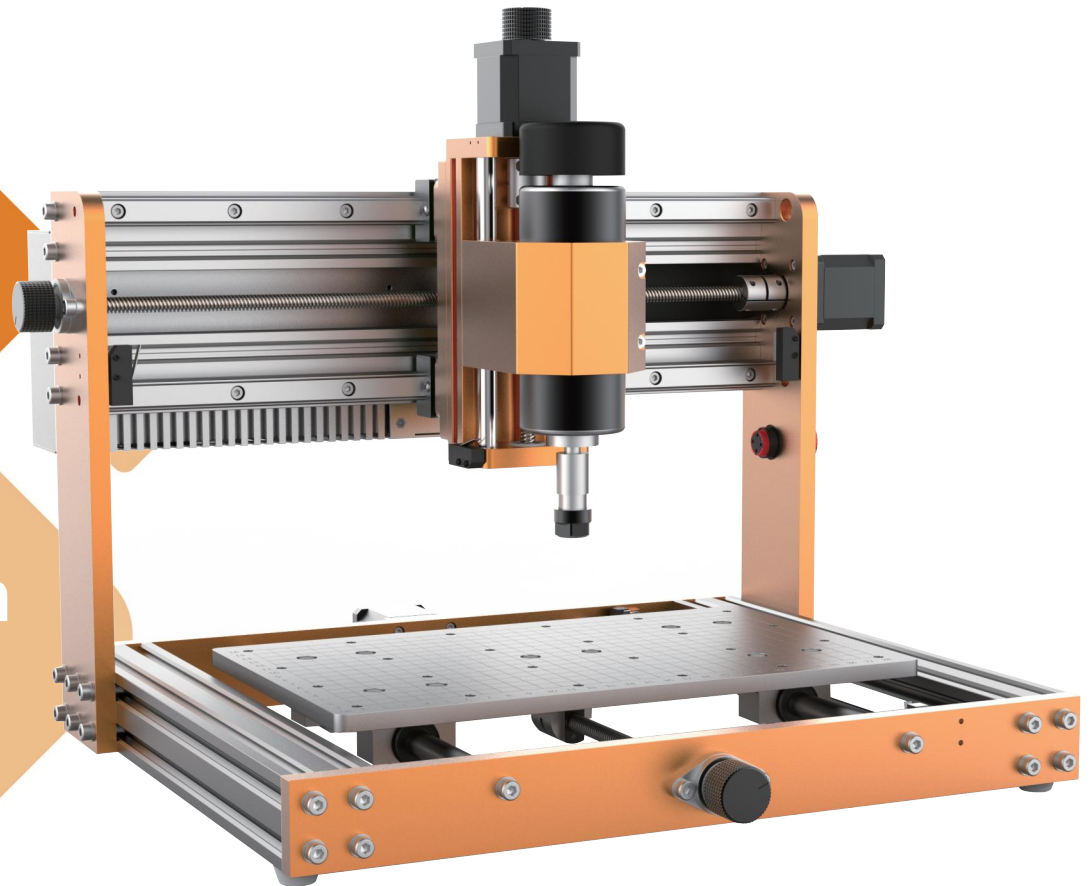


LUNYEE

Assembly Guide Instruction

**3018 Pro Ultra
CNC Router**



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Safety Guide



Please be careful when using your CNC machine. This machine is an electrical device with moving parts and dangerous areas.

- The CNC Machine is for Indoor Use Only.
- You must be 18 years or older to operate this machine, unless supervised by a knowledgeable adult familiar with the machine.
- Wear the proper Personal Protection Equipment (Safety Glasses etc.).
- Always place the CNC Machine on a stable surface.
- The CNC Machine is supplied with a Switchable Power Supply 220VAC or 110VAC. Never use a different power supply; it may cause malfunctions or damage to the machine.
- The 3018 PRO ULTRA utilizes a high amp power supply. It is recommended that you do not plug the CNC Router into an extension cord or power strip as it may damage the machine. (Need final confirmation)
- Ensure the Emergency stop button is easily accessible at all times. Never disassemble the Power Supply or Electrical Components. This will VOID the warranty.
- DO NOT TOUCH the machine spindle, or place any body part near the working area when the machine is operating. Serious injury may occur.
- DO NOT leave children unsupervised with the CNC Machine even when it's not operating. Injury may occur.
- DO NOT leave the machine unattended while it's operating.
- Ensure your CNC Machine is in a well-ventilated area. Some Materials may discharge smoke or fumes during operation.

Specifications

Work Area	300x180x78mm (11.81x7.08x3.07inch)
Drive Type	Chrome Plated Shaft & T-Shaped Screw Rod
Control Board	3 Axis V5.2 GRBL 1.1f
Stepper Motor	Nema17 42x48mm
Stepper Motor Drive	A4988
Spindle	φ52mm 500W 12000RPM
Power	48V 500W
Max Motion Speed	5000mm/min
Max Process Speed	2000mm/min
Max Accelerated Speed	200mm/s ²
Accuracy	±0.1mm
Limit Switch	Yes (X1, X2, Y1, Y2, Z1, Z2)
E-Stop	Yes
Z-Probe	Yes
Software	UGS
Laser	Support laser module with 40mm width
Operating System	Windows XP/7/8/10 & Linux & MAC OS
Overall machine size	485x415x374mm (19.09x16.34x14.72inch)
Machine Weight	13kg

Package Contents



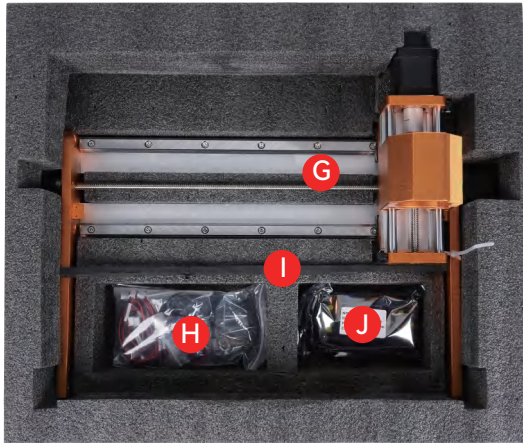
- A 36. User manual 2pcs
- B 4. Control board 1pc
- Tool box
- Connection guide for offline screen

The toolbox contains:

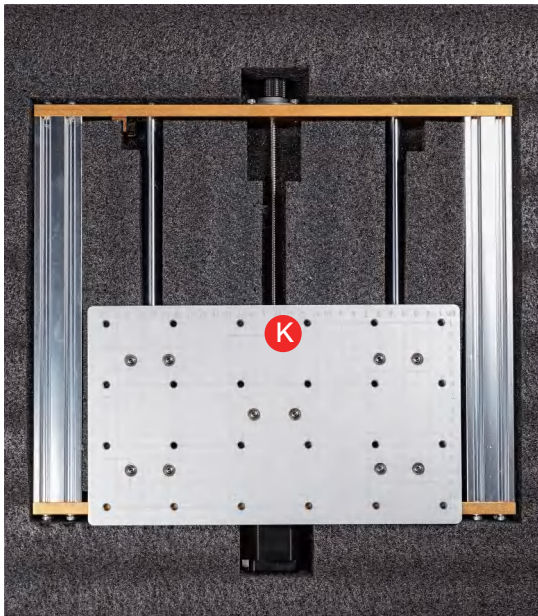
- 1 35. Lube 1pc
- 20. Wrenches
- 2 10. Power brackets 2pcs
- 3 7. Limit switches 2pcs
- 4 8. Spindle clamp 1pc
- 31. USB driver 1pc
- 6. Rubber feets 4pcs
- 5 28. Wire clamp 10pcs
- 13. Gasket M5 12pcs
- 14. Screw M5-16 12pcs
- 15. Screw M5-10 4pcs
- 16. Pan head screw M4-8 4pcs
- 17. Pan head screw M4-6 4pcs
- 18. Pan head screw M2-10 5pcs



- C 22. Power cord 1pc
- 29. Platen 2pcs
- 12. Emergency stop switch 1pc
- 19. Flat head screwdriver 1pc
- 33. Brush 1pc
- 34. Steel ruler 1pc
- 21. Tool setting instrument 1pc
- 27. Router bit* 1 set
- 11. Cable ties
- D 23. USB data cable 1pc
- E 5. Power supply 1pc
- F 3. Spindle motor 1pc (With ER11 collet)



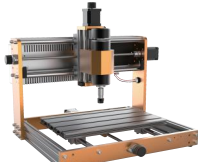
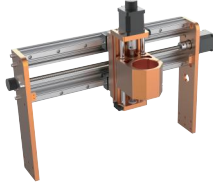
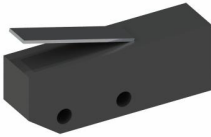
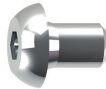
- G** 2. XZ-axis module 1pc
- H** 24. Motor cable 3pcs
- 25. Limit lines 6pcs
- 26. Spindle cord 1pc
- 32. Braided tube 1pc
- I** 9. Wire trough 1pc
- J** 30. Offline controller



- K** 1. Y-axis module 1pc

Tip: When you cannot find the required part, you can find the location of the accessory in the packaging based on the name and serial number of the part. If not, please contact us:
support@lunyeecnc.com
amazon@lunyee.com

Package List

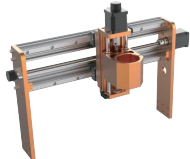
1. Y-axis module 1pc 	2. XZ-axis module 1pc 	3. Spindle motor 1pc (With ER11 collet) 	4. Control board 1pc 	5. Power supply 1pc 
6. Rubber feet 4pcs 	7. Limit switches 2pcs 	8. Spindle clamp 1pc 	9. Wire trough 1pc 	10. Power bracket 2pcs 
11. Cable ties 	12. Emergency stop switch 1pc 	13. Gasket M5 12pcs 	14. Screw M5-45 12pcs 	15. Screw M5-10 4pcs 
16. Pan head screw M4-8 4pcs 	17. Pan head screw M4-6 4pcs 	18. Pan head screw M2-10 5pcs 	19. Flat head screwdriver 1pc 	20. Wrenches 

21. Tool setting instrument 1pc 	22. Power cord 1pc 	23. USB data cable 1pc 	24. Motor cable 3pcs 	25. Limit line 6pcs 
26. Spindle cord 1pc 	27. Router bit* 1 set 	28. Wire clamp 10pcs 	29. Platen 2pcs 	30.Offline controller 
31. USB driver 1pc 	32. Braided tube 1pc 	33. Brush 1pc 	34. Steel ruler 1pc 	35.Lube 1pc 
36.User manual 2pcs 				

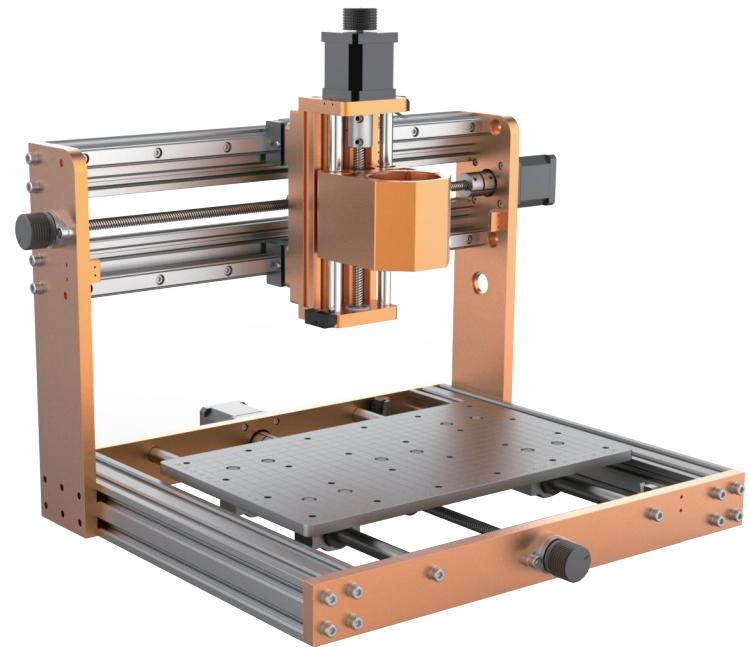
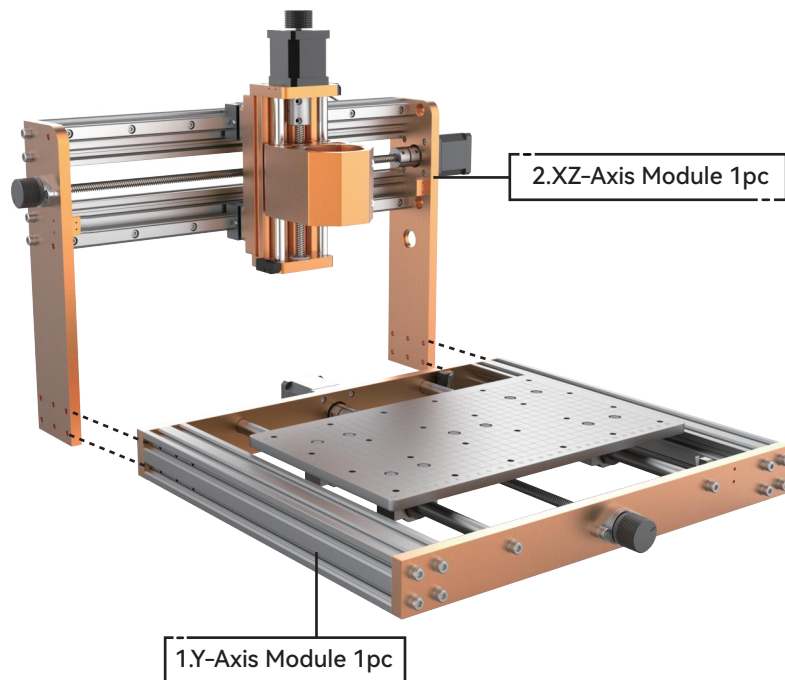
Note: Please check that all accessories are complete before installation.

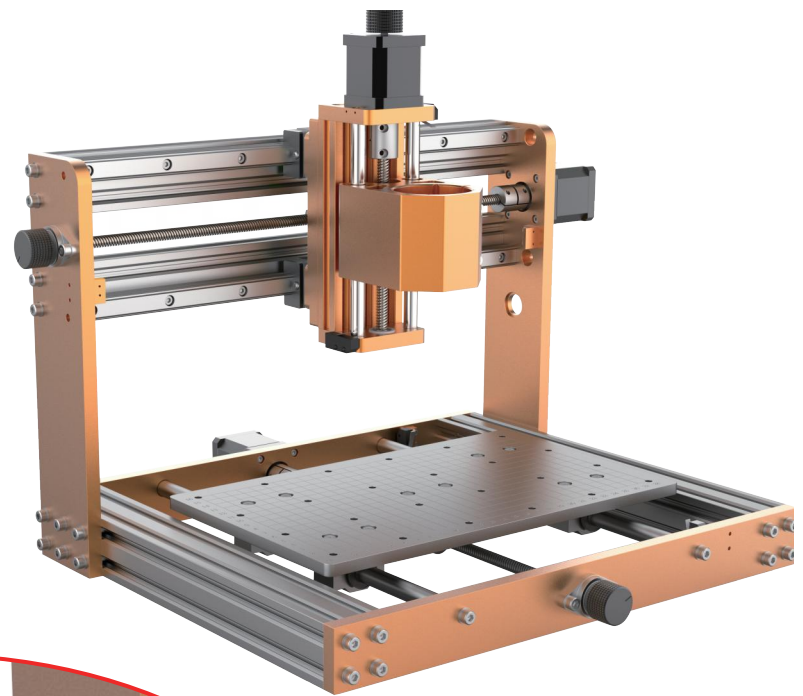
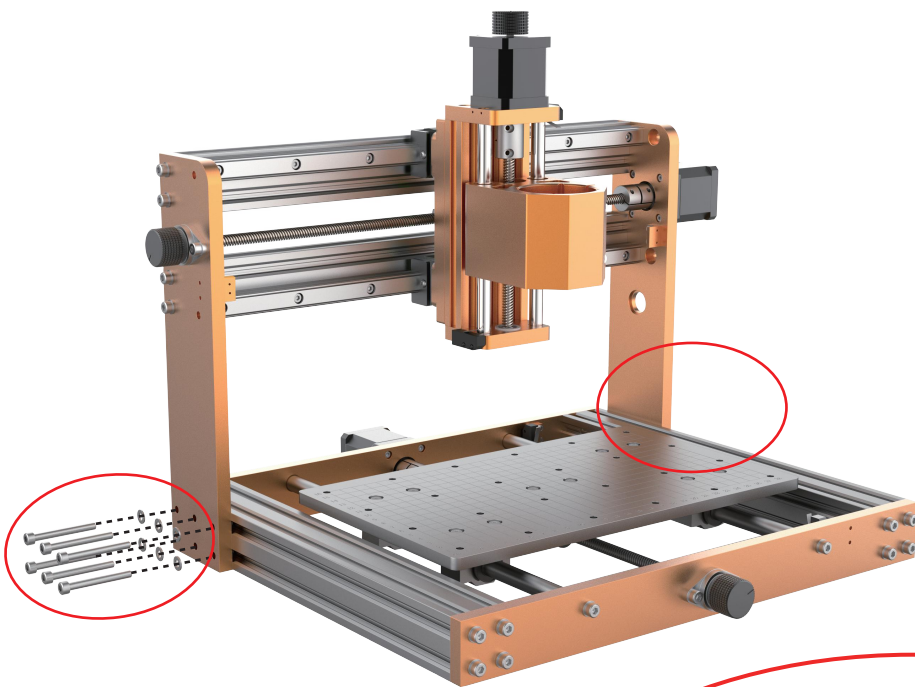
Assembly Instruction

Step 1 X Y Z Module Assembly

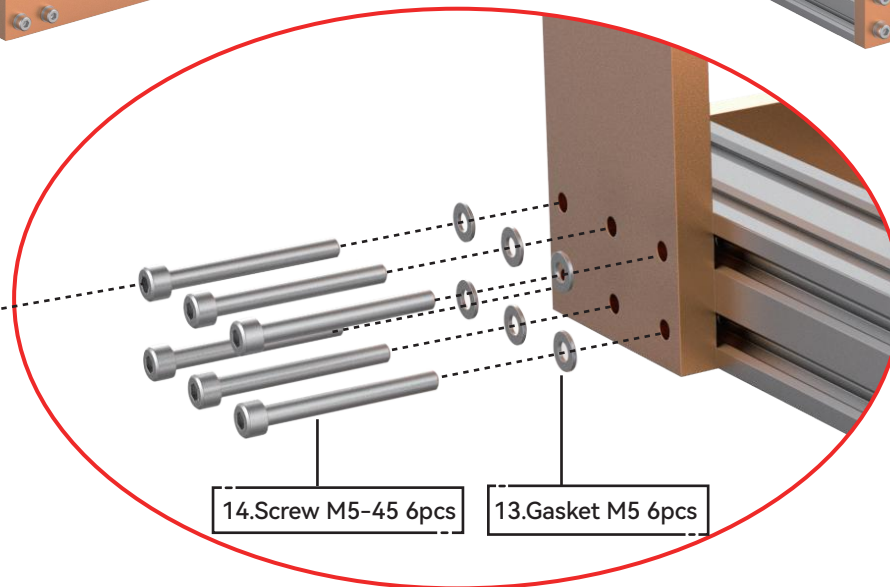
Parts to be used					
	1.Y-Axis Module 1pc	2.XZ-Axis Module 1pc	14.Screw M5-45 12pcs	13.Gasket M5 12pcs	20.Wrench 4# 1pc

Tip: The bottom surface of the aluminum plate of the XZ-axis module is flush with the bottom surface of the aluminum profile of the Y-axis module.





20.Wrench 4# 1pc

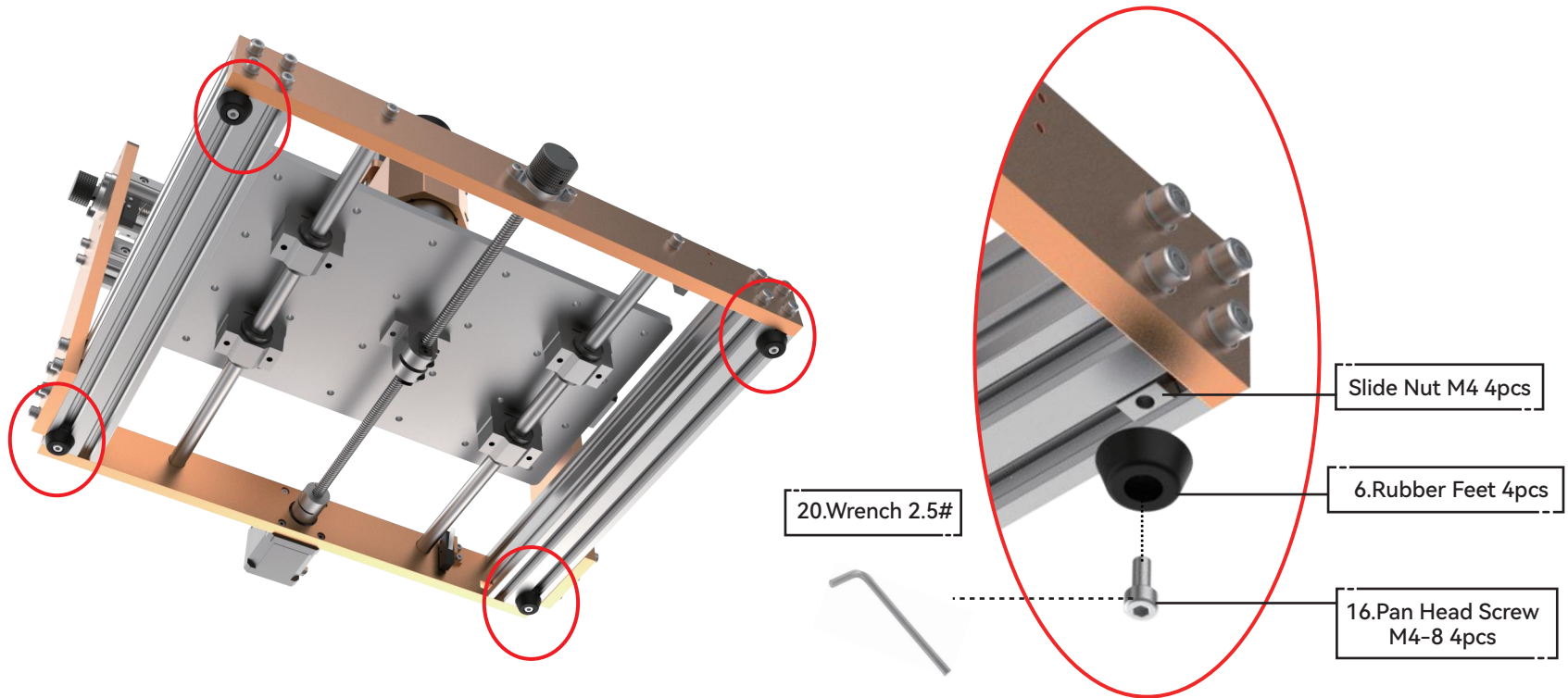


14.Screw M5-45 6pcs

13.Gasket M5 6pcs

Step 2 Install Rubber Feet

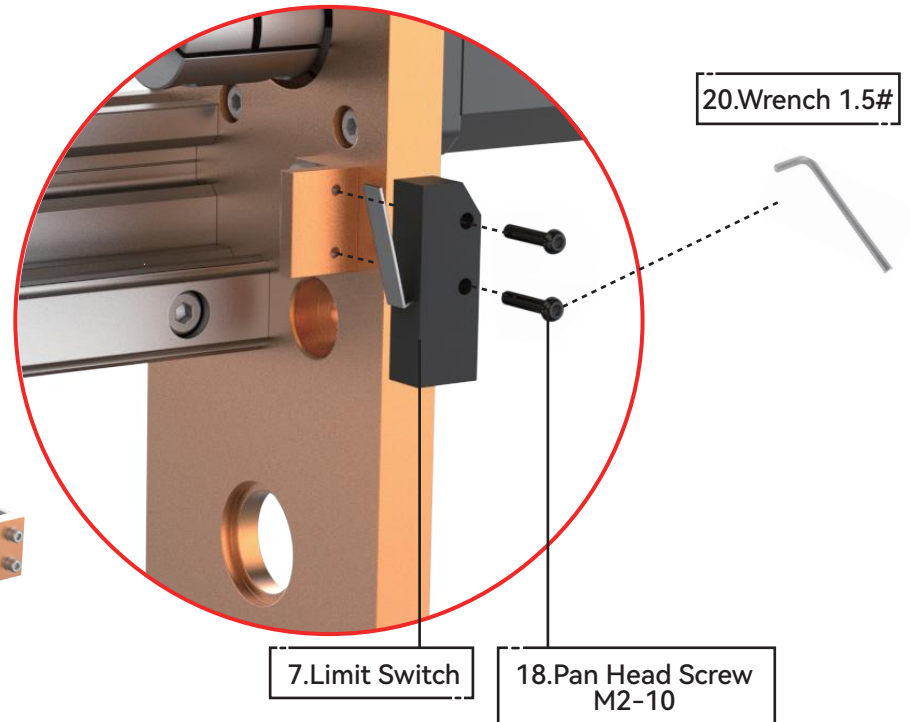
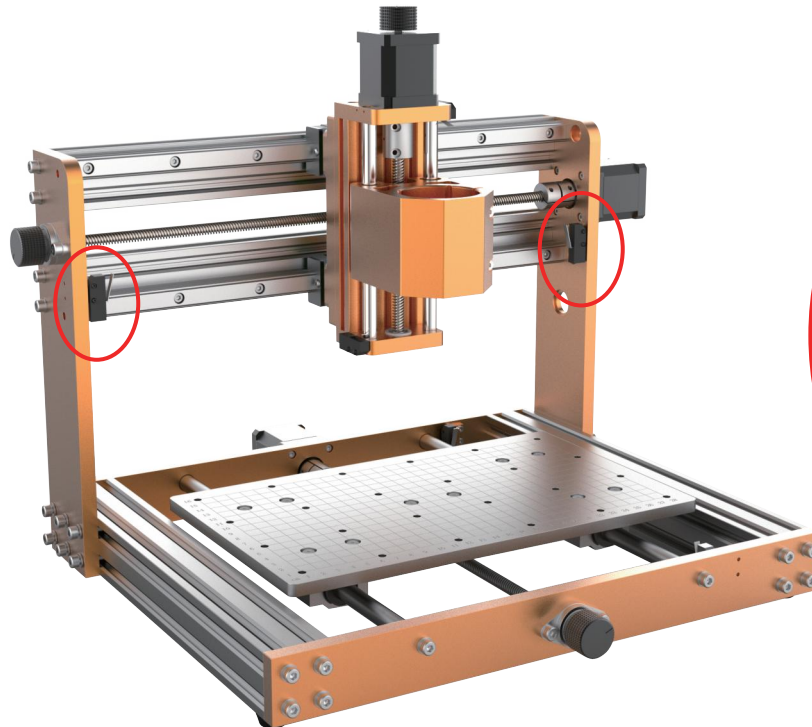
Parts to be used			
	6.Rubber Feet 4pcs	16.Pan Head Screw M4-8 4pcs	20.Wrench 2.5# 1pc



Step 3 Install the X-axis Limit Switch

Parts to be used			
	7.Limit Switch 2pcs	18.Pan Head Screw M2-10 4pcs	20.Wrench 1.5#

Tip: Limit switch socket position downward.

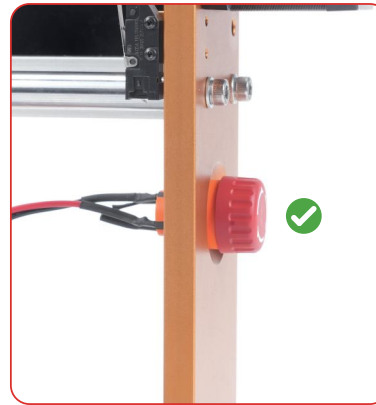


Step 4 Install E-stop Switch

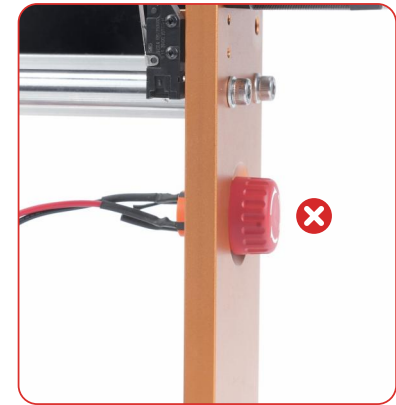
Parts to be used



12.E-stop Switch

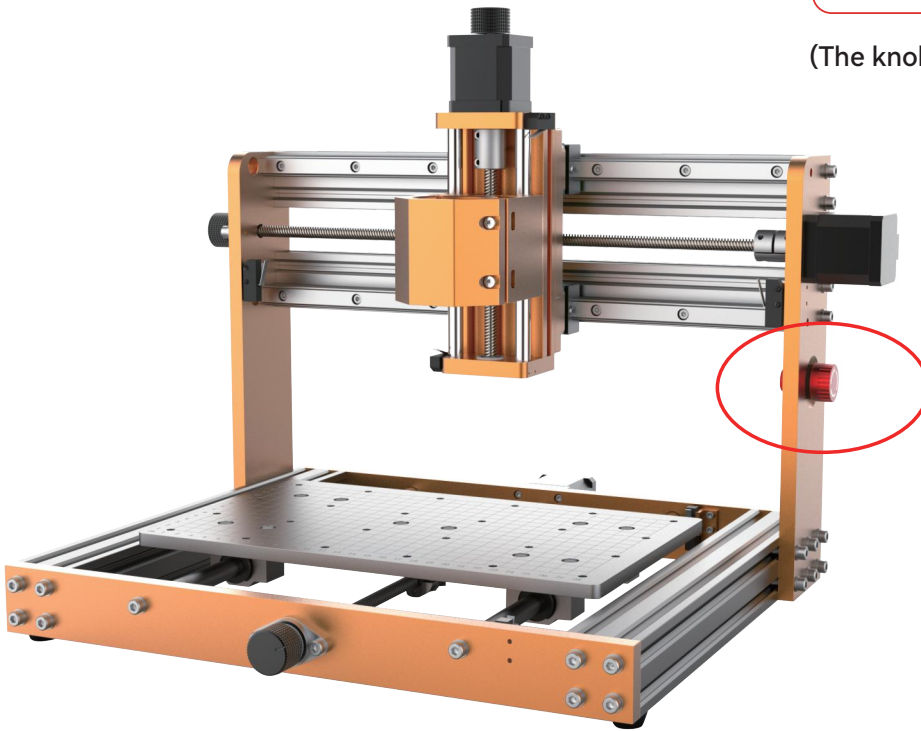
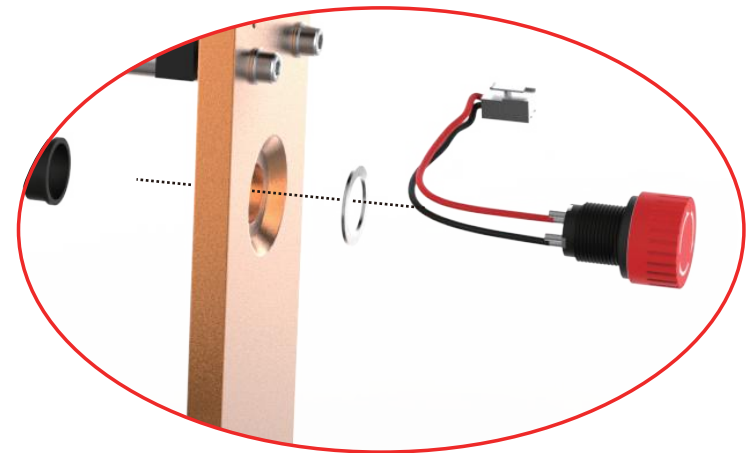


Correct State
(The knob is not pressed down.)

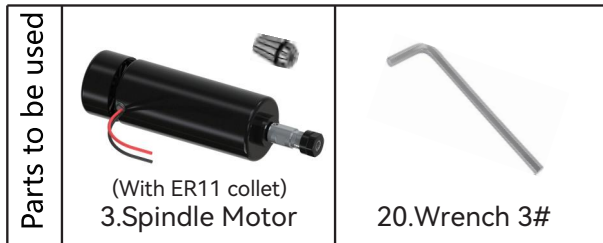


Error Status
(The knob is pressed down.)

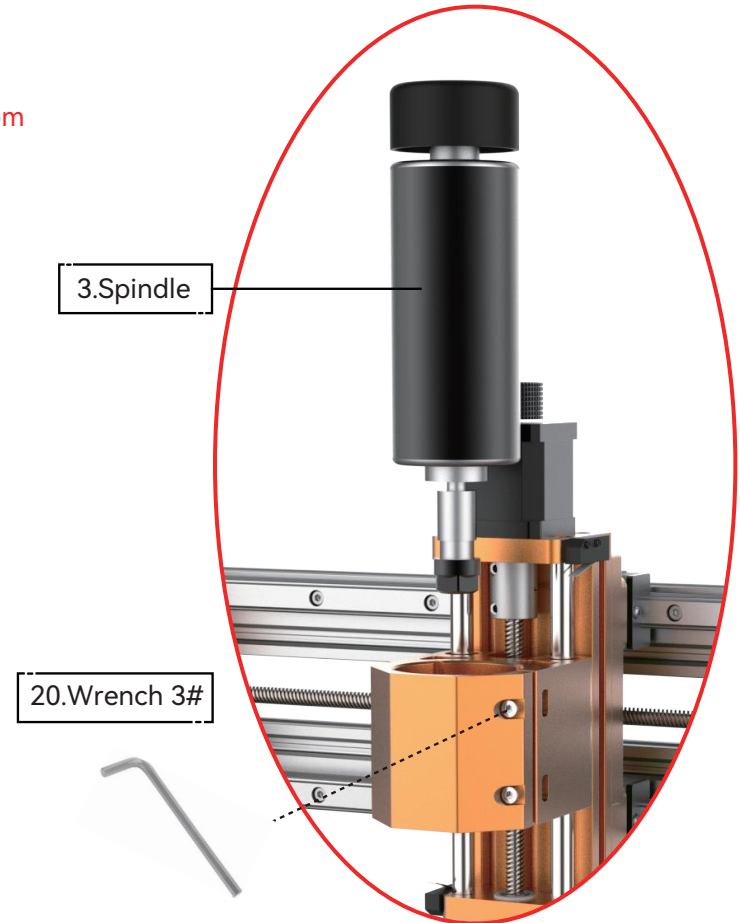
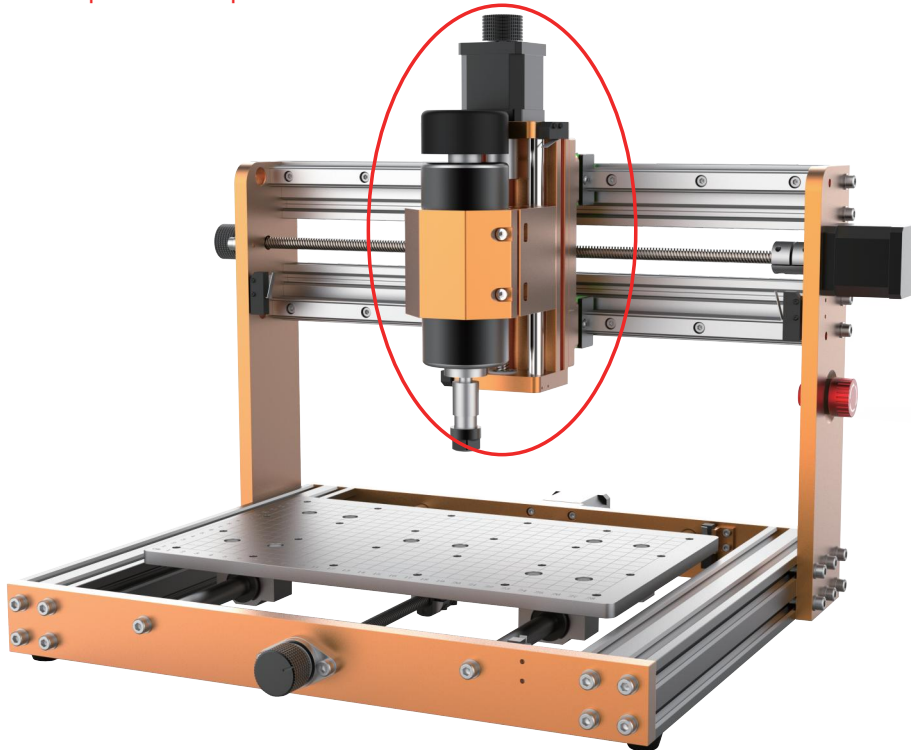
Tip: The emergency stop switch needs to be disassembled and then installed in the corresponding position.



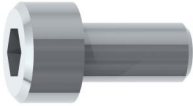
Step 5 Install the Spindle Motor

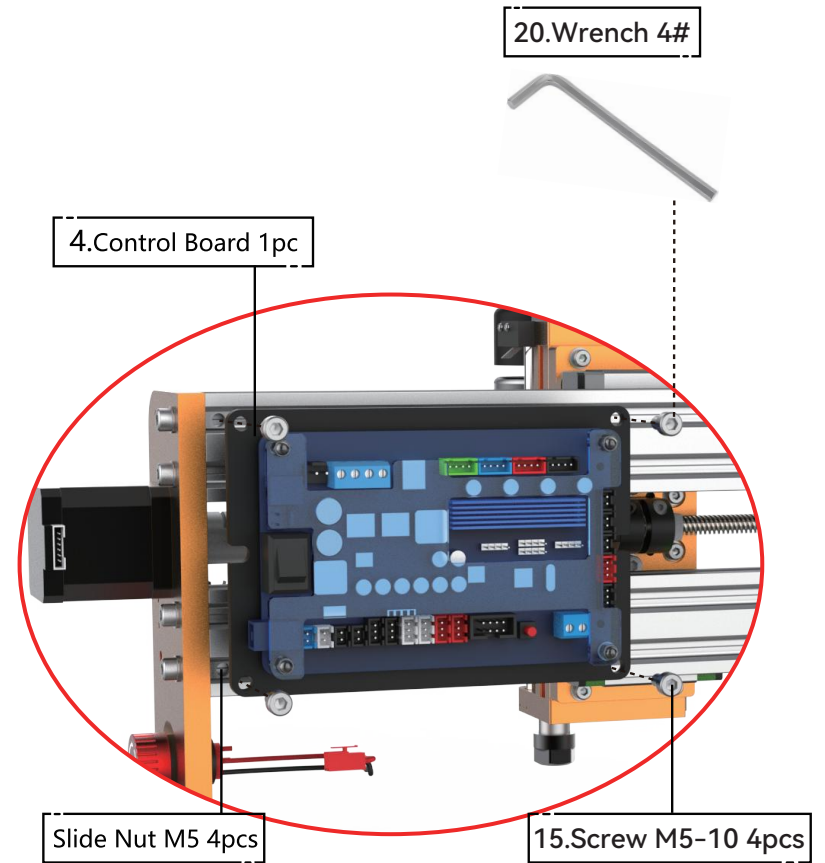
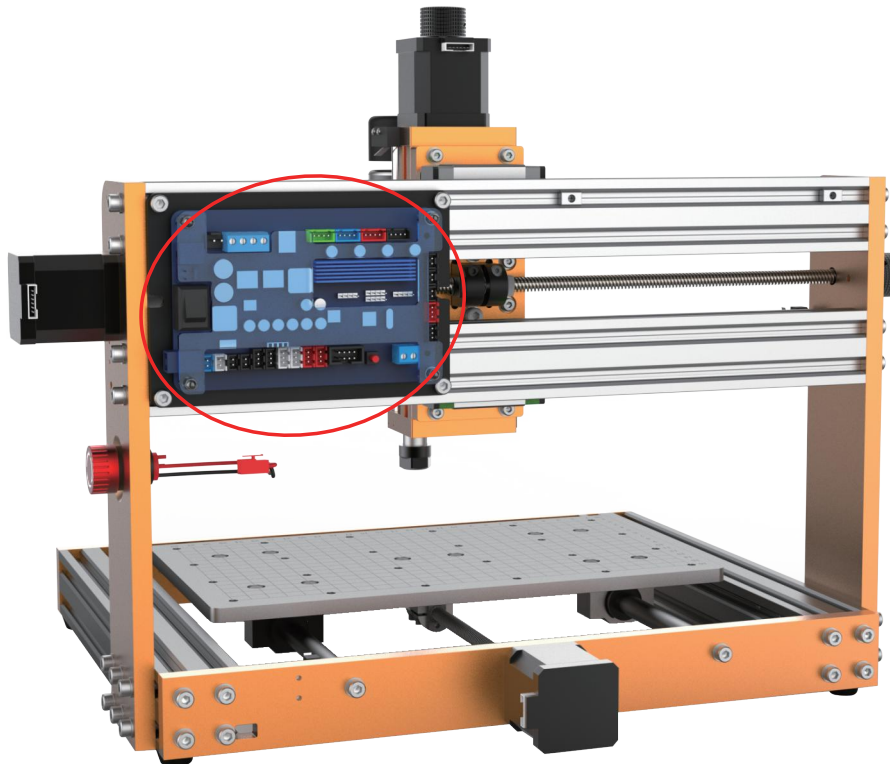


Tip: The optimal installation dimension is that the spindle protrudes 25mm from the spindle clamp.



Step 6 Install Control Board

Parts to be used	 4.Control Board 1pc	 15.Screw M5-10 4pcs	 20.Wrench 4#
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Step 7 Install the Power Supply

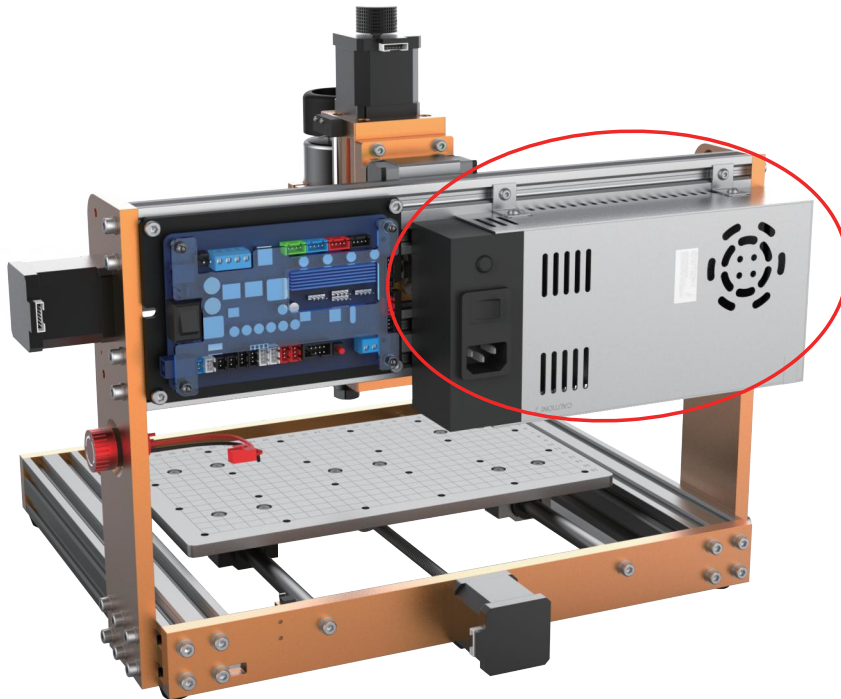
Parts to be used				
	5.Power supply 1pc	10.Power Bracket 2pcs	17.Pan head screw M4-6 4pcs	20.Wrench 2.5#

Select the correct input voltage based on your location before power on the machine.

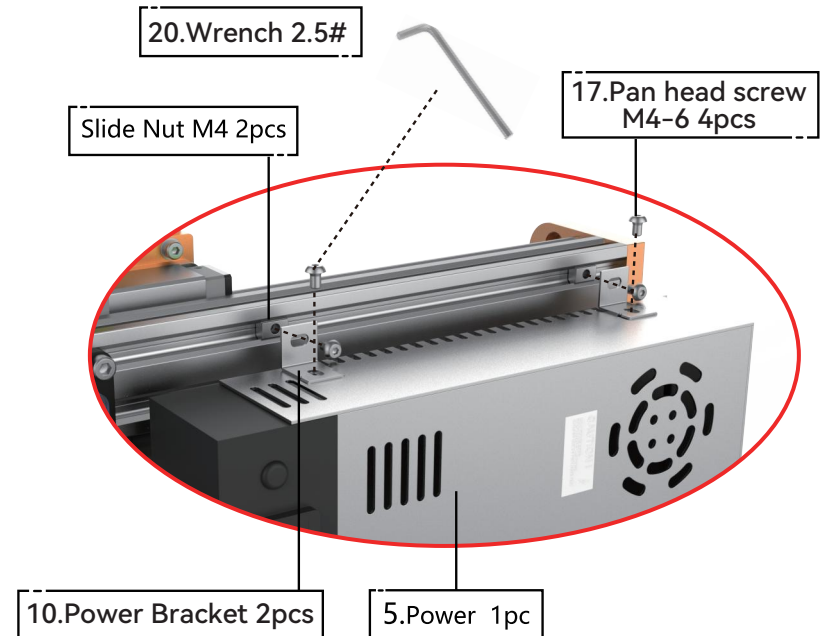
Input voltage switch is at the bottom of the controller box.

For 220-240V areas, flip the switch to the right side, displayed as "220"

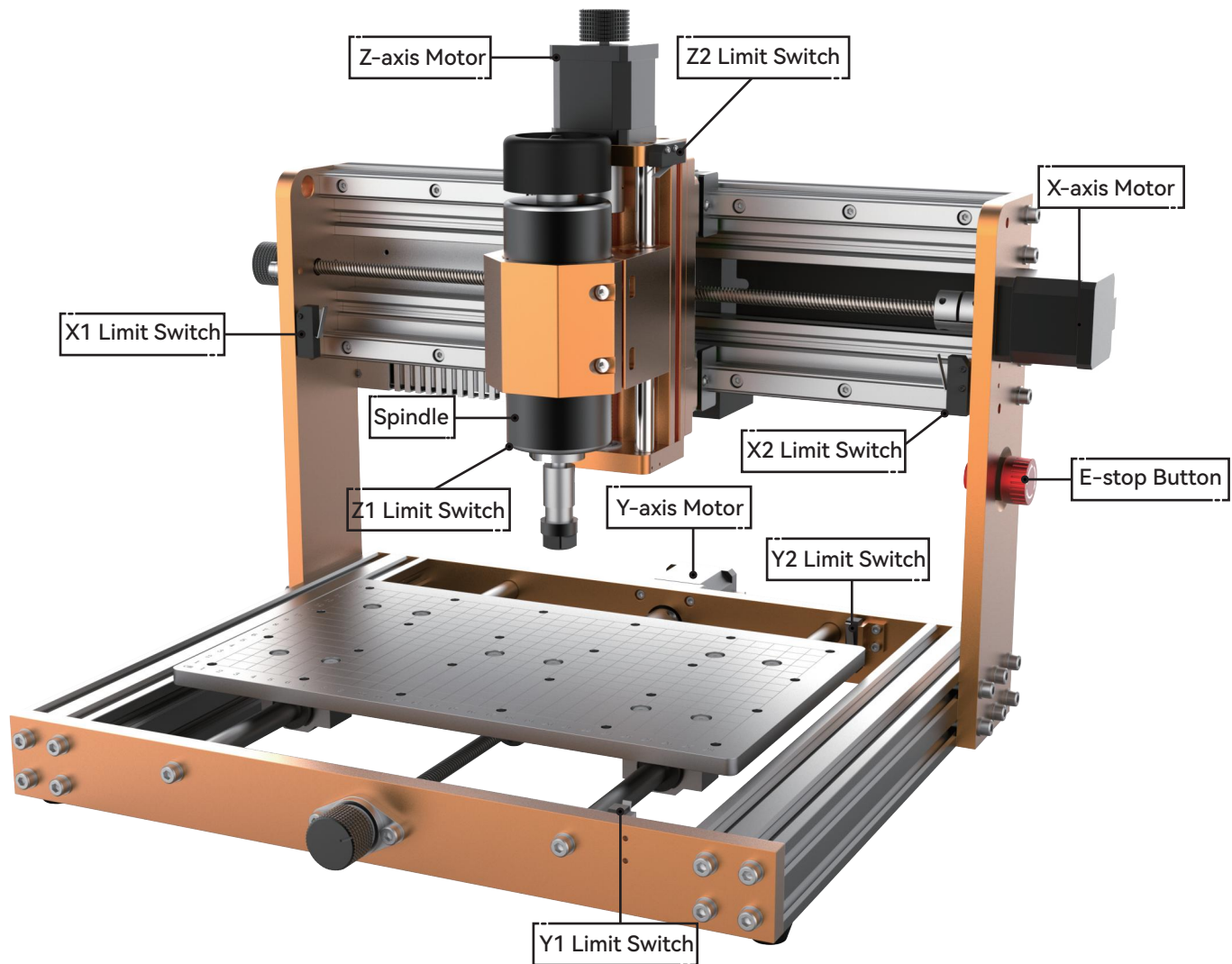
For 110V areas, flip the switch to the left side, displayed as "110"



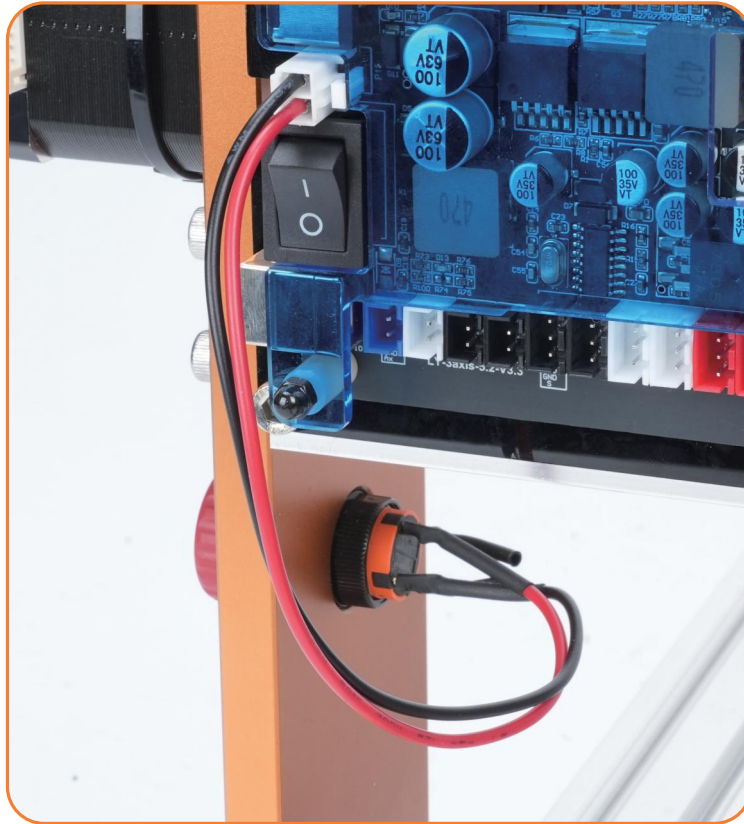
!!! Warning:
Wrong input voltage will burn out the power supply.
Check the input voltage first after receiving the machine.



Wiring Diagrams



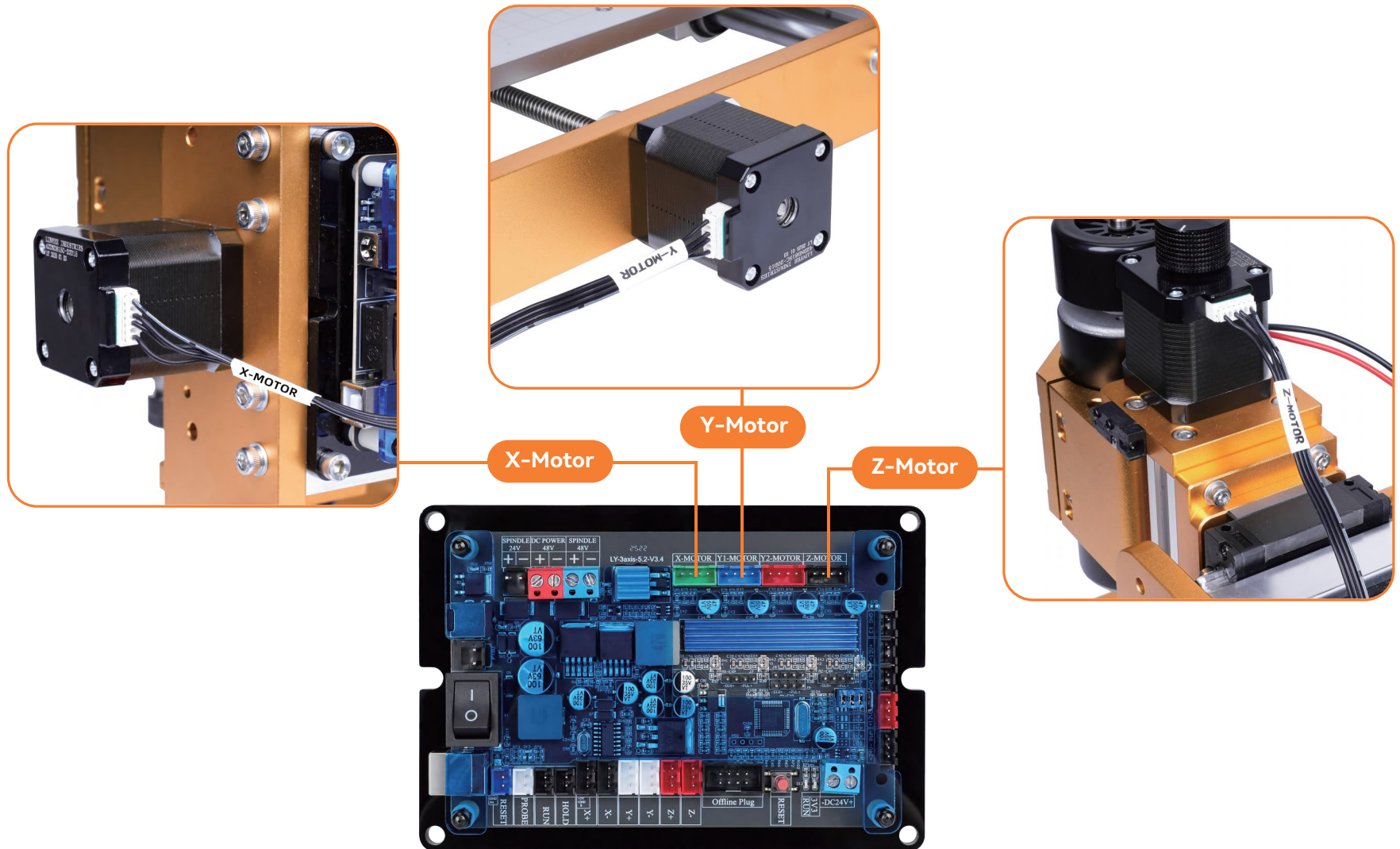
Step 1 Emergency Stop Switch Wiring Diagrams



E-stop Switch



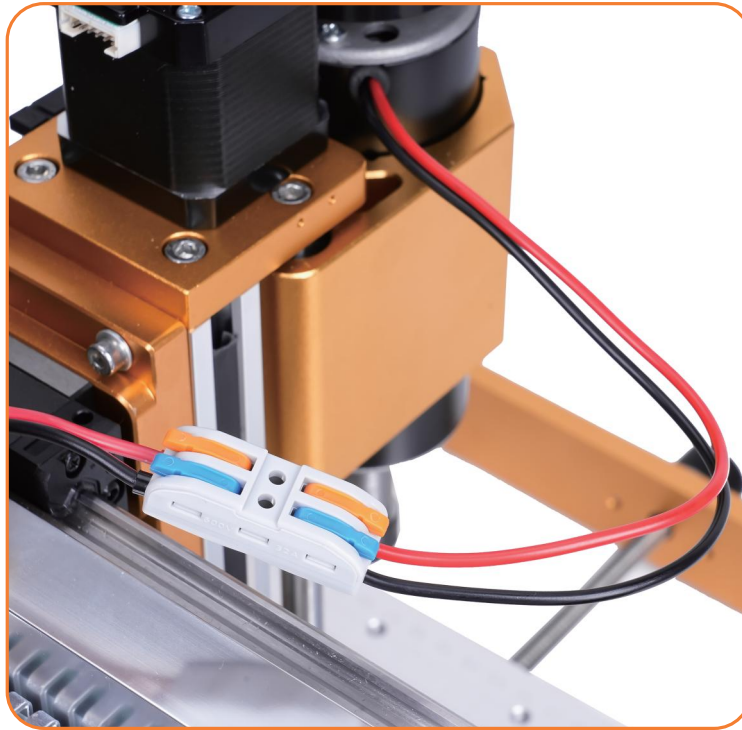
Step 2 X , Y & Z Stepper Motors Wiring Diagrams



Step 3 X , Y , Z Limit Switches Wiring Diagrams

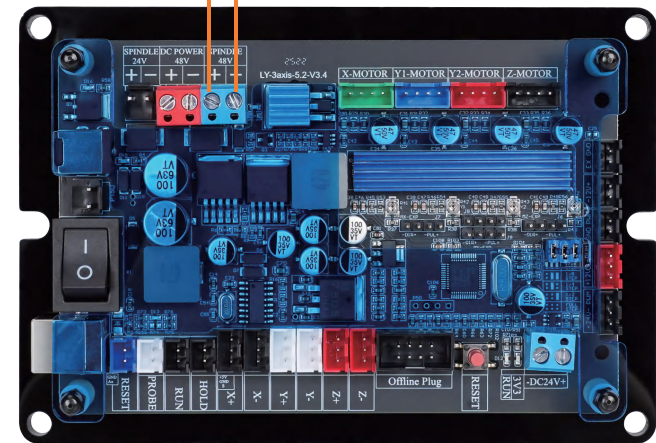


Step 4 Spindle Wiring Diagram

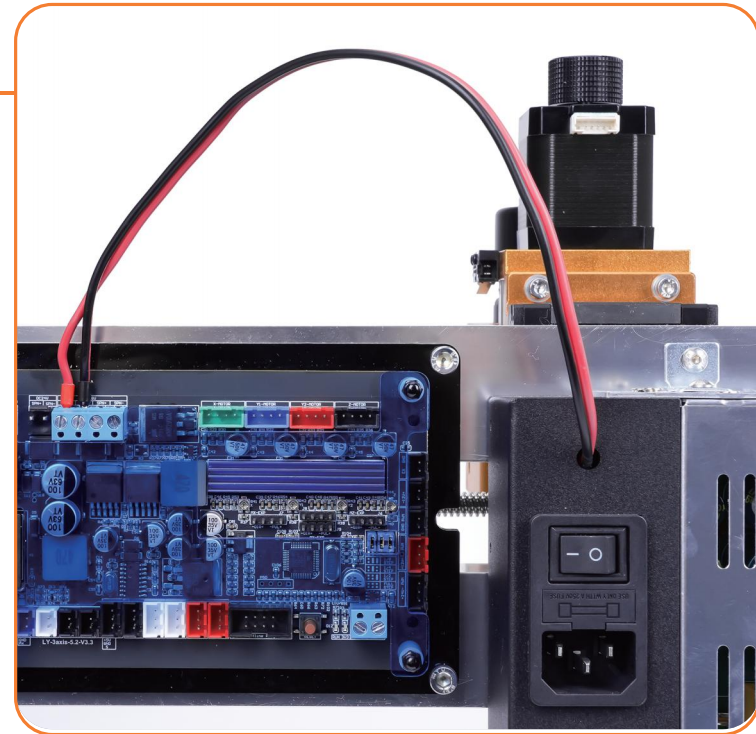
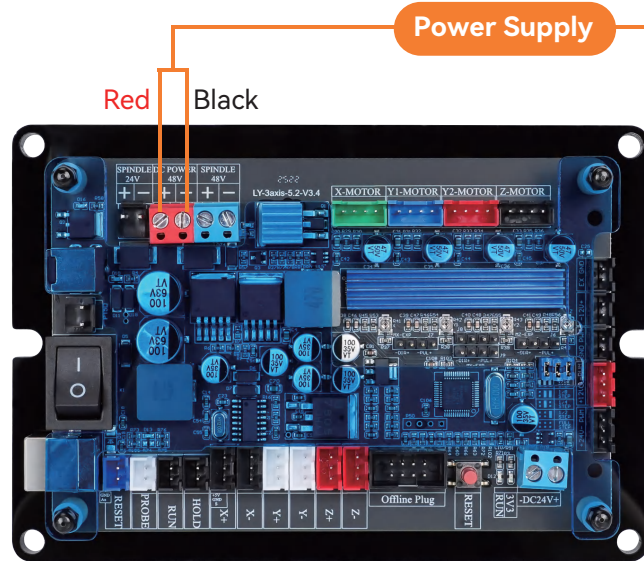


Spindle Motor

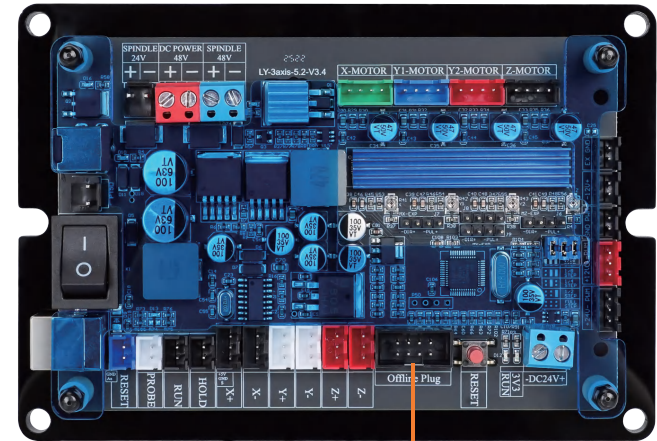
Red Black



Step 5 Power Supply Wiring Diagram



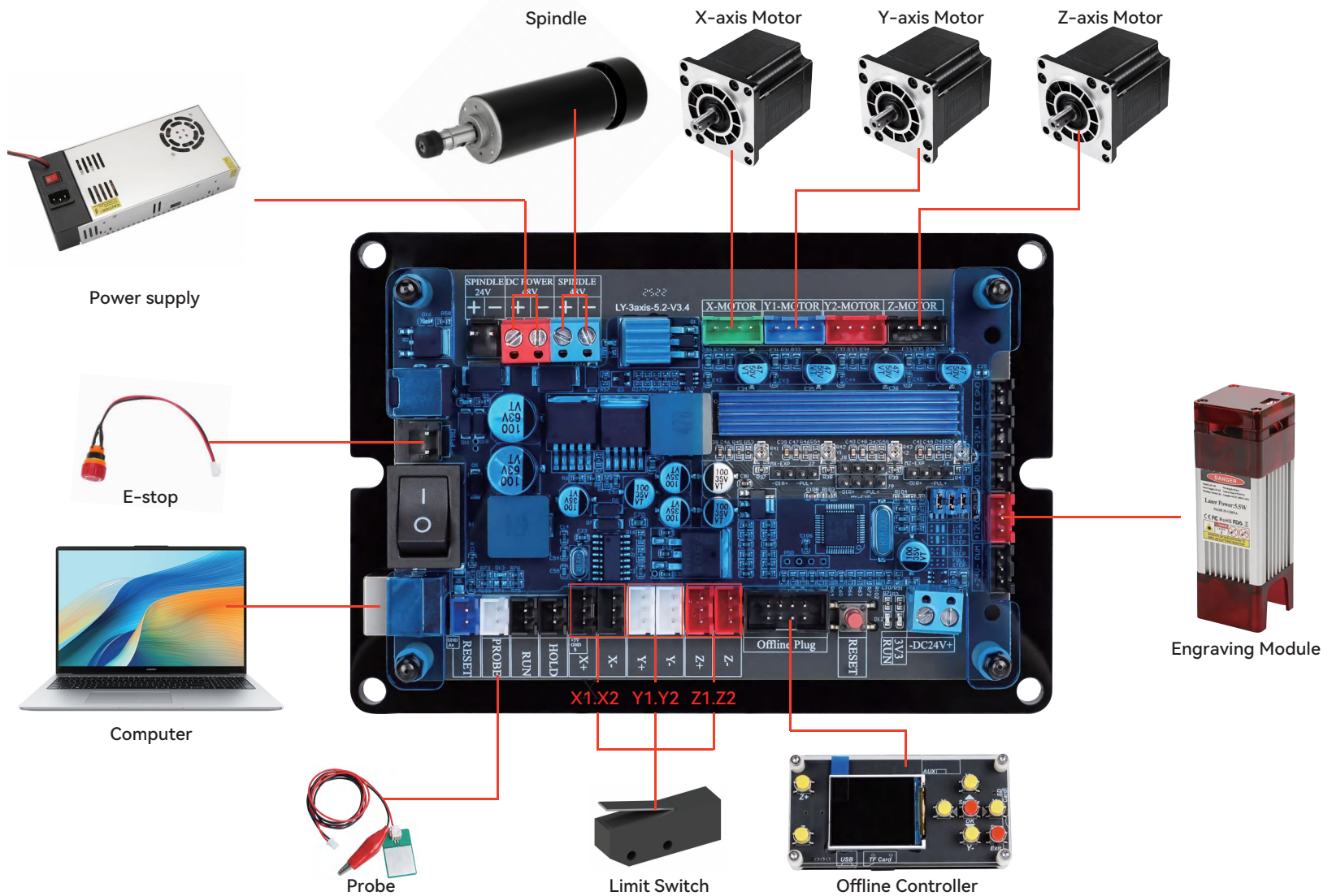
Step 6 Offline Controller Wiring Diagram



Offline Controller

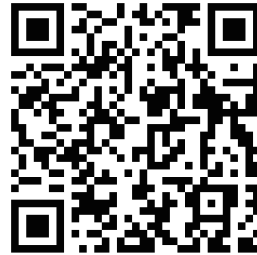
!!! Warning:
The computer and offline controller cannot be connected to the engraving machine at the same time.

Step 7 Control Board Function Diagram

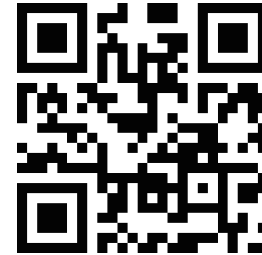




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