



E1-10W All-in-one Engraving Machine (Fiber Laser)

USER GUIDE

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Preface

Thank you for using the E1-10W all-in-one engraving machine products from Maxphotonics. We compile this document for you in order that the equipment is used and maintained properly. Due to the limited level of the writers, coupled with time constraints, there are some careless mistakes in this document, your understanding and suggestion to help us make an improvement will be much appreciated . Thank you again for using Maxphotonics' products.

Please take time to read and understand this User's Guide and familiarize yourself with the operating and maintenance instructions before you use the product. We strongly recommend that the operator read the Section 2 titled "Safety Information" prior to operating the product.

This User's Guide should stay with the product to provide you and all future users and owners of the product with important operating, safety and other information.

We identify the parts to which you need to pay special attention in the document with underscore. Please notice those information to prevent the unnecessary damages.

Company Profile

Found in 2004, Maxphotonics is one of the first fiber laser manufacturers in China. It is also the first in China to realize independent intellectual property rights and vertical integration in the core technologies of fiber lasers and optical devices. One of the national high-tech enterprises. Maxphotonics has developed into an internationally renowned laser manufacturer that develops, manufactures and sells fiber lasers and core optical components. It is the second largest domestic fiber laser manufacturer in the domestic market.

Maxphotonics specializes in the research, development, production and sales of fiber lasers, including pulsed fiber lasers, continuous fiber lasers and direct diode lasers. It also implements pump sources, combiners, fiber gratings, isolators, laser output heads, and stripping. Optical devices such as molds, acousto-optic modulators, and pattern matchers are produced autonomously. Products are widely used in marking, engraving, cutting, drilling, cladding, welding, surface treatment, rapid prototyping and additive manufacturing processes.

More informations, please visit our website:

<http://en.maxphotonics.com>

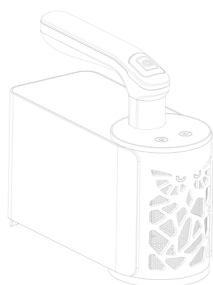
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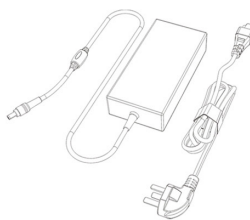
Chapter 1

Product Accessories List

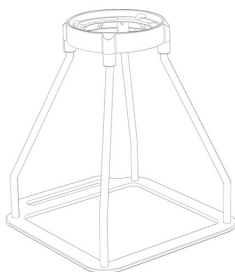
1-Standard (products Included In This Set)



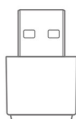
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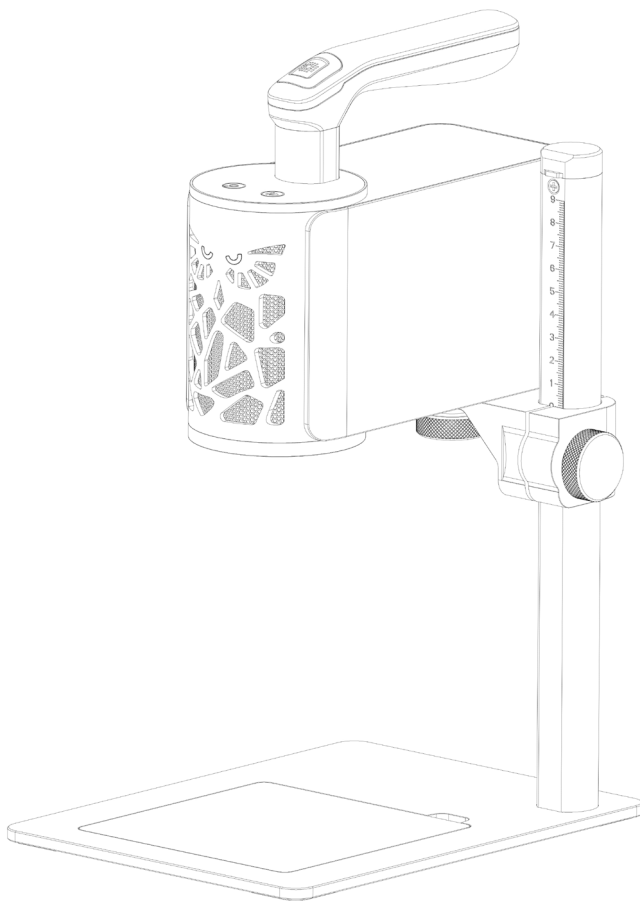


⑥

1. Host
2. Power Adapter
3. Fixed focus bracket

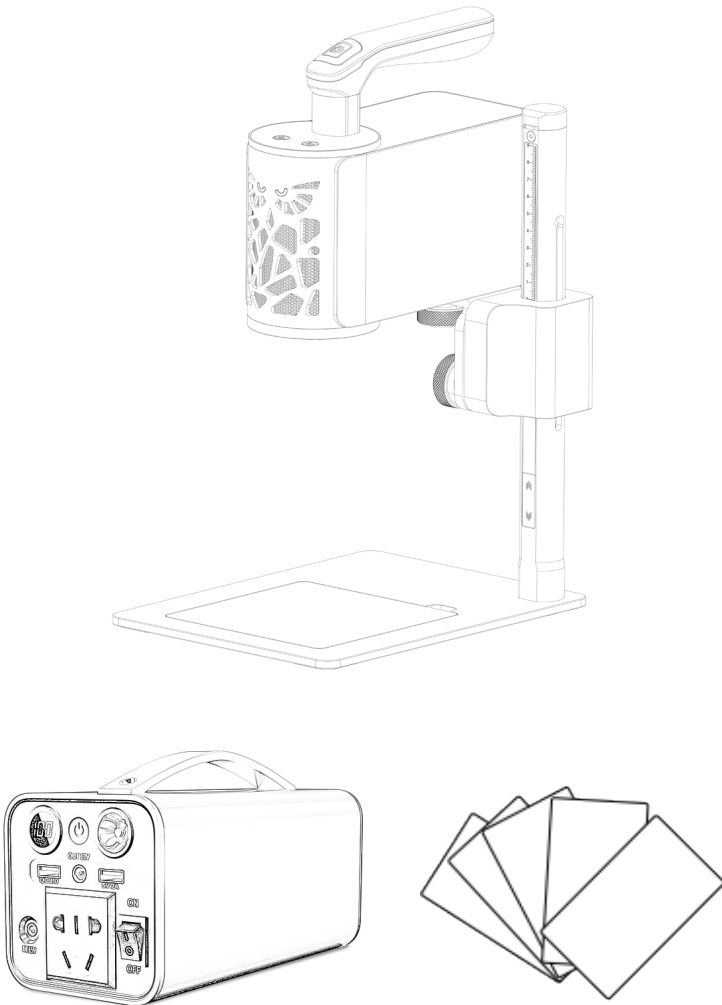
4. Wireless network card
5. Goggles
6. Wooden ruler

2-Professional Edition



Manual lift table + host

3-Deluxe Edition



Electric lift table + host + mobile portable power supply + material package.

DECLARE:

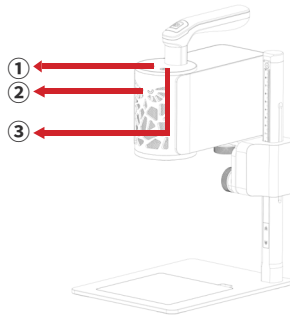
© For details of packaging, please refer to the purchased version.

Chapter 2

Button/Indicator Description

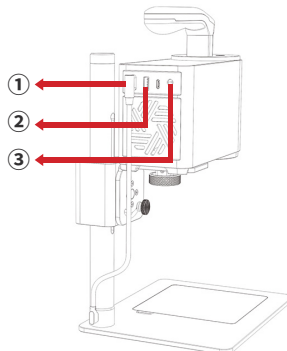
1-Host Indicator

1. Preview button
2. Host indicator
3. Short press to stop/long press to start engraving button



2-Power Interface

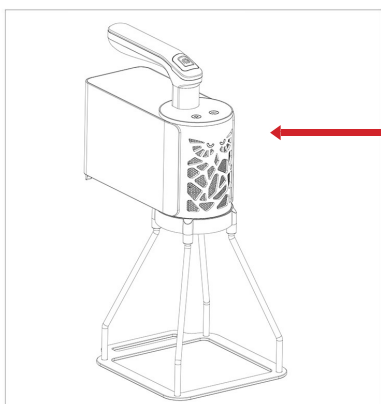
1. Electric stand power interface
2. Exhaust fan reserved power interface
3. Host DC power interface (round)



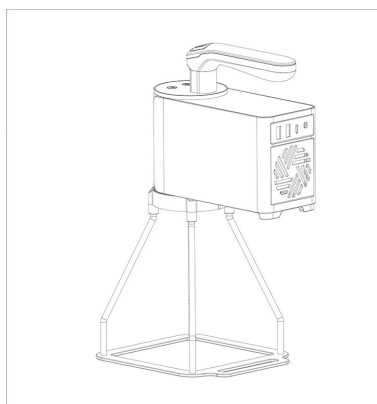
Chapter 3

Quick Installation Instructions

1-Handheld Engraving



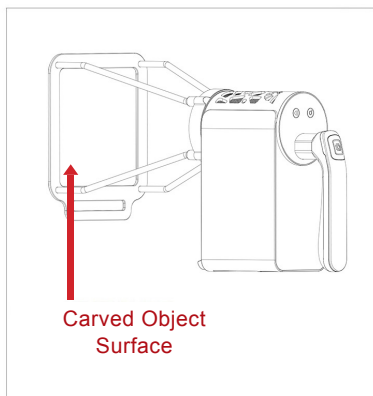
1. Install the fixed focus bracket on the bottom of the main unit.



2. Access the host DC power supply.

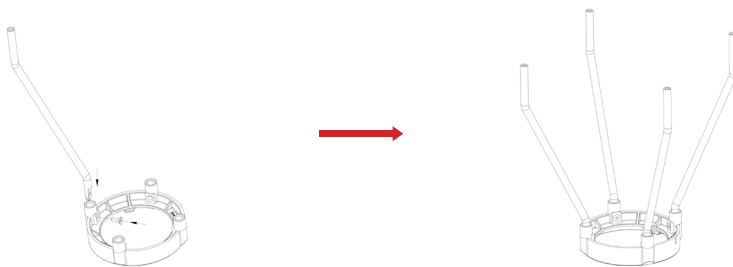


3. The installation is complete, Complete the engraving according to the APP guidelines.

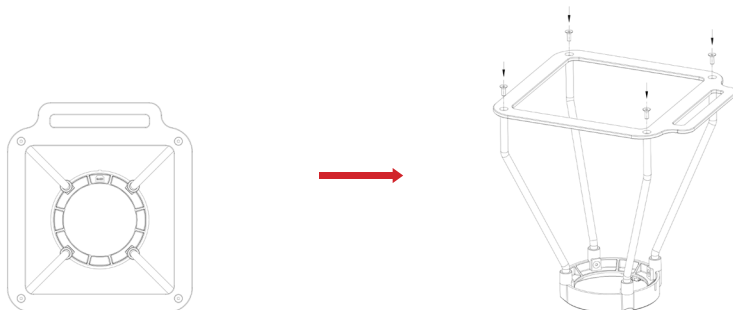


4. Hold the host handle, Align the surface of the object to be engraved.

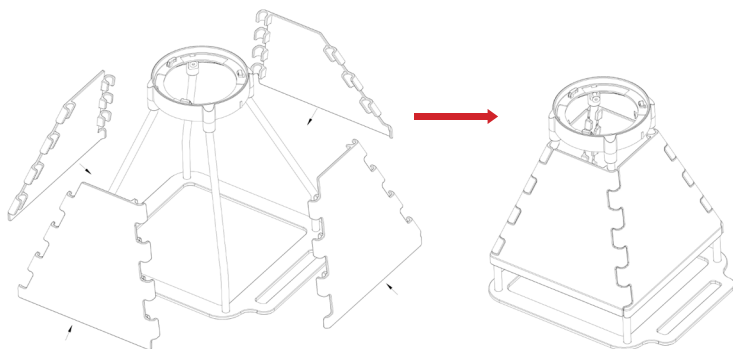
2-Fixed Focus Bracket Installation Instructions



1. Insert the 4 support rods into the connector, then lock the screws.



2. Align the bottom plate with the support rod, the connector "BACK" is in the same direction as the groove on the bottom plate, and then lock the screws.



3. Buckle the bottom 4 protective sheets into the support rod.

Chapter 4

Download And Operation

1、 Download And Install

Method: Select Android download APP or PC software application through QR code.

Client software installation: Double-click the software installation package → select the installation path, check agree to install, install → complete the installation.



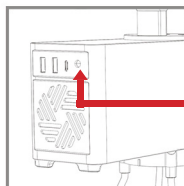
Owl Android Client



Owl PC Client

2. Access The Host

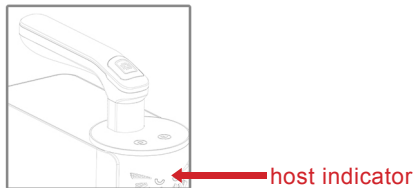
Insert the wireless network card into the computer, search for the WiFi hotspot of the engraving machine and connect it. The initial password of the WiFi hotspot is 123456789.



Host DC power interface

3. Connect To WiFi

Open the software, click Device Connection Management, select WiFi in the pop-up box, and click Connect, the WiFi column turns green, indicating that the connection is successful.



Open the APP and search for connected devices in the APP:

The indicator light of the host flashes blue (alternative: red and green two-color lights), which means WiFi to be activated;

The main unit is always on blue light (alternative: red and green two-color light), which means the WiFi system is stable.

4. APP Device Connection

Notice:

© The mobile phone does not need to be connected to the wireless network WLAN of the device. After connecting to the wireless network of the device, the mobile phone will not be able to access the Internet normally.

1. If Wi-Fi is not turned on, turn on Wi-Fi first.
2. Click "Device not connected" on the main interface again, confirm that the device is powered on, and find the corresponding address of the handheld marking machine.
3. When you need to disconnect, click "Device is connected", enter the next interface and click the connection device address page, and a prompt box will pop up and click "Disconnect".

Unable to connect/Failed to connect:

1. The device cannot be searched: Please confirm whether the power of the device is turned on and whether the battery is charged. After confirming, power off and restart and follow the steps to connect again.
2. Connection failure: Please confirm whether the device has been connected to other mobile terminals or computers. If there is a connection, you need to disconnect other connections first, and then follow the steps to connect again.



Select the content to be engraved on the APP homepage to start engraving.

Chapter 5

Product Specifications

size	Overall size: 183*79*163 mm
weight	Overall weight: 1.5KG
Laser type	Pulse Fiber Laser
Laser wavelength	1064nm
Laser output power	10W
Exterior	Aluminum alloy anodizing
document transfer	WiFi
Supported document formats	jpg, png, bmp, dxf, dwg
APP connection method	WiFi connection
APP operating system	Support Android 6.0 + Windows 10
power input	DC (24V, 7.5A)
range of working temperature	0°C~40°C
Operating humidity range	5%~80% (non-zero frosting)

Chapter 6

Use Safety Guidelines

1. Before starting the installation, please first check that the equipment is in good condition, and the laser mirror surface is clean and free of contamination.
2. Installation specification: Before starting the operation, please refer to the instruction manual to fix the main unit (use fixed-focus brackets and other accessories with fixed functions or support objects) to avoid falling due to unstable placement.
3. Please be sure to supply power to the device according to the power and type of power (24V, 7.5A adapter) indicated in the instruction manual.
4. Before starting the laser engraving, please make sure to take safety measures. For example, you can install a fixed focus bracket or a laser protective cover, wear goggles to prevent the laser from accidentally hurting your eyes or skin, and remove irrelevant items to prevent laser exposure. And cause unnecessary damage, especially to remove flammable and explosive materials to prevent fire.
5. When starting the engraving after the laser is started, do not move the device, so as not to cause the device to stop working due to self-protection or even to affect the final effect of the engraved work due to the displacement of the engraved object.
6. If you must move the device or the engraved item, please operate it before starting the engraving or after the engraving has been completed. Do not move the device or item during the laser work.
7. Due to the danger of lasers, do not allow minors, children and people who do not have self-protection awareness to approach the equipment at work.

8. Before using this product to engrave, please check that the engraved object will not release toxic and harmful gases during the laser burning process, so as to avoid poisoning accidents.
9. If there is peculiar smell and smoke generated during the engraving process, please use an electric fan to blow it away in time or place it in a spacious and ventilated place to operate.
10. Before using this product to engrave objects, check whether the engraved objects have total reflection or diffuse reflection characteristics, and special attention should be paid to safety protection for such objects (it is recommended to use a whiteboard pen to blacken the engraved area before engraving).
11. Do not use the host to directly irradiate the skin or eyes of the human body or pets to avoid irreversible damage.

Chapter 7

Precautions

- ◎ Please read the [Use Safety Guide] in detail, and keep all the contents in mind to standardize the operation.
- ◎ This product does not contain any user-replaceable components, no matter what the scene, please do not attempt to disassemble the device or eliminate the problem by yourself.
- ◎ The main unit in the working state will emit laser light, and the beam will burn the skin of the human body; especially to the eyes of the human body or animals (pets), the damage is extremely serious; in addition, the electronic products such as mobile phones and Pads The screen damage is also extremely serious. The correct use and maintenance of this product is extremely important to the safe operation of this product. Regarding the operation and maintenance specifications of this product, please strictly follow the instructions in this manual.
- ◎ When operating this product, be sure to wear goggles throughout.
- ◎ When the engraving machine processes high-reflection materials, if the processing graphics are in the center of the marking area, there will be a phenomenon that some areas cannot be engraved. This phenomenon is an inherent defect of the engraving machine and cannot be avoided. Now there are two ways to avoid this defect. measure:
 1. Move the pattern in the center on the host computer page to ensure that the pattern is not in the center;
 2. On the parameter setting page of the host computer, reducing the engraving speed can effectively reduce the missed marking range, but the corresponding marking effect will be different.

Chapter 8

Disclaimer

Thank you for purchasing the Owl Laser Engraver. The content mentioned in this article is related to your safety and legal rights and responsibilities. Before using this product, please read this article carefully to ensure the correct settings for the product. Failure to observe and follow the instructions and warnings in this document may cause injury to you and the surrounding people, or damage the host or other surrounding items. Once you use this product, it is deemed that you have carefully read the disclaimer and warning information, and understand, recognize and accept all terms and contents of this statement. You promise to use this product only for normal purposes, and agree that Owl Laser will not be responsible for any damage, injury or any legal liability caused by direct or indirect use of this product. Users should follow, including but not limited to, all safety guidelines mentioned in this article.

Chapter 9

Warn

◎ Before operating the owl laser engraving machine equipment, please be sure to read the operation contents carefully and strictly abide by the operation rules.

◎ This equipment uses four types of lasers (strong laser radiation), which may cause the following accidents:

1. Ignite the surrounding flammable materials;
2. During the laser working process, other radiation and harmful gases, toxic gases or odorous gases may be generated due to the different direct laser objects;
3. Direct exposure to laser radiation can cause human injury. Therefore, operators must keep a distance from the equipment and wear protective equipment (such as goggles, protective covers, protective clothing or fire fighting equipment, etc.), and it is strictly forbidden to stack flammable and explosive materials around the workbench and equipment, and the working environment must be preserved. good ventilate.

◎ There may be risks in the process of laser work. Users should carefully consider whether the material of the object to be engraved is suitable for laser work.

◎ The working voltage of the equipment is 24V, 7.5A. It should be powered by an adapter of suitable specifications. It is strictly forbidden to operate when overloaded or the voltage is unstable. And if the grounding wire of the power supply (such as the power strip) used in the power plug of this product does not work effectively, do not plug in the power supply, otherwise there will be a very dangerous risk of electric shock.

- © This product is equipped with very precise and dangerous laser source components. It is strictly forbidden to place the device near electrical appliances with strong electromagnetic interference, because it may cause electromagnetic interference. When the laser power is turned on, the laser will be emitted at the speed of light, and the user must avoid direct exposure to the laser beam.
- © It is strictly forbidden to place any irrelevant total reflection or diffuse reflection objects in the equipment, so as to prevent the laser light from being reflected on the human body or flammable objects.
- © Before using this product to engrave objects, please ensure that the emissions generated by the laser irradiation of the engraved objects comply with local laws and regulations.

Chapter 10

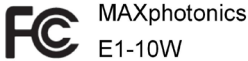
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3. The contents of this manual shall not be rewritten and forwarded in any form or for any purpose without the written permission of the company, except for the personal use of this product.

Chapter 11

Appendix

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION



Complies with the FCC rules as mentioned in the following paragraph:

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

Important information:

Changes or modifications to the equipment not expressly approved by MAXphotonics can void the user's authority to use the equipment.