



LaserPecker LX2

User Manual

v1.0

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Safety Information

1 General Safety

Before operating this product, please read and familiarize yourself with all safety guidelines and usage steps. Users must strictly adhere to all safety precautions and ensure that the product is correctly assembled and in normal working condition.

- Before using the machine, check the equipment for any damage and ensure that no defective or damaged machines are used.
- The usage methods, specific applications, and emissions from the engraved objects must comply with local laws and regulations.
- The use and maintenance of this device should follow the instructions in the manual to ensure safe operation.
- This device should not be operated by individuals with physical, sensory, or intellectual disabilities, minors, or untrained personnel.
- Ensure that the equipment is placed on a stable and level surface for operation.
- Keep the area around the device dry, well-ventilated, and maintain the environment within 50-95°F (10-35°C) and 10-95% humidity.
- Operating the device at sub-zero temperatures is strictly prohibited.
- When this product is in operation, ensure that it is supervised.

Please stop using the device immediately and disconnect the power in the following situations:

- A burnt smell is detected coming from the device.
- Open flames or sparks are observed coming from the engraving material.
- Any part of the device is damaged or malfunctioning.
- The device suddenly stops operating without any apparent reason.
- There are unusual sounds, smoke, or abnormal lights coming from the device.

2 Laser Safety Regulations

During normal operation, the laser is enclosed within a protective casing. The LX2 is equipped with a safety interlock system; if the cover is opened during operation, the laser will stop emitting light, ensuring that there is no harm to the user.

- It is strictly prohibited to operate the device with any parts disassembled. The absence of any components can pose a laser safety risk and damage the equipment. Do not tamper with the safety mechanisms of the cover.
- Operating lasers or reflecting laser beams can quickly lead to fires, burns, and permanent vision damage. Normally, the laser is shielded by a protective cover or safety enclosure. If the target object cannot be fully covered, such as when using feeding accessories, safety goggles must be worn to protect the eyes from laser exposure.
- Before operating the equipment, users should be thoroughly knowledgeable about the following aspects: the physical characteristics of laser radiation, the hazard classification of lasers and related health effects, and safety measures.
- Never operate the laser unattended. During operation, closely monitor the device to ensure it is functioning normally.
- Do not engrave or cut materials that contain PVC or vinyl. During operation, these materials may release toxic or harmful gases or fumes. Depending on the type and composition of the engraving/cutting materials, these emissions may pose health and environmental risks. To ensure safe use, it is advisable to fully understand the material properties before processing; do not engrave or cut any unknown materials. LaserPecker is not responsible for any damage to the machine or injury to persons caused by engraving materials containing PVC, vinyl, or materials with unknown properties.
- Do not use this device in humid, dusty, or high electromagnetic interference environments. Under these conditions, the laser may easily deflect or reflect.
- Reflective materials can cause laser reflections, so ensure that the work area is free from any reflective surfaces.

3 Equipment Safety

- Please ensure that the power adapter specifications indicated in the main unit's user manual are followed for powering the device. Using an adapter with different power ratings may cause the device to malfunction.

- Do not ignite explosive materials or any substances that may increase the risk of fire near the device (especially flammable materials such as paper, acetone, gasoline, alcohol, or volatile solvents).
- Do not place any objects on top of the device, particularly heavy items, to prevent permanent damage.
- When operating the device, ensure good ventilation to expel exhaust gases outdoors, or use it in conjunction with an air purification filtration system. If symptoms such as respiratory irritation occur, immediately get fresh air and seek medical attention as needed.
- Keep the interior of the device clean to prevent the accumulation of cutting or engraving debris, which could lead to fires. After use, promptly clean any residual materials from the tray.
- Have a fire extinguisher ready and conduct regular maintenance checks on it. If open flames occur during processing, take the following measures:
(1)First, disconnect the power supply to the device.
(2)Then, use the fire extinguisher to put out the fire.

4 Safety Labels

Warning and instruction labels for the LaserPecker laser protective enclosure are placed in areas that may pose hazards during operation or before use. If any labels are damaged or missing, please replace them immediately. You can use the following template to copy and print the required labels.

Software Download

Download App

Scan the QR code below to download and install the LaserPecker Design Space App.

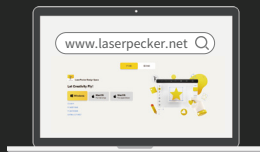
Please follow the operation guide and read the warnings and precautions in the App carefully.



LaserPecker Design Space

Download PC Software

Please visit <https://www.laserpecker.net/pages/software> to download the PC software.



After-Sales Service

Contact Us

If you encounter any issues, please do not hesitate to reach out to our customer support team at support@laserpecker.com



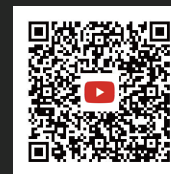
YouTube: @LaserPecker



Facebook Group: @LP5 Official Group

Video Tutorials

Scan the QR code below to learn how to use the machine.



Package List



LX2 Main Unit × 1



Rotary Extension
× 1



Feeder Accessory
× 1

Riser Base
× 1



2-3 Lasers Units



Security Keys × 2



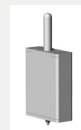
Toolbox × 1



1.5M Computer
Connection Cable × 1



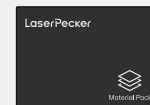
Exhaust Pipe × 1



Auto Focus Probe × 1



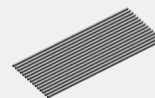
USB Drive (32G) × 1



Material Pack × 1



User Manual × 1



Cutting Slats × 15



Hex Wrench H2.5 × 1
Hex Wrench H2.0 × 1
Hex Screws × 4



Screwdriver × 1

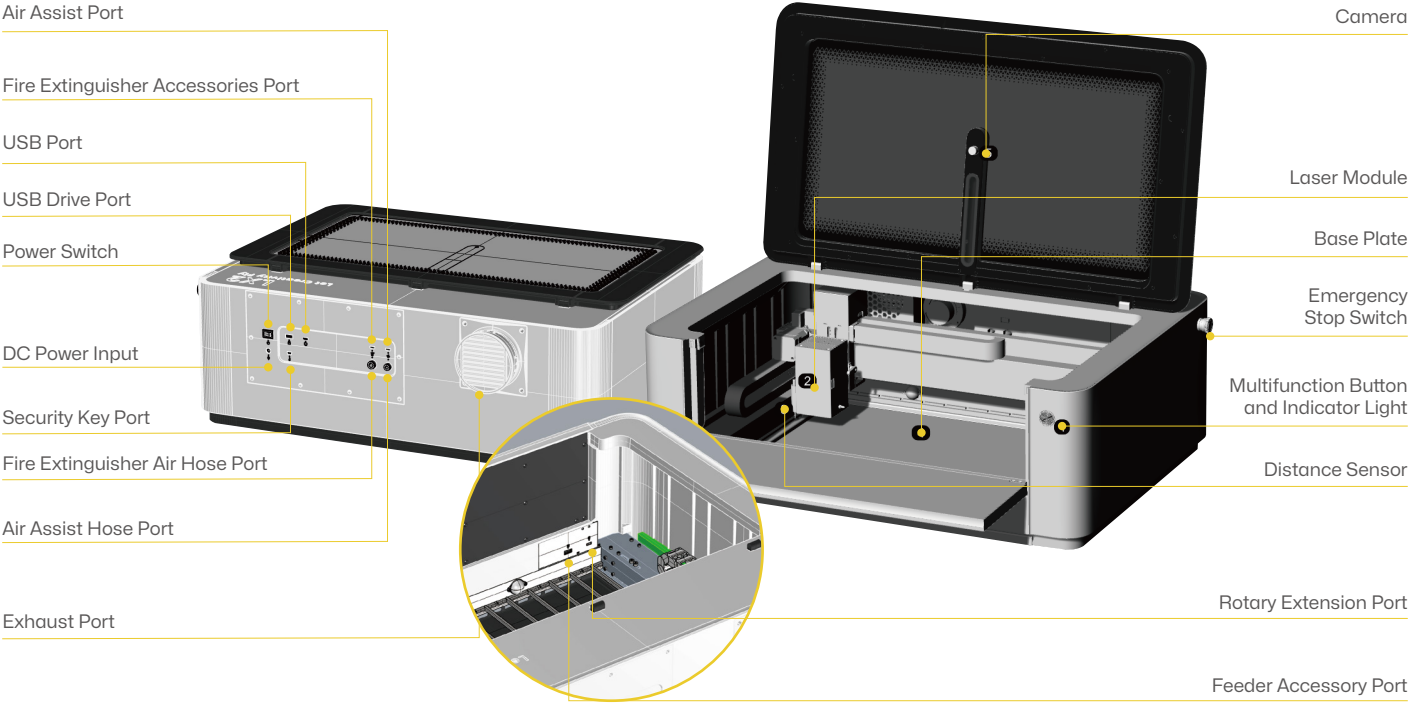


Flexible Fixing Accessory
× 1



Air Assist Accessories
× 1

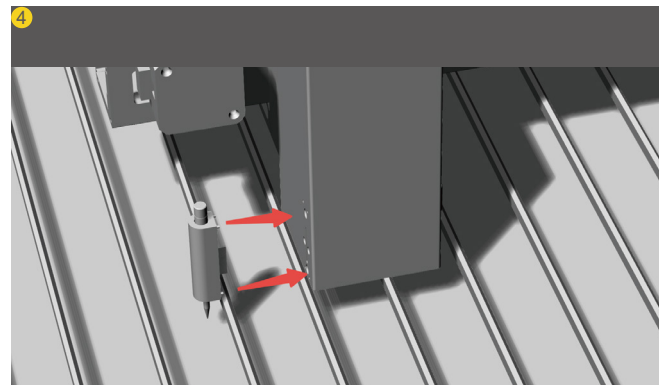
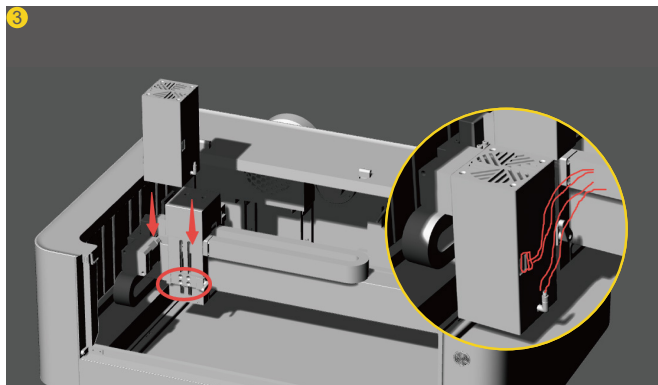
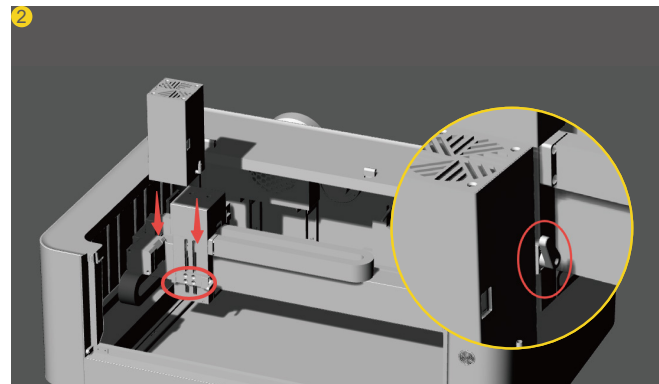
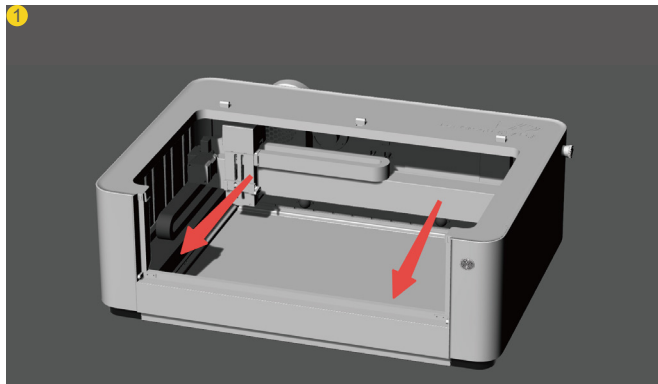
Component Introduction



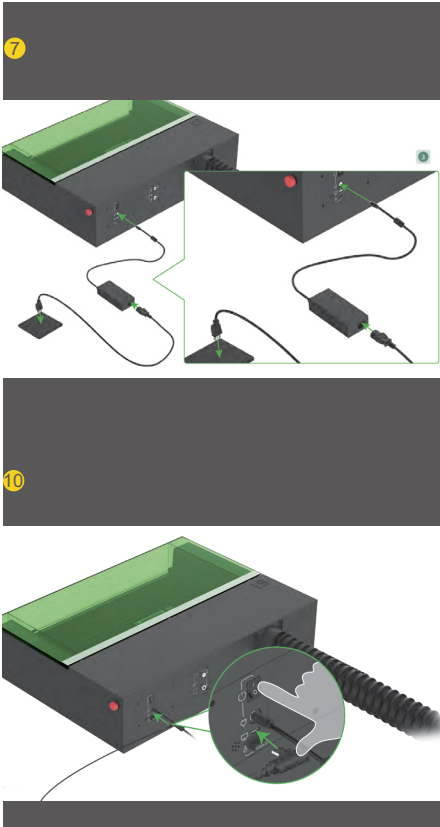
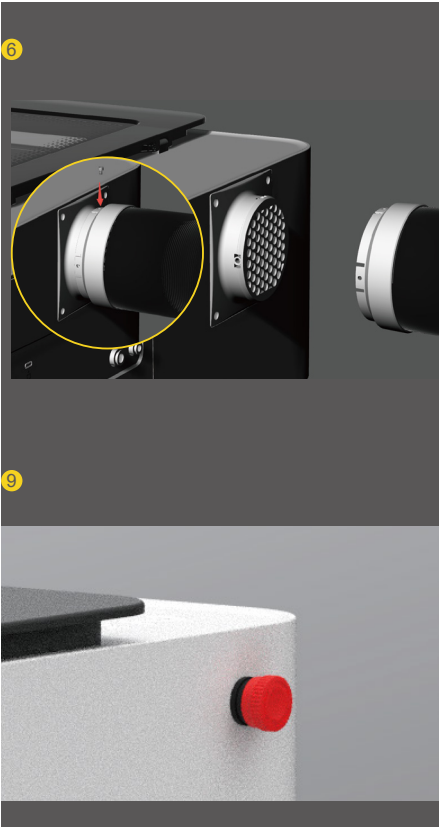
Button Functions and Definitions

Status & Operations	Buttons		Indicator Lights	Buzzer	备注
	Button	Button Operations			
Power On	Power Button	Toggle the boat-shaped switch to "On"	After powering on, if not connected to the network or USB: Yellow light stays on.	 One beep	
Start Network Configuration	Main Button	Long press for 5 seconds	Yellow light changes to green light blinking, with a 0.5s interval.	 One beep	
Configuring Network			Green light blinks, with a 0.5s interval.	 /	
Network Connection Successful			Green light changes from blinking to solid.	 One beep	
Start Firmware Upgrade		The machine requires no operation; confirm on the APP side.	Green light changes from solid to blinking, with a 0.5s interval.	 One beep	Click "Confirm Upgrade" on the app to start the upgrade.
Firmware Upgrading			Green light blinks, with a 0.5s interval.	 /	
Upgrade Successful			Green light changes from blinking to solid.	 One beep	
Confirm Edge Tracing	Main Button	Short press once	Green light stays solid.	 One beep	On the mobile device, click "Preview". The display will prompt "Click Main Button" to start the preview.
Edge Tracing in Progress			Green breathing light.	 /	
Confirm Engraving Object	Main Button	Short press once	Green light stays solid.	 One beep	On the mobile device, click "Engrave". The display will prompt "Click Main Button" to start engraving.
File Transfer Starting			Green light changes from solid to blinking, with a 1s interval.	 One beep	
File Transferring			Green light blinks, with a 1s interval.	 /	
File Transfer Complete			Green light changes from blinking to solid.	 One beep	
Engraving			Green breathing light.	 /	
Pause Engraving	Main Button	Short press once	Green light stays solid.	 One beep	
Resume Engraving After Pause	Main Button	Short press once	Green light stays solid.	 One beep	
Cancel Engraving Task	Main Button	Long press for 3 seconds	Green light stays solid.	 One beep	
Cover Open Protection		Open cover while engraving	Green light stays solid.	 long press for 3 seconds.	Pause engraving will stop immediately. The duration of the stop needs to be measured for compliance.

Using the LX2



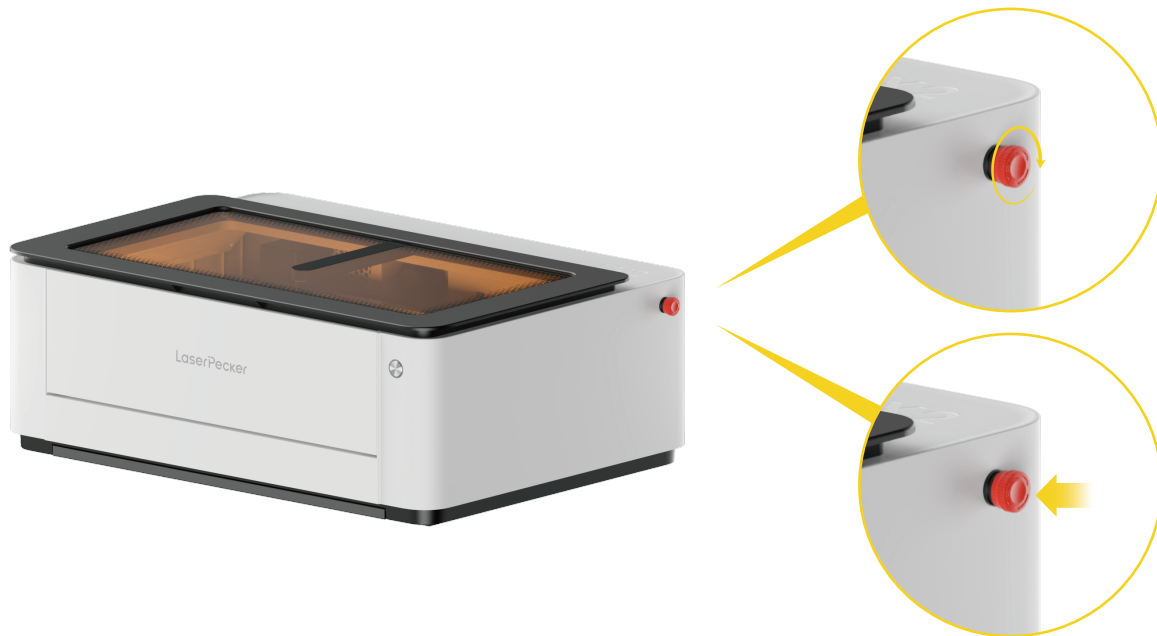
Using the LX2



Using the LX2

Emergency Stop

If an emergency occurs during operation, press the emergency stop switch. This will immediately cut off power to the machine to halt all activity.

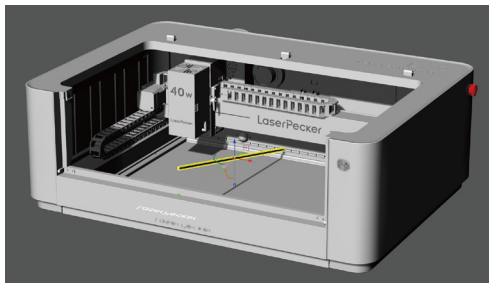


Using the LX2

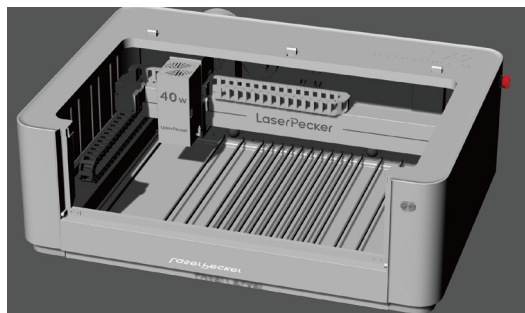
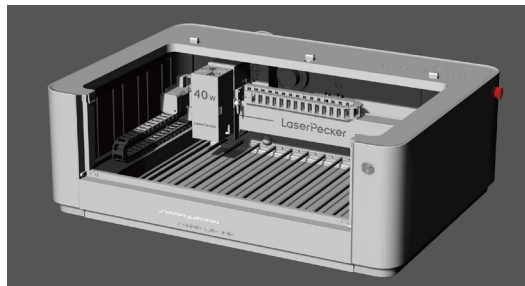
Install the Cutting slats

To cut materials like wood, use the provided cutting grid to improve airflow and cutting results:

① Remove the cutting slats from its packaging and place it in the slots at the front and rear of the main frame.



② The spacing of the cutting slats can be adjusted as needed. The LX2 comes with 15 cutting slats.



Connecting the LX2 (Using the LDS App)

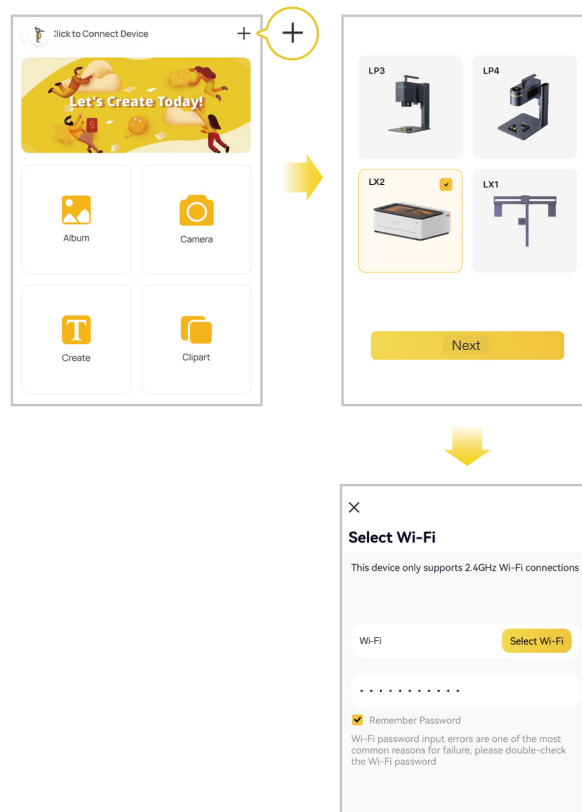
Connect to App through Wi-Fi (First time WiFi setup or changing the network)

Open the LaserPecker Design Space App, click the "+" in the upper right corner, select the machine model 'LX2' and follow the instructions to configure the WiFi network for the machine.

Note: Both the machine and the phone must be under the same 2.4GHz WiFi network.

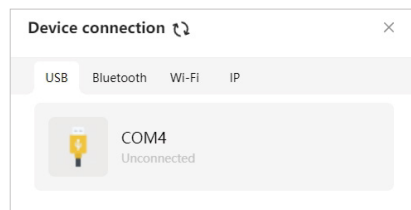
The Laser unit indicator is in solid blue if the connection is successful.

- Blinking white: Not connected to network
- Solid white: Connecting to network
- ◐ Blinking blue: Connected to network
- Solid blue: Connected to App



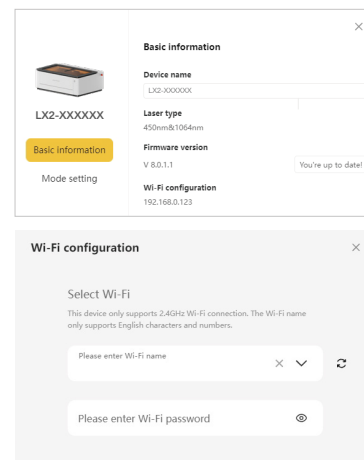
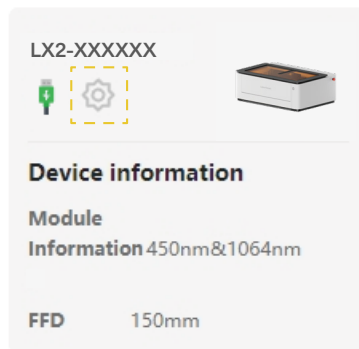
Connecting the LX2 (Using the LDS Software)

Option 1: Connect directly via the 1.5M Computer Connection Cable



Option 2: Connect to PC Software through WiFi (First-time WiFi setup or changing the network)

- 1 Before setting up the wireless connection, you must first connect the machine to a computer using a USB cable. This USB connection allows you to configure the WiFi settings on the machine.
- 2 After connected, entering the machine setting page on the upper right corner in the software. Select 'WiFi setting' and follow the instructions to configure the WiFi network for the machine.



Both the machine and the computer must be under the same 2.4GHz WiFi network.

Maintenance

Clean the Laser Module

Engraving can generate smoke, which may cause the laser module's lens to get dirty or clog the air nozzle. Failure to clean it can reduce laser power, affecting engraving quality, or even damage the module.

When not using air assist, follow these cleaning frequencies:

40W laser module: Clean every 0.5 hours of processing.

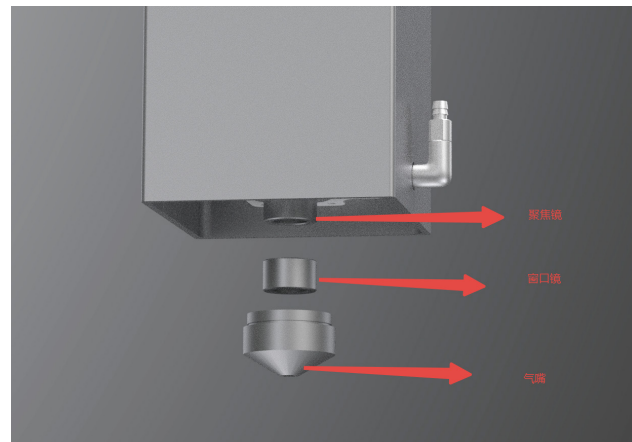
20W laser module: Clean every 1 hour of processing.

10W laser module: Clean every 2 hours of processing.

If using air assist or generating minimal smoke, you may reduce cleaning frequency. Generally, clean the laser lens as soon as you notice dirt to maintain module longevity.

Cleaning Guide:

1. Turn off the device and remove the laser module.
2. Unscrew the nozzle and protective lens from the bottom of the laser module.
3. Use a lint-free cloth or cotton swab with a small amount of alcohol to clean the protective lens and nozzle. Generally, the focus lens does not require cleaning unless it becomes dirty during the cleaning process of the protective lens. If so, clean the focus lens thoroughly as well.



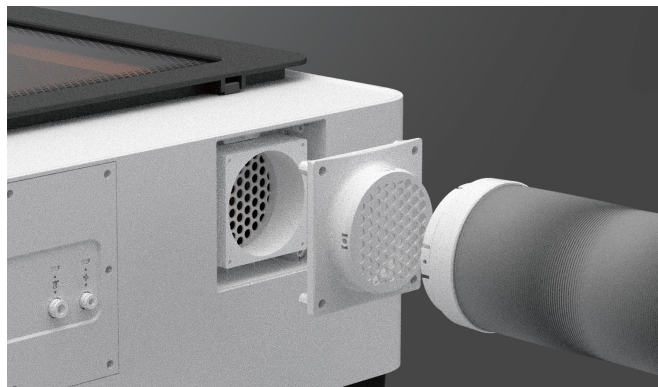
Maintenance

Clean the Exhaust Fan

Over time, smoke may accumulate in the exhaust fan, reducing efficiency. Clean the fan if you notice a slower exhaust rate.

Cleaning Guide:

1. Turn off the machine and remove the exhaust hose and exhaust window.
2. Unplug the fan power cord, unscrew the fan mount, and remove the fan.
3. Use a cotton swab or cloth with a bit of water or alcohol to remove dust from the fan.
4. Clean the front and back exhaust ports of the fan.
5. Reinstall the fan, reconnect the power
6. Reattach the exhaust window and hose.



Clean the Camera

After extended use, smoke and dust may settle on the camera lens, causing a blurry image. If the camera feed is unclear in the software, open the top cover and check the camera. If needed, clean it with a lens cleaning cloth or lint-free cloth.

Technical Specifications

Product Model	LaserPecker LX2				
Device Laser Class	Class 1				
Size	762 * 597 * 281mm				
Weight	21kg				
Engraving Area	500 * 310mm				
	Basic Parameters of Different Modules				
Module	10W 450nm	20W 450nm	40W 450nm	2W 1064nm	Cutting with Pen Blade
Laser Source	450nm	450nm	450nm	1064nm	/
Laser Output Power	10W	20W	40W	2W	/
Laser Spot Size	0.06*0.04mm	0.08*0.06mm	0.08*0.10mm	0.03*0.03mm	/
Cutting Thickness	8mmPlywood	15mmPlywood	23mmPlywood	/	/
	8mmAcrylic	10mmAcrylic	15mmAcrylic	/	/
Supported Document Formats	PC Version: G-code /JPG /PNG /BMP /SVG /DXF等 Mobile Version: G-code /JPG /PNG /SVG				
Operating System	Supported Software: iOS9.0+、Android7.0+、MacOS 10+、Windows 10+、Compatible with LightBurn				
Input Power	DC(24V,10.5A)AC(100-240V50-60Hz)				
Connection Method	Wi-Fi,USB,IP				
Operating Temperature Range	0-35℃				
Operating Humidity Range	5% - 80% (non-condensing)				
Safety Certifications	CE、ROHS、FCC、FDA、PSE、KC、UKCA、TELEC、SRRC				

Disclaimer and Warranty Terms

Disclaimer

Thank you for choosing LaserPecker LP5! This manual relates to your safety, legal responsibilities and rights. Please read and get familiar with all safety precautions and procedures before using the product. If you do not use the product according to the instructions and requirements of the manual, or mis-operate the product due to misunderstanding, etc., LaserPecker (Hingin Technology Co., Ltd.) shall bear no responsibility for any loss resulting therefrom.

Given the conditions and methods of use of this product are beyond the control of LaserPecker, LaserPecker shall not be liable for any of the following consequences, which shall be borne by the user:

- Personal injury, property loss, and product damage caused by improper operation, failure to follow the manual or other uncertainties.
- The work that user created using the LaserPecker product infringes intellectual property rights of the third party or violates relevant laws and regulations.
- Personal injury, property loss, and product damage that may arise during the installation, transportation, storage, use, maintenance, and disposal of this product.
- All official LaserPecker materials have undergone safety testing and are compatible with this product. LaserPecker shall not be liable for material safety or engraving quality if the user uses non-LaserPecker official materials.

Warranty Terms

- To the extent permitted by law, this warranty is exclusive and supersedes all other express or implied warranty conditions, including those arising from specific purposes, statutory requirements, or other circumstances, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. Additionally, LaserPecker (Hingin Technology Co., Ltd.) will not be liable for any incidental, special, consequential, or derivative damages (which may arise from use, misuse, inability to use, or product defects).
- Consumers requesting warranty service should back up all personal and important data in advance. During the repair process, such as when replacing parts or updating product software, data may be lost. LaserPecker (Hingin Technology Co., Ltd.) does not provide data backup or guarantee the integrity of data and settings.
- The product is eligible for free repair service with no shipping costs within 7 days from the date of shipment. For repairs requested after 7 days from the shipment

date and within the warranty period, shipping costs must be paid by the customer.

- Any product that is replaced or repaired will retain the remaining warranty period of the original product or will be covered by a 30-day warranty for the replacement product.
- For products sold outside mainland China, due to factors such as local laws and regulations, safety standards, customs duties, repair technology, and parts inventory, some products may not be returned to Hingin Technology for warranty service. Therefore, Hingin Technology can only offer limited warranty services. Consumers outside mainland China, regardless of whether their product is still under warranty, must first seek warranty service through the authorized points in the country of purchase. Authorized service points in the country may charge for inspection and handling fee, and any additional customs duties in the country will be the consumer's responsibility. Warranty service requests made directly to Hingin Technology will be handled in a similar manner.
- For Hingin Technology products distributed by dealers, any value-added services provided to consumers outside mainland China that differ from this warranty are valid only within the dealer's sales region and are unrelated to this warranty service.
- Processing quality is highly related to user operation, material used, and processing environment, and is not covered under the warranty. Unauthorized resale or secondary sales are prohibited. Failure to comply will result in the forfeiture of official warranty coverage.

Copyright

- Copyright of this manual, as well as the rights to the software and hardware related to this product, are owned by Shenzhen Hingin Technology Co., Ltd. (hereinafter referred to as "Hingin Technology"). LaserPecker is a registered trademark of Hingin Technology.
- The information in this manual may be changed without notice; The information in this manual does not constitute a commitment of the Company. Please learn about the latest update from(<https://www.laserpecker.cn>). The contents of this manual shall not be rewritten or forwarded in any form or for any purpose without the written permission of the Company.

Warning

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 interference received, including interference that may cause undesired operation.

Any 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 interference to 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.

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 & your body.

Warning

IC Warning

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

This device may not cause interference, and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme aux normes RSS sans licence d'innovation, sciences et développement économique Canada. Les opérations sont soumises aux deux conditions suivantes:

(1) Cet appareil ne peut pas causer d'interférences, et

(2) Cet appareil doit accepter toute interférence, y compris celles qui pourraient entraîner un fonctionnement accidentel de l'appareil.

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

Tout changement ou modification non expressément approuvé par la partie responsable de la réglementation de l'OCDE peut faire perdre à l'utilisateur le droit d'utiliser l'appareil.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

L'appareil est conforme aux limites d'exposition aux radiations spécifiées par la IC pour les environnements non contrôlés.

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 & your body.⚡

⚡

L'appareil est conforme aux limites d'exposition aux radiations spécifiées par la FCC pour les environnements non contrôlés. La distance entre le radiateur et le corps doit être d'au moins 20 cm lors de l'installation et du fonctionnement de l'appareil.⚡

LaserPecker