

← cubiio X

Interface Usage and Parameter Instructions

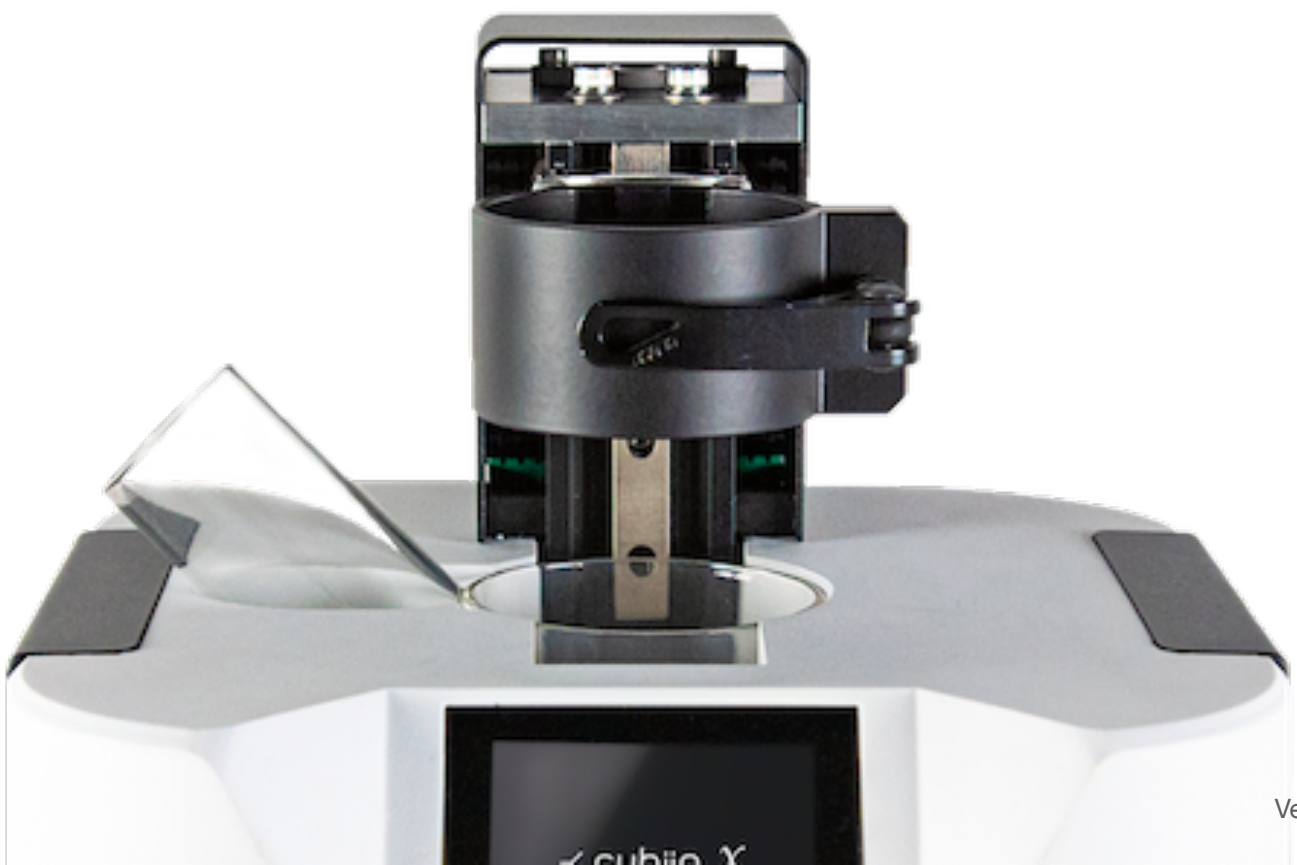
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Main Page / Retract Belts / Table Length Input / Belts Extension

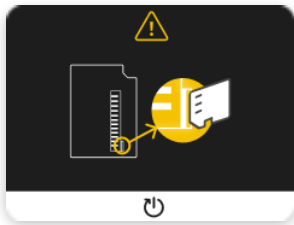
P3 Attach the Anchors / Go to Global Center / Tool Selection / Spindle Installation / Laser Module
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Manual



Warning & Troubleshooting



01

mSD Card Not Read/Inserted

Please insert the mSD card and press the reset button below to have the machine re-read the card.

▲ DON'T remove the mSD card while the machine is in operation. First, turn off the power before removing the card.

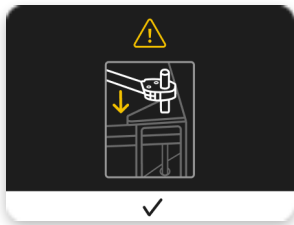


02

Recycling the belt is incomplete

Check if the belt is obstructed by anything and remove it. Press the 'check' button below to allow the machine to restart the belt recycling process.

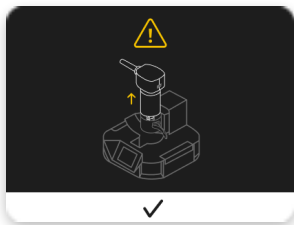
▲ If the belt recycling is incomplete, please refrain from performing other operations. Make sure to bring the belt back to the host machine first!



03

Belt buckled into anchor point reminder

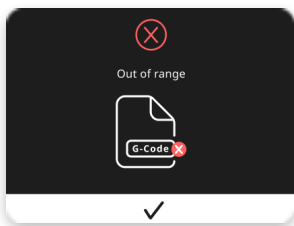
Please check if all four belts on the anchor points are securely fastened and press the 'check' button below.



04

Reminder to remove the trimmer

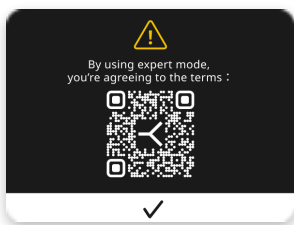
When changing the tool, please ensure that the spindle is raised, and press the 'check' button to continue.



05

G-code File exceeds processing area

The system recognizes that the G-code file exceeds the processing area, making it impossible to process this file. Please press the 'check' button and replace it with another file.



06

Confirm the terms before using the expert mode

If you agree to the safety terms of expert mode, please press the 'check' button below.

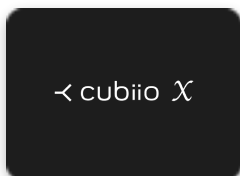


07

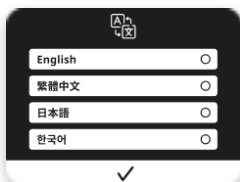
Laser processing reminder

Laser processing is about to start. Please carefully operate. DO NOT look directly at the laser light source with your eyes.

Icons and Interface Descriptions



01 Cubiiio X
Welcome to Cubiiio X.



02 Language Setting
The language setting screen will appear when you use Cubiiio X for the first time. Changing the language ▶ [30 Settings](#).

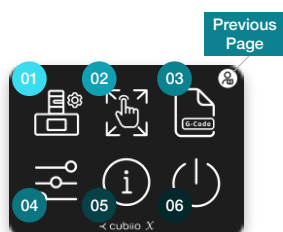


03 Welcome and Start
Press the **Start** button to create your project! You can view the **current firmware version of the machine** on this page.



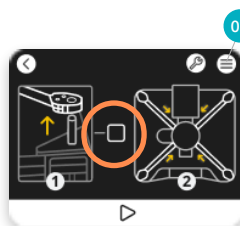
04 Main Operation

- Press (▶) to enter the Novice Mode
- 04-01 Enter the Expert Mode ▶ 05 Expert Mode Main Page
- 04-02 Enter Settings ▶ 28 Settings
- 04-03 Enter Info Page ▶ 31 Info Manual
- 04-04 Retract Cable and Turn Off ▶ 06 Retract Belts

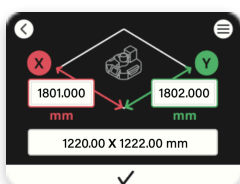


05 Expert Mode Main Page

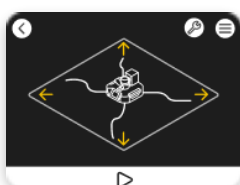
- 05-01 Cubiiio X Installation ▶ 06 Retract Belts
- 05-02 Enter Function Menu ▶ 26 Function Menu
- 05-03 Read Files ▶ 16 File Reading Menu
- 05-04 Enter Settings ▶ 28 Settings
- 05-05 Enter Info Page ▶ 31 Info Manual
- 05-06 Retract Cable and Turn Off ▶ 06 Retract Belts



06 Retract Belts
Please make sure all the belts have been lifted from the corner, then press the checkbox and click the button below. Cubiiio X will start retracting the belts, and hearing a 'click' sound is a normal part of the belt retraction process.
06-01 Enter Info Page ▶ 31 Info Manual

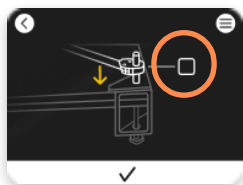


07 Table Length Input
Please measure the dimensions of your working table and enter them accurately in millimeters (mm). ▲ **Please ensure that all four corners of your work table are at right angles. A non-right-angle table surface can affect the precision of Cubiiio X.**



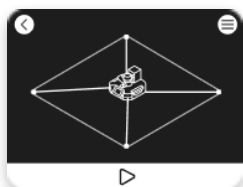
08 Belts Extension
Press the ▶ button below, and the machine will automatically extend 4 belts length slightly longer than the table length, making it convenient for users to place the belts on the corner brackets.

Icons and Interface Descriptions



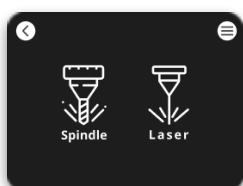
09 Attach the Anchors

Make sure 4 belts are attached to the corner bracket anchors. Click the checkbox, then click the ✓ button below to proceed to the next step.



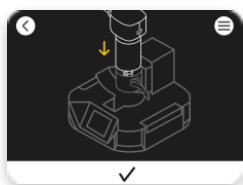
10 Go to Global Center

After clicking the button below, Cubiio X will automatically retract the belts, moving the host to the center of the workspace. This is the machine's original point, **the Global Center**.



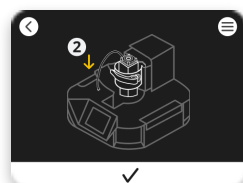
11 Tool Selection

If you are using the milling tool for processing, please click the **left** spindle button. If you are using the laser module, please click the **right** laser button.



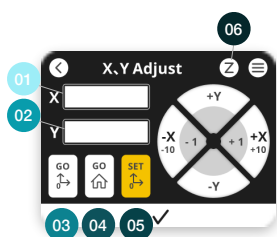
12 Spindle Installation

Place the spindle in the fixture and make sure the tool's tip touches the processing surface. This action sets the Z-axis zero point. Please be careful during installation. **Ensure that your spindle has a diameter of 65mm to be compatible with Cubiio X.**



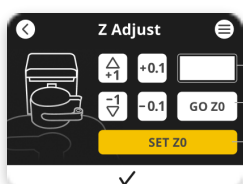
13 Laser Module installation

1. Place the laser module into the fixture > 2. Make sure the laser module's power cable is connected to the rear interface of the main unit. Then, click the ✓ button below to proceed to the next step.



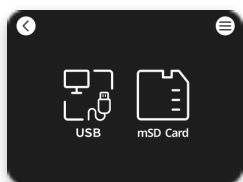
14 X-Y Axis Adjustment

- Unit: mm
- 14-01 X-axis position
 - 14-02 Y-axis position
 - 14-03 Return to the working center
 - 14-04 Return to the Global center
 - 14-05 Set the current position as a new working center
 - 14-06 Set the Z-axis coordinates ▶ 15 Z-Axis Adjustment



15 Z Axis Adjustment

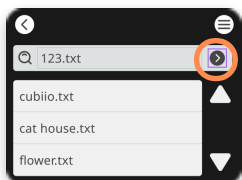
- Unit: mm
- 15-01 Z-axis position
 - 15-02 Return to the Z-axis center
 - 15-03 Set the new Z-axis position as the center



16 File Reading Menu

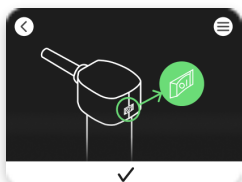
Cubiio X offers two file-loading options: **USB** and **mSD Card**. To choose the USB option, insert the USB cable into the USB port at the rear of the main spindle.

Icons and Interface Descriptions



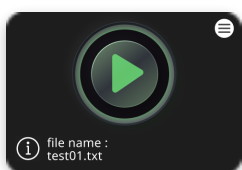
17 Choose the File

After selecting the file you want to process, click on "▶" and then proceed to the next step.



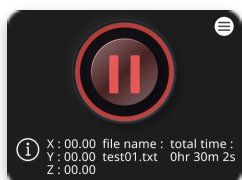
18 Turn on the Spindle

Please turn on the spindle switch, and also activate your dust collector switch. Then, press the check button below.



19 Start Processing

Press the green ▶ button to start Cubiio X, and it will begin the processing. You can see the name of the file being processed below.

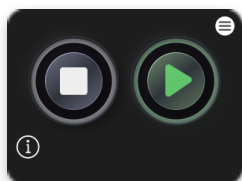


20 Processing

During processing, the file being processed will display the current XYZ coordinates of the spindle, the file name, and the cumulative processing time.

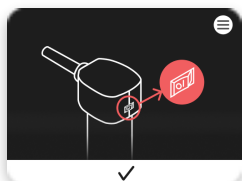
▲ If you wish to pause the processing, you can press the central red button to pause the machine's operation.

▲ In case of an emergency, please press the emergency stop switch immediately.



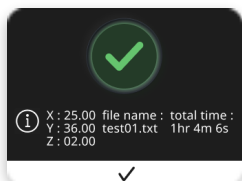
21 Pause

The white button on the left ■ can be used to stop the machine that is currently processing. The green button on the right ▶ can be used to resume processing from the paused position.



22 Turn off the Spindle

After completing the processing, please turn off the spindle and dust collector switches, and press the check button below.



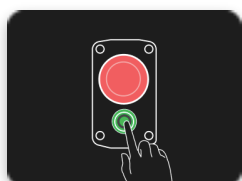
23 Completed

Congratulations, the processing has been completed. Press the check button below to proceed.



24 Choose Next Action

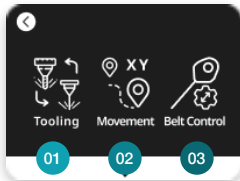
The left button to continue with other operations ▶ 26 Function Menu. The right button to retract belts and shutdown process ▶ 06 Retract Belts.



25 Power off

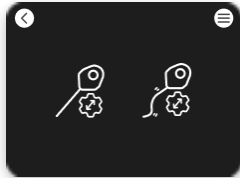
Please unplug the Cubiio X power cord directly.

Icons and Interface Descriptions



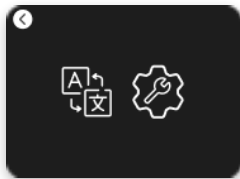
26 Function Menu

Choose different functions of Cubiio X for
22-01 Change the processing tool ▶ 11 Tool selection
22-02 Adjust XYZ axis positions ▶ 14 X-Y Axis Adjustment
22-03 Tighten or loosen belts ▶ 27 Belts Control



27 Belts Control

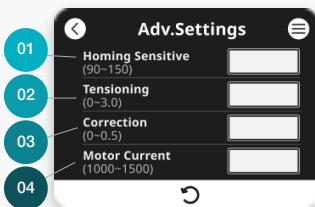
Press the left button to **tighten** the belts.
Press the right button to **loosen** the belts, making it easier to remove them from the anchor points.



28 Setting

Press the left button ▶ 30 Language Setting.
Press the right button ▶ 29 Advanced Parameter Setting.

29



Advanced Parameters Setting

01 Homing sensitive

The zero return sensitivity of Cubiio X is related to the fit of the machine's parts and may change over extended periods of use. A smaller value indicates that it stops when encountering greater resistance during the homing process, while a higher value is better as long as it allows stable homing. It is typically set to **100-110** at the factory, and in general, there is no need to adjust this value.

02 Tensioning

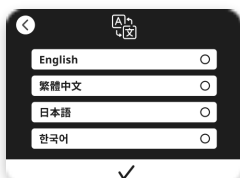
Because there can be some variation in measuring the table length and installing the anchor points, we have designed this parameter for users to fine-tune the tension of the belt based on their specific circumstances. A higher numerical value means the belt is tighter, which can improve the precision of the processed dimensions. However, if it's too tight, it may exceed the motor's output limit. In general, adjusting it to **1.5-3.0** can achieve good results. If you need to set it higher than 3.0 to tighten the belt, or if the machine frequently loses steps, we recommend rechecking the table length, table angles, and anchor point installations for accuracy.

03 Correction

The timing belt has elasticity, the machining coordinates may be affected when the machine encounters resistance during movement. We have designed this parameter for users to adjust the machining results according to their specific circumstances. In a well-constructed environment, this value should be adjusted to **0.1-0.3**.

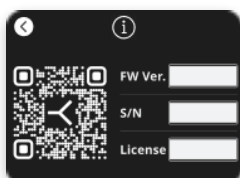
04 Motor Current

The default setting is **1400 mA**, and it generally does not need to be changed.



30 Language Setting

On this page, you can change between four languages.



31 Info Manual

This page shows Cubiio X main unit's firmware version, S/N, and License information.