# PRODUCT MANUAL



### TTC-H40 CNC Router













Note: The picture is for reference only. The actual product is the standard

#### To our customers

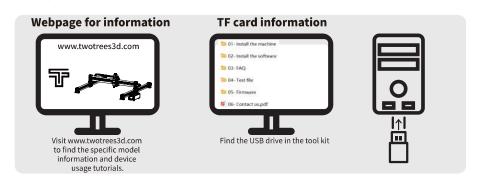
#### **Dear Customer:**

To ensure a smooth assembly and usage experience, we have prepared this assembly and user guide manual. Please read the following content carefully and follow the instructions to ensure safety and convenience when using the product. If you encounter any issues during use, you can scan the QR code, access our company's website, and read USB drive information to access relevant instructional videos. In case of machine malfunction, please refer to the names of the corresponding parts inside the machine and inform us of the issue and the machine's condition via the after-sales email provided on this page.

After-sales Email:service@twotrees3d.com

Wikipedia:wiki.twotrees3d.com

InquiryEmail:info@twotrees3d.com







#### **Safety Warning:**

- 1. Please make sure that the machine installation is firm, when first using the machine.
- 2. Please press the emergency stop button quickly when danger occurs.
- 3. Please wear safety goggles when operating machinery.
- 4. Please use a brush to remove debris, do not blow with your mouth.
- 5. Please be careful of the sharp parts when using milling tools or grinding workpieces.
- 6. Please ensure they are securely fastened when installing milling tools.
- 7. Please ensure that the machine is stopped before loading/unloading, adjusting tools, measuring, and cleaning.
- 8. Never wear cotton gloves during operation.
- 9. Never place measuring tools or other clutter within the working area.
- 10. Please ensure the workpiece is securely fastened when clamping it. Never start engraving if it is loose or not properly clamped.
- 11. This engraving machine is intended for using in indoor settings.
- 12. Considering the size and weight of the machine, you need to carry more than one person in order to protect the operator as well as the safety of the equipment.

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## 1.Unboxing operation

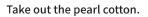
After unboxing, remove the top cover wrapped in pearl cotton.

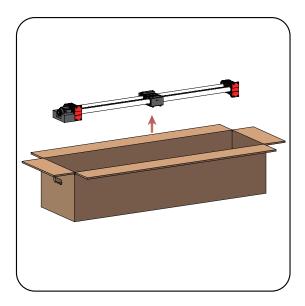
Then, take out the following items in order: cable chain and wires, spindle, spindle mounting bracket, edge trimming machine mounting bracket, Z-axis module, head-mounted ear muffs, tool kit, and a bag of screws.

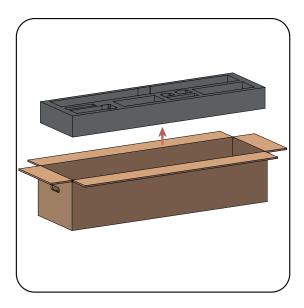




Take out the X-axis module.



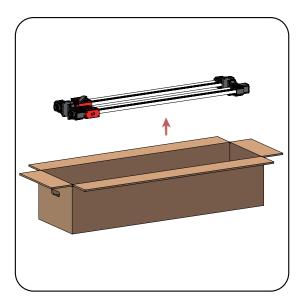




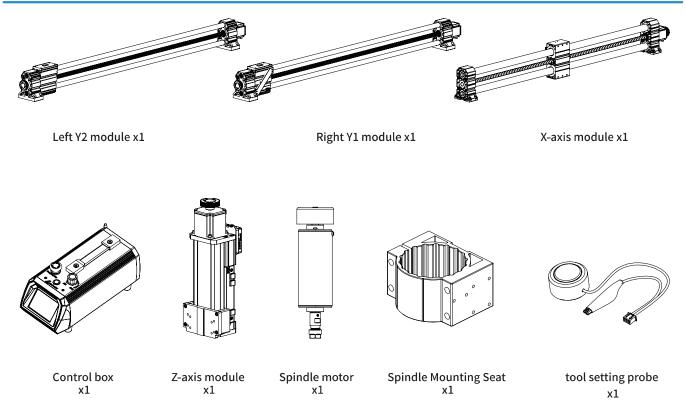
Take out the interlayer cotton, cable chain support bracket, and positioning strip in order.

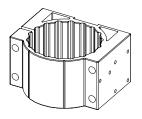
Take out the Y1 and Y2 modules in sequence.





2.Part list

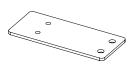




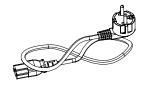
Trimming Machine Mounting Seat x1



Adapter Sleeve x1



Fixed Cable Carrier Sheet Metal x1



Power cable x1



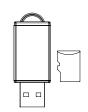
Drag Chains and Cables x1



Drag chain support bracket x1

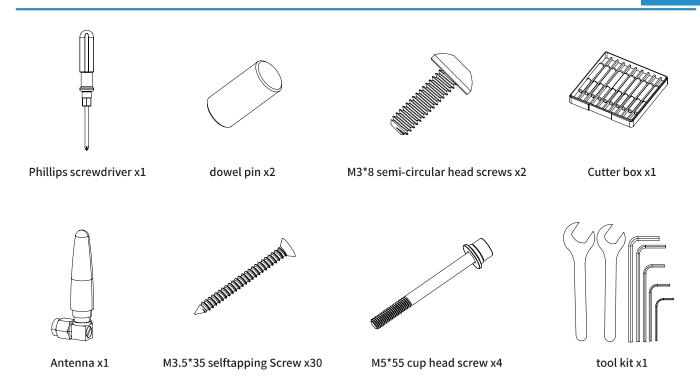


positioning strip x1



memory card x1

#### EN





M5\*12 cup head screw x8



M3\*6 countersunk screw x4



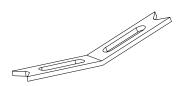
M4\*8 countersunk screw x4



M5\*45 cup head screw x4



M5\*65 cup head screw x4



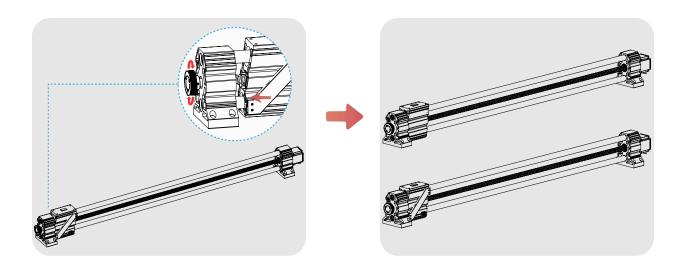
Workpiece clamping plate x6

### 3. Machine assembly

3.1. Move the right side of Y1 module and the left side of Y2 module to the front, and make sure they are flush against the base.

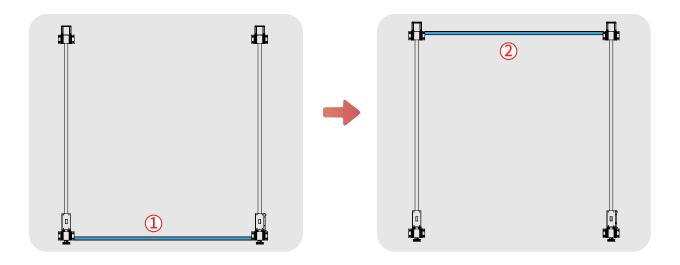
use:
Right Y1 module x1
Left Y2 module x1

3.2. Make sure that the moving blocks of the modules on the right side of Y1 and the left side of Y2 are already in tight contact with the base.



3.3. Place the Y2 module on the left side and the Y1 module on its right, and make sure that the positioning strip is at the front of the base.

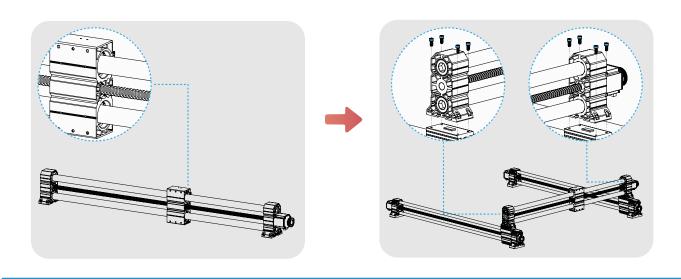
use: positioning strip x1 Right Y1 module x1 Left Y2 module x1 3.4. Place the positioning strip between the bases of the Y1 and Y2 motors and make sure that both modules are aligned.



3.5. Ensure that the side of the moving block with multiple holes faces the front, when installing the X-axis module.

3.6. Place the X-axis module onto the surface of the Y1 and Y2 modules, and secure it with M5\*12 cup head screws.

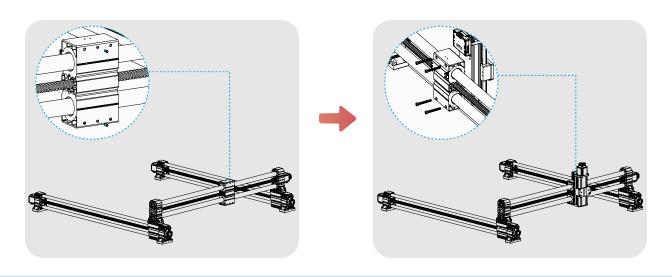
use: X-axis module x1 M5\*12 cup head screw x8



### 3.7. Install a pin in each of the upper and lower pin holes of the X-axis carriage block.

use: dowel pin x2 3.8. Align the back side of the Z-axis module with the front side of the X-axis module, and secure them with M5\*45 cup head screws.

use: Z-axis module x1 M5\*45 cup head screw x4



# 3.9. Install the cable chain bracket onto the plane of the X-axis module and secure it with M3\*8 flat head countersunk screws.

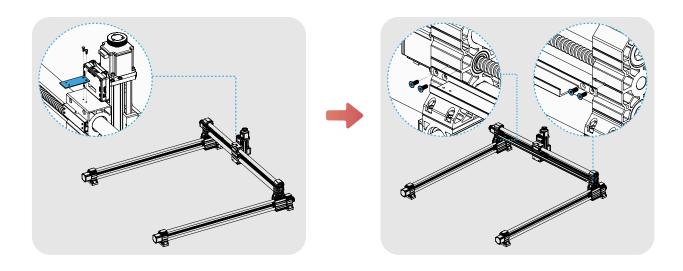
use:

Fixed Cable Carrier Sheet Metal x1 M3\*8 semi-circular head screws x2

3.10. Install the cable chain support bracket on the backside of the X-axis module and secure it with M4\*8 flat head countersunk screws.

use:

Drag chain support bracket x1 M4\*8 countersunk screw x4

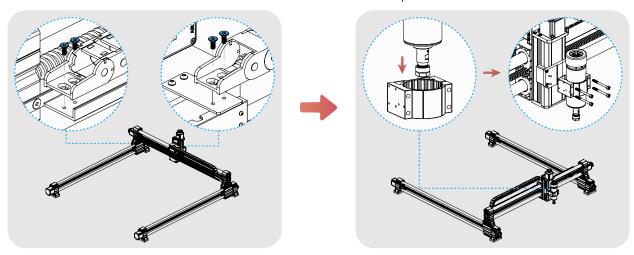


3.11. Position the cable chain and wires onto the support bracket, and fix the ends of the cable chain with M3\*6 countersunk screws.

use:
Drag Chains and Cables x1
M3\*6 countersunk screw x4

3.12. First, insert the M5\*55 cup head screws into the spindle mounting bracket and align it with the hole of the Z-axis carriage module. Then, place the spindle motor in position, and tighten the screws.

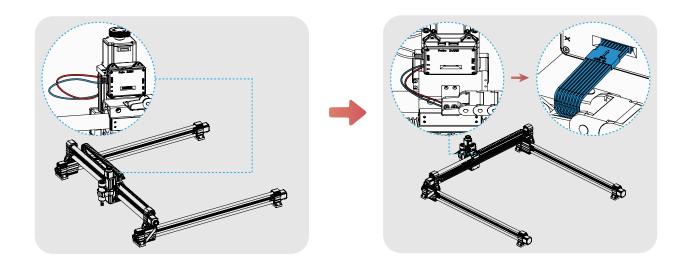
use:
Spindle motor x1
Spindle Mounting Seat x1
M5\*55 cup head screw x4



#### 3.1. Machine wiring

3.1.1. Please insert the spindle motor cable into the corresponding port on the interface board at the back of the Z-axis module.

3.1.2. Plug the X-axis limit switch cable and the main control cable into their corresponding ports on the adapter board.



3.1.3. First, connect the limit switch cable to the limit terminal on the Y-axis. Then, insert the X-axis terminal into the corresponding port of the X-axis motor.

3.1.4. Align the antenna with the hole, and then tighten the nut clockwise.

