

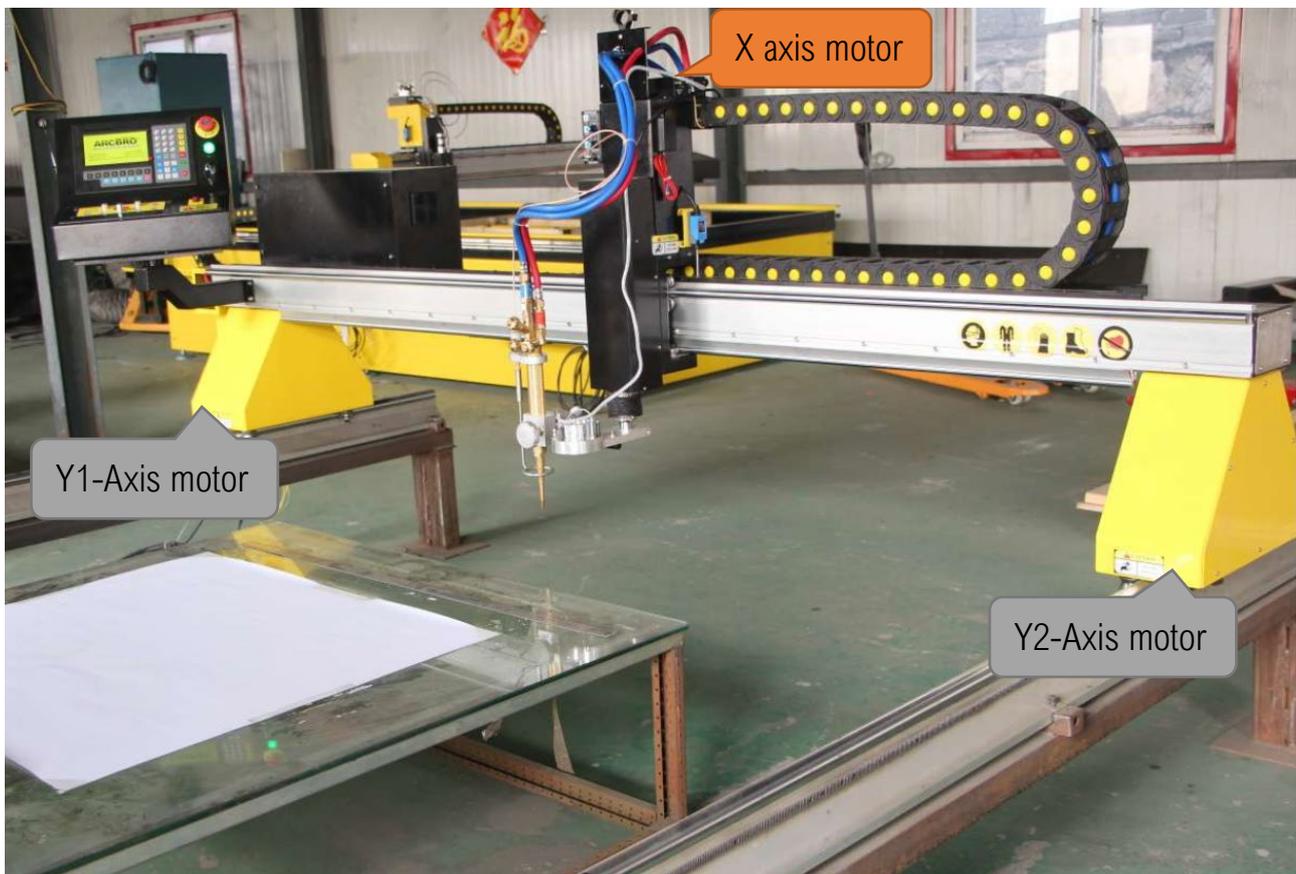
The upgrade 86 motor --Thunder-X PRO

→ Problem: The upgrade 86 motor --Thunder-X PRO

- Solution overview:
1. Installation motor;
 2. Installation driver;
 3. Cable to connect the drive - 5 positions;
 4. Adjust system pulse and test machine;

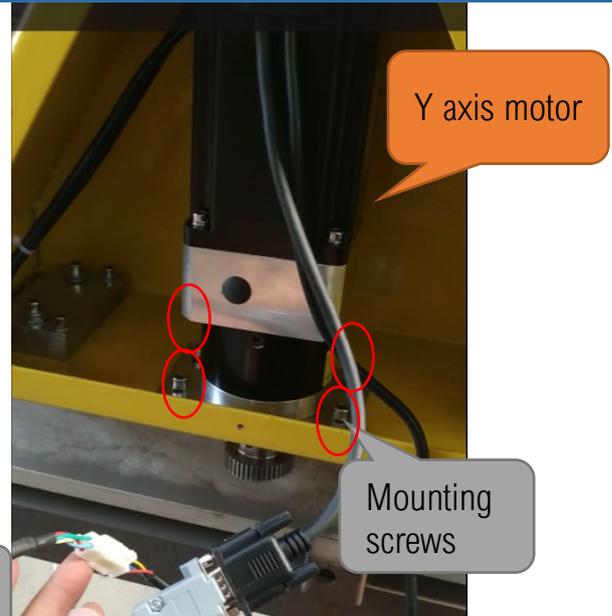
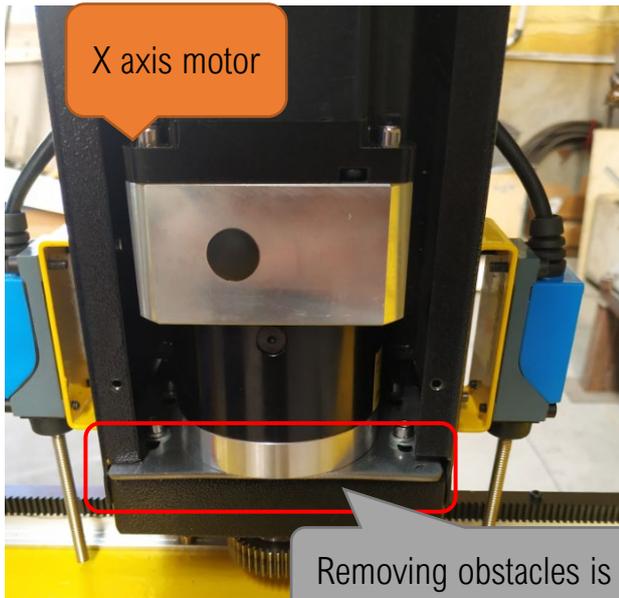
→ Installation 3 motor;

✳ Step1: Remove the cover of the Y1 and Y2、 X axis;



✳ Step2: Since the motor mounting plate is the same size, it is only necessary to replace the old motor with a new one. As shown;

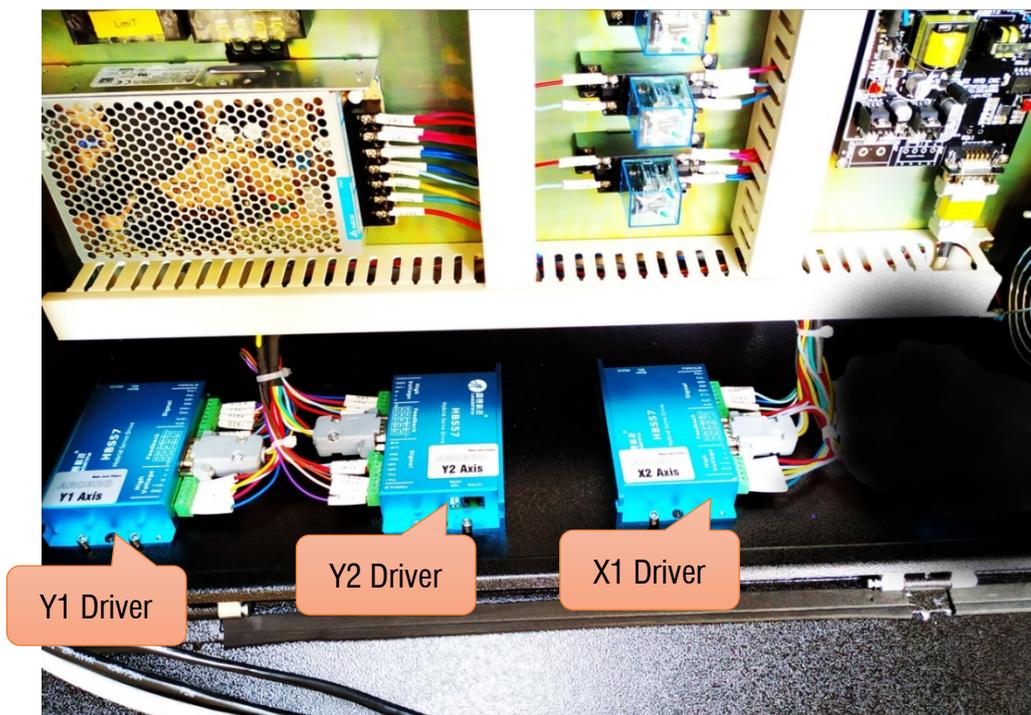
Service Support Spirit



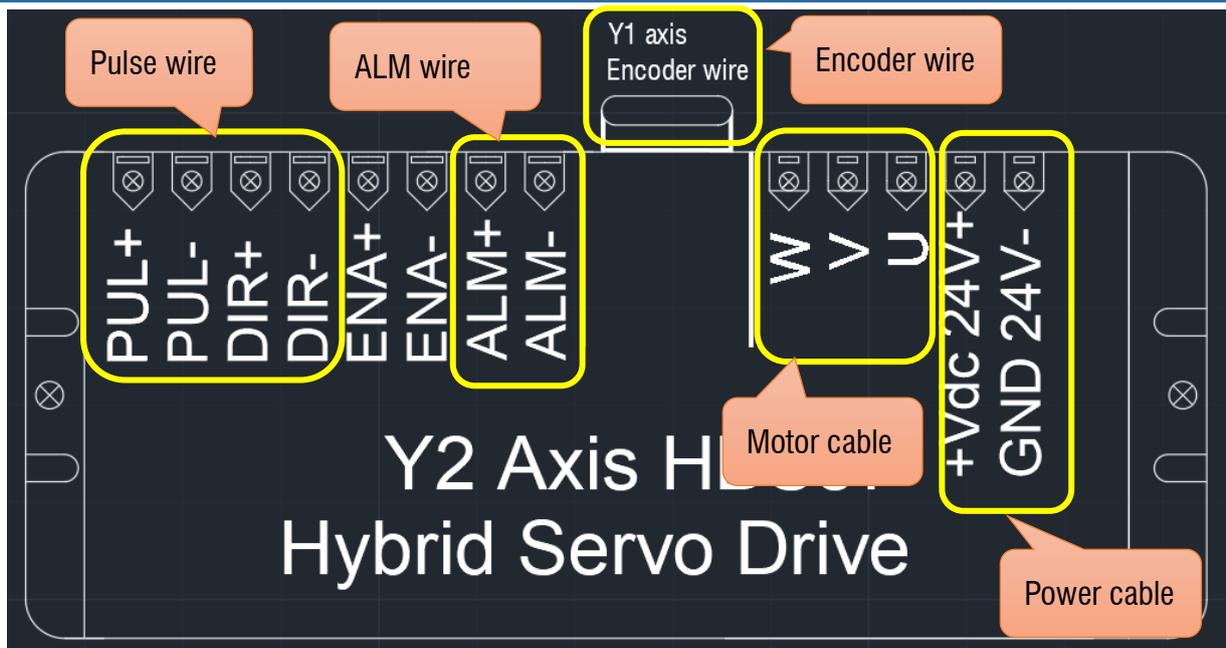
✦ Step3: Install 3 motor on Thunder X-pro

➔ Installation 3 Driver;

✦ Step1: Removing three HBS57 drives; As shown:



✦ Position1--Y1 driver and Y2 driver X driver→Have 5 location need to remove; Each cable has a white label; Note: please do not remove this tag for the next connection;



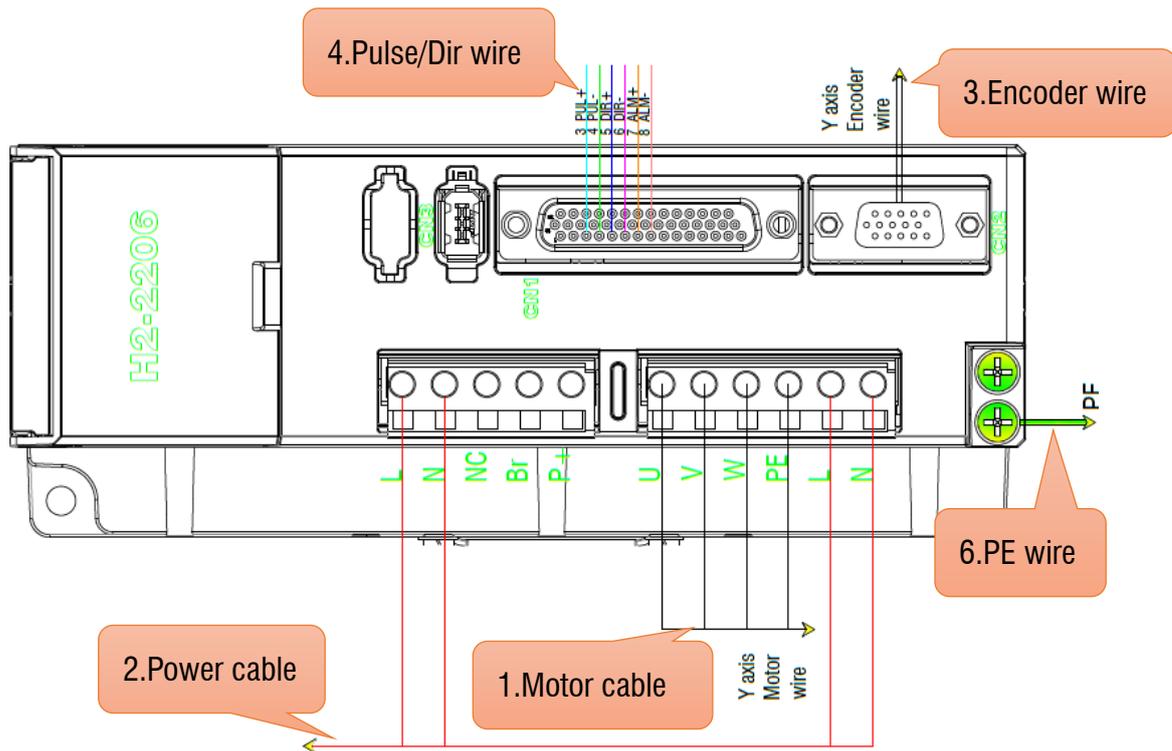
* Note: The power cable needs to be removed, and the new drive does not require this cable.;

* Step3: Installation 3 Driver-H2-2206; Install the driver in the electrical box and fix it with screws;



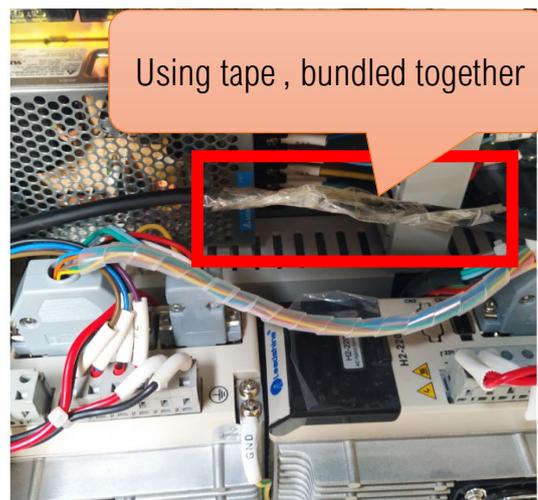
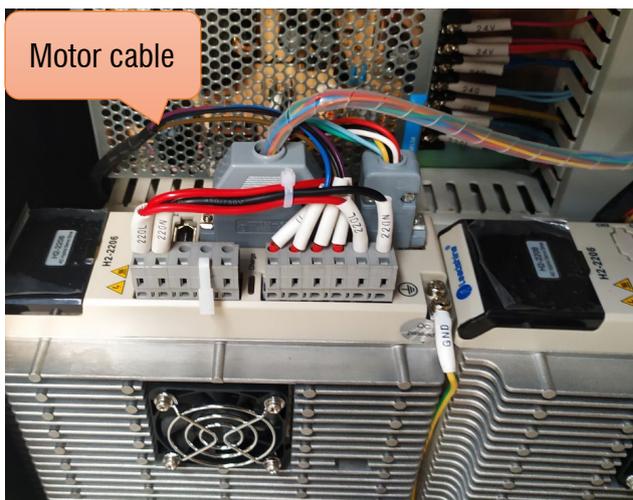
➔ Cable to connect the drive - 6 positions;

5.AL M wire



✧ Step1: Replace the motor cable of the drive;

1. Four-core cable in the accessory,--This is new motor cable;
2. Using tape, put one end of a new motor cable (one end of a white plug) and one end of the old motor line to bundled together;



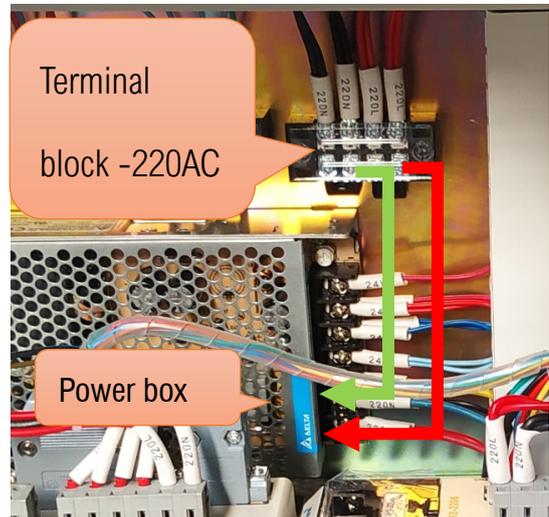
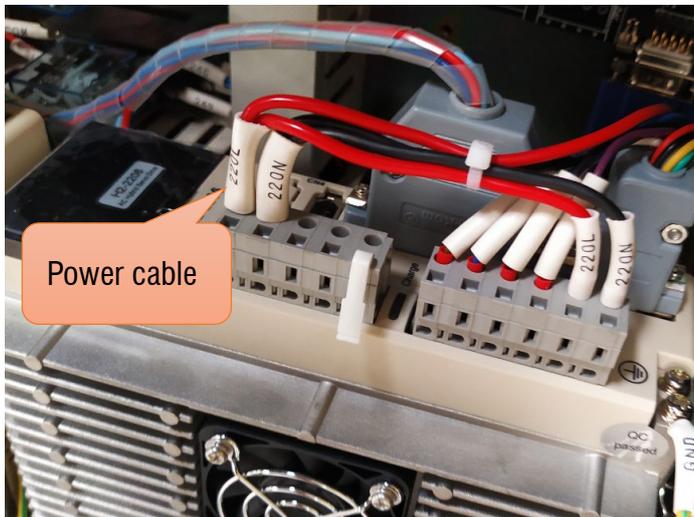
3. Two people are needed. One person pushes the motor cable on the side of the electrical box, and the other pulls the motor cable on the Y1 axis side;
4. Connect the new motor cable to the drive according to the U, V, W, PE markings;

Service Support Spirit

Note: The same method replaces the motor line of the three drives;

✧ Step2: Connect the power cable of the drive;

1. Terminal block -220AC is installed inside the electrical box;



2. Connect the new motor cable to the drive according to the 220L,220N markings;
3. The same method connect the power cable of the three drives

Note: Each drive has two power supply locations.

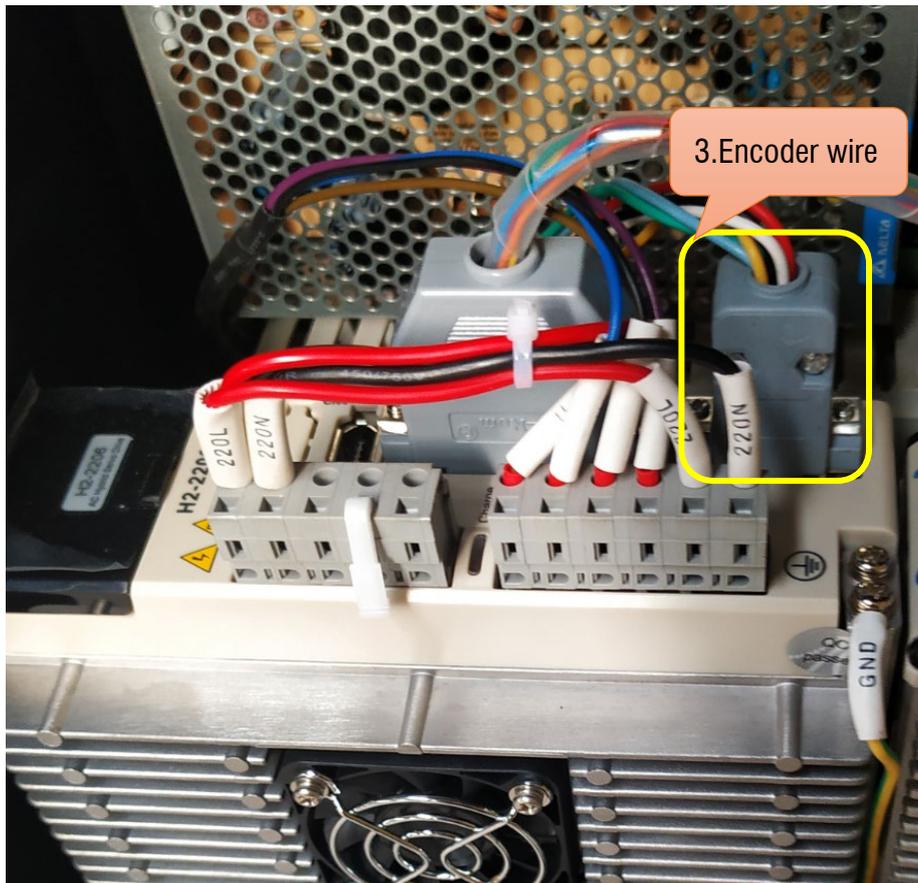
4. Check the direction of the drive.--- Powering the drive→Press **【ENT】** key into Drive display **【d00uEP】** →Press **【M】** key into **【PR__00】** →Press **【▲】** key Selection parameter—Selection No.19 then press **【ENT】** key,-- Display parameter settings;

NOTE: The Y2 axis driver No. 19 parameter display is 1, the other two drivers are the same and can be exchanged.

✧ Step3: Connect the encoder cable of the drive;

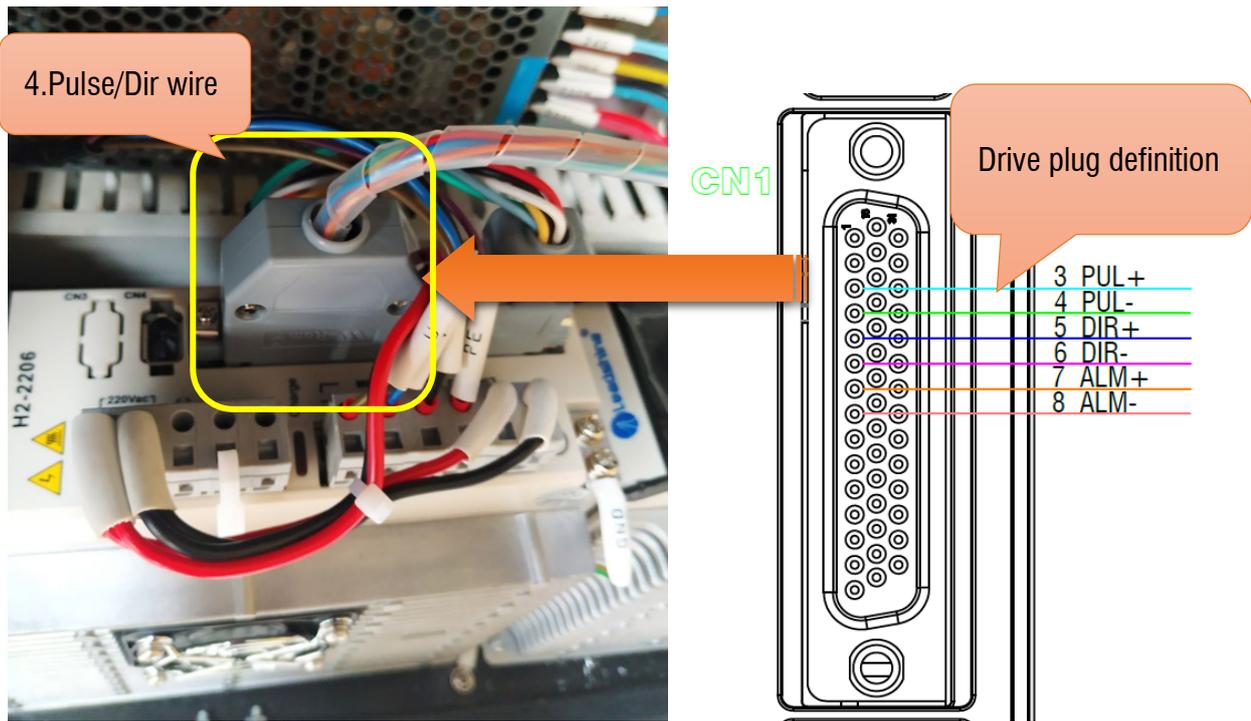
1. Since the encoder lines are the same, connecting the encoder lines only needs to be connected according to X Y1 and Y2.;

2. Motor connection encoder line;



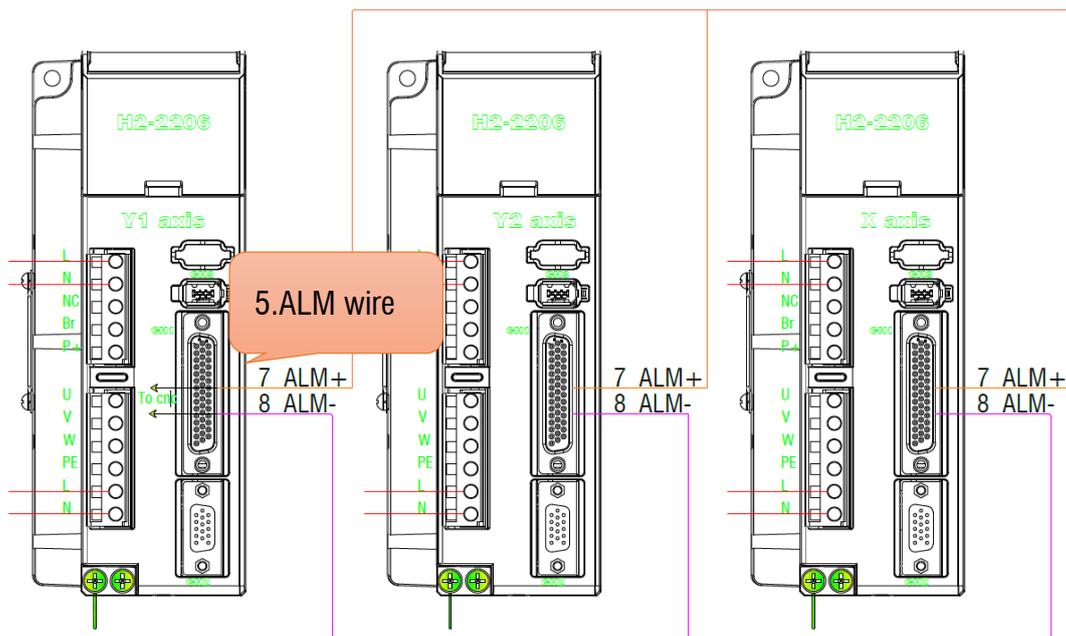
✳ Step4: Connect the Pules/Dir cable of the drive;

1. Each cable in the pulse and direction is marked, please follow the marked, connect to the new driver plug; Need used electric soldering iron.;
2. The same method connect the Pules/Dir cable of the three drives;

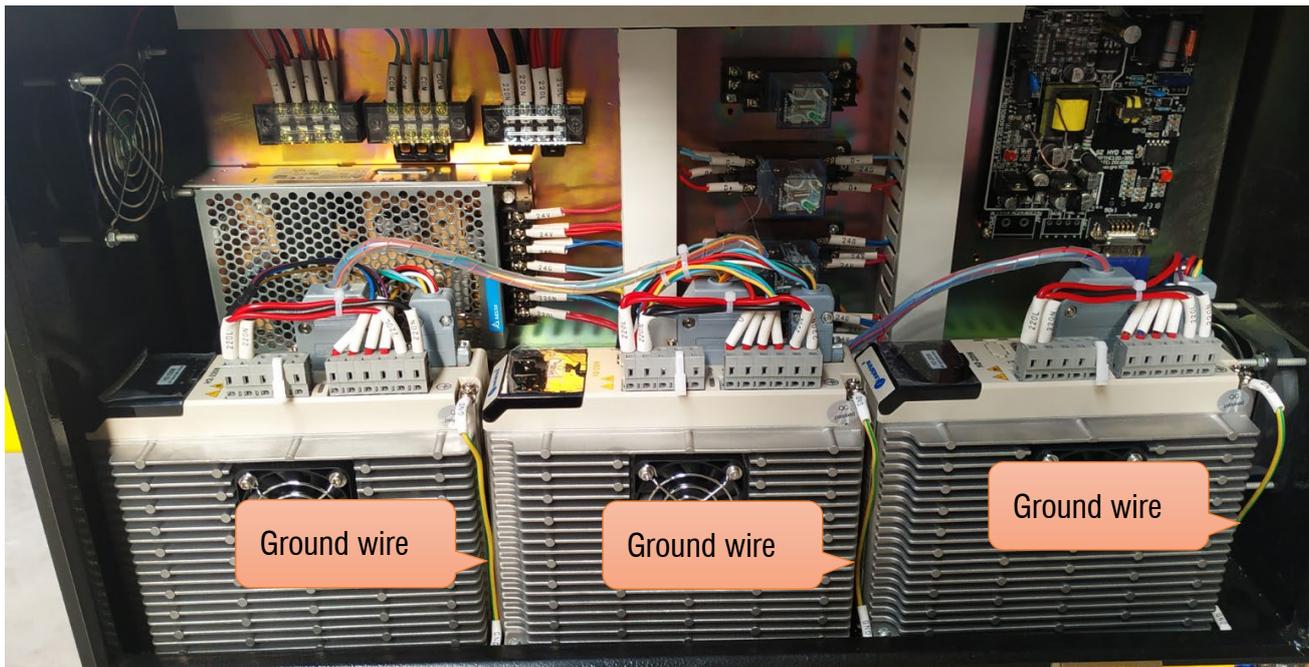


✧ Step5: Connect the ALM cable of the drive;

1. The system outputs two ALM signals to the Y1 driver; marking ALM+ and ALM-; please follow the marked, connect to the new driver plug; ALM+/-parallel connection to the other two drive; Need used electric soldering iron;



✧ Step6: Connect the Ground cable of the drive;-- Ground wire connected to the housing;



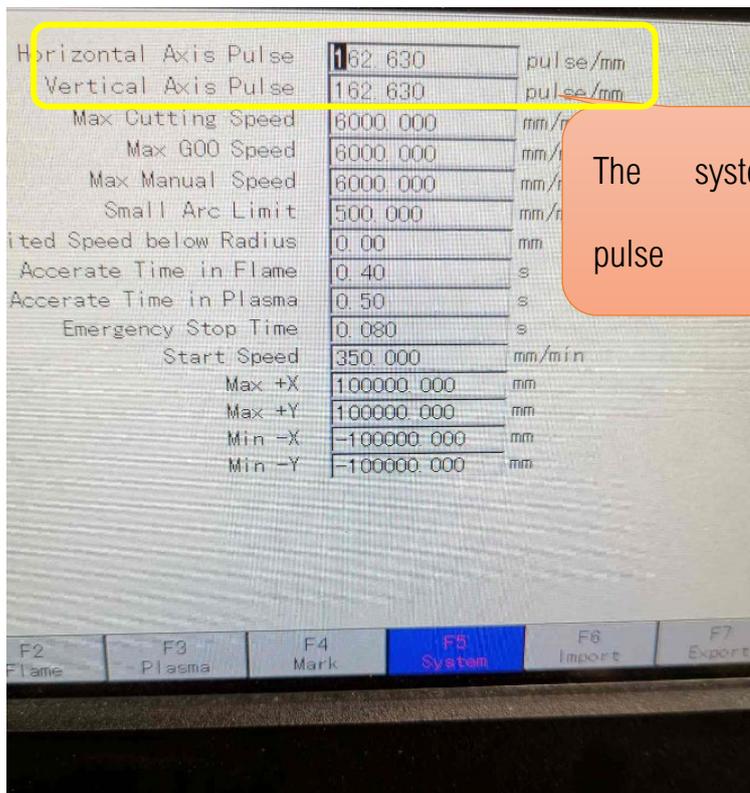
➔ Adjust system pulse and test machine;

1.The system pulse is as shown:

2. Modification speed:

- 【Max cutting Speed】: 12000mm/min
- 【Max Manual Speed】: 12000mm/min

3.Press Save



Congratulations on your
successful machine upgrade