LOTMAXX
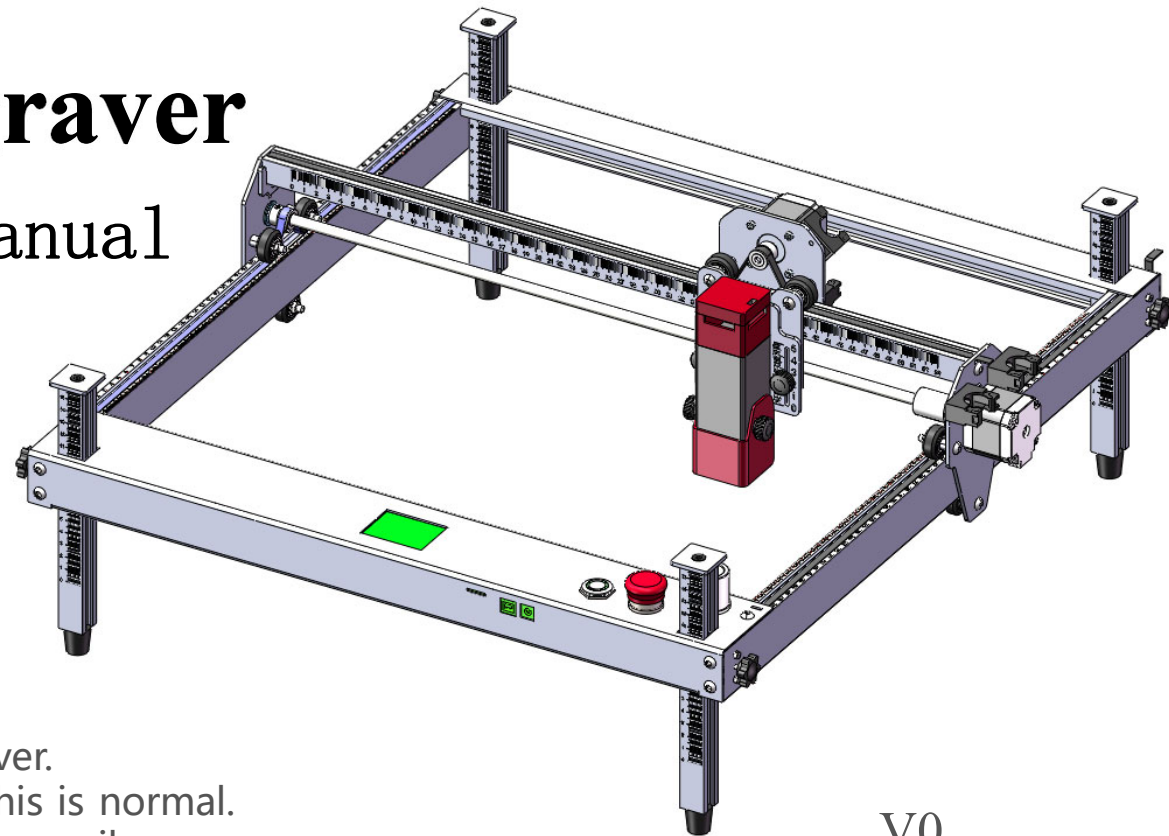
G10 Laser Engraver

Quick Start User Manual

V0

◆ This manual was written for the G10 Laser Engraver.
◆ There are some differences between versions. This is normal.
   Any new documentation about your version will prevail.
◆ For more details, please read the usage guide on the TF Card.
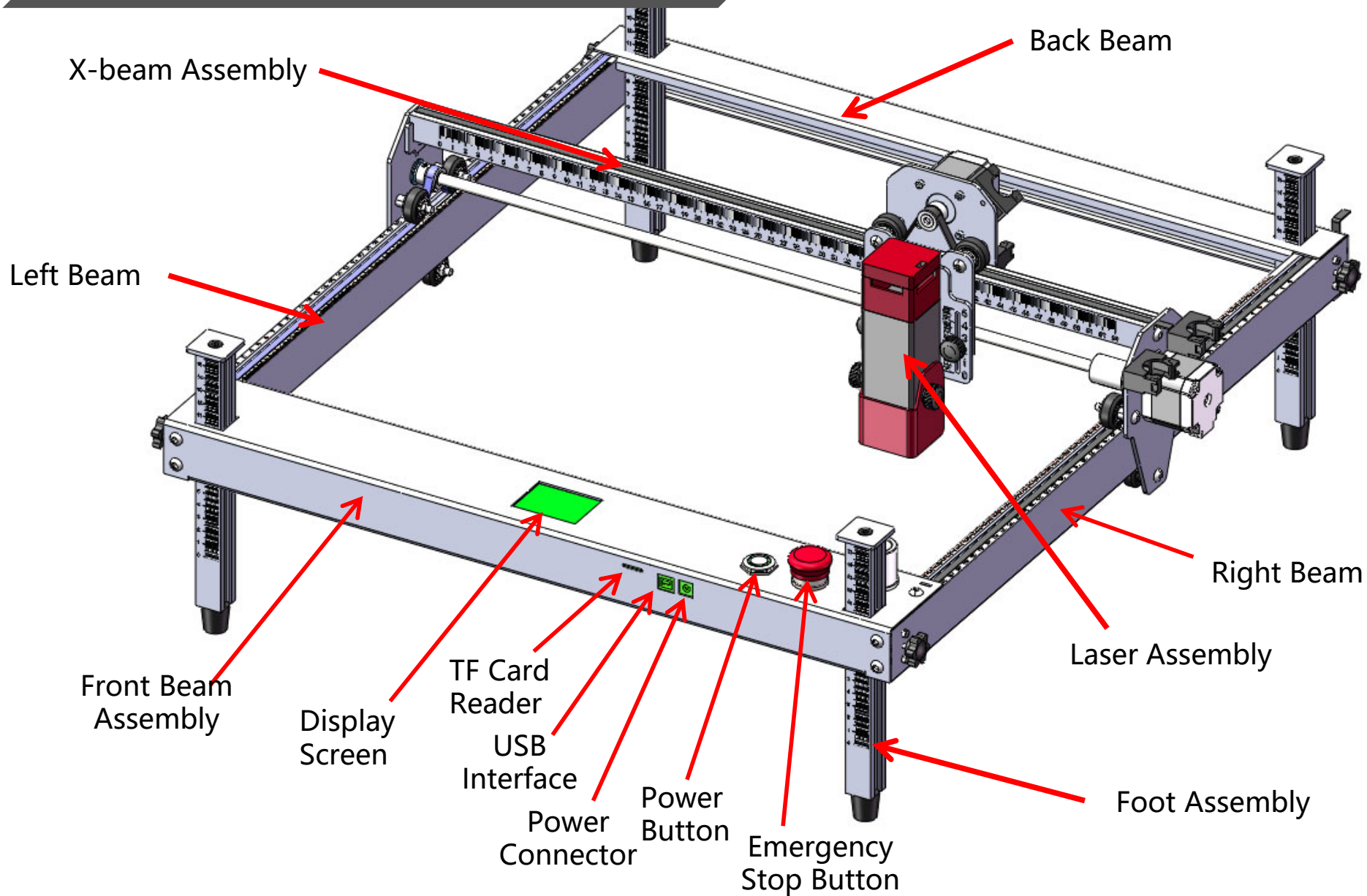
Contents

Foreword

Dear LOTMAXX users,

To get started quickly with your new machine, we want to make sure you know about our YouTube channel, LOTMAXX, which provides detailed information on initial machine setup, software usage, firmware updates, troubleshooting, FAQs tutorials, and more. Please be sure to check it out, we hope it's useful to you.

Also! Be sure you take a look at the goodies included on the TF card. In there, you will find some sample pictures to engrave and firmware if you ever should need it.
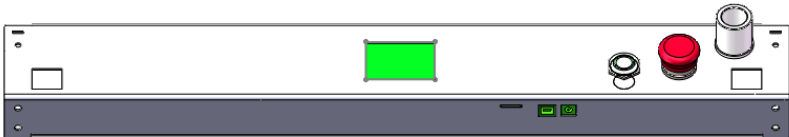
NOTICE

1. Do not try to use the machine in any way not described in the instructions to avoid accidental personal injury and property damage；

2. Please do not place the machine near flammable and explosive materials or high heat sources, please place the machine in a ventilated, cool and less dusty environment；

3. Please do not place the machine in a vibrating or other unstable environment, machine shaking will affect the quality of engraving/cutting；

4. Please do not use other products in the installation process instead of the power cord, please use the power cord that comes with the machine, the power plug needs to be plugged into a three-hole socket with a ground wire；

5. Please do not touch the laser head and the path of laser emission when the machine is working, to prevent laser burns and personal injury；

6. Please do not wear gloves or wraps when operating the machine to prevent the moving parts from causing injury to your body；

7. Do regular product maintenance with the power off by using a dry cloth for cleaning the laser etcher body. Wipe away dust and foreign objects from all surfaces.

8. Children under the age of 16 should not use this machine without supervision to avoid personal injury.

9. When using this machine, avoid looking directly at the laser and the laser work area, if you need to observe the working process of the laser, please wear protective glasses.

1. Equipment Overview

Back Beam

X-beam Assembly

Left Beam

Front Beam Assembly

Display Screen

TF Card Reader

USB Interface

Power Connector

Power Button

Emergency Stop Button

Right Beam

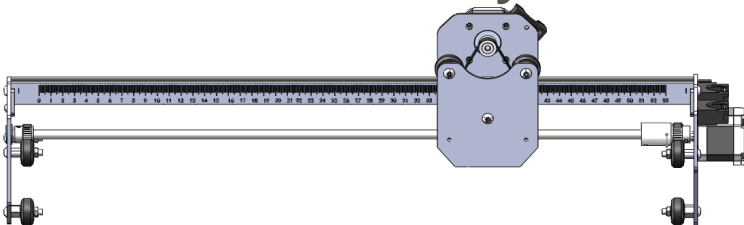Laser Assembly

Foot Assembly
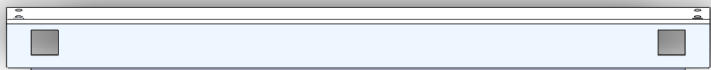
2. Packing Contents

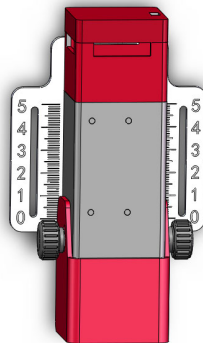◆ Front Beam Assembly

◆ Left and right beams 2pcs

◆ X-Beam Assembly

◆ Back Beam

◆ Foot Assembly

◆ Laser Assembly

◆ Tools+Spare parts

◆ Tools + Spare Parts List

#	Name	Picture	Qty	#	Name	Picture	Qty
1	M3*30 Hand Screws		4	6	Washers		2
2	M3*8 Hand Screws		4	7	Power Cord + Adaptor		1 Set
3	M5*10 Flat head screws		8	8	Data Cable		1
4	M5*20 Flat head screws		4	9	Tools		1 set
5	M5*8 Countersunk head screws		4	10	TF Card + Card Reader		1
				11	Foot Assembly Cap		4

◆ **Install the left and right beams on the back beam.**

M5*10 2PCS

M5*20 2PCS
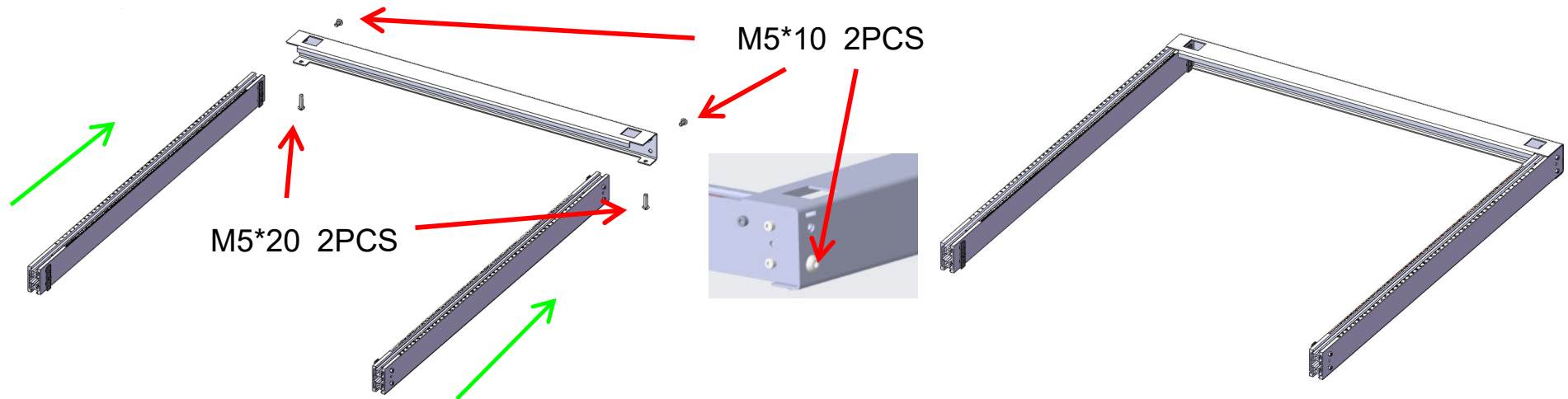
◆ **As shown in the picture, install the X beam components into the left and right beams.**
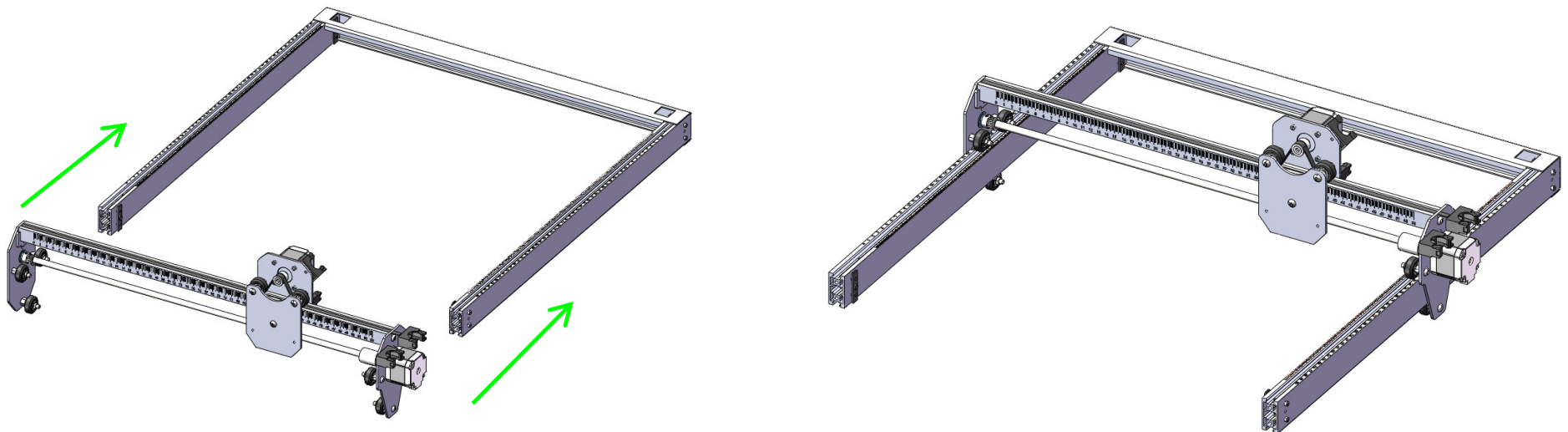
3. Equipment Installation

◆ **Mount the front beam assembly on the left and right beam as shown**

M5*20 2PCS

M5*10 4PCS

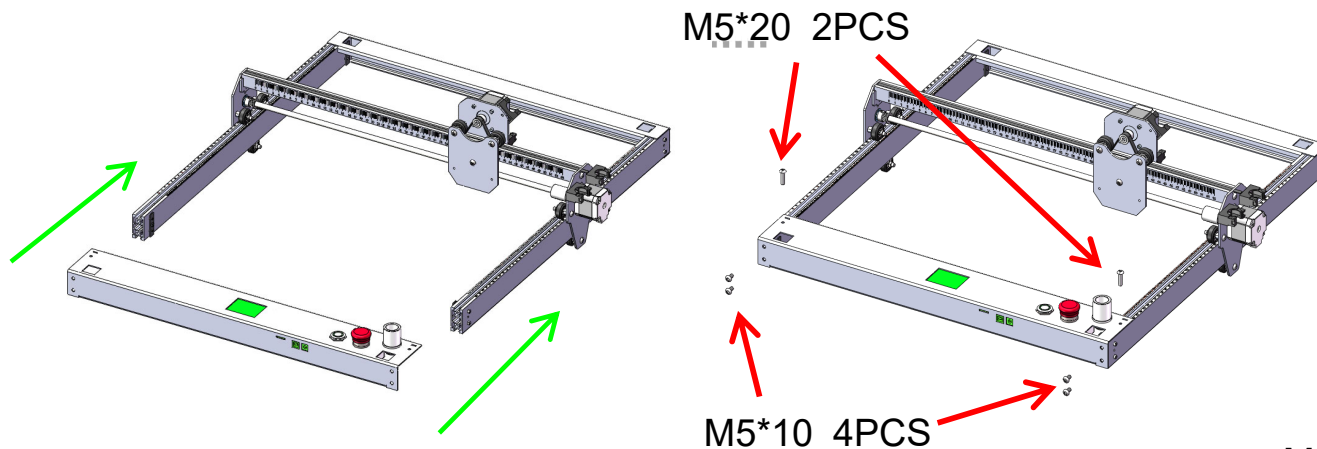◆ **As shown, mount the laser on the back plate**

M3*8 hand screws 2PCS
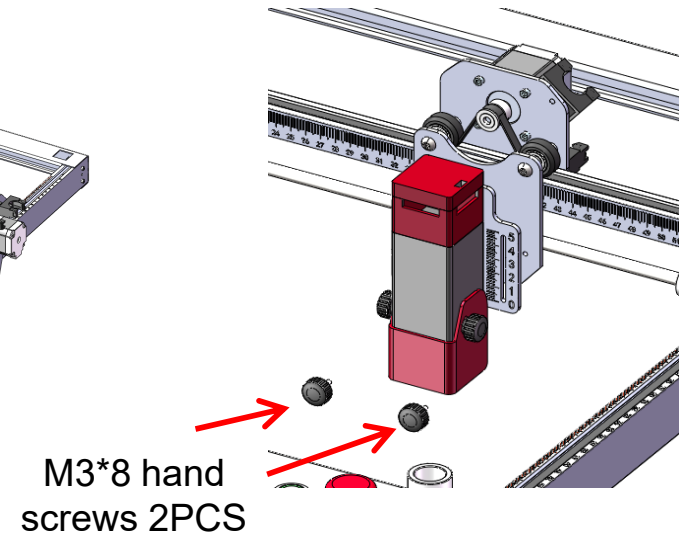
◆ **Wrap the timing belt on the left and right side of the Y-axis around the timing pulley**

◆ **A closer view**
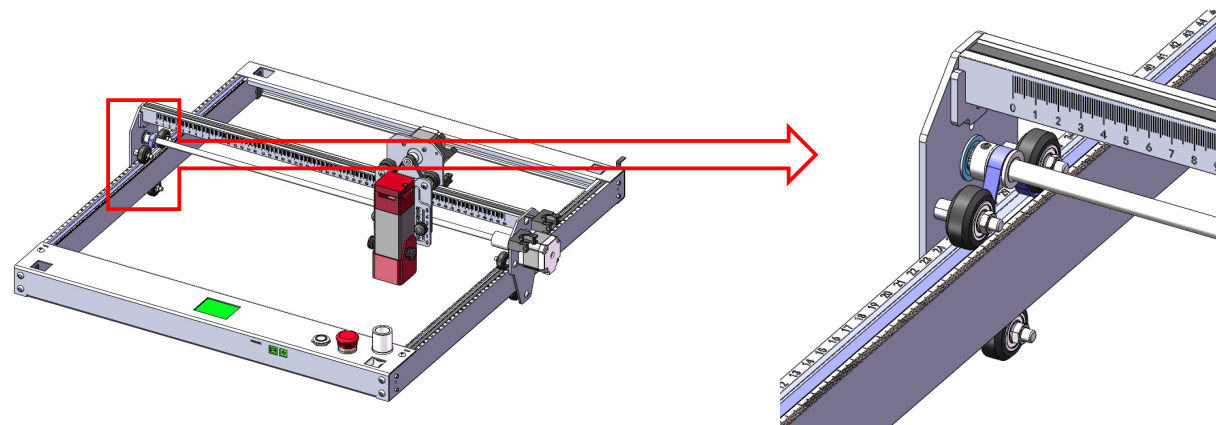
◆ **Pull the timing belt tight and secure it with screws and flat spacers. (This picture shows the position at the back of the machine)**

M5*10 2PCS
Washers 2PCS
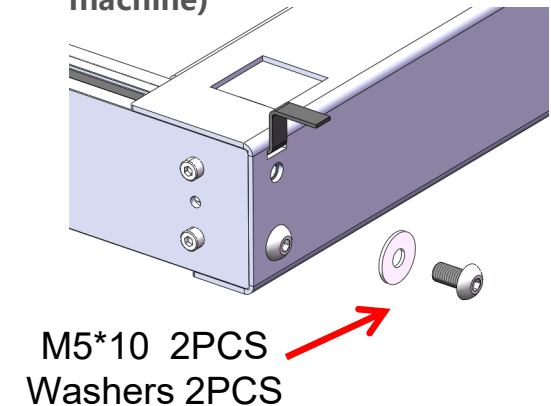
3. Equipment Installation

◆ **Install the foot assemblies to the machine from the bottom**

Cardboard snaps into foot slot
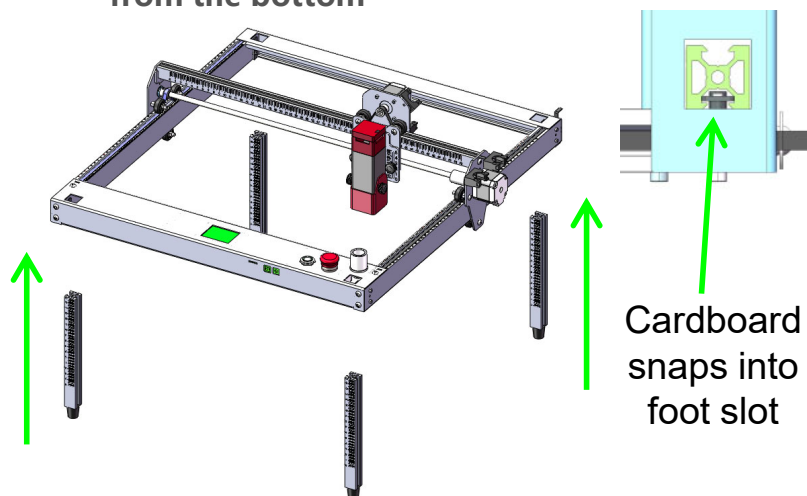
◆ **Install the Foot Assembly Caps on the foot assemblies**

◆ **A closer view**

M5*8 4PCS
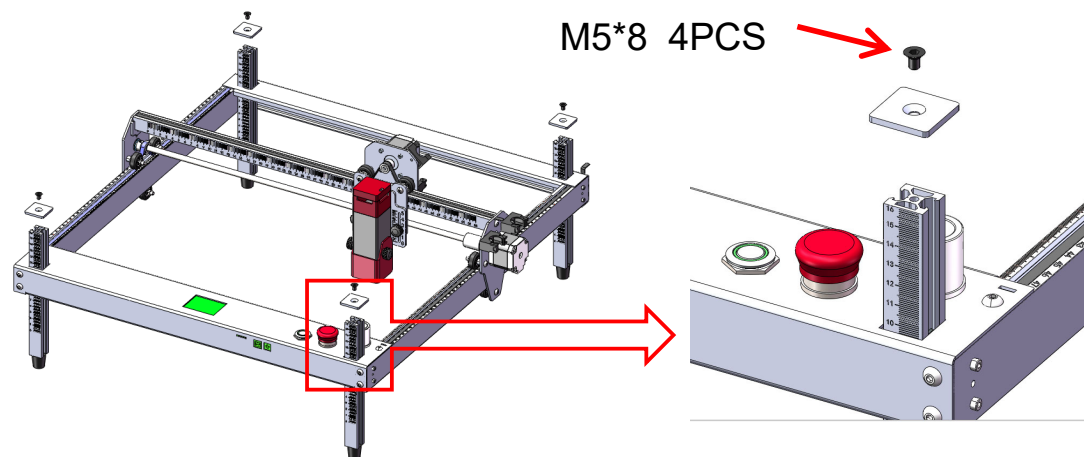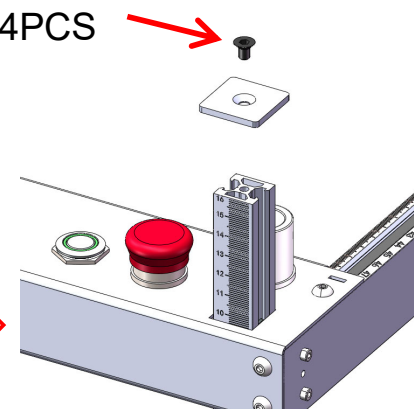
◆ **Fit the hand screw nuts into the left and right profiles to fix the foot assembly, which can be adjusted up and down in height.**
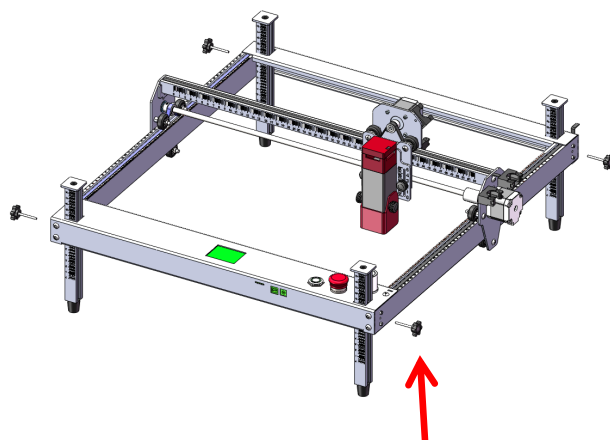
◆ **A closer view**

Hand Screws M4*30
4PCS
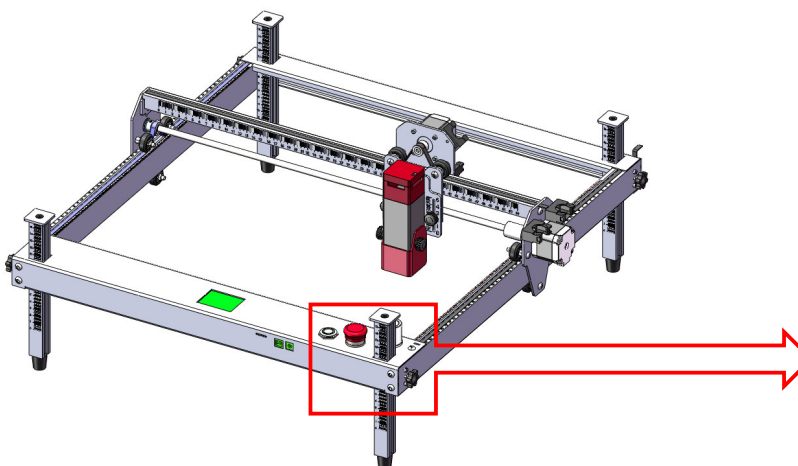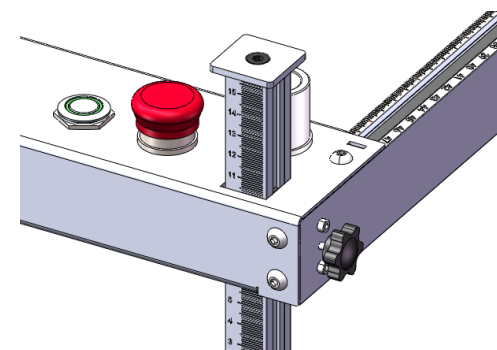
4. Equipment Wiring
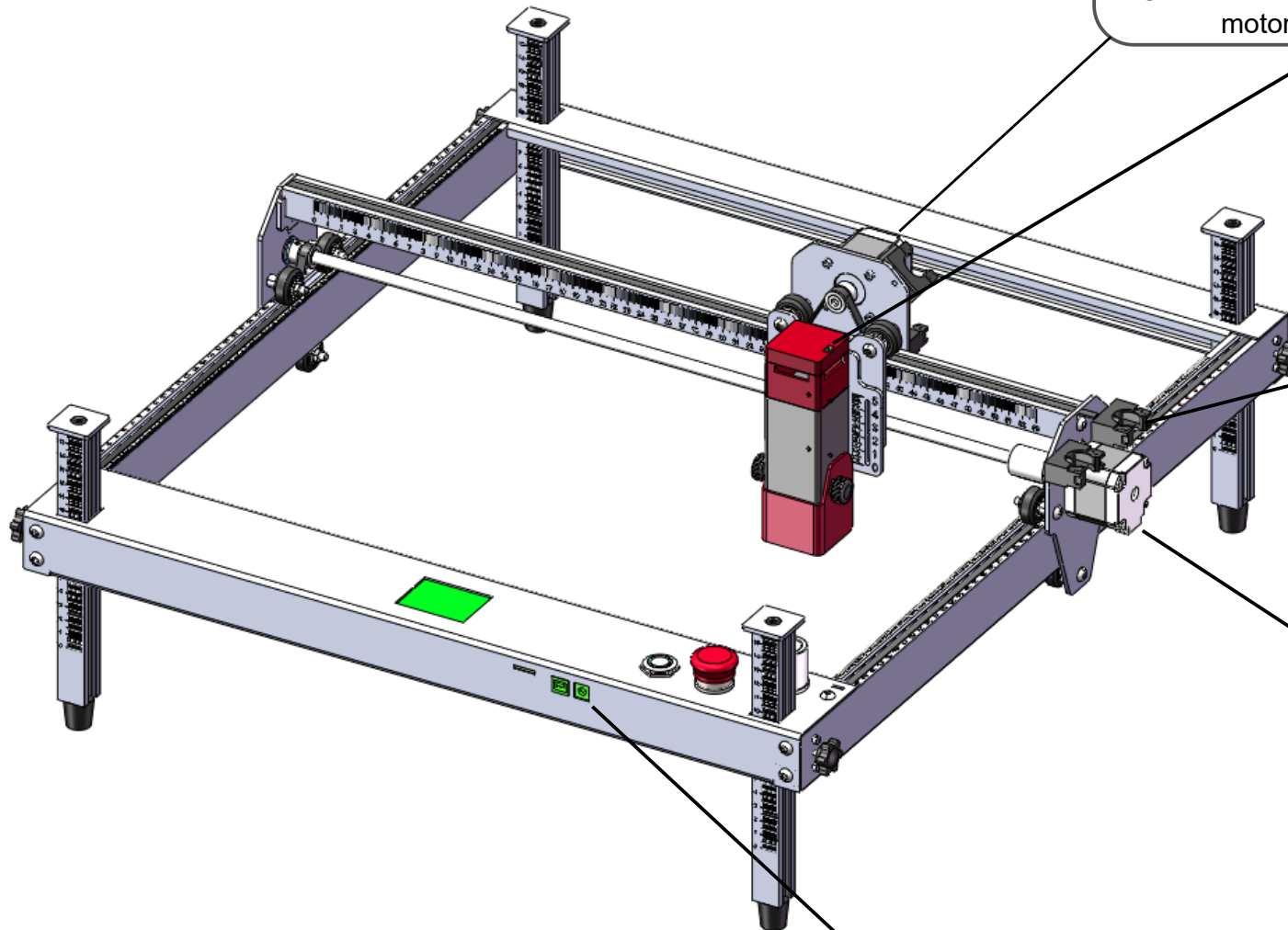
X Connect the X axis motor
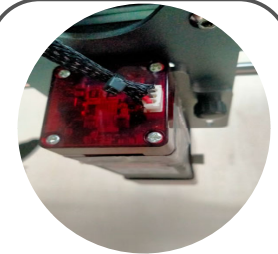
Connect the Laser Assembly

Cable Bundle Mount

Y Connect the Y axis motor

Connect Power Cord

5. Equipment adjustment

◆ **Loosen the hand screw nut, you can adjust the laser head up and down, and tighten it when it is adjusted to the right position.**
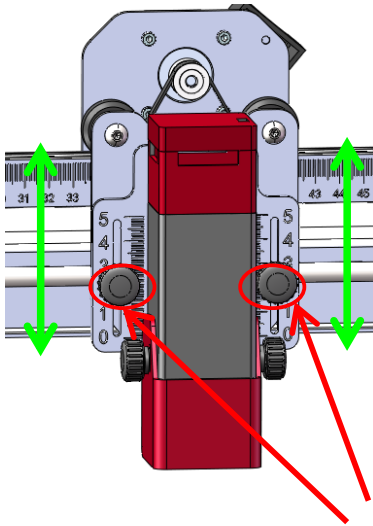
◆ **Loosen the hand screw nut, you can adjust the four feet up and down, and tighten it when it is adjusted to the right position.**
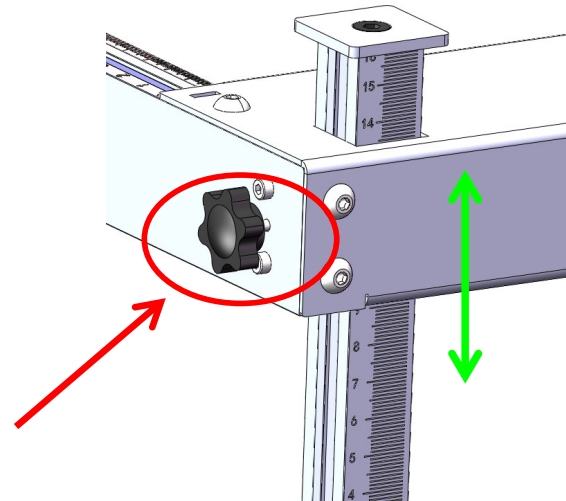
6. Focal Length Adjustment

●Loosen the hand screws shown in the figure and pull down the acrylic cover to the lowest point after tightening the screw.

●After loosening the hand screws shown in the figure and allowing the bottom surface of the acrylic cover to come in contact with the item being engraved, tighten the screw.

●Loosen the hand screws shown in the figure, and lift the acrylic cover up to the highest position and then tighten the screw.
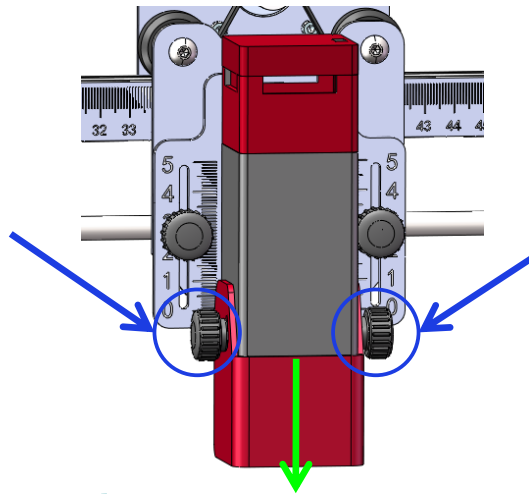
Schematic
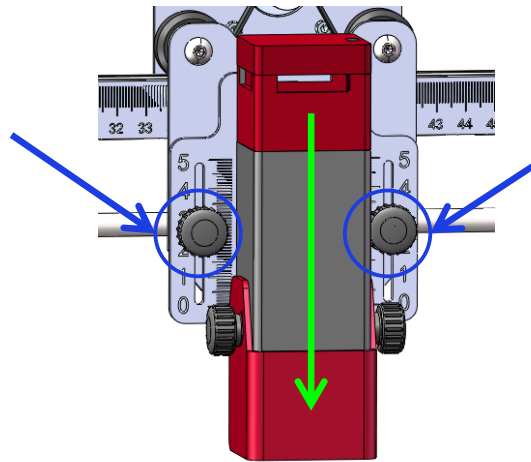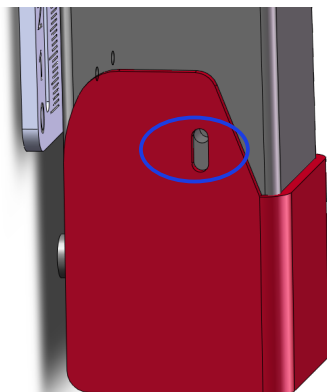
Schematic

Schematic

Engraving object

8
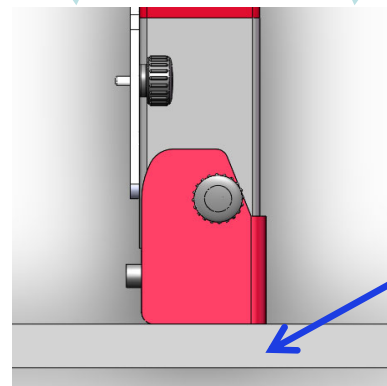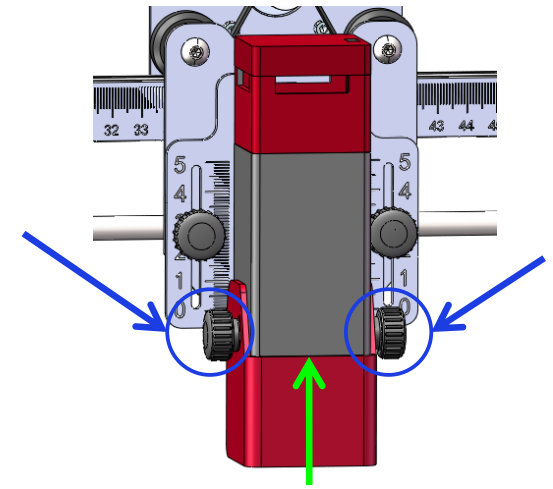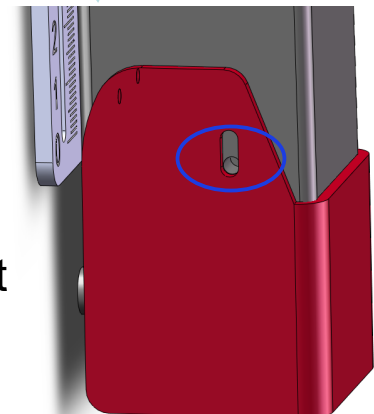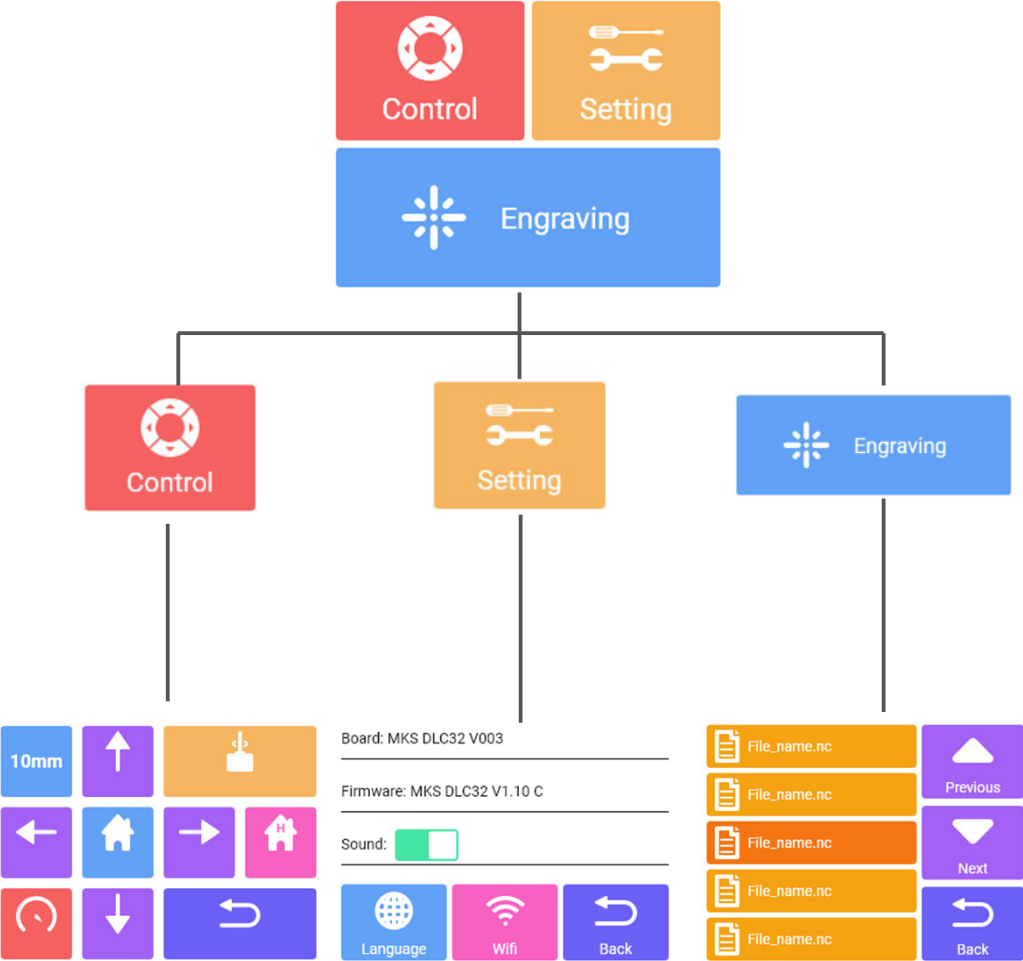
Main Menu	Primary Directory		Explanatory note
Control	10mm	10mm	Set single movement distance, switchable to 0.1mm, 1mm, 10mm
	Move	→	Control the direction of movement to operate each axis of X, Y, Z movement
		🏠	
	Zero		Set (Home) XYZ to Zero
	Laser		Emits laser light, fixing focus, etc.
Setting	Speed	Language	Movement speed, can be switched to low speed, medium speed, high speed
	Language	Wifi	Language Switch
	WIFI		Connect WIFI
Engraving	Files	File_name.nc	Show sliced files

● Setting

● WIFI

Board: MKS DLC32 V003

Firmware: MKS DLC32 V1.10 C

Sound:

Language | Wifi | Back
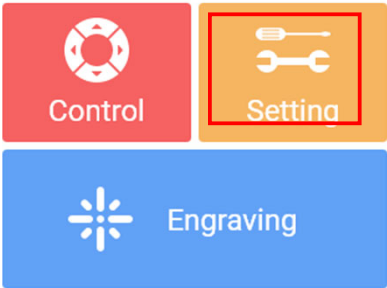
● Input WIFI Password, Confirm

Wifi 1   RSSI: 100%

Password: [   ]

a	b	c	d	e	f	Delete
g	h	i	j	k	l	m	n
o	p	q	r	s	t	u	v
w	x	y	z	⇧	123	Back
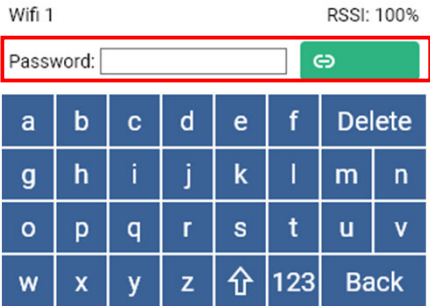
● WIFI Connect Successful

Wifi 1   Disconnect

IP: 192.168.1.2

Single: 100%

Research | Back
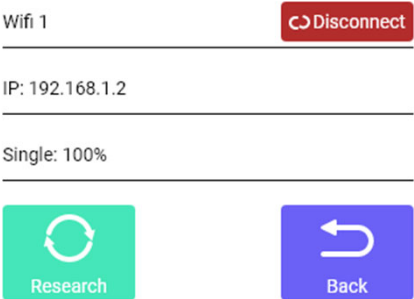
● Engraving
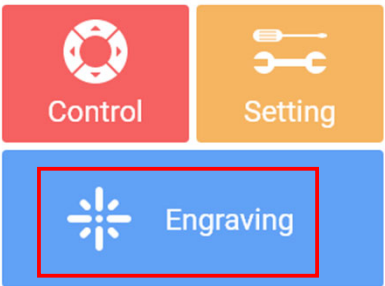
● Select the file to be engraved

File_name.nc
File_name.nc
File_name.nc
File_name.nc
File_name.nc

Previous | Next | Back
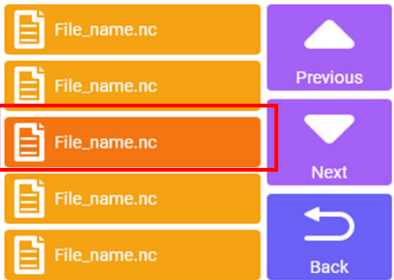
● Click on the edge tour function, the machine will run through the outline of the engraved file, check whether the outline of the engraved file is the desired position, and adjust the position of the engraved item as needed after.

gcode

边边 | 控制 | 返回
雕刻

● Once the position of the work area is set and the item to be carved is placed, you can click to confirm and the machine starts engrving.

.GC
times:1
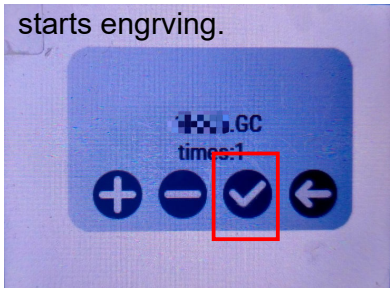
9. APP Usage

●Software Download and Installation: Apple phones can search for MKSLaser in the App Store ,then download and install. Android phones can install the app by copying the MKSLaser installation software from the memory card to the phone.

●WIFI Connection: The phone needs to be in the same network environment as the engraver. On the main screen of the app, click on the connection icon in the upper left corner ,Enter the same IP address in the IP address field as on the engraver, and click Connect.

●You can choose the material, create, control, and engrave on the home page.

● After tapping into the creation interface, you can engrave by drawing your favorite pattern, taking a photo and uploading it, or selecting a photo in your phone.

●After tapping into the control screen, you can move the axis and adjust the speed of the moving axis.

●After tapping into the material interface, you can choose the pattern you would like to engrave.

●Tap into the file interface to select a file in the memory card for engraving.
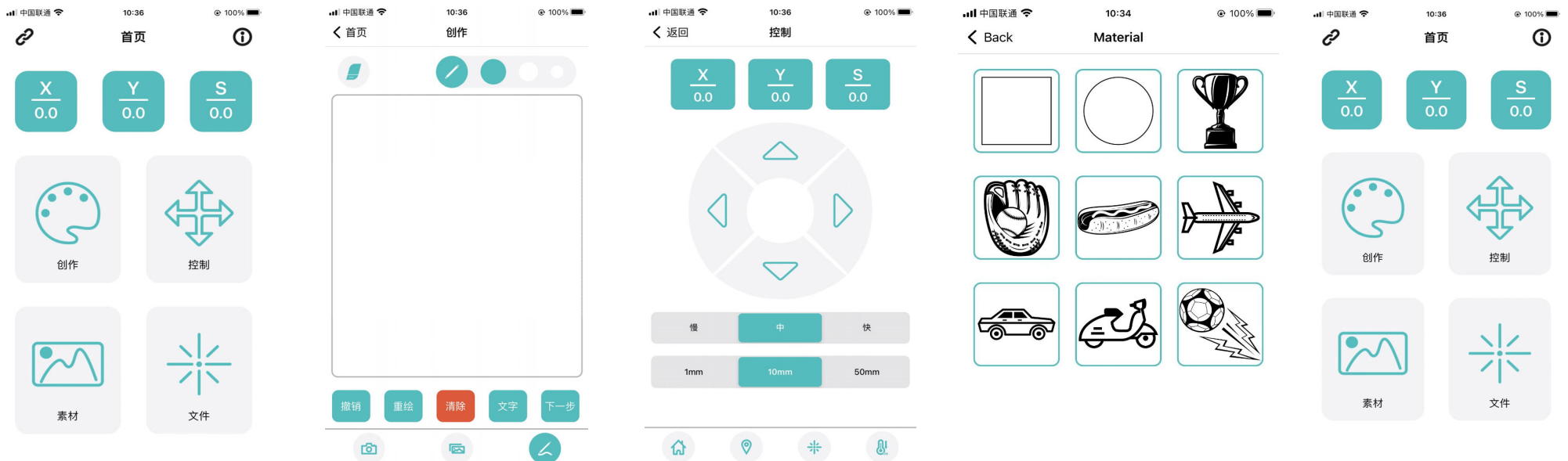
10. Online Engraving

●For engraving over USB, you connect the computer and the engraving machine using the data cable. While engraving, the computer cannot be powered off, and the computer cannot enter the screen saver or hibernate, to prevent data transfer failure.
●When you use the USB cable to connect the engraver to the computer, and if the driver cannot be loaded correctly, proceed as follows:
Open the distributed SD card and select the path (computer \F:\2. software and driver \online driver\USB driver) to install the file.
• Turn on the engraving machine, connect the USB cable, open the laser engraving and slicing software, click monitor, display the engraving machine model and other information, indicating that the computer has been successfully linked.
• Once the engraving file is sliced, it is ready for online engraving.
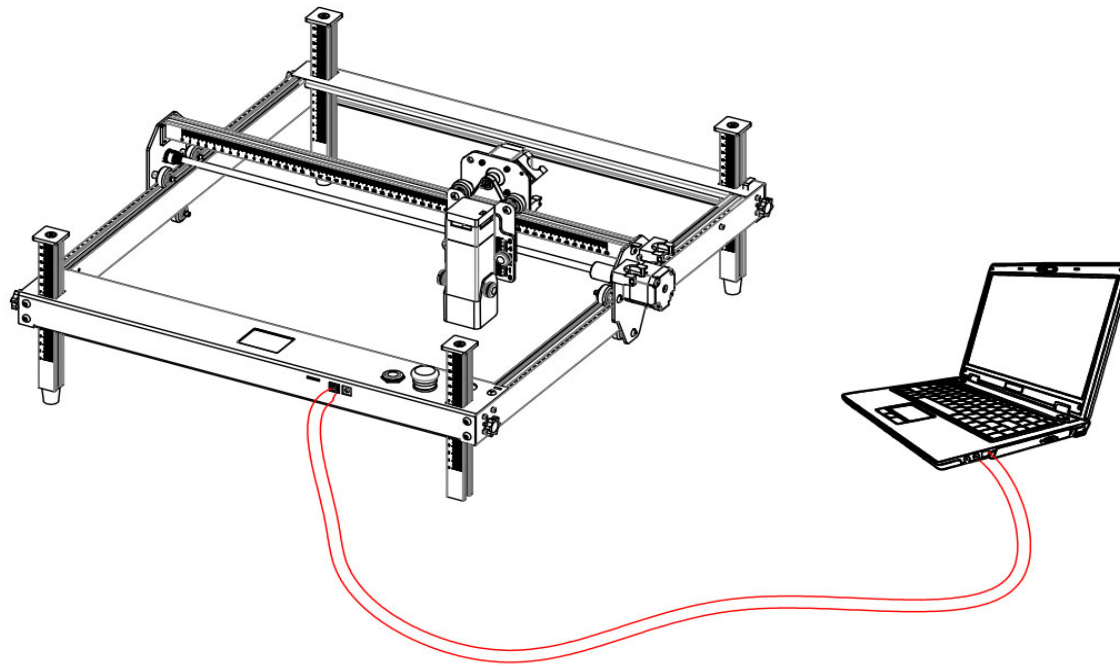
11. Safety Information

Improper use of the laser engraver can cause eye and skin injury, fire or other serious consequences. Please read this section of the laser engraver instructions before you begin to ensure that it is used correctly.

Electrical Safety

In order to reduce the risk of electric shock or fire,except as advised by qualified

Lotmaxx representatives.

●Do not attempt to repair or modify the machine.

●Do not attempt to disassemble the machine's wiring.

●Do not open the power supply or other sealed parts.

●In case of any emergency or malfunction, press the emergency stop button of the

machine and disconnect the power cord.

●**Use a properly grounded receptacle.**

Smoke and smoke safety

When you laser engrave, visible or invisible aerosols (generally referred to as "fumes and gases") are produced. Fumes and gases are carbon monoxide or other chemical gases that are produced depending on the material being laser engraved. Usually the fan module of the print head can blow away some of the fumes and gases, but there will still be some unpleasant odors left behind when engraving.

Watch out during laser operation

●Please do not operate the laser engraver and leave it unattended, you need to stay in sight at all times.

●It is normal for the laser beam to produce a burning spot on the material. The spot should move continuously with the laser head and not remain burning in the same position for a long period of time, if this results in a flame, please do the following:

1. Make sure the machine is turned off. Push the emergency stop switch and disconnect the power cord.

2. Use a fire extinguisher to put it out, while wet towels can also be used to extinguish small fires.

3. If you cannot put out the fire or if the fire is burning somewhere else outside the machine, call the emergency number (e.g. 911) immediately.

Materials must be suitable
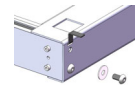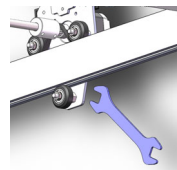
If the material is not compatible with laser engraving use, it can also lead to an increased risk of injury and fire.

●Please ensure that the laser head does not collide with the material when moving, otherwise unnecessary damage to the machine and personal injury will occur when laser engraving is performed.

●The materials that can be engraved are generally paper, wood, plastic, stainless steel, aluminum, glass, etc.

●Materials that can be cut are paper, wood and plastic, as well as the thickness should be within 10mm.

Laser engraving/cutting work range

Laser engraving maximum size 432*406mm

12. Troubleshooting

Problem Description	Troubleshoot Location	Solutions	Illustrations, descriptions
Engraving a single straight line, or the file being engraved produces doubled lines	1. Check whether the synchronous belt for X/Y-axis are moving. 2. Check whether the speed of the engraving file is too fast.	1. After loosening the fixing screws of the too loose timing belt, re-stretch the timing belt and set it with the fixing screws. 2. Reduce the engraving speed when slicing files. 3. Check wire connections if belt is tight.	
Poor engraving accuracy, offset or streak shape in details	1. Check whether the fixed plate of X/Y-axis are loose 2. Check whether the speed of the engraving file is too fast.	1. Adjust the eccentric nut in one direction until it feels tighter, but the wheels still move smoothly 2. Reduce the slicing speed when engraving the file.	The eccentric nut is elliptical in shape shape, as you move it in one direction it will get tight then loose, and tight again. Tighten it until the wheel moves smoothly.
Laser assembly connection line or motor line is loose resulting in poor contact	1. Check whether the laser head emits light, and whether the fan is rotating. 2. Check whether the X/Y-axis is moving normally.	1. Reinsert the laser assembly cable back into the socket, it needs to be fully inserted. 2. Reinsert the X/Y-axis motor cables back into the socket, it needs to be fully inserted.	
WIFI cannot connect to the machine	1. First check whether the IP address in the mobile terminal APP is the same as the machine IP address. 2. Confirm whether the machine and the mobile terminal are connected to the same network environment. 3. Check whether the network environment is good.	1. The IP address inside the mobile terminal APP should be the same as the IP address of the machine. 2. The mobile terminal and the machine should be connected to the same network environment. 3. Place the machine and the mobile terminal close to the WIFI device.	
Computer software does not recognize the machine	1. Check whether the USB cable is fully inserted 2. Check if there are any devices found in the computer device manager that are not installed as drivers.	1. Reinsert the USB cable. 2. Install the CH340G driver in the TF card delivered with the product.	
No boot	1. Check whether the power is on and whether the power plug is completely inserted into the machine. 2. Check whether the emergency stop switch is in the stop state.	1. After checking the outlet to make sure there is power, remove and reinsert the power plug both at the outlet and the power plug on the machine 2. With the emergency stop switch, rotate it in the direction of the arrow until the emergency stop switch pops up. At this time the emergency stop switch is reset, so turn on the machine to start.	

Official Website QR Code

Shenzhen Senma Utrend Co.Ltd.

Phone: +86 400 8882963 / +86 755 2300 5369

2/F, Building 9, Rundongsheng Industrial Zone, 107 National Road, Longzhu Community,

FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any inte rference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interferenceto radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.