

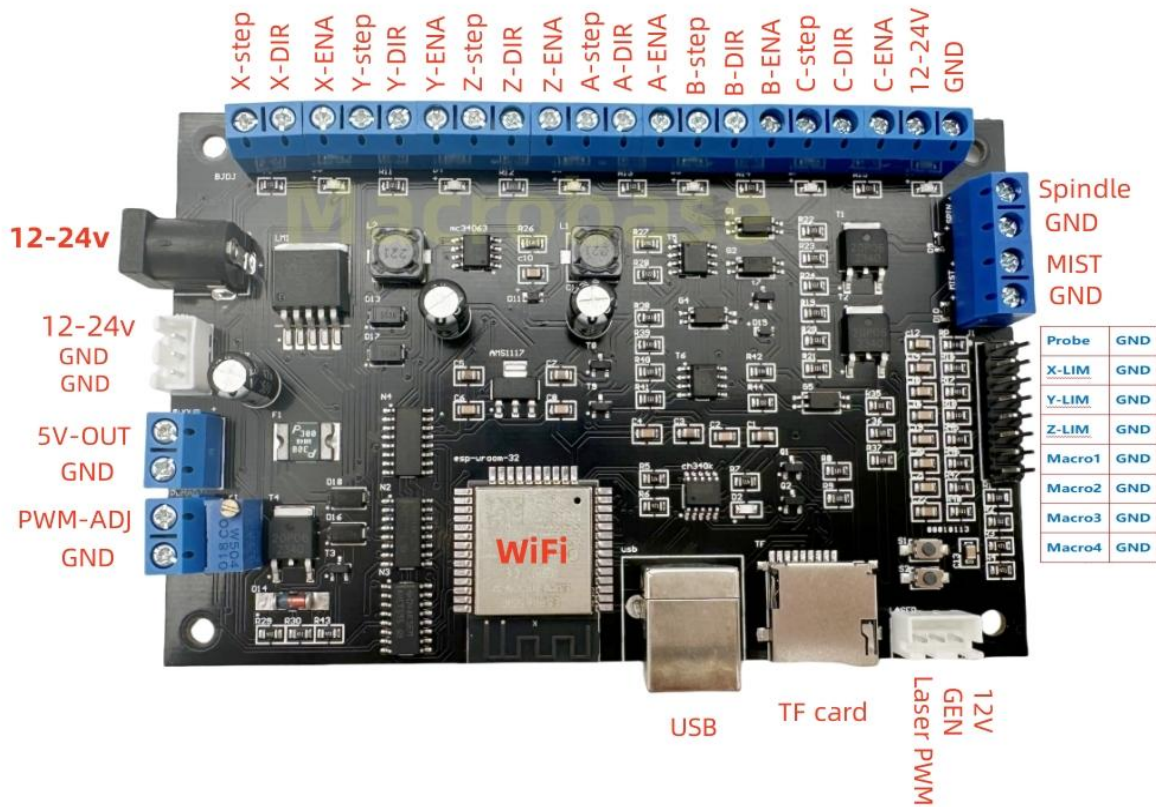
## Features

- ❖ Adopting dual-core ESP32 16-bit high-speed processor
- ❖ Compatible with GRBL software,Such as Candle,Bcnc,CNC3D COMMANDER...
- ❖ Support six stepper drivers
- ❖ Support Homing,software/hardware endstop,Z probe.
- ❖ Support hotspot,Wifi to control
- ❖ Support 3pin laser.Adjustable voltage 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.

## Wiring



PROBE Z-probe

X-LIM X limit,Always on

Y-LIM Y limit,Always on

Z-LIM Z limit,Always on

GND XYZ axis com,probe

PWM-OUT PWM output

GND PWM ground

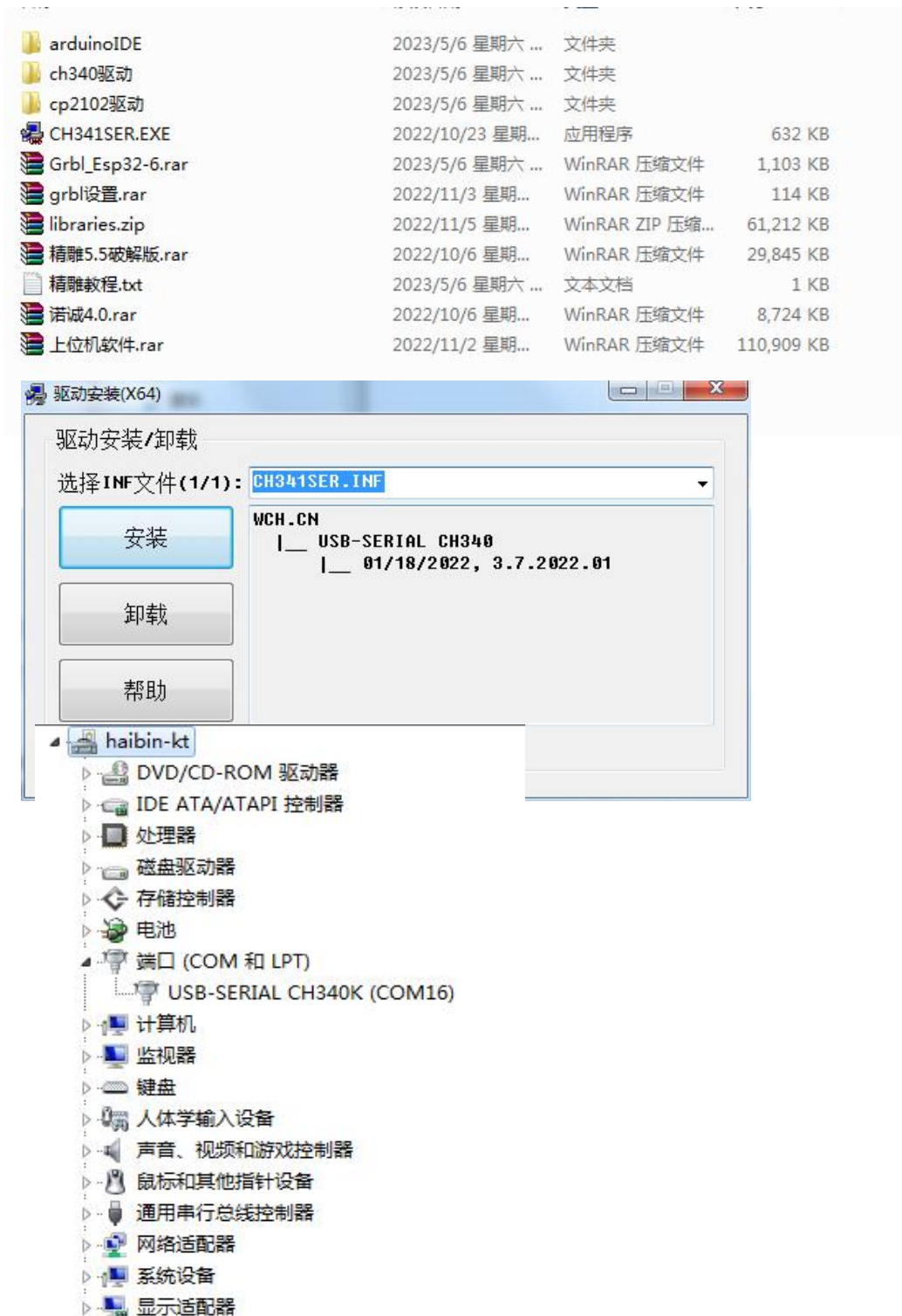
PWM-ADJ PWM adjustable

GND All drivers PUL-,EAN-,DIR-

X-STEP X-PUL+ X-EAN X-ENA+ X-DIR X-DIR+



## Install ch340 USB Driver



See CH340K,successfully install.

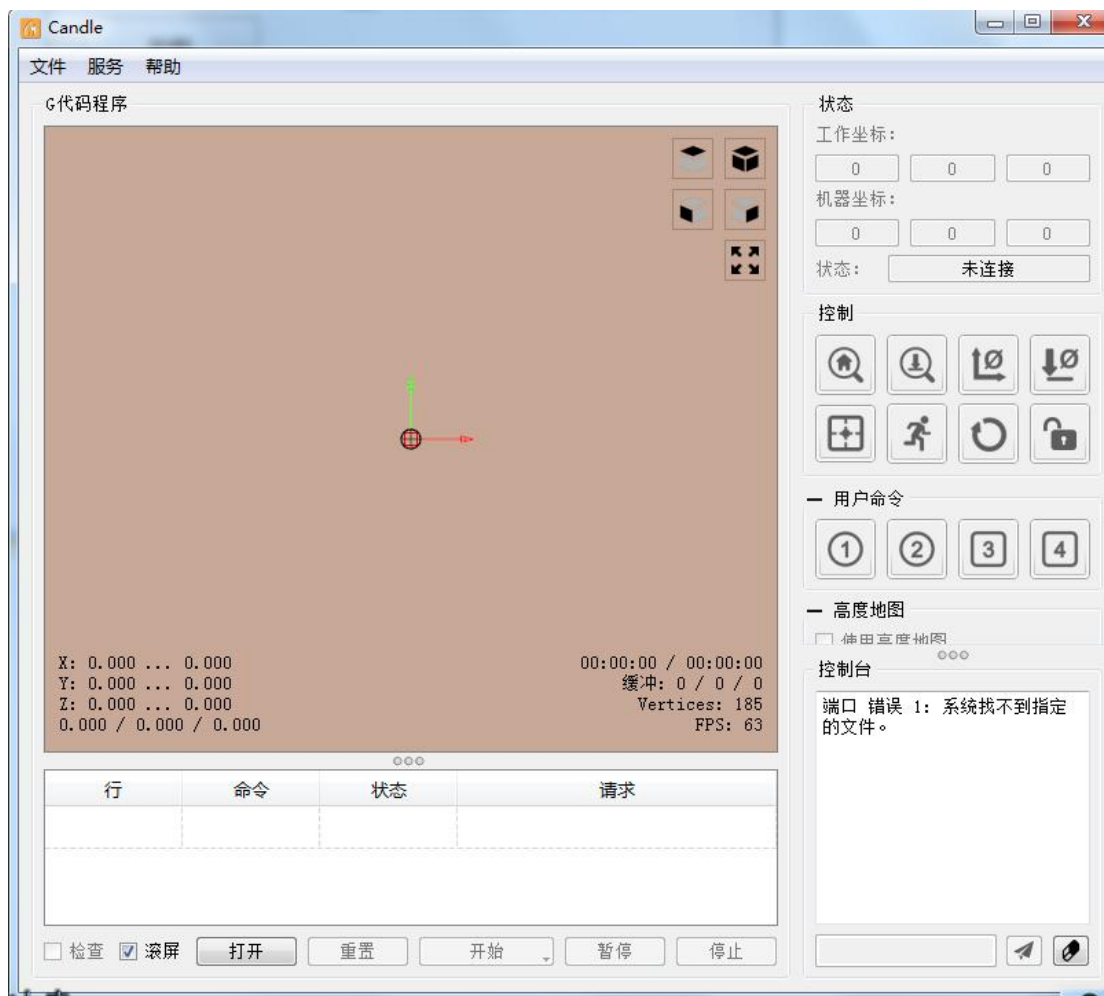
# Software

Candle,CNC3dCommander and Bcnc.

上位机软件.rar 2022/11/2 星期... WinRAR 压缩文件 110,909 KB

## 1.Candle

Unzip candle and open [candle.exe](#)



设置

连接

发送者

机器信息

控制

用户命令

高度地图

解析器

可视化工具

工具模型

控制台

面板

颜色

字体

连接

端口：

COM6

波特率：

115200

发送者

☐

忽略错误响应

☒从所选行发送前自动设置分析器状态

机器信息

状态查询周期：

250

单位：

毫米

快速速度：

0

加速度：

10

主轴最小转速：

0

最大：

100

最小激光功率：

9

最大：

100

控制

对刀命令：

G90G21G38.2Z-50F100; G92Z1.6; G0Z10;

安全位置命令：

命令 1; 命令 2; ...

☒“还原原点”将工具移入：

平面

用户命令

按钮 1：

命令 1; 命令 2; ...

设为默认值

确认

取消

状态

工作坐标：

0.000

0.000

0.000

机器坐标：

0.000

0.000

0.000

状态：

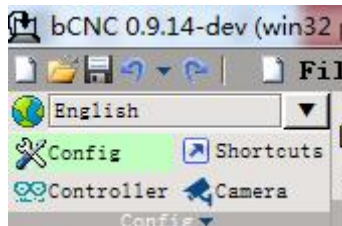
空闲

## 2. BCNC

Plug control board to PC via USB cable, and enter bcnc.exe



Click CAM, select language.



Enable 6 axis display, then reboot software.

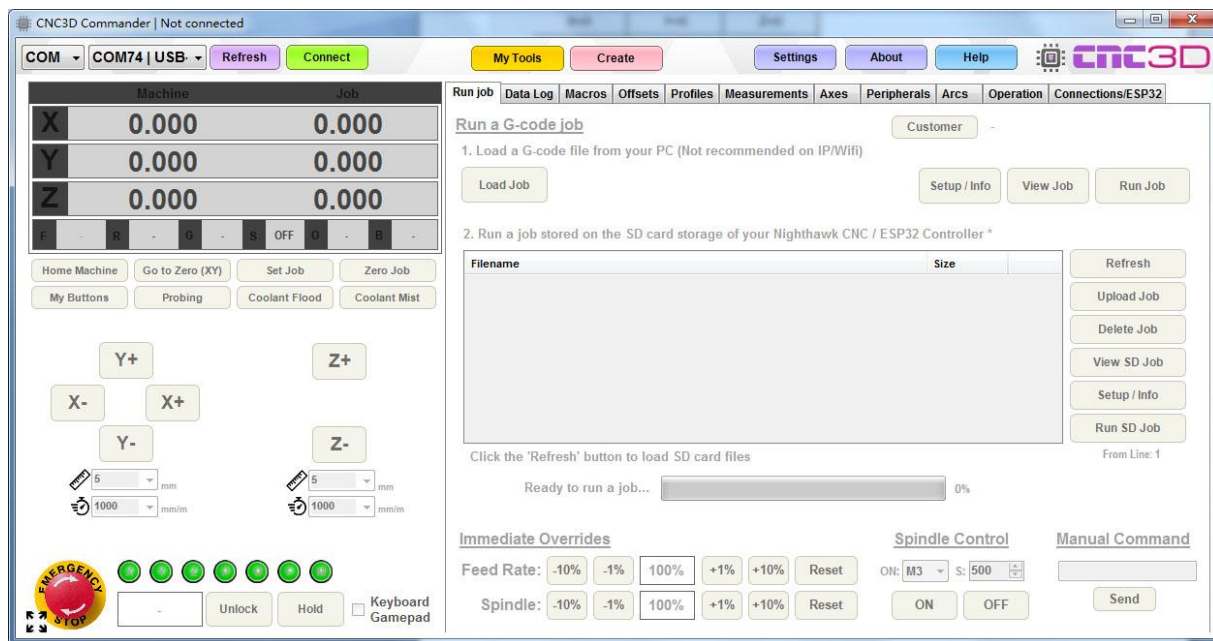


Click file, select COM and open it.

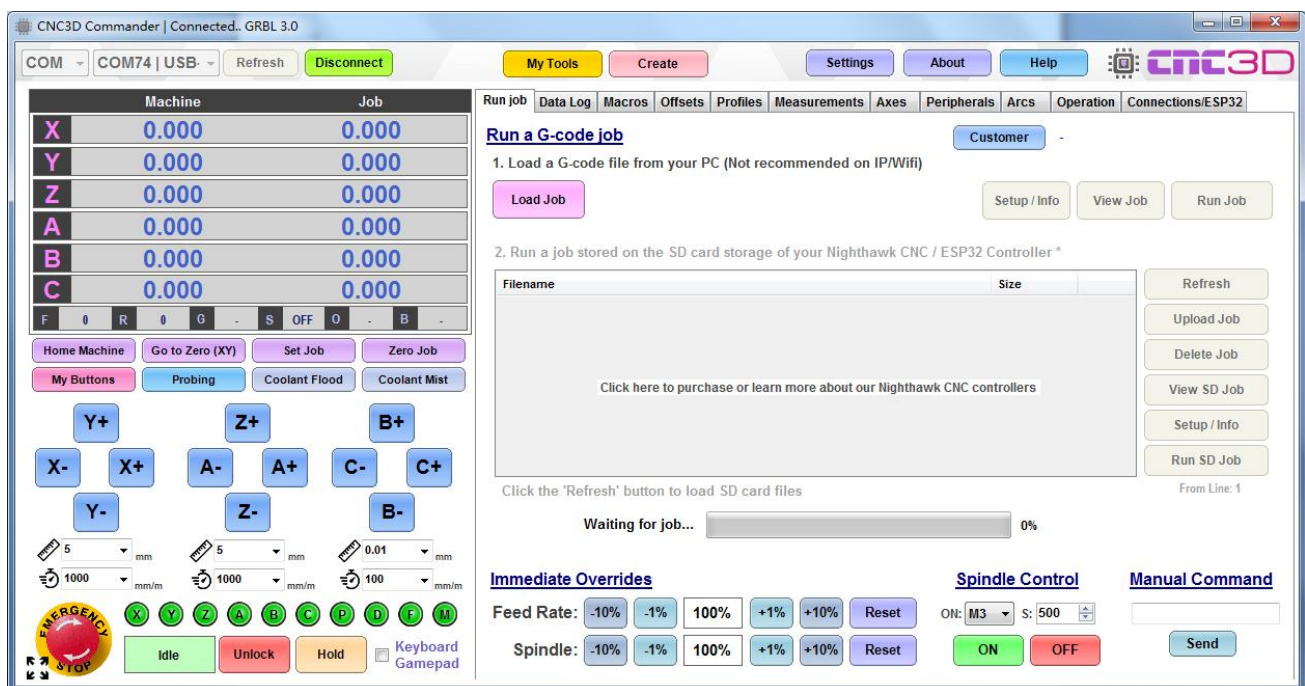


### 3.CNC3d Commander

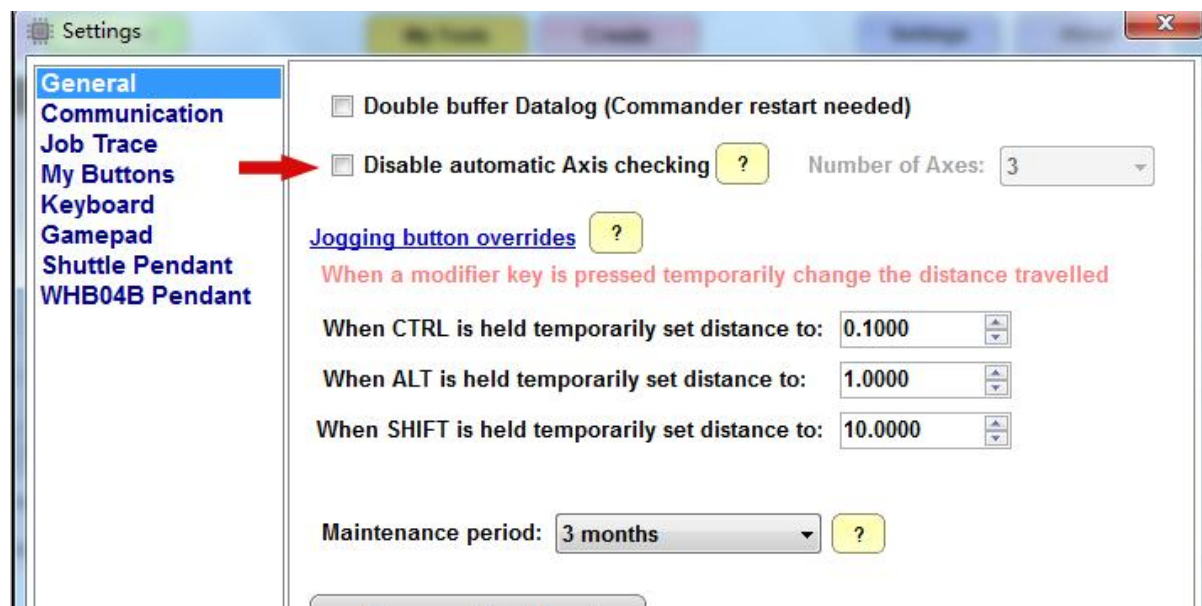
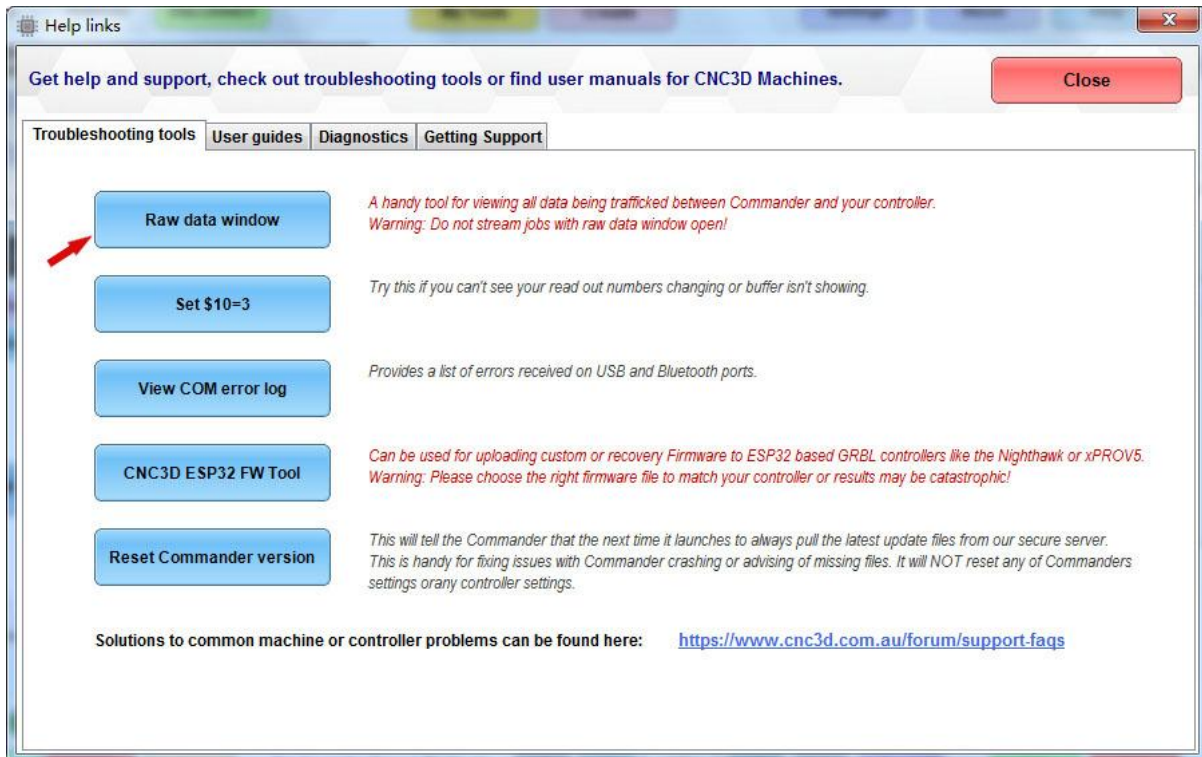
Open CNC3dcommander as below



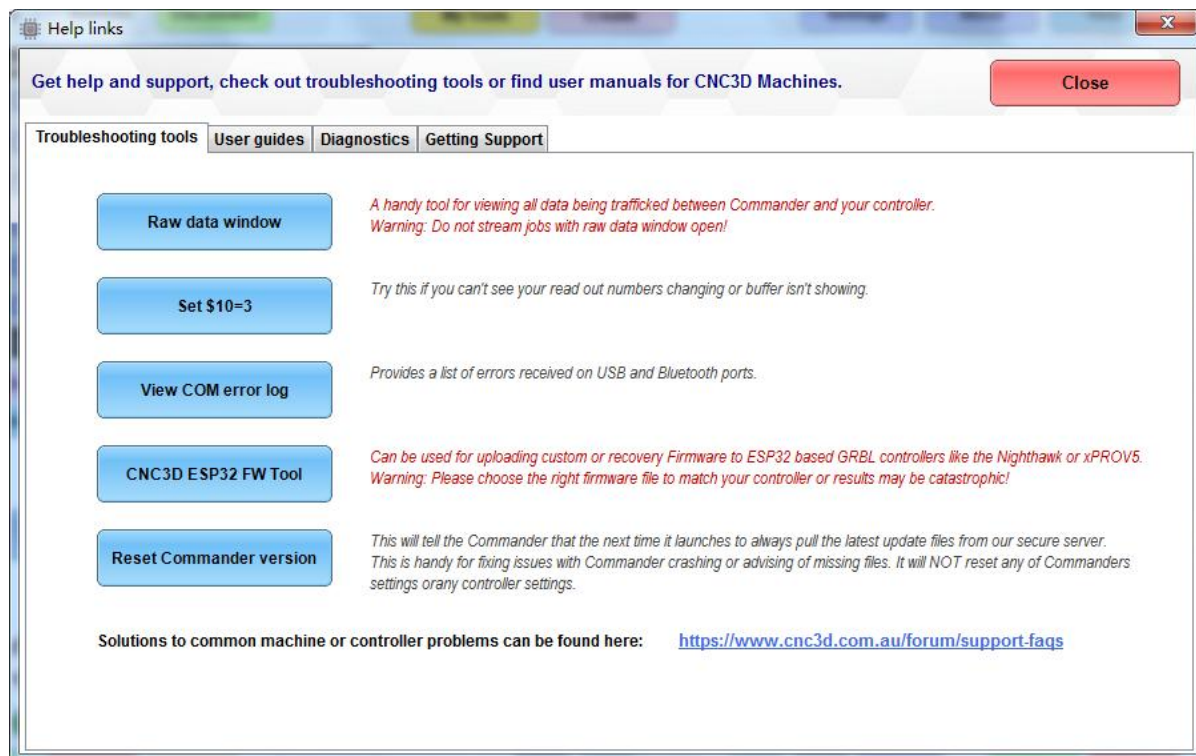
Connect control board and reflash.



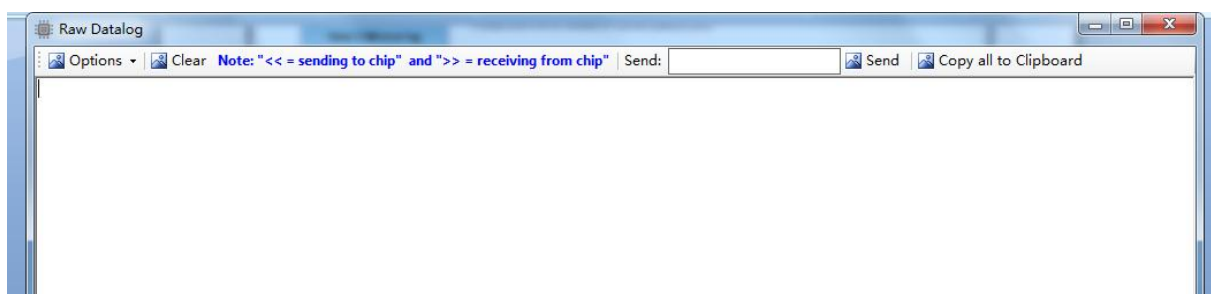




## Update and connect



## Raw data window



Enter below

\$sta/ssid=wifi

\$sta/password=wifi

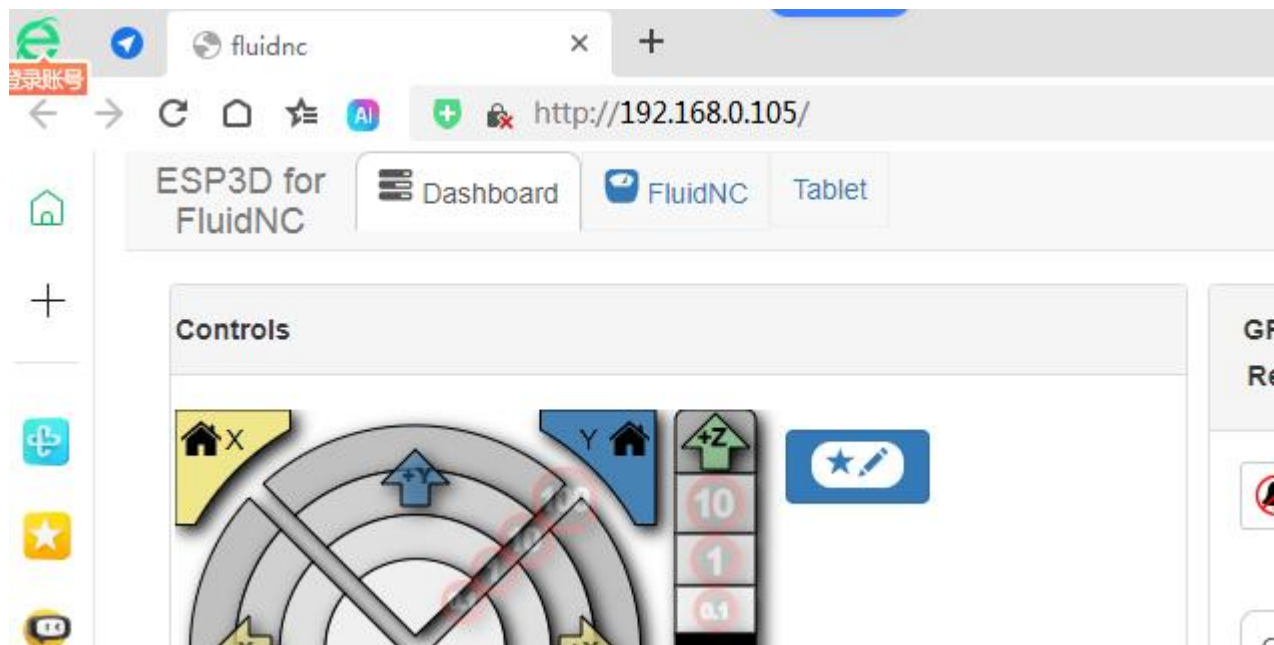
\$bye

```
<< $sta/ssid=haibin-kt
>> ok
<< $sta/password=hxtbc13363258373
>> ok
<< $bye
```

## Find wifi ip

```
>> [MSG:INFO: Connected - IP is 192.168.0.105]
>> [MSG:INFO: WiFi on]
>> [MSG:INFO: Start mDNS with hostname:http://fluidnc.local/]
>> [MSG:INFO: SSDP Started]
>> [MSG:INFO: HTTP started on port 80]
>> [MSG:INFO: Telnet started on port 23]
>> Grbl 3.0 [FluidNC v3.0.x (noGit) (wifi) '$' for help]
```

Open Browser and enter the ip.



Fluidnc

# FluidNC Settings



☒ Flash Settings    ☐ Config Items

## FluidNC Local Filesystem

Upload files    No file chosen



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

Total: 875.31 KB | Used: 120.60 KB 13%

Close



```

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↵

```

More refer to

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