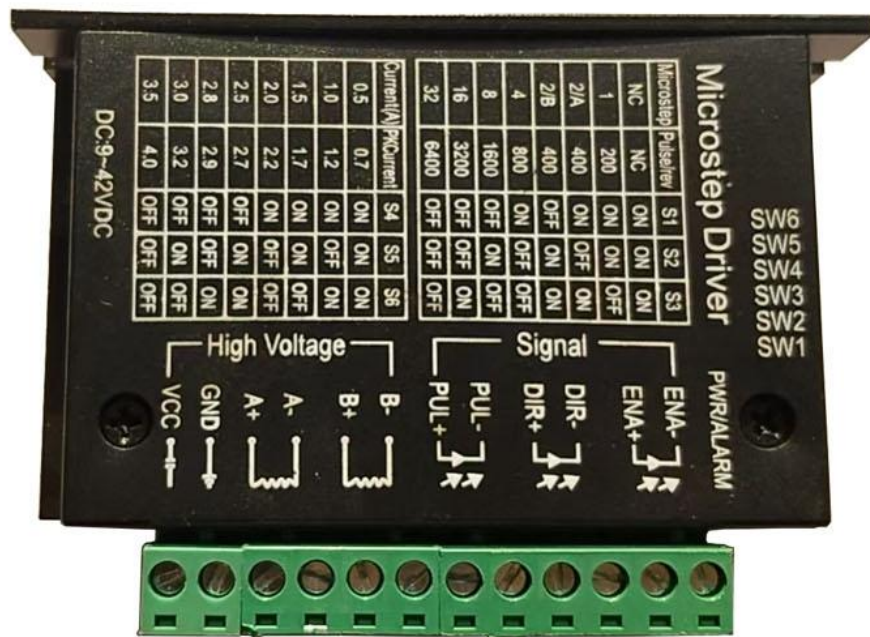


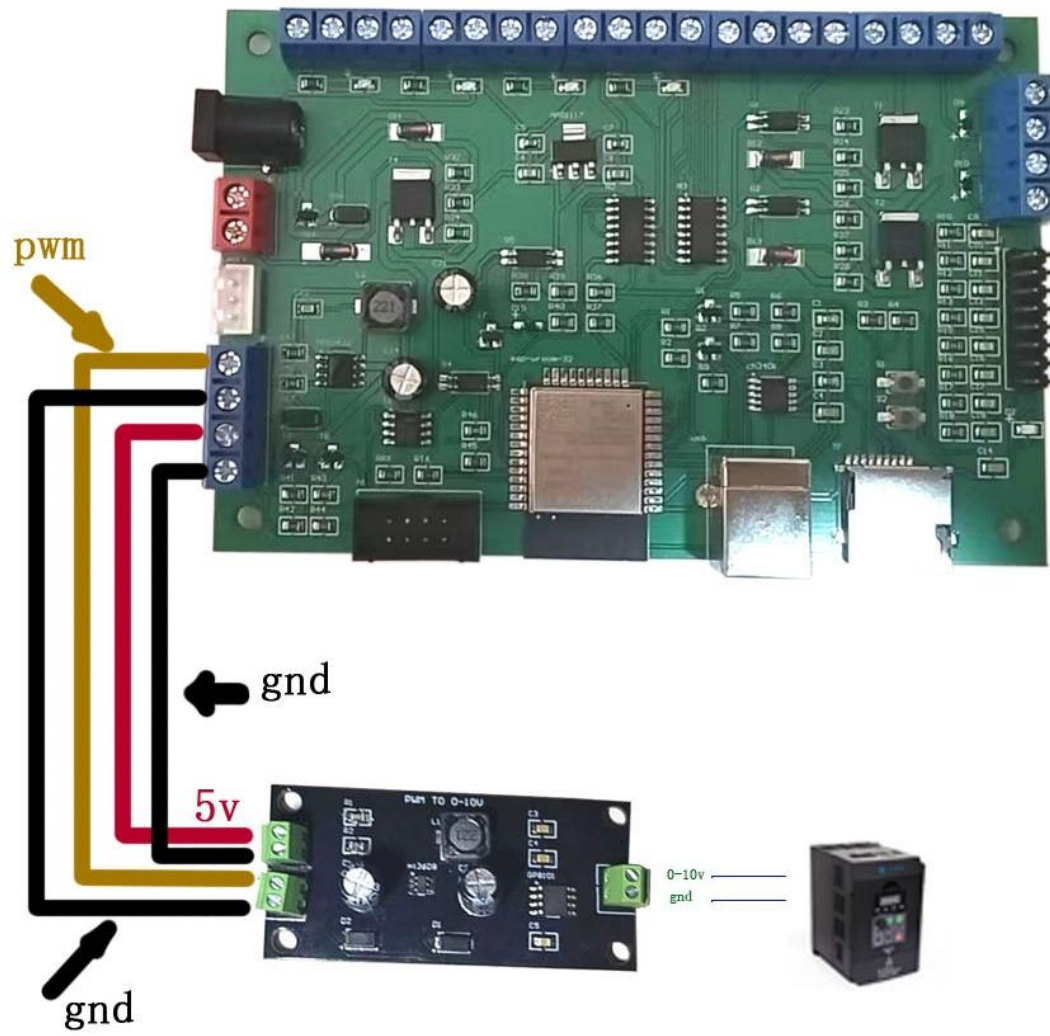
common anode

- ➔ step
- ➔ dir
- ➔ ena

5vout

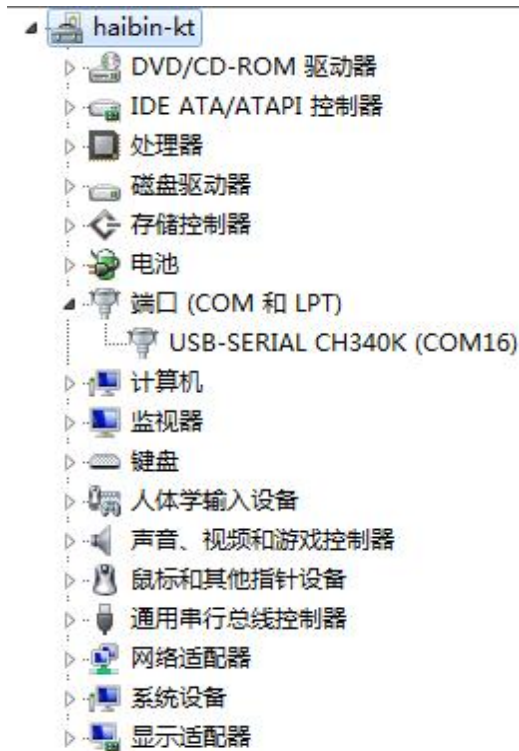
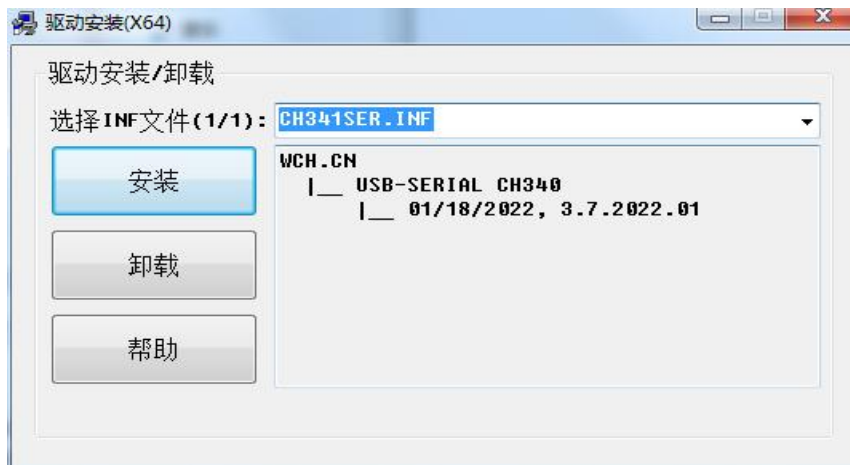








## Install ch340 USB Driver

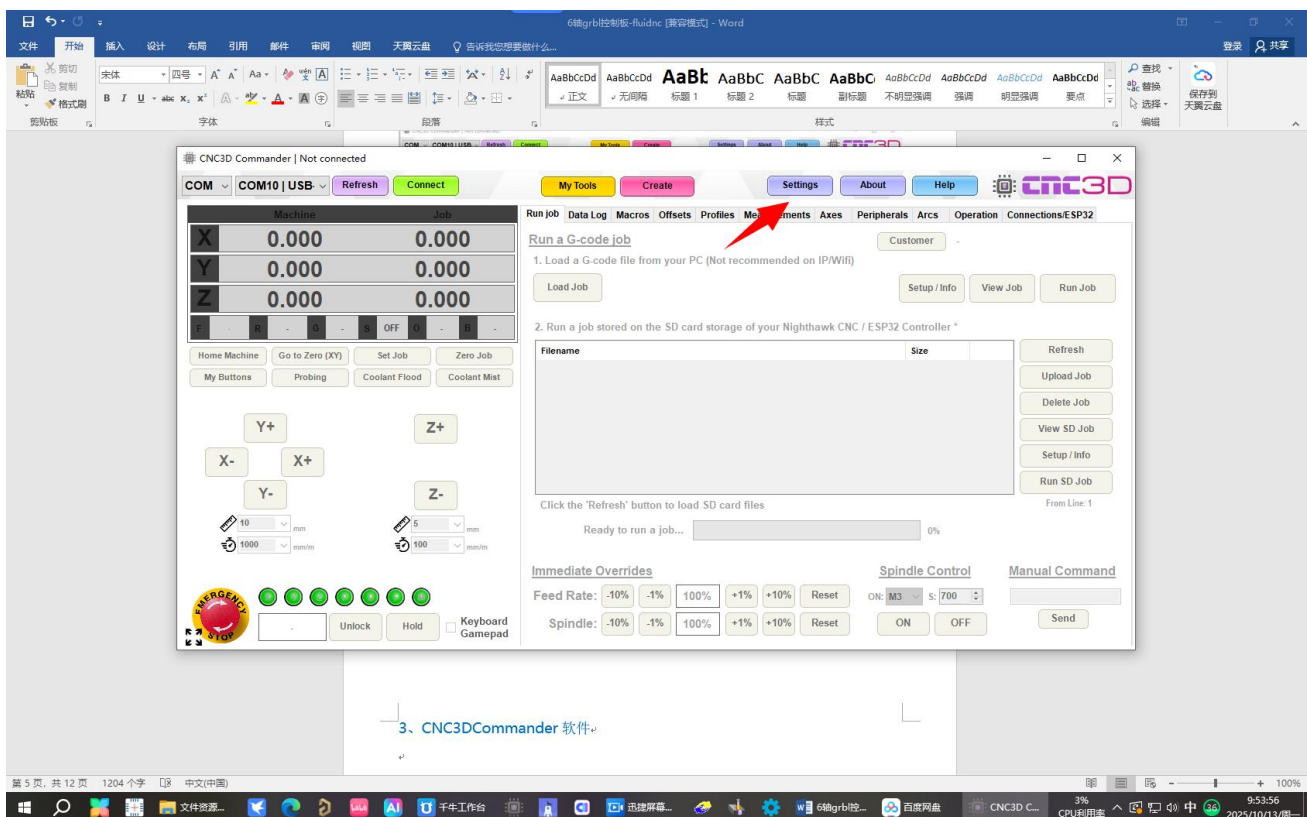
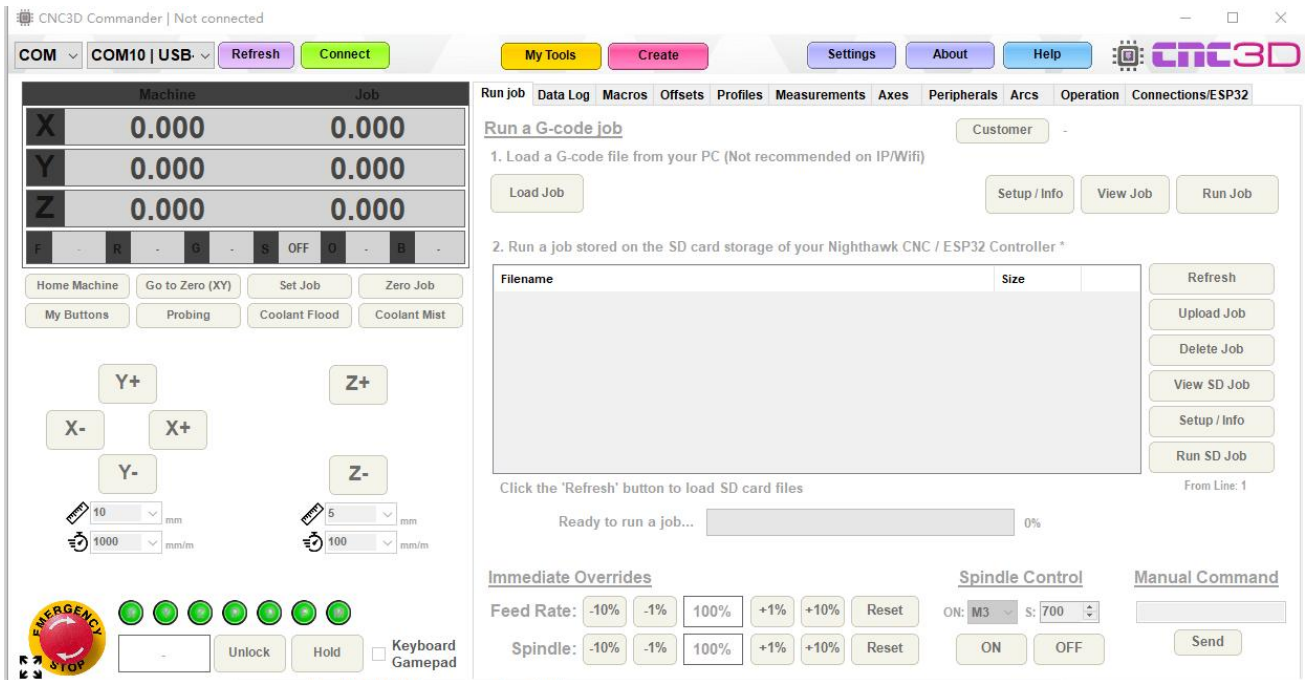


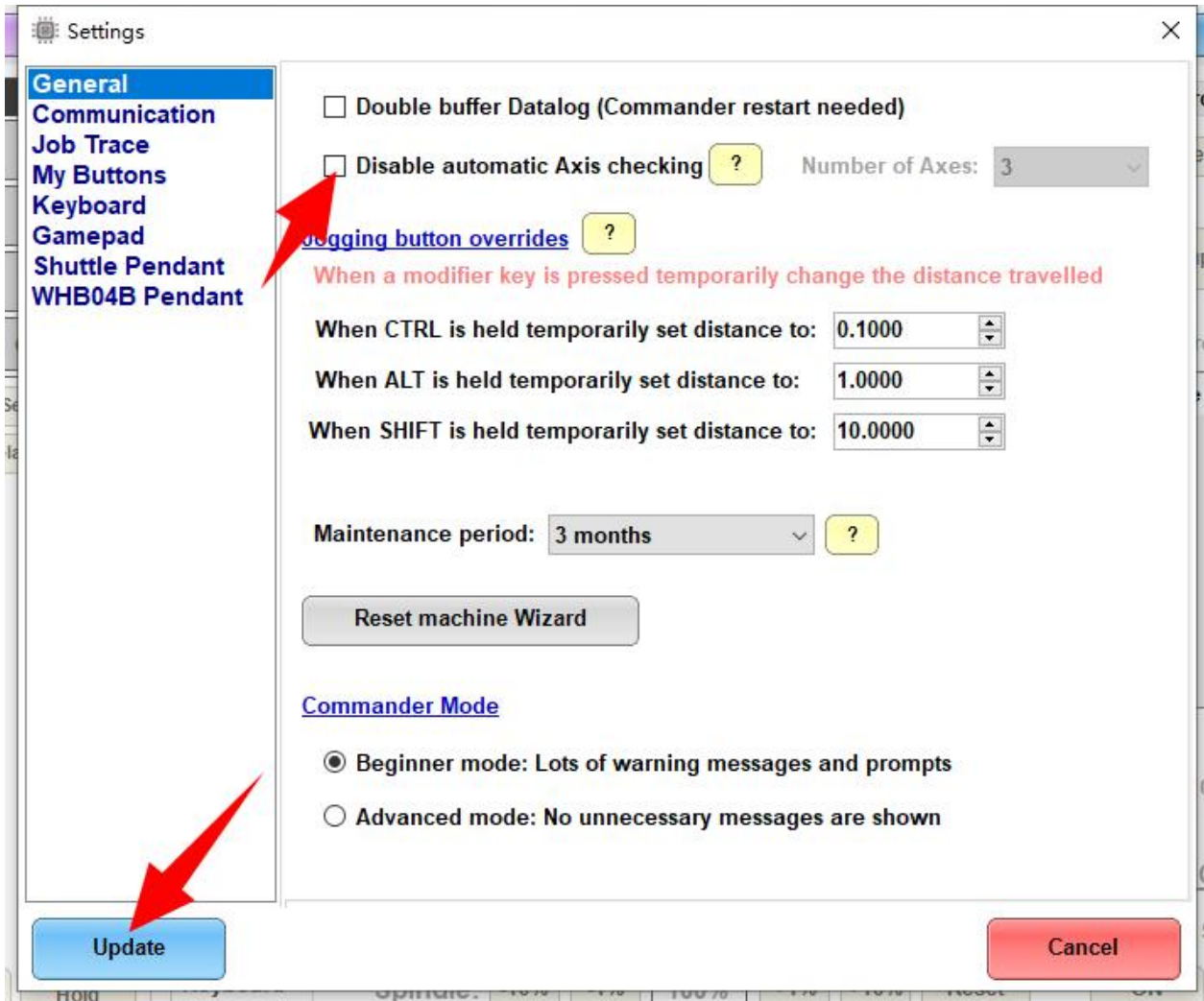
Successfully install when CH340K comes up.



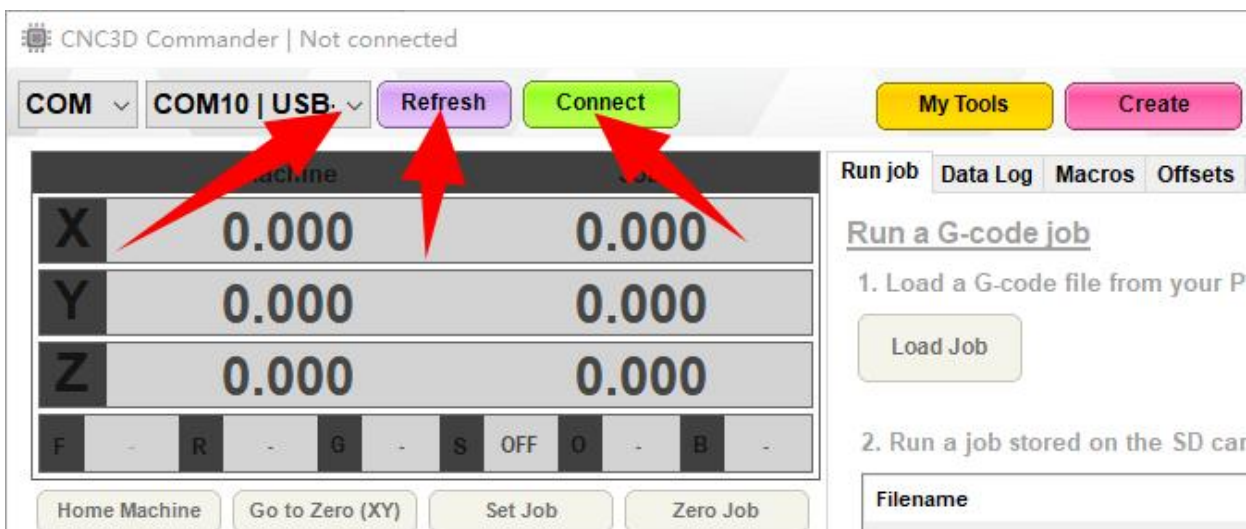
# CNC3D Commander

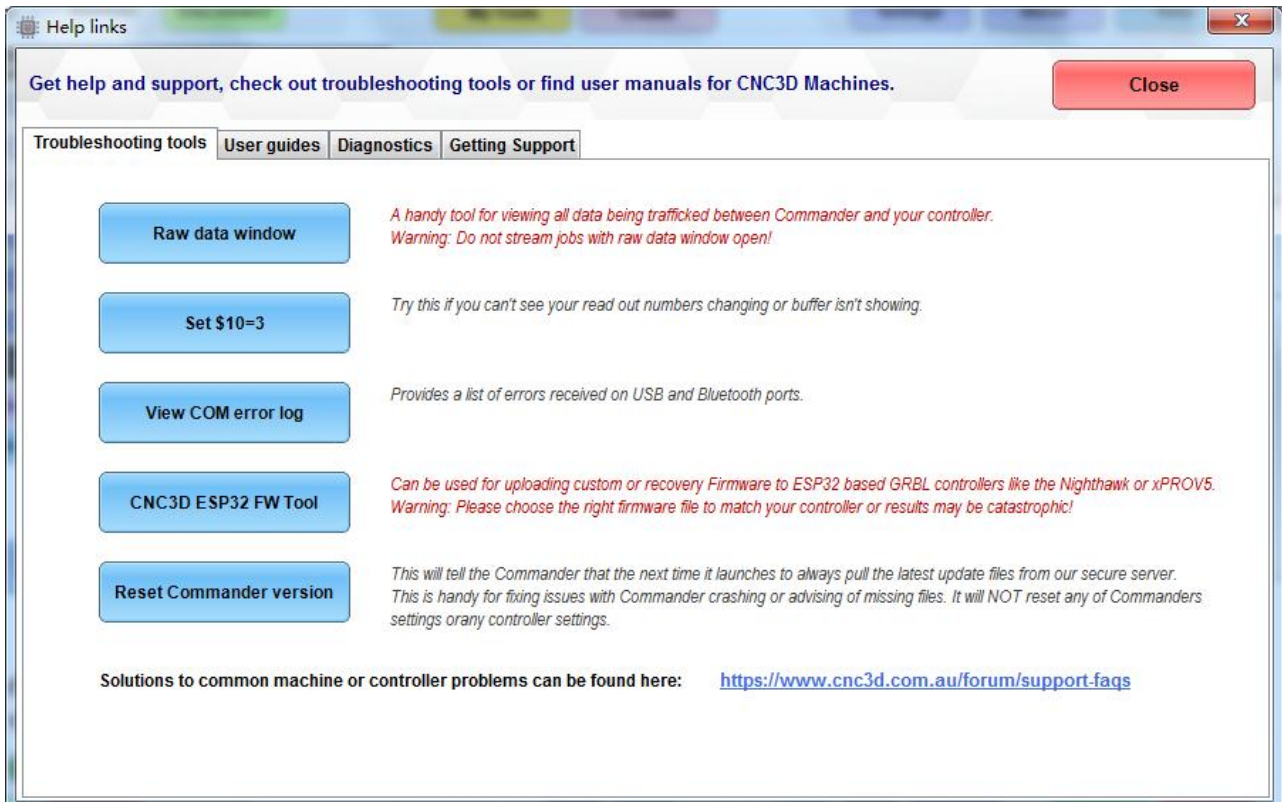
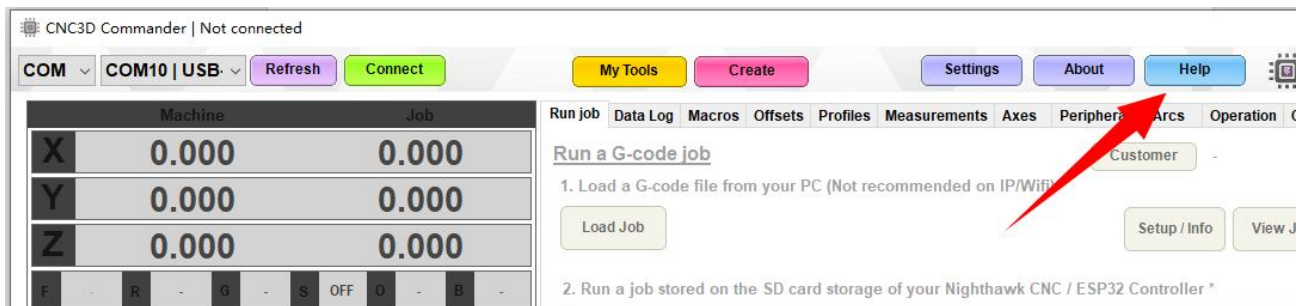
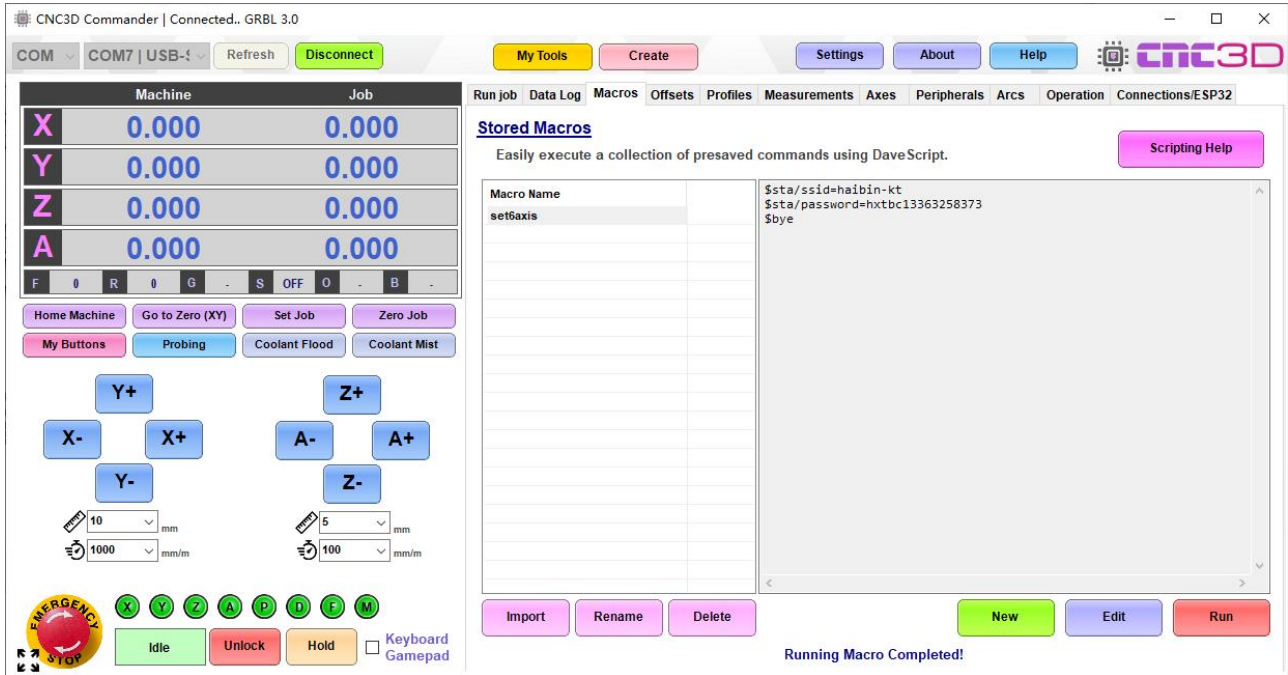
Open CNC3D Commander software and follow below settings.



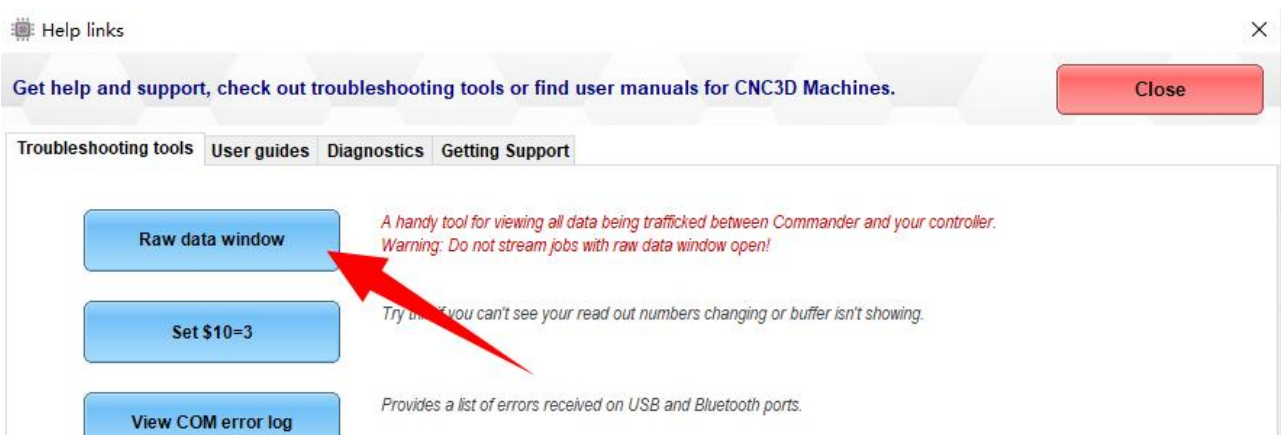


Refresh and connect





## Click data window

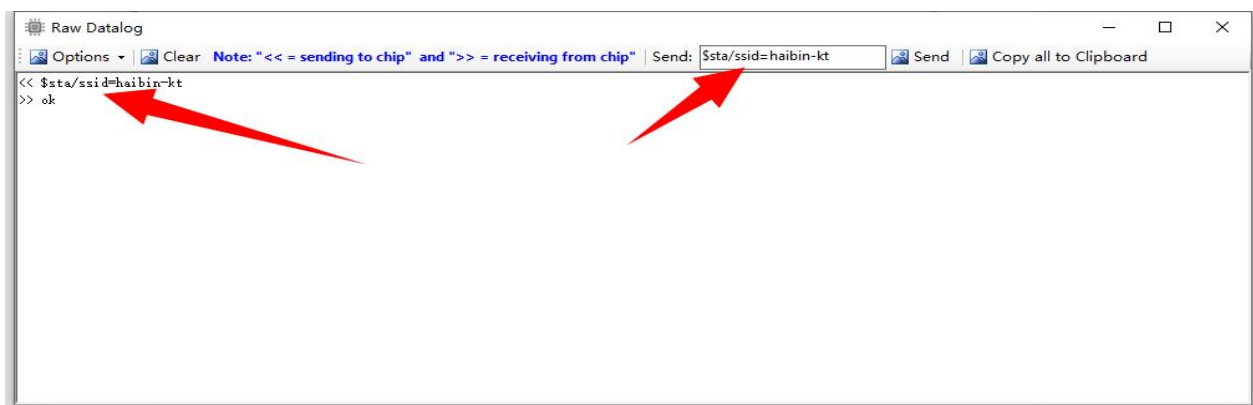


Enter below

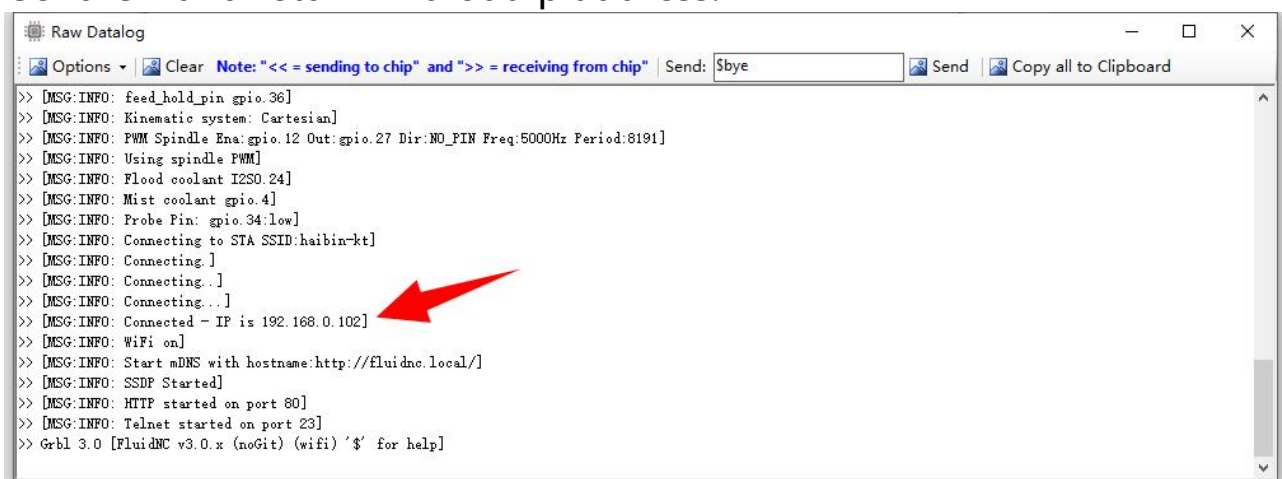
\$sta/ssid=your wifi account

\$sta/password= your wifi password

\$bye

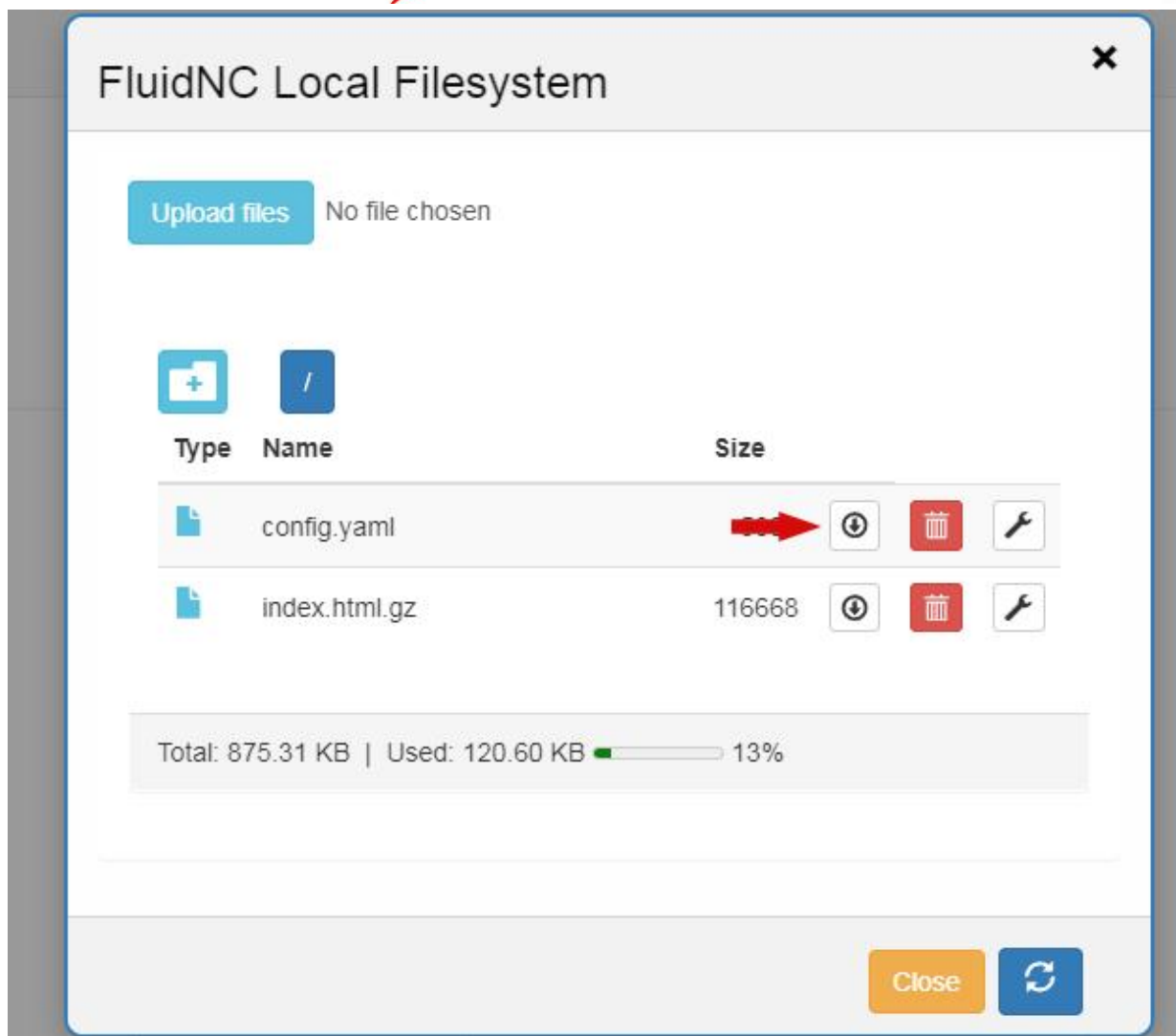
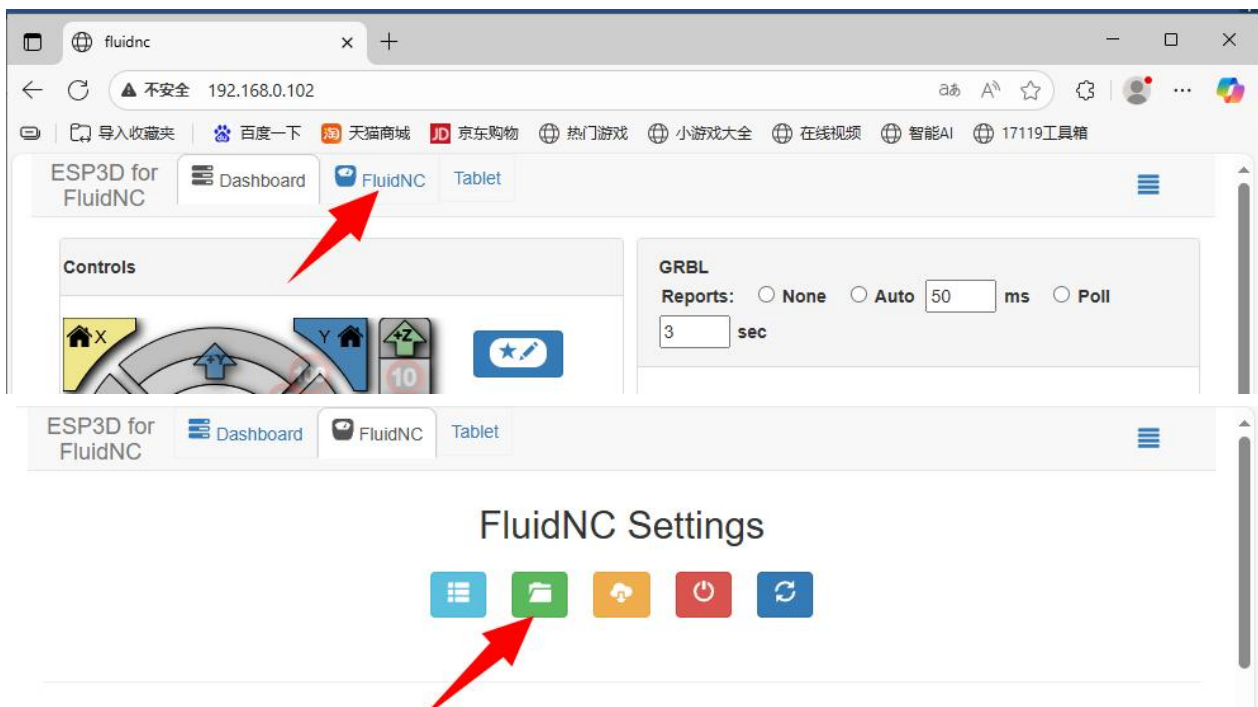


Send OK and return find out ip address.





Enter ip you got on browser and click FluidNC.



Open the config file you download.

```
board: 6 Pack↵
name: 6 Pack StepStick XYZABC↵
stepping:↵
  engine: I2S_STREAM↵
  idle_ms: 250↵
  pulse_us: 4↵
  dir_delay_us: 6↵
  disable_delay_us: 0↵
↵
axes:↵
  shared_stepper_disable_pin: NO_PIN↵
  x:↵
    steps_per_mm: 800.000↵
    max_rate_mm_per_min: 5000.000↵
    acceleration_mm_per_sec2: 100.000↵
    max_travel_mm: 300.000↵
    soft_limits: false↵
    homing:↵
      cycle: 1↵
      positive_direction: false↵
      mpos_mm: 0.000↵
      feed_mm_per_min: 100.000↵
      seek_mm_per_min: 200.000↵
      settle_ms: 500↵
      seek_scaler: 1.100↵
      feed_scaler: 1.100↵
↵
  motor0:↵
    limit_neg_pin: NO_PIN↵
```

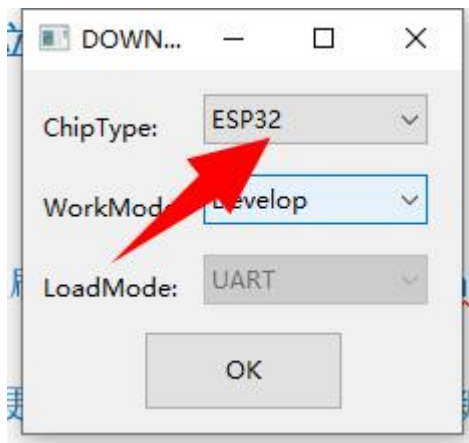
## Update Firmware

The 4 axis card is already pre-installed FluidNC firmware. And upload index and yaml file.

Latest FluidNC firmware

<https://github.com/bdring/FluidNC>

Open flash\_download\_tool3.9 software and select as below.



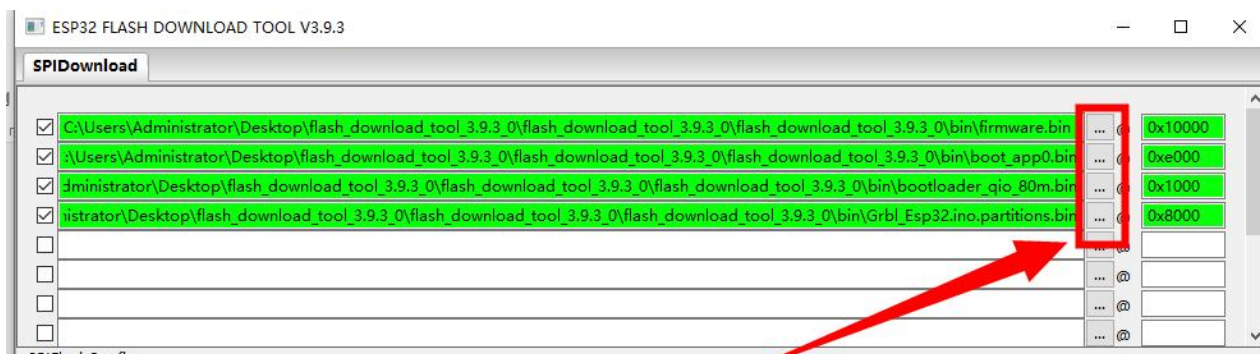
Select and upload file as below:

First line: firmware.bin

2th line: boot\_app0.bin

3th line: bootloader\_qio\_80m.bin

4th line: Grbl\_Esp32.ino.partitions.bin





Select COM and Erase, then start.



After download firmware, re-boot control card and configure Wifi, Also upload yaml and index file.

There is no configuration and index in new firmware.

Need to unlock and set more axis.



CNC3D Commander | Connected.. GRBL 3.0

Disconnect

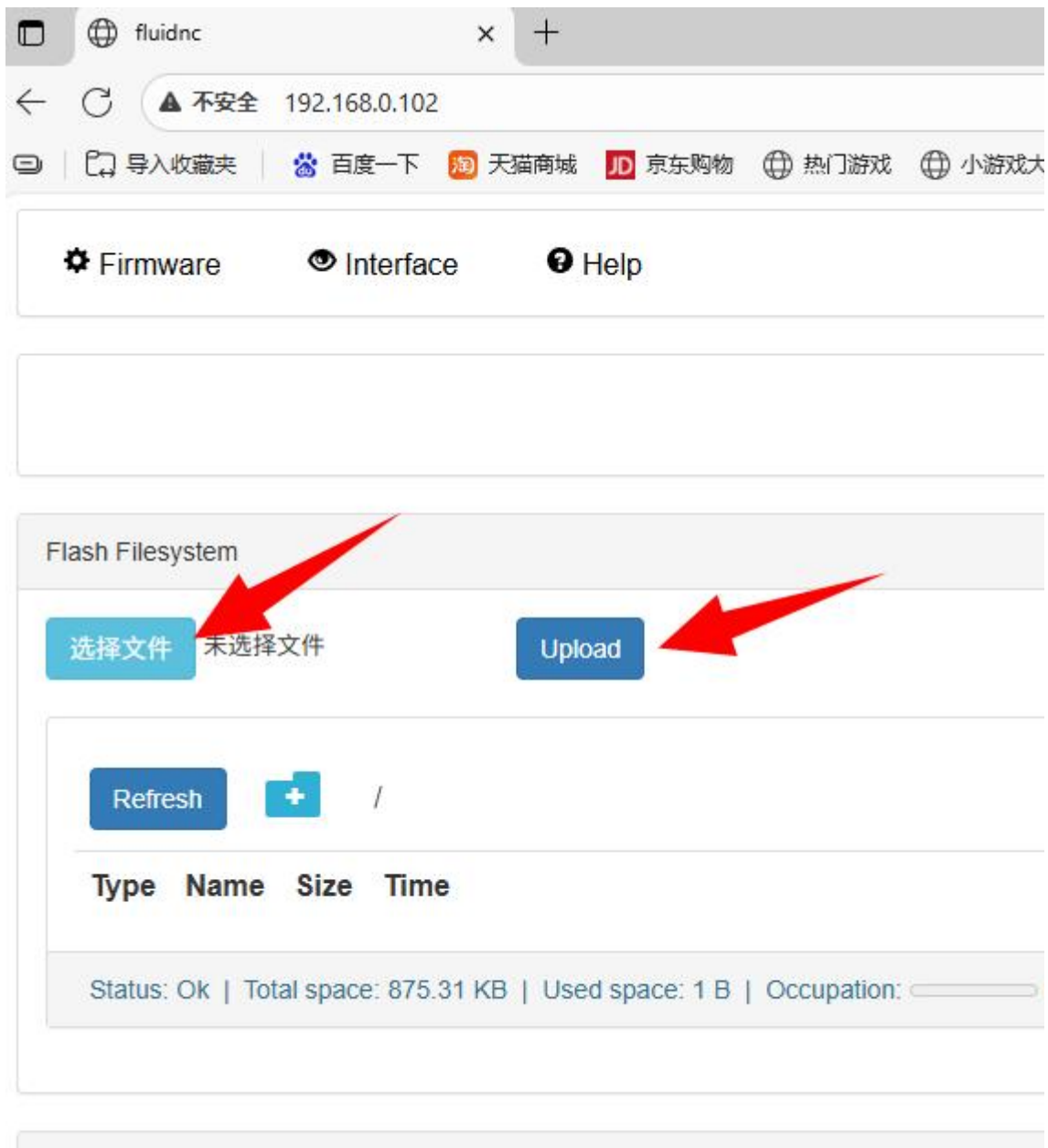
R


Coolant Mist

mm/m



## Upload yaml and index file



名称	修改日期	类型	大小
 config.yaml	2024/11/6/周三 9:29	YAML 文件	6 KB
 index.html	2024/11/6/周三 9:29	WinRAR 压缩文件	114 KB





Firmware
Interface
Help
v FluidNC v3.0.x (noGit)

Go to ESP3D interface

Flash Filesystem

选择文件 未选择文件 Upload

Refresh
+ /

Type	Name	Size	Time
	config.yaml	5203	
	index.html.gz	116668	

Status: Ok | Total space: 875.31 KB | Used space: 120.35 KB | Occupation:  13%

192.168.0.102

Re-start CNC3D Commander, and will see XYZABC axis.

More refer to

<http://wiki.fluidnc.com/en/config/overview>