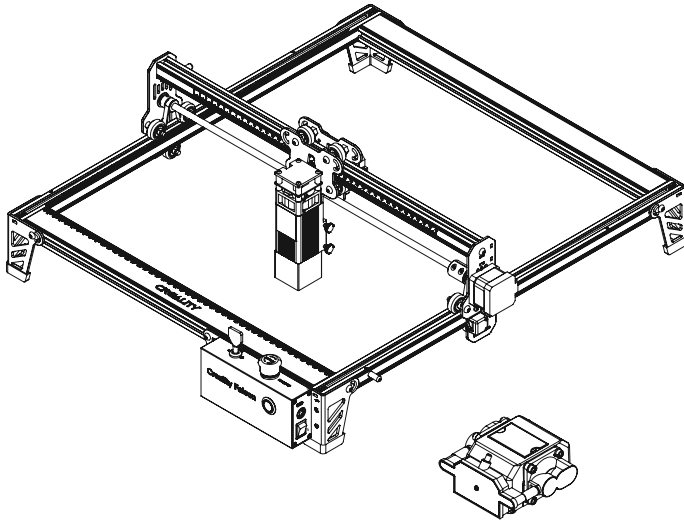


CREALITY

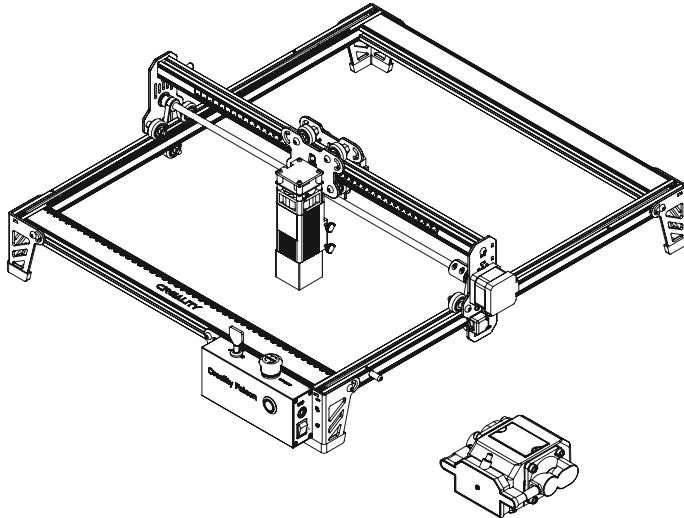
Creality Falcon Pro 10W User Manual

V1.0



SHENZHEN CREALITY 3D TECHNOLOGY CO., LTD.

Rendering picture



Dear Consumers:

Thank you for choosing our products. For the best experience, please read the instructions before operating the machine. Our teams always be ready to render you the best services. Please contact us via the phone number or e-mail address provided at the end when you encounter any problem .

For a better experience in using our product, you can also learn how to use the engraving machine in the

following ways:

View the accompanied instructions and videos in the TF card.

Visit our official website www.creadity.com to find relevant software/hardware information, contact details, operation and maintenance instructions.

Firmware Updating

You can download the latest firmware from <https://www.crealitycloud.cn/en/software-firmware/other?type=16>. Save the ".bin" file in the root directory of the TF card, and delete other files in TF card. Insert the TF card into the machine when powered off, and it will update automatically when powered on. The buzzer will sound during the updating process. When the updating is completed, the sound will stop (do not power off during the updating process). If the machine has already flashed the latest firmware, it will not update again.

Security Statement

For the purpose of engraving or cutting with a laser engraving machine, allow the workpiece to be exposed to the high-density laser beam emitted by the laser engraving machine. The workpiece may be subject to gasification without combustion as it is pretty hot on the surface. On the other hand, most workpieces are essentially combustible, which may be ignited, leading to an open flames and consequently to the machine breakdown and environmental contamination.

1. It is prohibited to store the machine in areas close to combustible and explosive substances, volatile solvents or source of heat. Instead, store it in a well-ventilated, cool and dust-free place;
2. Make sure that only the specific attached power cord rather than other similar power cords are used during installation;
3. Clean the tripod and laser module with a dry cloth regularly when the power is off.
4. Ensure to run the laser at 0°C-35°C. It is prohibited to run the machine under wet environment or in thunderstorm weather;
5. Switch off the machine if it is offline for an extended period of time, and unplug the power cord;
6. It is prohibited to come in contact with electronic areas with hands or other tools when the machine is connected to power supply;
7. Touching any moving parts and laser module while the machine is running is prohibited;
8. Before engraving, place a flat object that cannot be penetrated by the laser, such as an aluminum alloy or stainless steel plate on the workbench, and then place processing material.
9. Wear goggles to prevent vision damage arising from exposure to the laser spot during laser engraving operation;
10. It is advisable to run the machine under well ventilated condition as laser engraving may generate small amount of fume or gas;

11. Children under 10 years old are not allowed to run the machine without adult presence, which otherwise may lead to personal injury;

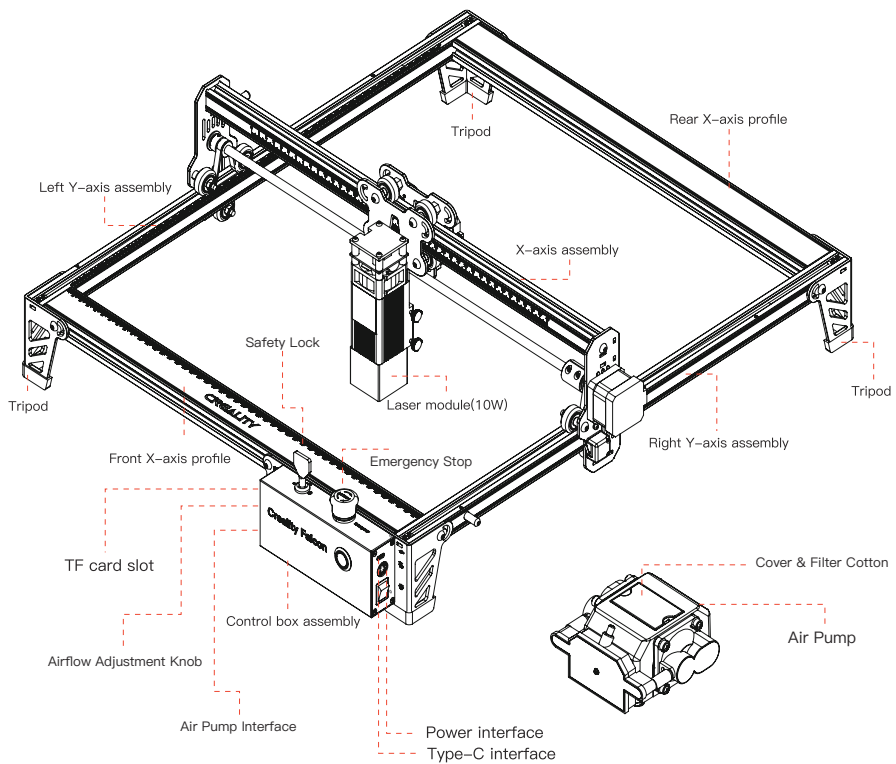
12. Put in place fire extinguishers in case of use, which shall be regularly checked. It is prohibited to keep the machine unattended while it is running;

13. Users should comply with the laws and regulations of the corresponding countries and regions where the equipment is located (used), abide by professional ethics, pay attention to safety obligations, and strictly prohibit the use of our products or equipment for any illegal purposes. Creality will not be responsible for any violators' legal liability under any circumstance.

Parameters

Model	Crealty Falcon 10W
Machine size	568*638*198mm
Net weight	5.6Kg
Operation system	Windows /MacOS
Input	100–240V~ 50–60Hz
Output	DC 24.0V 3.0A
Range of operating temperature	0°C–35°C
Safety certification	IEC60825、FDA、CE、ROHS、FCC、UKCA、UL 、PSE
Engraving size	400mm*415mm
Laser source	Semiconductor laser unit
Laser wave length	455±5nm
Laser power	10W
Safety class	Class IV (FDA classification standard)
Laser engraving software	LaserGRBL、LightBurn
Format files	jpeg、jpg、png、bmp、svg、dxf
Type of supporting materials	Cardboard, wood, bamboo, rubber, leather, fabric, acrylic, plastic, etc

Equipment Intro



Parts List

1. X-axis assembly
& Control box assembly *1



2. Front X-axis Profile *1



3. Rear X-axis Profile *1



4. Left Y-axis Assembly *1



5. Right Y-axis Assembly *1



6. Tripod *3



7. Laser Module *1



8. Air Pump *1



9. Silicone Tube *1



10. Power adaptor *1



11. Power adaptor *1



12. Goggles *1



13. Basswood *2



14. Data Cable *1



15. Multi-level Fixed Focus Bar *1



16. Cable Tie *3



17. User Manual*1



Parts Box *1

1. M5*20 Screws *18



2. T-shaped nuts *6



3. M1.5/M2/M2.5/M3 Allen key *1



4. Open Wrench*1



5. Black Cable Straps *3



6. Key *2



7. TF Card & Reader *1



8. USB-A to USB-C Adapter *1



9. Protective Lens *1

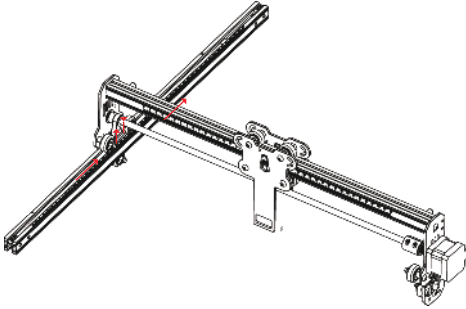


10. Clean cloth *1

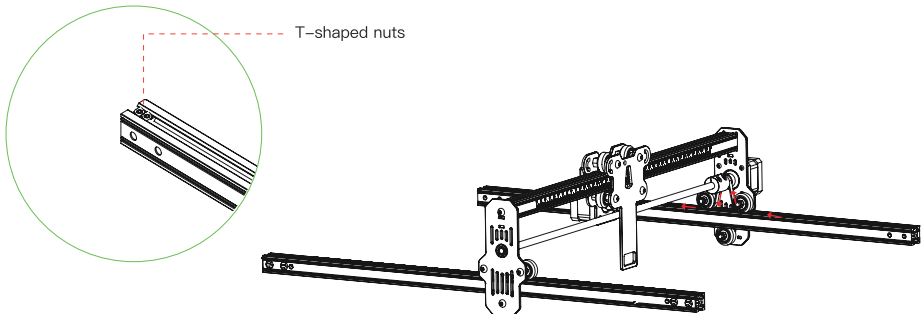


Assemble directions

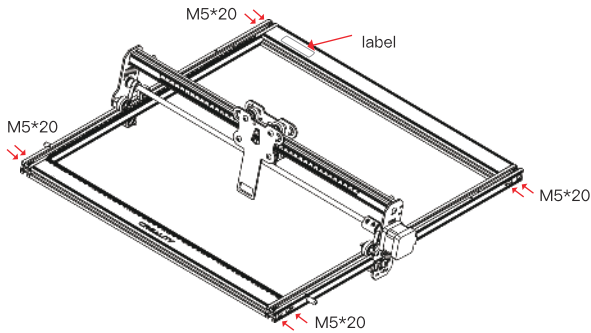
1. Assemble the left Y-axis assembly: Pass the left Y-axis assembly (with the belt up) through the X-axis assembly and put on the belt in the direction shown in the figure:



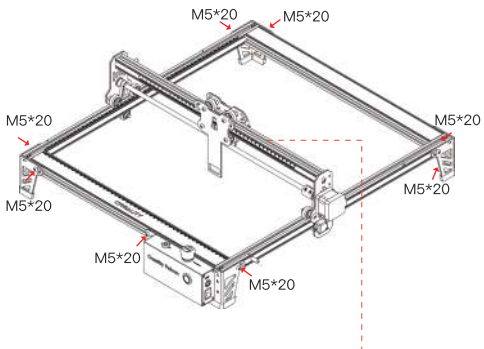
2. Assemble the right Y-axis assembly and it is the same as above. Insert two T-shaped nuts into the left and right Y-axis assembly.



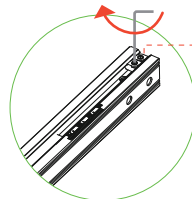
3. Assemble rear X-axis profile and front X-axis profile: Lock with eight M5*20 screws.



4. Assemble three tripods and control box assembly: Lock with eight screws.



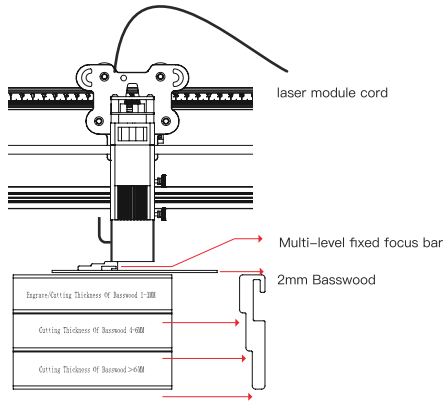
Tighten the belt and lock the belt with hexagon screw.



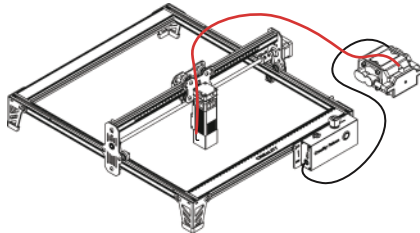
Not to lock too tightly to prevent the belt from perforating.

Push the X-axis assembly to the end and make sure it is parallel to the rear X-axis profile.

Assemble 10W laser module: Please place the multi-level fixed focus bar between the laser module and the processed material. Follow the tips and make the bottom of the laser module contact with the corresponding surface of the multi-level fixed focus bar. Finally lock it with two hand screws on the right. For example, if you engrave or cut a 2mm basswood or other material:



Connect the air pump and the control box. Use the silicone tube to connect the air pump and the laser module. Finally use the cable straps to fix them.



For better engraving effect, try to elevate the laser module as far away from the workbench as possible on the premise that the focal length is correct. The laser module must be installed and removed only when the power is off.

Software Installation & Use

The machine can be controlled with LaserGRBL or LightBurn after connected to the PC via a USB-C cable, and can also work by reading codes (exported from LightBurn) in a TF card. For software tutorials, please refer to the information provided in the TF card.

Control from PC

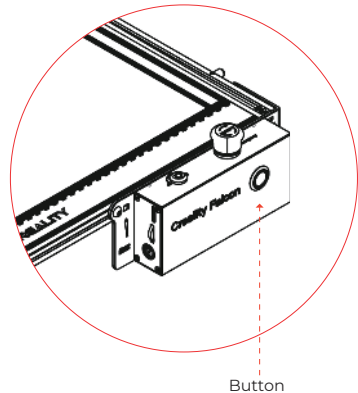
Connect the machine to the PC via a Type-C cable. If your computer does not have a USB-A port, please use the included adapter to convert it. While controlling from PC, you can also control it through the button on the control box of the machine.

Work with TF Card

1. Generate the engraving or cutting file (gcode) through the LightBurn software, and save the file to the root directory of the TF card (the machine will access the file with the latest data in the root directory of the TF card by default, so it is advised to delete other irrelevant files in the root directory). Insert the TF card into the machine before powered on, plug in the power adapter and power cable and power on.

After the machine is powered on, it will sound two beeps and enter standby mode. The indicator light will pulse white slowly.

2. Press the button, and the machine will exit the standby mode and enter the preview mode. The laser module will emit a weak beam and move along the X/Y axis to frame the target working area. The indicator will be in solid white. You can adjust the material to a suitable position.



3. In the preview mode, press the button to enter the working mode, the laser module will emit a strong beam, and the machine will start working. The indicator will be in solid white.

If you need to pause, please press the button, and the indicator light will pulse white slowly. Press the button again to continue working.

If you need to cancel, please press and hold the button for 3 seconds, the machine will sound a beep, and the machine will reset. After the reset is completed, the machine will sound a beep and enter the standby mode. The indicator will pulse white slowly.

After the working is completed, the machine will sound three beeps and then reset. After the reset is completed, it will enter the standby mode, and the indicator will pulse white slowly.

Indicator Status

1. Light off: The machine is in a power-off state, or the power is abnormal.
2. Breathing light: The machine is in standby mode, you can press the microswitch to enter preview mode or engraving mode. (Present a light effect with a gradual change of light and shade.)
3. Light flashes: the machine is in upgrade mode or abnormal mode, and the buzzer beeps rapidly, and it will automatically enter standby mode after the upgrade is completed or the abnormality is cleared.
4. Light always on: the machine is in preview mode or engraving mode. The laser head is working, please pay attention to safety

Exception Handling

1. The machine cannot be turned on normally.

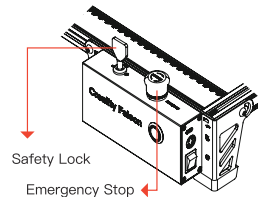
Solution: Please check the emergency stop and the safety lock.

2. If the machine overturns or moves suddenly during working, it will turn off the laser. Motor stops moving, indicator light flashing, and buzzer emits alarm.

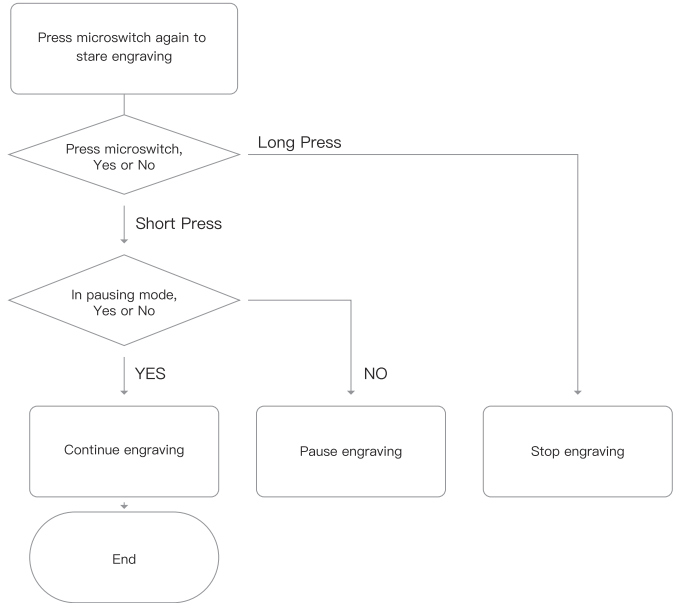
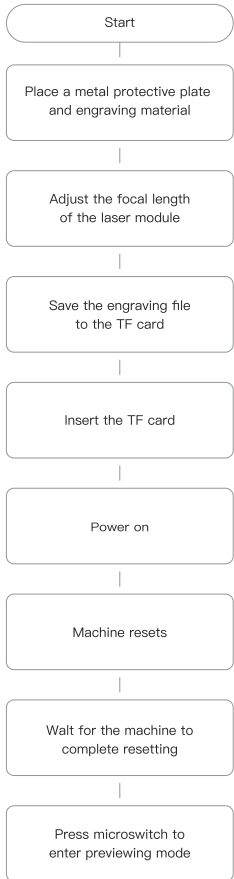
Solution: Please move the machine to its original position and press microswitch on the machine control box to continue previewing or engraving after clearing abnormality(The microswitch only works during offline working)

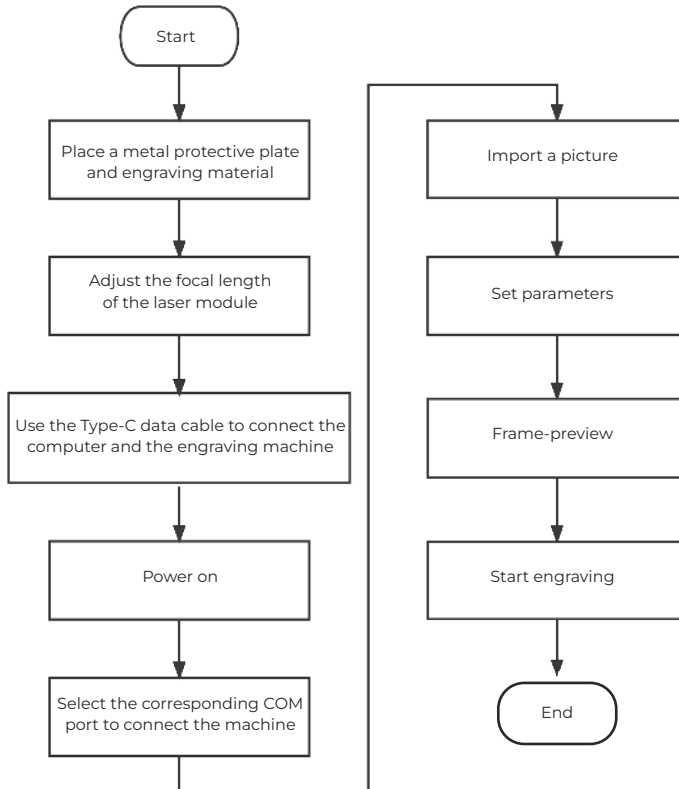
3. The machine cannot enter frame-previewing mode: In standby mode, after pressing the button, the machine beeps twice, and the white indicator light flashes twice.

Solution: Check whether the TF card is inserted, and whether there is a gcode file in the root directory of the TF card.



Offline working





WARRANTY

Before returning the product and filling in a warranty, please contact after-sale person for going through after-sale formality. And attach this warranty card along with the returned machine.

Repair

Change

Return

Name: _____ Telephone: _____ Malfunction And Damage Depiction Or Return
Address: _____ And Change Reasons/Suggestions:

Serial Number: _____ Order Number: _____

Channel: Platform Offline Repair Records:

Date of purchase Day _____ Mon. _____ Year _____

Note: Client need filling in basic infor. and return reasons. Repair records shall retain for technicians.

※ Users should abide by the laws and regulations of the country and region where the equipment is located (place of use), abide by professional ethics, and pay attention to safety obligations. It is strictly forbidden to use our products or equipment for any illegal purpose. Our company is not responsible for the relevant legal responsibilities that the violator should bear.

Since each model is different, the actual product may be different from the picture. Please refer to the actual product. The final

※ interpretation right belongs to Shenzhen Chuangxiang 3D Technology Co., Ltd.

3D Printing Industry Evangelist

With the spirit of evangelists, we want to share the convenience of technology with everyone.



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