

# LUMITOOL

## LumiTool F20 Instruction Manual

### IMPORTANT

Adjust the height of the lifting bracket (the focal length of each machine may be slightly different, please refer to the red focus distance measurement) Specifically, please refer to the red focus distance measurement.



## APP Software Download

**Multi-Platform Support:** Our marking machine is designed with different users in mind, so it can support Android, iOS, and Windows computers. This means that no matter if you are using a smartphone, tablet or PC, you can easily connect and operate our marking machine.

**Format Support:** Our laser marking machine supports a wide range of file formats.  
Image formats: JPG, PNG, BMP, these formats are widely used for image storage and can meet your needs for image marking.  
Vector Graphics Formats: DXF, AI (Adobe Illustrator), PLT, SVG, these formats support vector graphics and are ideal for designs that require high precision and scalability.



Android



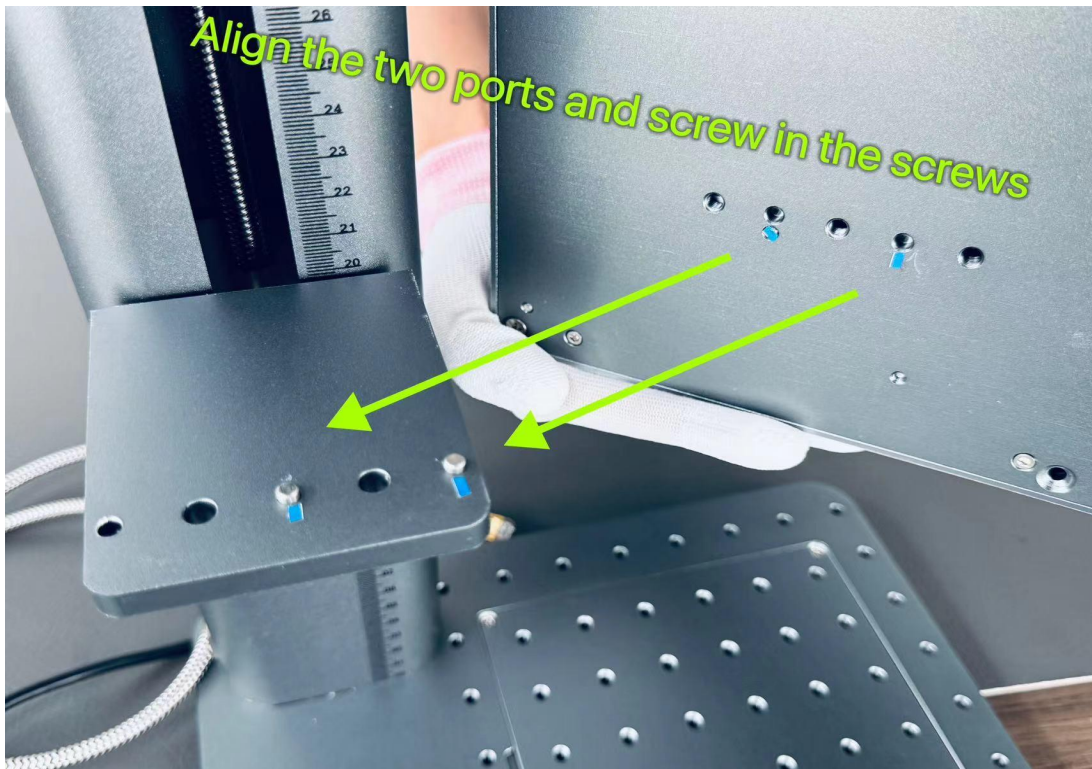
iOS



Material upload

## Quick Installation:

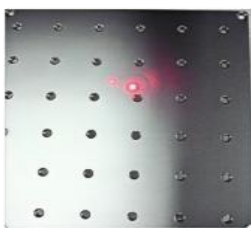
Align the two screw ports and tighten the screws.



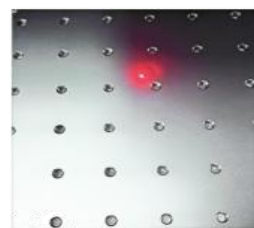
Make sure the two screws are tightened and the assembly is complete.



## Adjust the Focus:



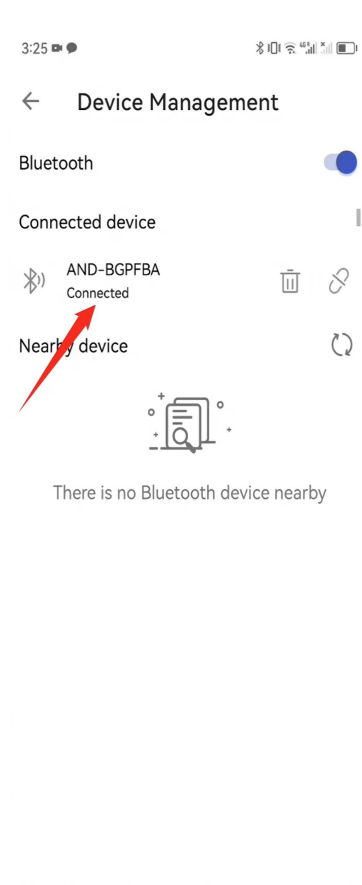
**Image 1:** When two red dots are not overlapping or separated, it suggests that the laser is not focused accurately.



**Image 2:** When two red dots overlap at one point, it suggests that the laser is focused.

The more precise the focal length, the better the marking effect is.





After completing the editing of bitmap images, text, barcodes, or other content, you can click "Next" to enter the printing interface. In the printing interface, there are a few steps you need to follow:

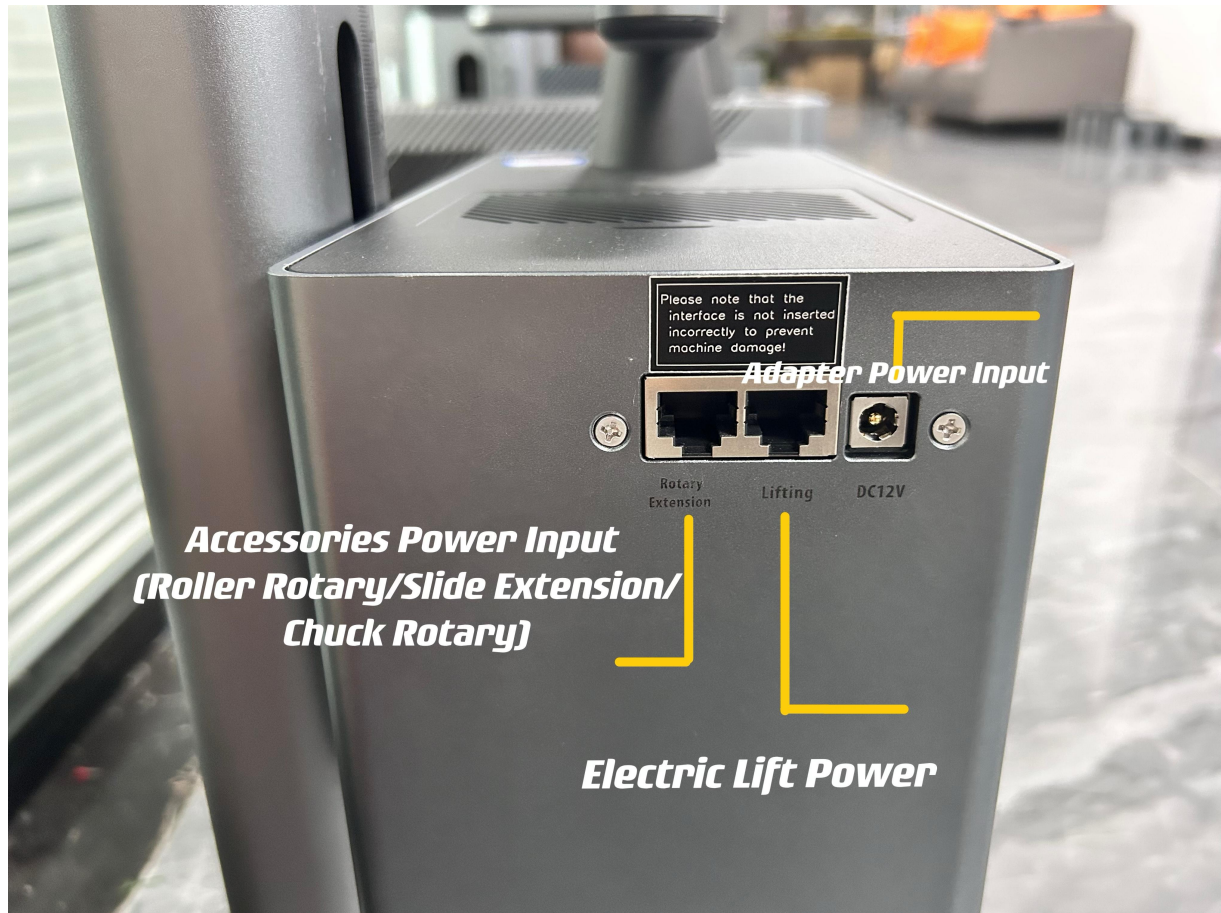
1. Connect the device and laser engraver via Bluetooth.
2. Adjust the laser focus by raising or lowering as needed.
3. Initiate the laser marking or engraving process

**Website: <https://en.earainsmart.com/index/user/login.html>**

Registration is required

1. Click the Add button
2. Categorize the uploaded vector image into stuff category.
3. Click the Upload button and select the vector image to be uploaded.
4. Name the uploaded vector image.
5. Set the number of times the vector image will be used, the default is 0 (unlimited).
6. Click the OK button to upload the vector material.

## Plug Connector Details



① **Accessories Power Input:** This port is used to connect an external accessory to the laser marker [Roller Rotary/Slide Extension/Chuck Rotary] all three of which are connected to the same jack.

② **Electric Lift Power:** If the laser marker is equipped with a motorized lift, this port is used to power the motorized lift system. The motorized lifting system allows the user to adjust the working height of the marking machine according to the working needs, making the operation more convenient and flexible.

③ **Adapter Power Input:** This connector is used to connect the power adapter so that the laser marker can get the required power from the power outlet. It ensures that the laser marking machine is safely and stably connected to the power source for normal marking operations.

Product Specification

Model	F20
Working Area	110mm"110mm/175mm"175mm
Laser Type	20w 1064nm Fiber Laser
Resolution	1K/2K/4K/8K
Cutting Depth	1.5mm on Metal, 3mm on Stone
Engraving Precision	0.001mm
Repeat Pulse Frequency Range	25-67(kHz)
Output Power	18-20W
Input Power	12V/20A
Engraving Speed	7000mm/s
Net Weight	7.5kg

<b>Operation Temperature</b>	-15-35S°C
<b>Laser Head Dimensions</b>	280x130x145mm
<b>Laser Stand Dimensions</b>	280x210x425mm
<b>Support File Format</b>	JPG/PNG/BMP/G-Code/PLT/DXF/Ai
<b>Pc Support System</b>	Windows
<b>Mobile Support System</b>	iOS & Android & HarmonyOS
<b>Wireless Connection</b>	BlueTooth, Wi-Fi

## Safety Guidelines for Use

Before starting the installation of LumiTool F20, please check that the equipment is intact and the laser mirror is clean and free of contamination as a matter of priority.

Installation Specifications: Before starting to operate the LumiTool F20, please refer to the instruction manual to fix the main unit (with accessories or support objects that have a fixing function, such as a protective cover, a motorized stand, and a third axis) to avoid dropping it due to unstable placement.

Before starting the laser to start engraving, please make sure to do a good job of safety measures, for example, by adding a protective cover, wear goggles to prevent the laser accidentally hurt the eyes or skin, remove irrelevant items to prevent unnecessary damage caused by the laser irradiation, in particular, to remove flammable and explosive items to prevent the cause of a fire.

In the laser start after the beginning of engraving items, do not move the equipment, so as not to cause the equipment to stop working due to self-protection, or even due to the displacement of the engraved items and affect the final effect of the engraving work.

If you must move the equipment or the engraved object, please do so before you start engraving or after you have finished engraving, do not move the equipment or the object during the laser work.

Due to the danger of the laser, do not allow minors, children, or people who do not have the sense of self-protection to approach the equipment in operation.

Before using this product to engrave objects, please check that the objects to be engraved will not release toxic and harmful gases during the laser burning process to avoid poisoning accidents.

If there is any odor or smoke during the engraving process, please use a fan to blow it away in time or place it in a spacious and ventilated place for operation.

Before using this product to engrave items, examine whether the item to be engraved has total reflection or diffuse reflection characteristics, such items should pay special attention to safety protection (it is recommended to use a whiteboard pen to blacken the engraved area before engraving).

Do not use LumiTool F20 to directly irradiate human or pet skin or eyes, as this may cause irreversible damage.

## Liability statement

Thank you for purchasing the Lumitool F20, the contents of this document are related to your safety and legal rights and responsibilities. Before using this product, please read this document carefully to ensure that the product is set up correctly. Failure to observe and follow the instructions and warnings herein may result in injury to you and others around you, or damage to the Lumitool F20 or other items around you. By using this product, you are deemed to have carefully read the disclaimer and warning information, and to understand, recognize and accept the full terms and content of this statement. You undertake to take full responsibility for the use of this product and the possible consequences. You undertake to use this product only for normal purposes and agree to any regulations, policies and guidelines set forth herein, and Lumitool F20 shall not be liable for any damages, injuries, or liabilities arising directly or indirectly from the use of this product. Users should follow all safety guidelines including but not limited to those mentioned herein.

## About Us:

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