

# XTOOL | F1 Ultra

## Quick Start Guide



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\* The English version is the original instructions verified by the manufacturer.

## List of items



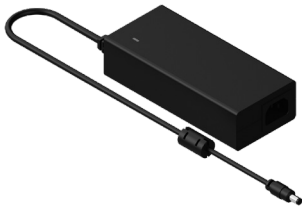
xTool F1 Ultra



Touchscreen controller



Pipe



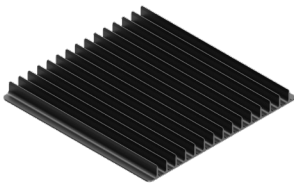
Power adapter



Power cable



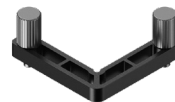
USB cable



Slatted panel



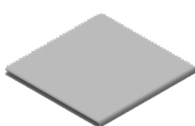
Screwdriver



L-shaped positioning piece



Key



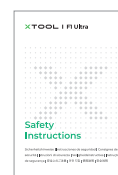
Lint-free cloth



Example project material



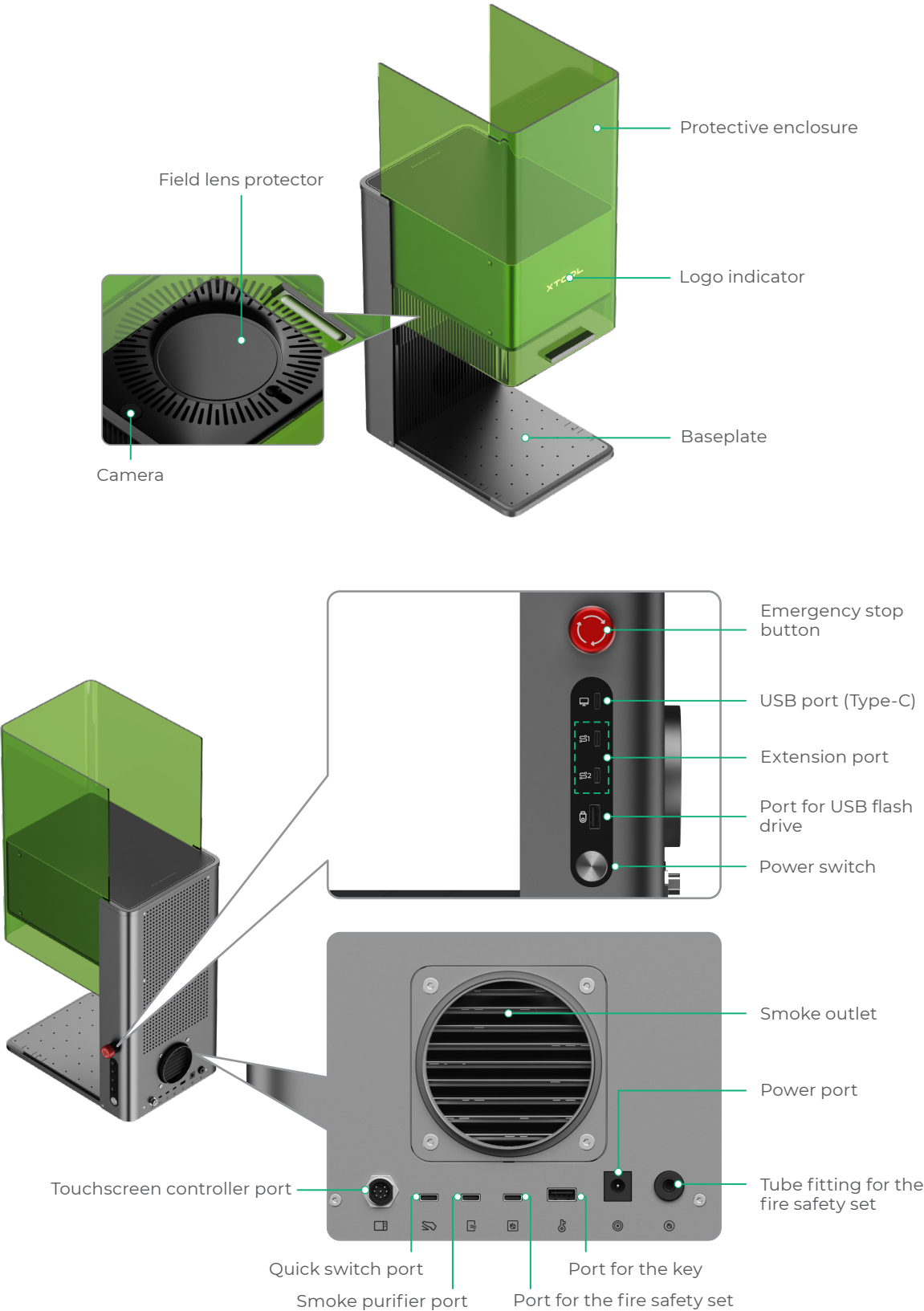
Quick Start Guide



Safety Instructions

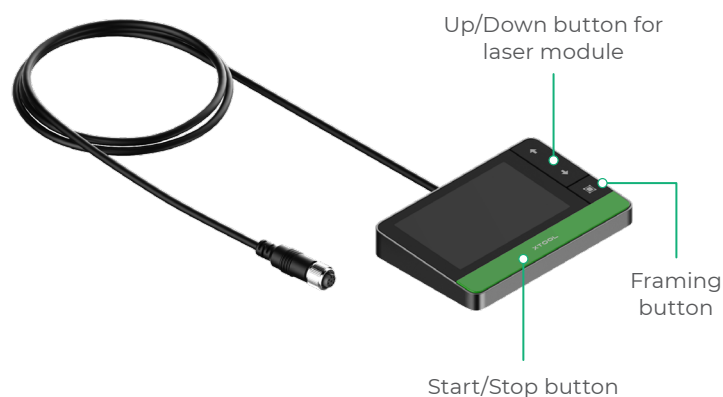
# Meet your xTool F1 Ultra

## Product structure





## Touchscreen controller



- **Up/Down button for laser module:** Lifts or lowers the laser module during manual focusing.
- **Framing button:** Starts or stops framing.
- **Start/Stop button:** Starts or stops material processing.

## Nameplate



### Class 1:

#### XTOOL | F1 Ultra

Model: MXF-K002-001 Wavelength: 445 ± 15 nm (20 W) / 1064 ± 5 nm (20 W)  
 Input power: 24 V – 25 V ≈ 10 A FCC ID: 2AH9Q-MXFK003  
 Manufactured by: Makeblock Co., Ltd. IC: 22796-MXFK003  
 Company address: Floor 4, Building C3, Nanshan iPark, No. 1001 Xueyuan Avenue,  
 Nanshan District, Shenzhen, Guangdong Province, 518000, China  
 Email: support@info.xtool.com

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.

Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.



### Class 4:

#### XTOOL | F1 Ultra

Model: MXF-K002-B20 Wavelength: 445 ± 15 nm (20 W) / 1064 ± 5 nm (20 W)  
 Input power: 24 V – 25 V ≈ 10 A FCC ID: 2AH9Q-MXFK002  
 Manufactured by: Makeblock Co., Ltd. IC: 22796-MXFK002  
 Company address: Floor 4, Building C3, Nanshan iPark, No. 1001 Xueyuan Avenue,  
 Nanshan District, Shenzhen, Guangdong Province, 518000, China  
 Email: support@info.xtool.com

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.

Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.



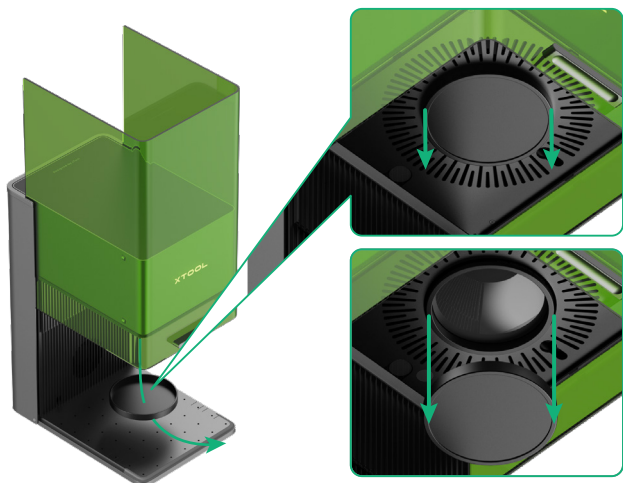
## Specifications

Product name	xTool F1 Ultra
Size	493 mm × 253 mm × 373 mm
Internal working area	220 mm × 220 mm
Maximum processing speed	10,000 mm/s

Input power	24 V – 25 V ≈ 10 A
Laser module	445 ± 15 nm blue-light laser 1064 ± 5 nm fiber infrared laser
Laser power	20 W (445 ± 15 nm) 20 W (1064 ± 5 nm)
Connection mode	Wi-Fi, USB, IP

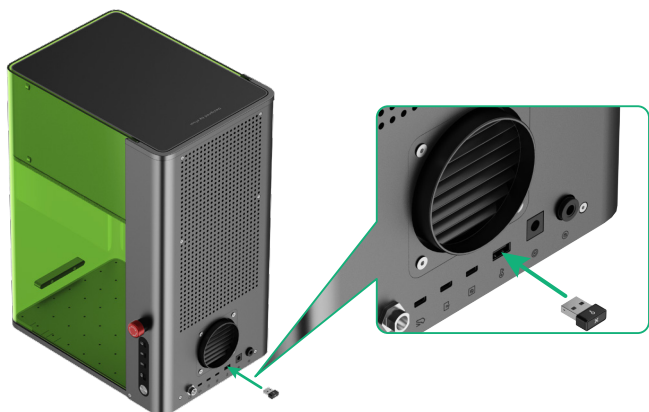
## Get the machine ready

- 1 Pull down the field lens protector to remove it.



If you won't use the machine for a long period of time, you can install the protector back to prevent the field lens from getting dusty. Ensure that the protector is removed every time before you use the machine.

- 2 Insert the key.



### Access-control key

You can remove the key to disable the processing and related functions of the machine.

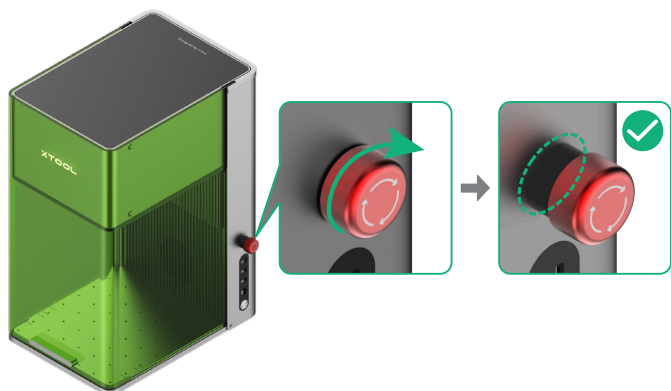
### Interlock connector (For Class 4 model)

You can also use the key as an interlock connector. Go to [support.xtool.com/article/1367](https://support.xtool.com/article/1367) to learn more.



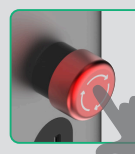
[support.xtool.com/article/1367](https://support.xtool.com/article/1367)

- 3 Ensure that the emergency stop button is released. If it is pressed, rotate to release it.

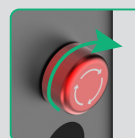


### Emergency stop button

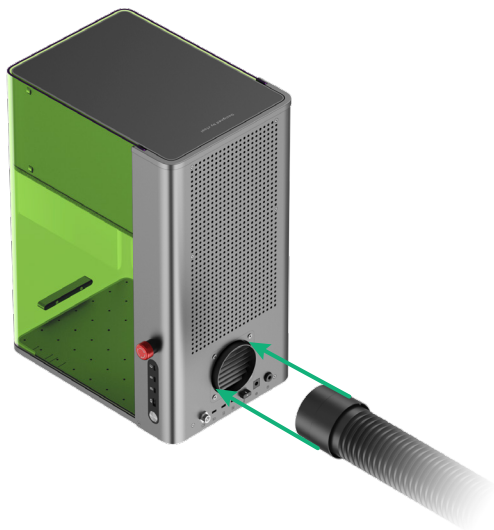
If an emergency occurs, you can press the emergency stop button to shut off the machine.



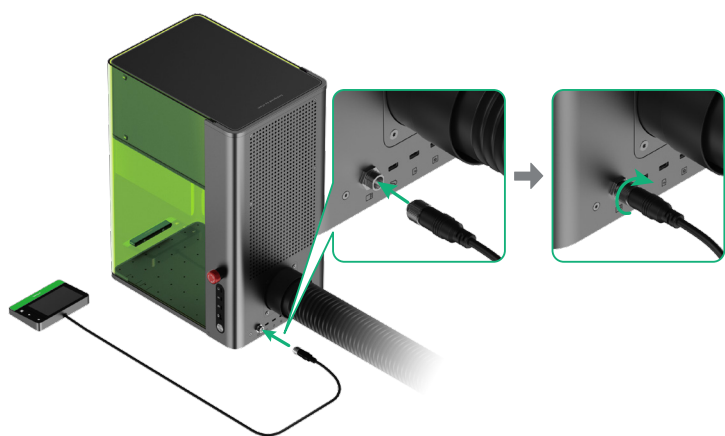
After dealing with the emergency, you can turn the emergency stop button to reset it.



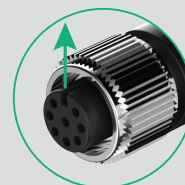
**4** Install the pipe.



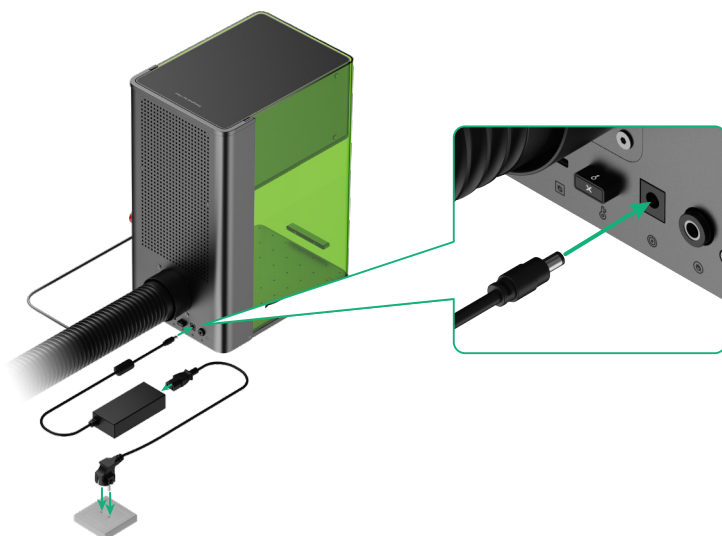
**5** Connect the touchscreen controller.



To insert the connector, ensure that the notch at the end faces up.



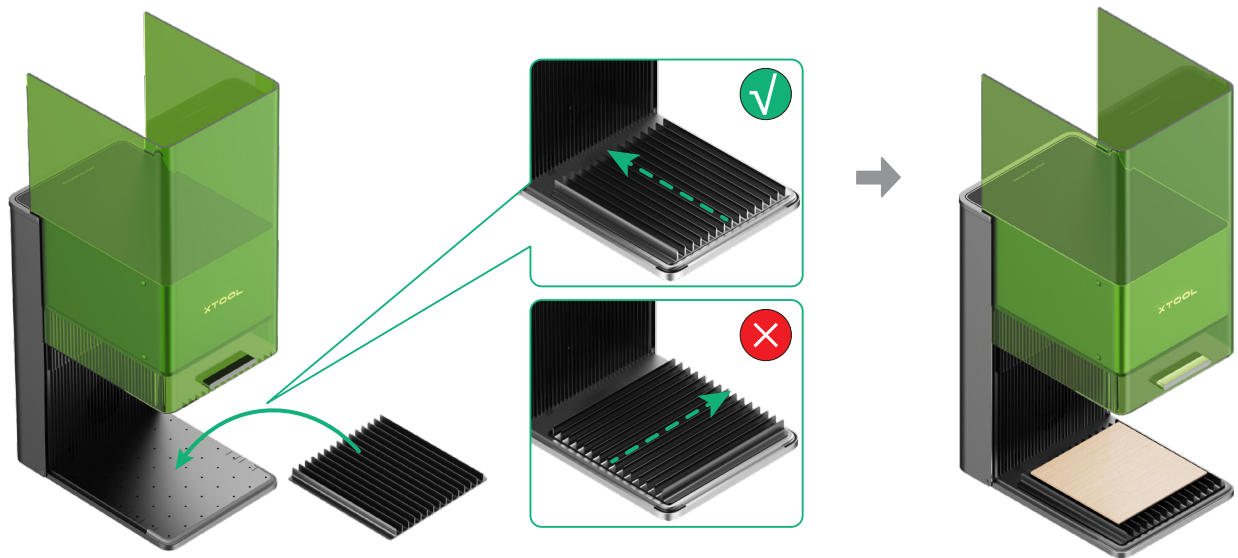
**6** Connect to a power supply.



## Install accessories

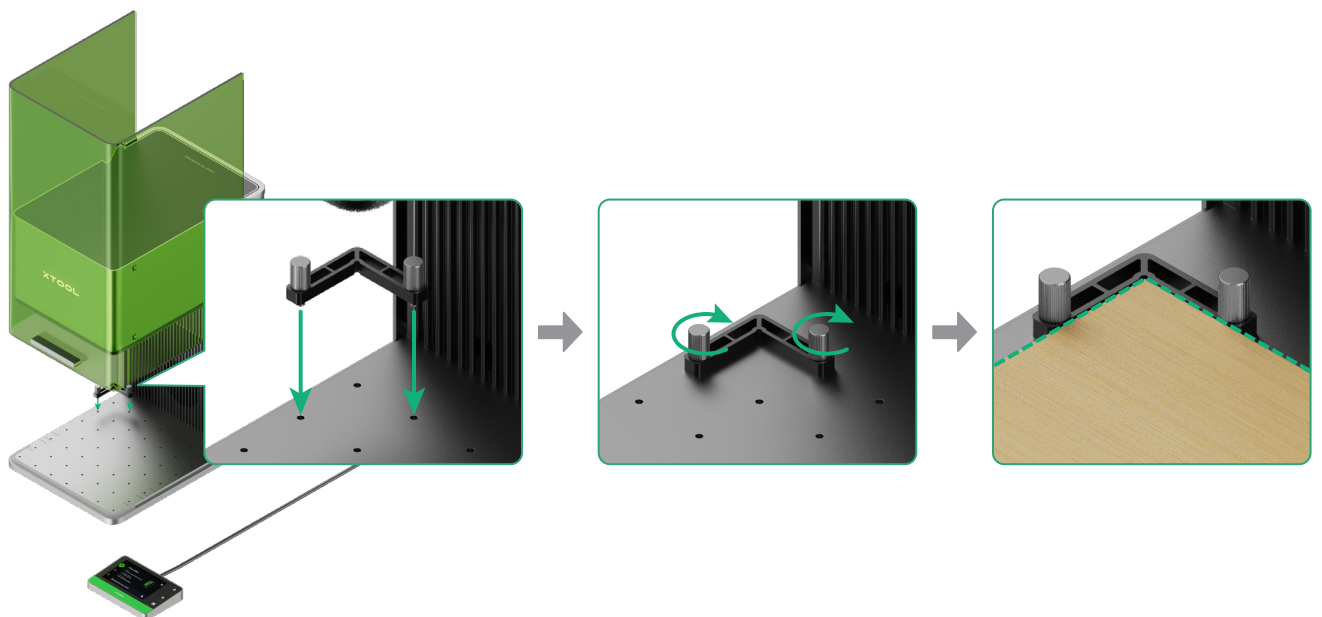
### Use the slatted panel

To cut a material, you are advised to use the slatted panel. It can reduce the areas burned during material processing and protect the baseplate.



### Use the L-shaped positioning piece

During batch processing, the L-shaped positioning piece can help you place a material in the same position every time.



## Use your xTool F1 Ultra

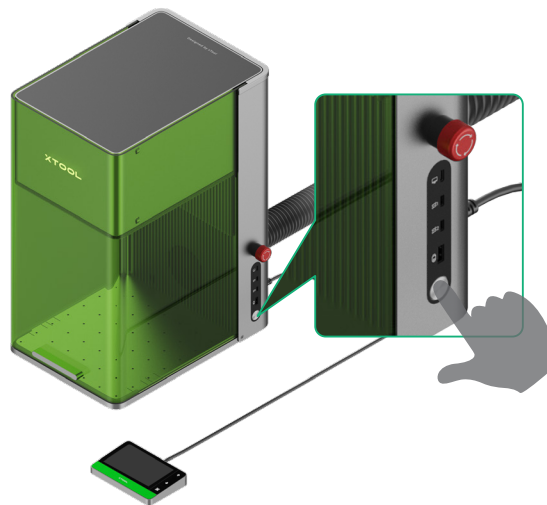
### Power on

Press the power switch to turn on xTool F1 Ultra.



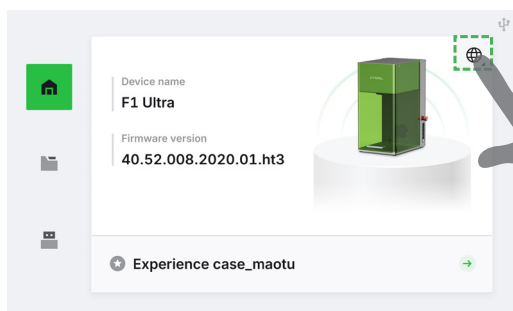
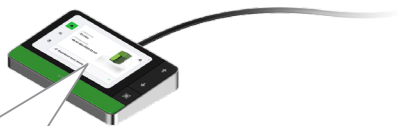
**Do not use the emergency stop button as a power switch.**

Use the emergency stop button only when an emergency occurs. Using it as a power switch to turn on and off the machine may damage the machine.



### Set up the language

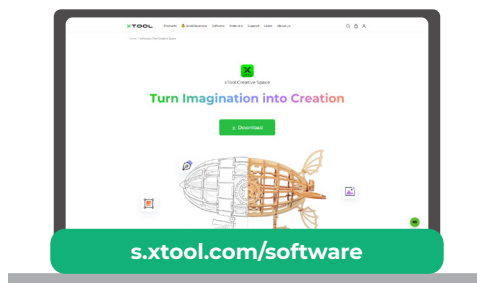
Set the UI language of the touchscreen controller.



## Use software to operate xTool F1 Ultra

### For computers

(1) Visit [s.xtool.com/software](https://s.xtool.com/software) to download and install xTool software.

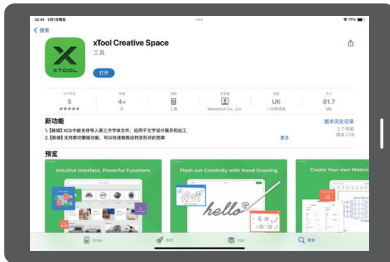


(2) Use the USB cable to connect xTool F1 Ultra to the computer, and then connect xTool F1 Ultra in the software.



## For mobile devices

Scan the QR code or visit [s.xtool.com/software](https://s.xtool.com/software) to download xTool app and install it.



Follow the online instructions for the App to connect xTool F1 Ultra on the App.

For details about how to use xTool software to operate xTool F1 Ultra to process materials, scan the QR code or visit [support.xtool.com/product/33](https://support.xtool.com/product/33).



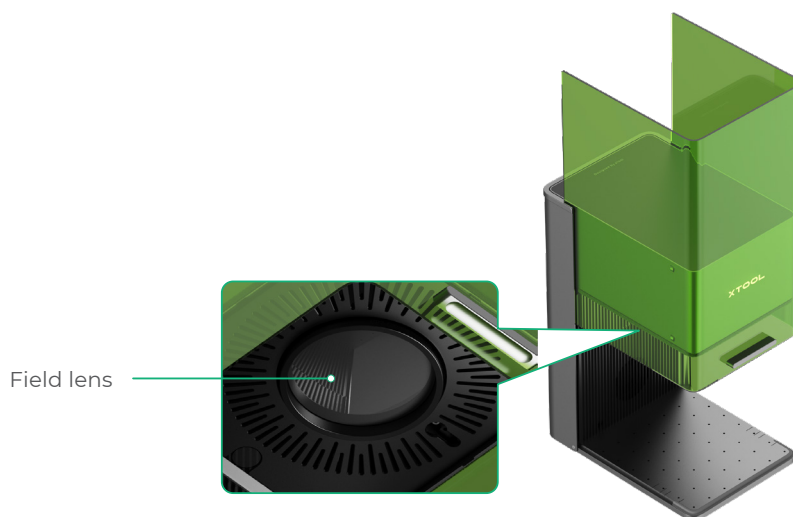


## Maintenance

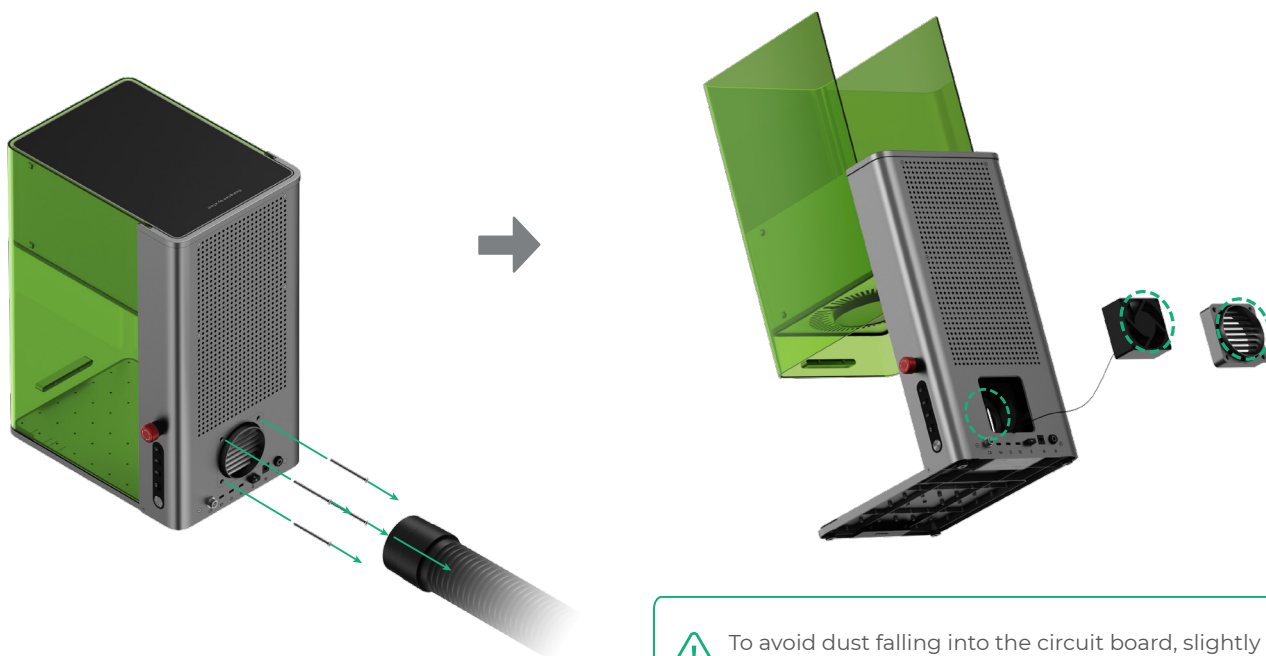


Disconnect power before maintaining the product.

- If laser power attenuation occurs, for example, engraved patterns are shallow or materials can't be cut as expected, the field lens may get dirty. Clean it with the lint-free cloth moistened with alcohol.



- If smoke runs out of the protective enclosure, the fan and smoke outlet may be blocked due to dust. Clean them to ensure proper smoke exhausting.



To avoid dust falling into the circuit board, slightly tilt the machine.

**XTOOL**