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industrial design



CREALITY

Create reality, achieve dreams

Sermoon D3 Pro

Sermoon D3 Pro

3D Printer User Manual

V1.0



Dear Users

Thank you for choosing our products. For the best experience, please read this User Manual carefully and strictly follow the instructions to operate the printer. Our teams will always be ready to provide you with the best services. Please contact us via the phone number or e-mail address provided at the end of this User Manual when you encounter any problem with the printer. For a better experience in using our products, you can also learn how to use the printer in the following ways: Accompanied instructions: you can find the relevant instructions and videos in the USB flash disk.

You can also visit our official website (<https://www.creality.com>) to find information regarding software, hardware, contact information, device instructions, device warranty information, and more.

NOTES

- 1 Do not use the printer in any way other than described herein in order to avoid personal injury or property damage;
- 2 Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, cool and dustless environment;
- 3 Do not expose the printer to a violent vibration or any other unstable environment, as this may cause poor print quality;
- 4 Please use recommended filaments to avoid clogging of the extrusion head and causing damage to the machine;
- 5 Do not use the power cable of other products during installation. Always use a grounded three-prong power outlet, which accompanies the printer;
- 6 Do not touch the nozzle and the heated bed during operation to avoid burns or personal injury;
- 7 Do not wear gloves or wraps while operating the machine to prevent entrapment of movable parts that could cause crushing and cutting injuries to bodily parts;
- 8 Use the provided tools to clean the filament from the extruder in time taking advantage of the residual temperature after printing. Do not touch the extruder directly when cleaning, otherwise it may cause burns;
- 9 Clean the printer frequently. Clean the printer body with a dry cloth regularly after powering off the printer, wipe away dust, bonded print filament and foreign objects on the guide rails;
- 10 Children under 10 years old should not use the printer without supervision, otherwise it may cause personal injury;
- 11 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;
- 12 Tip: Do not plug in or unplug wires on a charged basis.

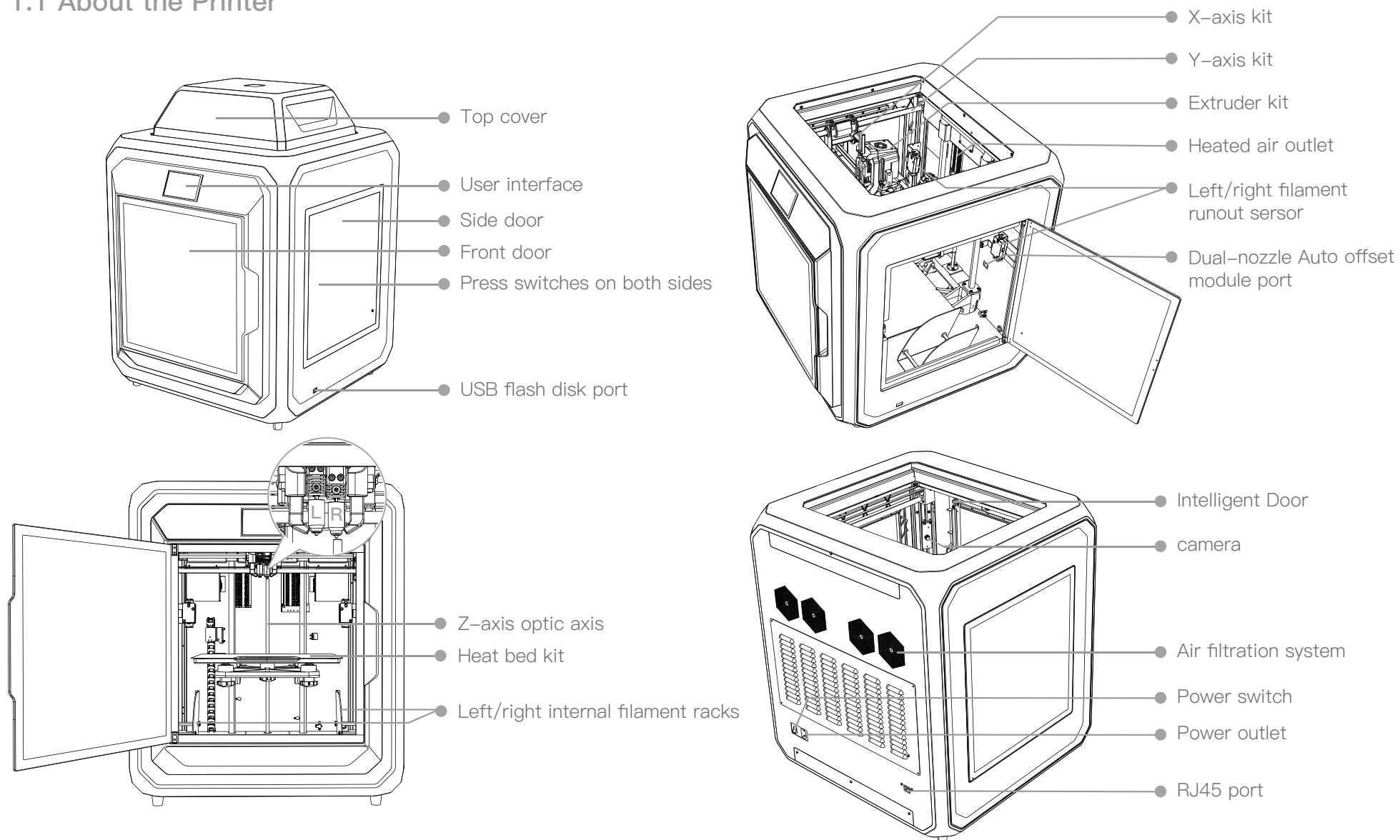


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1. About the Device

1.1 About the Printer



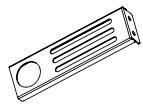


1.2 Device Specifications

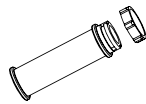
General Specifications	
Product Model	Sermoon D3 Pro
Dimensions	553*578*656mm
Max. Build Dimensions	290*220*300mm
Rated Voltage	100–240V~,50/60Hz
Rated Power	1300W
Ambient Temperature	10°C–30°C/50–80°F
Extruder	Dual-gear direct drive extruder with dual-nozzle
Number of Nozzles	2
Nozzle Diameter	0.4mm
Slicing Thickness	0.1–0.35mm
Precision	±0.1mm
Printing Speed	200mm/s, 3000mm/s ²
Filament Diameter	1.75mm
Supported Filament	ABS/PLA/PETG/HiPS/ASA/BVOH/PVA/Carbon
Max. Heated Bed Temperature	≤ 120°C
Max. Nozzle Temperature	≤ 300 °C
Cavity temperature	≤ 60°C
Screen	4.3 inch touch screen
Print Method	USB flash disk printing / LAN printing / Cloud printing
Connection	USB flash disk / WIFI/RJ45
Supported Slicing Software	Creality Print 4.3
File Format	STL/OBJ/3MF
PC Operating Systems	Windows/MacOS
Power Loss Recovery	Yes
Filament Detection	Yes
Intelligent Door	Yes
Auto Leveling	Yes
Air Filtration	Yes
Camera	Yes



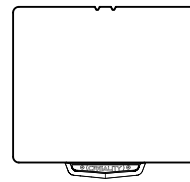
1.3 Packing List



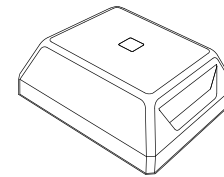
1 Material Rack x2



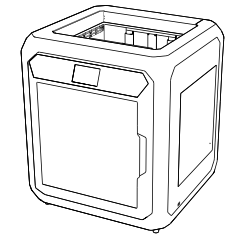
2 Spool & Nut x2



3 Plate x1



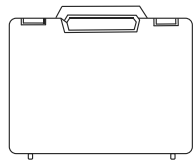
4 Clear Top Cover x1



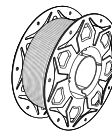
5 Printer x1



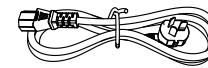
6 Quick Guide x1



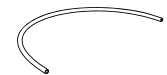
7 Tool Box x1



8 Filament x2



9 Power Cable x1



10 Teflon tube x2



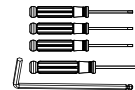
Tool Box List



11 Material rack screws x4



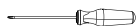
12 Blade x1



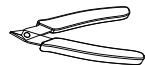
13 Wrench and Screwdriver



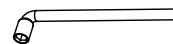
14 8-10 mm open-ended wrench x1



15 Cross screwdriver x1



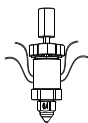
16 Cutting Plier x1



17 Socket spanner x1



18 Extruder Cleaner x1



19 Hotend x1



20 Nozzle brush x1



21 Brush x1



22 USB flash disk x1



23 USB cable x1

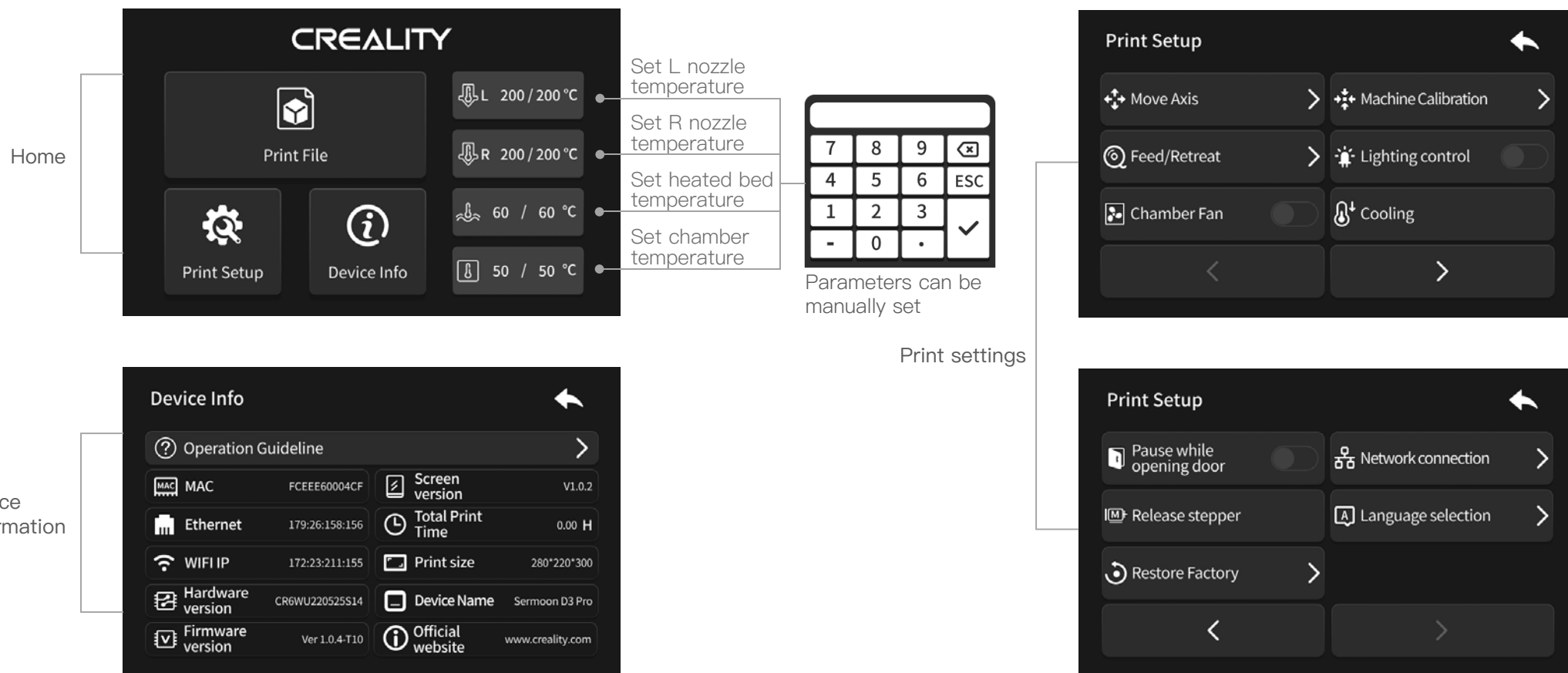


24 Dual-nozzle Auto offset module x1

Tips: the above accessories are for reference only*. Please refer to the physical accessories!



2. About the User Interface



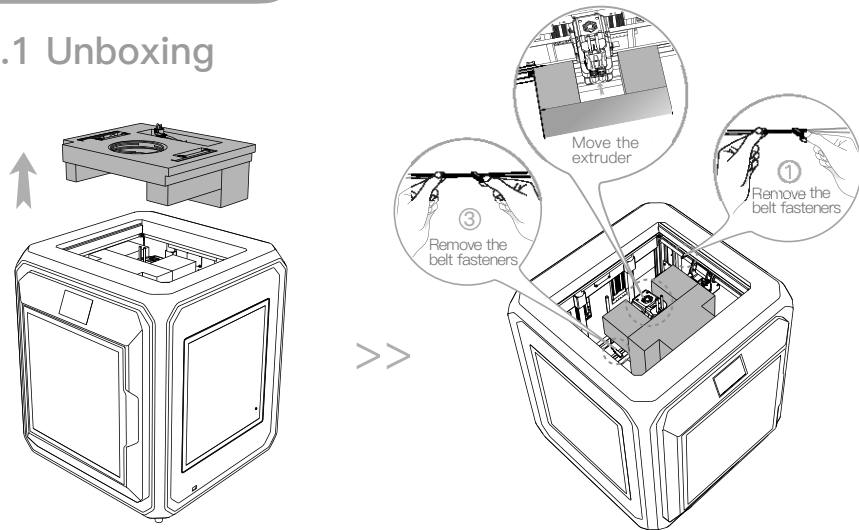
1. No further temperature setting or printing operation within 30 minutes after the temperature of extruder has been set, and the extruder starts to cool down.
2. After the temperature of hotbed has been set and there is no re-setting or printing operation within 60 minutes, the hotbed starts to cool down.



The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

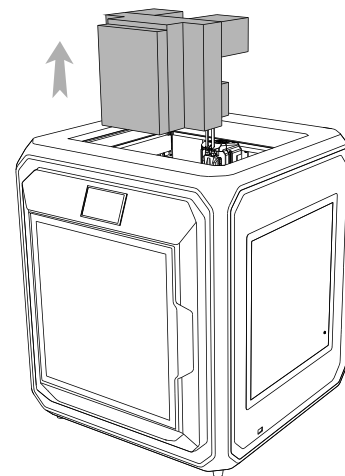
3. First Printing

3.1 Unboxing

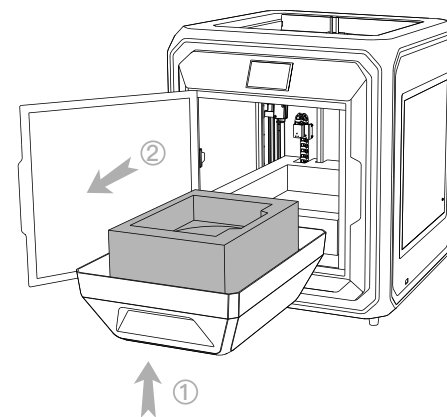


1. Remove the top foam.

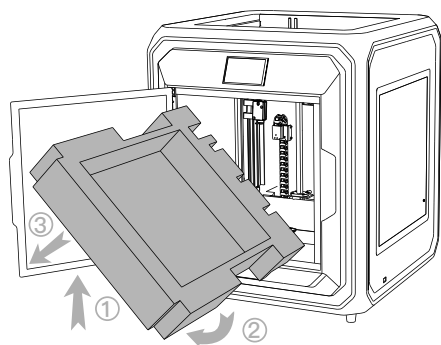
2. Remove the belt fasteners and move the extruder kit in the order shown.



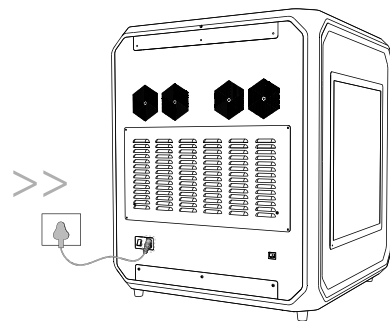
3. Remove the foam that holds the extruder.



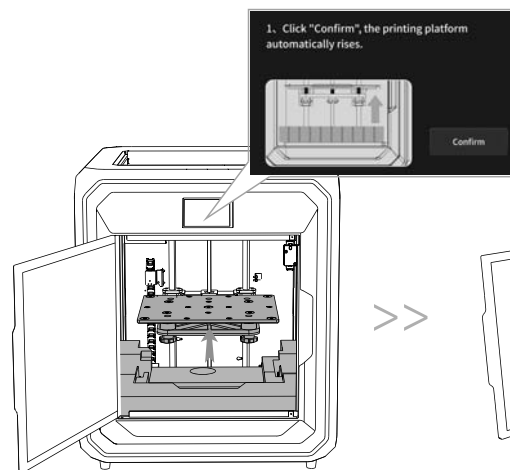
4. Lift the transparent cover in order and then remove it in a horizontal position.



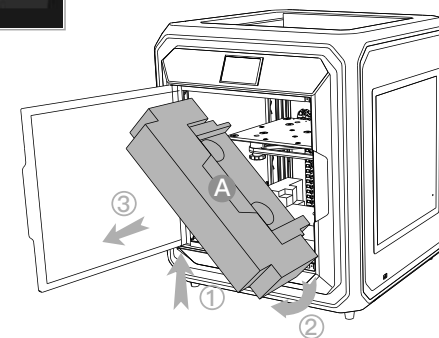
5. Remove the foam tray at the bottom of the transparent cover in the order shown in the figure.



6. Switch on the power.

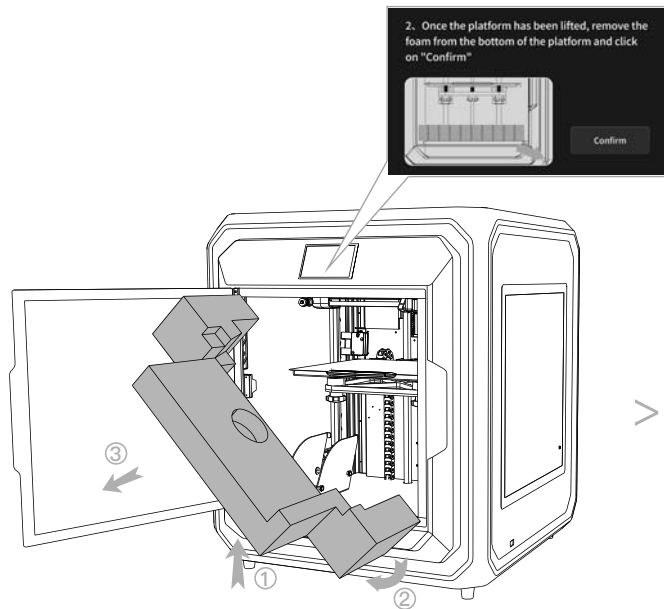


7. After switching on the power, click on "Confirm" and lift the printing platform.



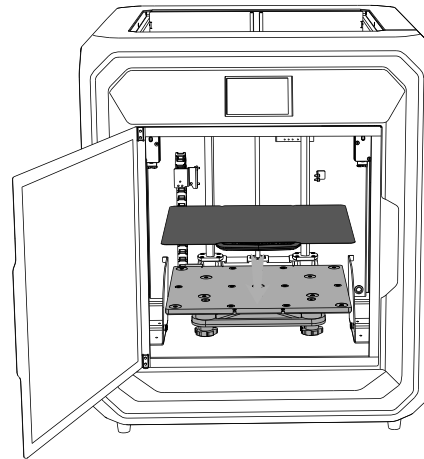
8. Remove the bottom foam A from the platform in order shown in the figure.

3.1 Unboxing



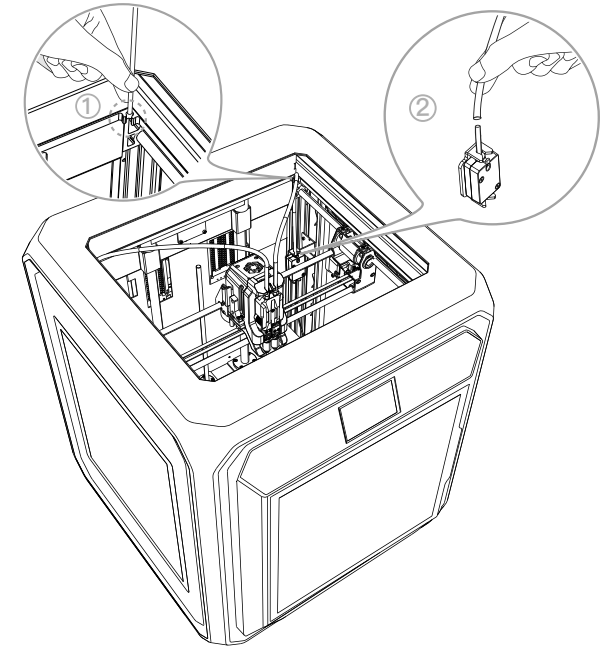
9. Remove foam B from the bottom of the platform in order as shown and click on "Confirm".

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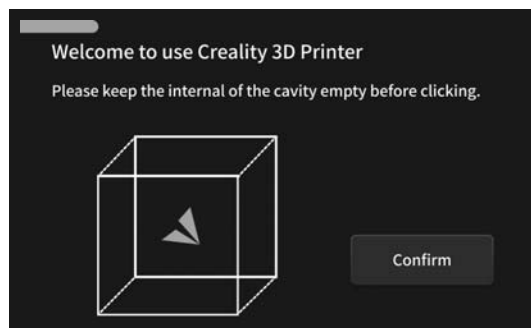
10. Place the printing plate (to be placed tight against the printing platform).

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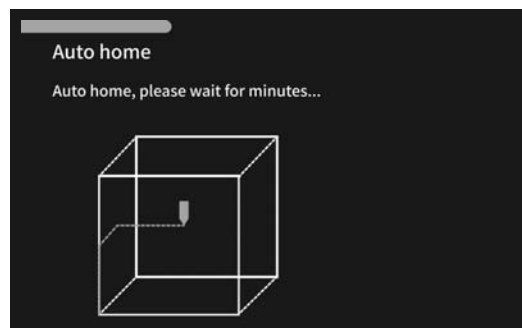
11. Thread the thick Teflon Tube through the fixing hole from top to bottom, then the thin Teflon Tube on the Filament Detection module and finally press the thick Teflon Tube into the clips.

3.2 Power-on guide



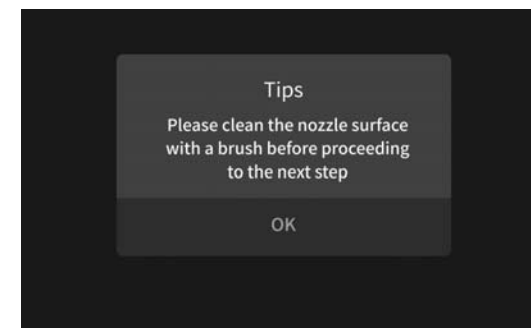
① Click "OK" after ensuring that the printing platform is free of foreign objects

>>

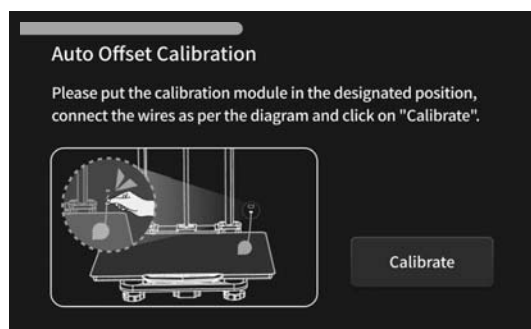


② Perform self-check after homing

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③ Use the nozzle brush to clean the nozzle



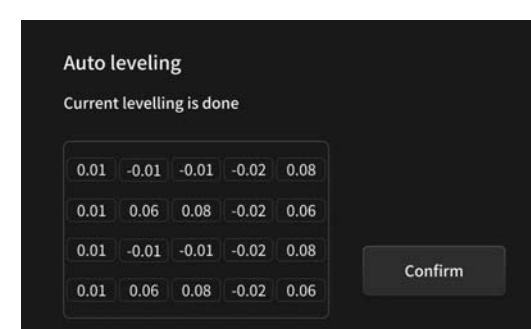
④ Platform Calibration – click "Calibrate" for automatic offset calibration

>>

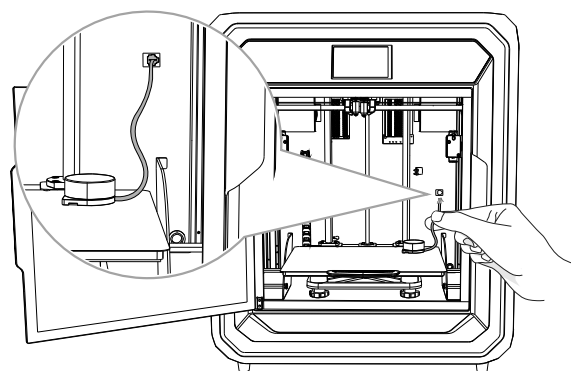


⑤ Platform Calibration – automatic offset calibration is done

>>



⑥ Platform Calibration – automatic leveling is done, click "OK"



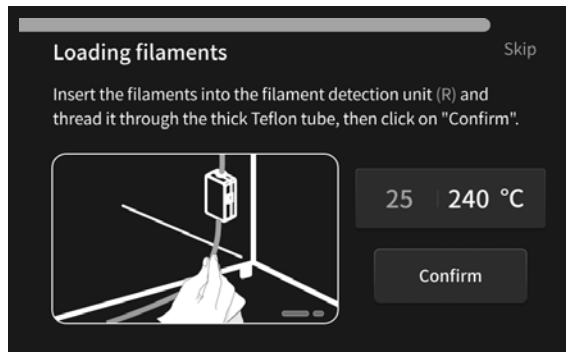
Tips:

- ① When using the Dual-nozzle Auto offset module for the first time, please remove the film from the back;
- ② Recommended interval for automatic offset calibration: every 150 hours of accumulated printing time.

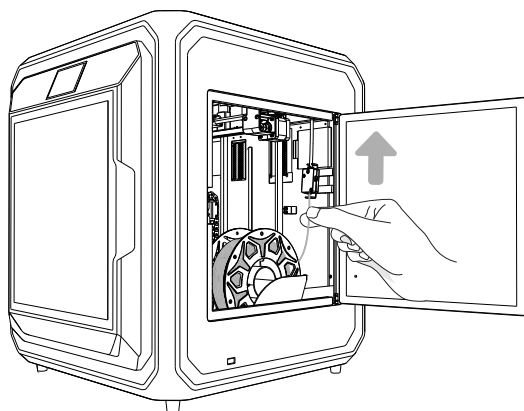


The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

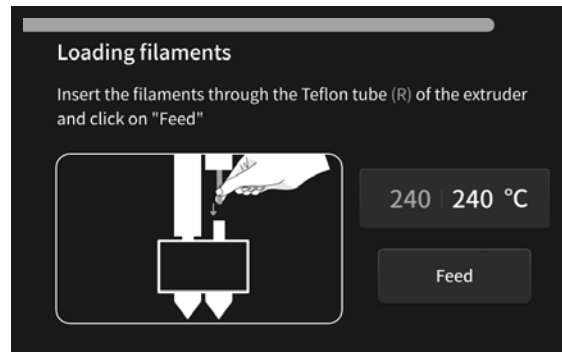
3.2 Power-on guide



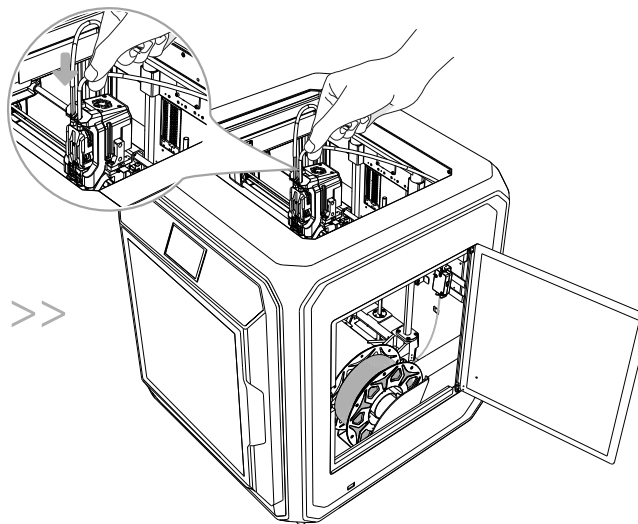
⑦ Thread the filament through the filament sensor until it contacts the extruder gear, then click "OK" to start heating;



>>

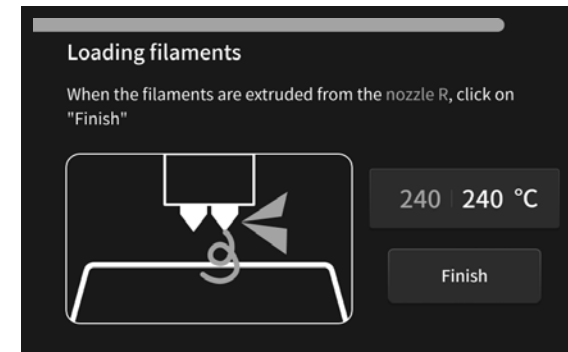


⑧ Click "Feed" when the temperature reaches 240°C;



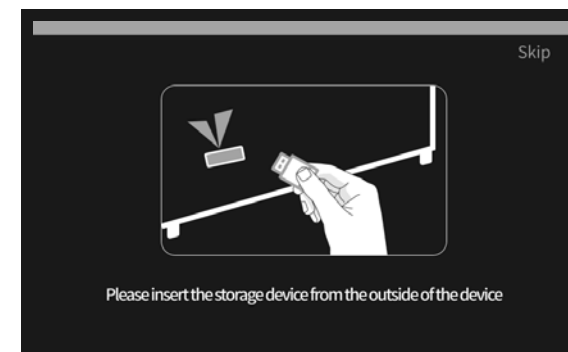
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⑨ Complete filaments loading by following the UI prompts.

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∨



⑩ Insert the USB flash drive into the device.

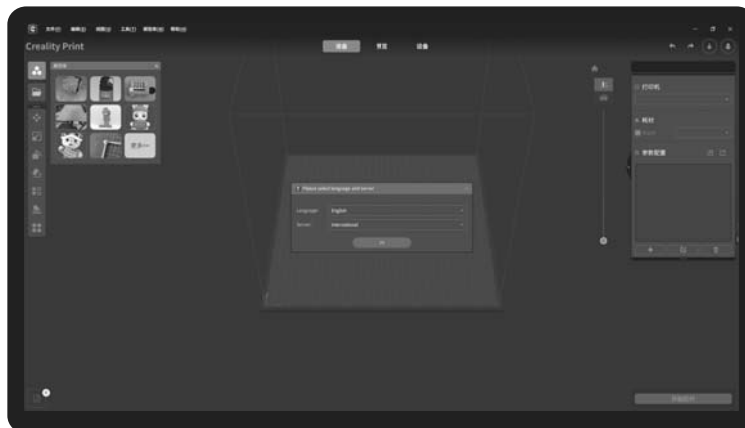
3.3 Start Printing

3.3.1 USB flash drive printing

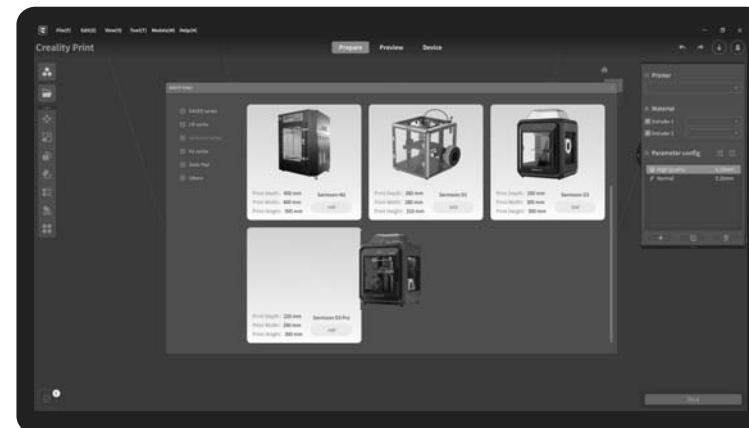
Creality Print 4.3



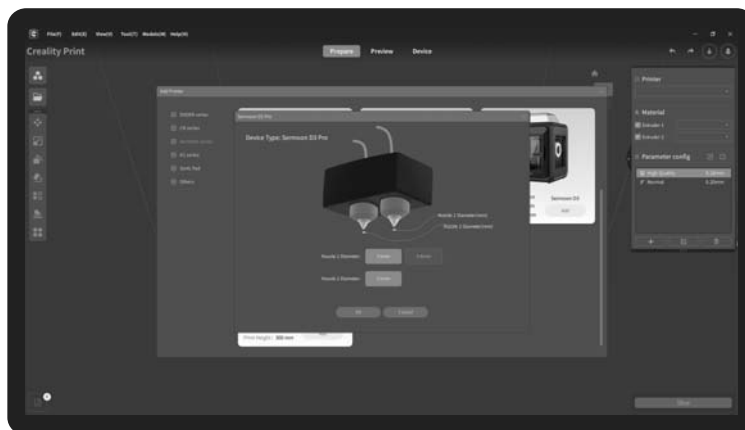
1. Download at
(www.creality.com)
or find the software
on a USB flash drive
and install it.



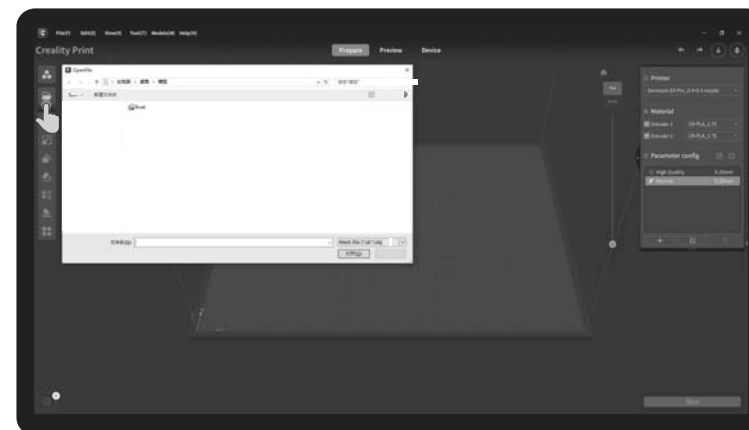
2. Select language and server



3. Choose a printer



4. Select nozzle diameter



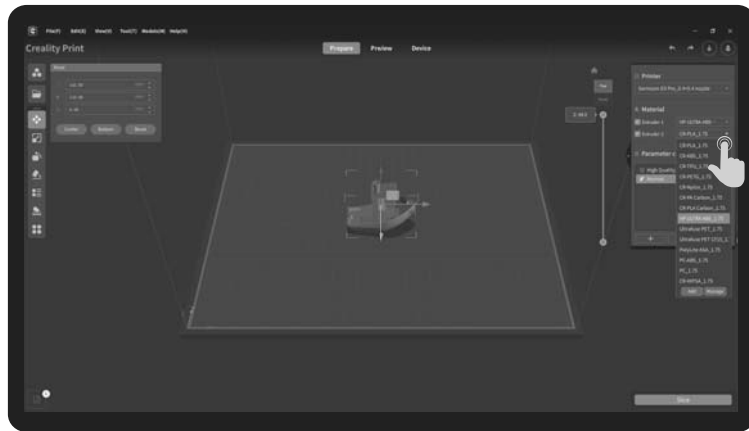
5. Import a model file



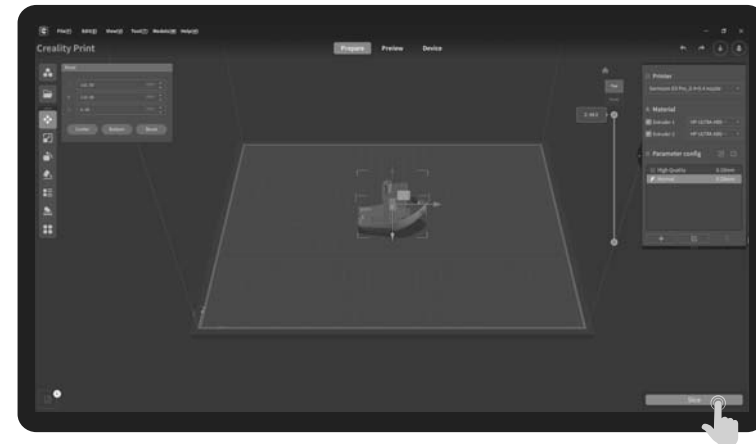
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



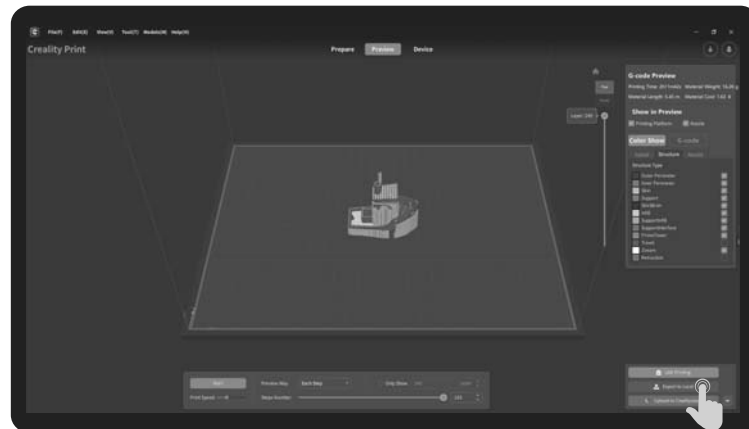
3.3.1 USB flash drive printing



6. Set filament type



7. Click "Slice"



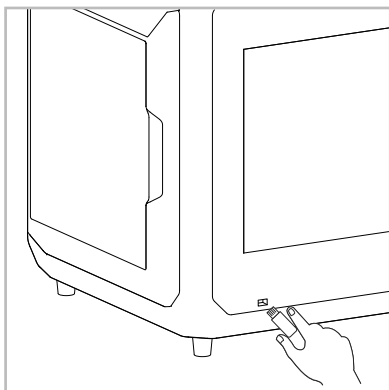
8. After slicing, generate the gcode file → click "Export to local" and save it to a USB flash drive



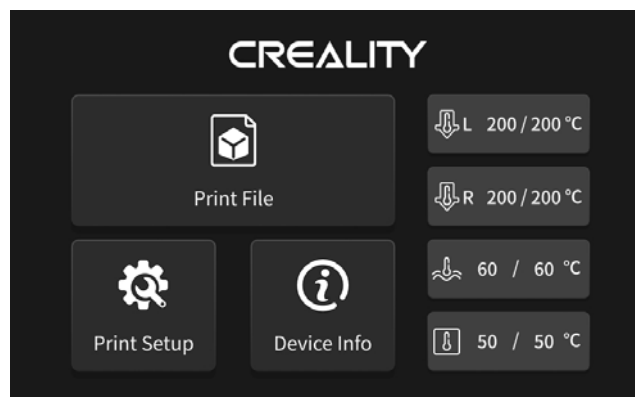
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



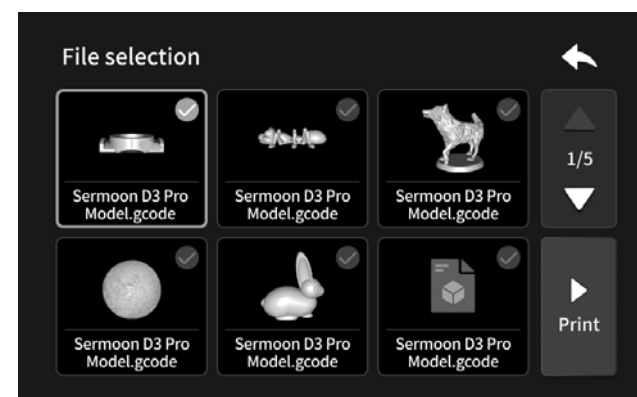
3.3.1 USB flash drive printing



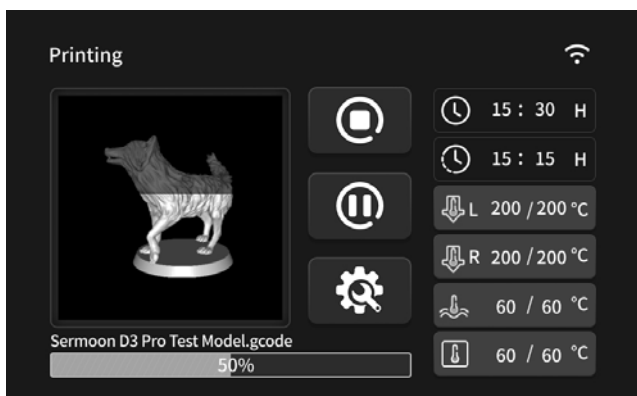
9. Insert the USB flash drive into the device.



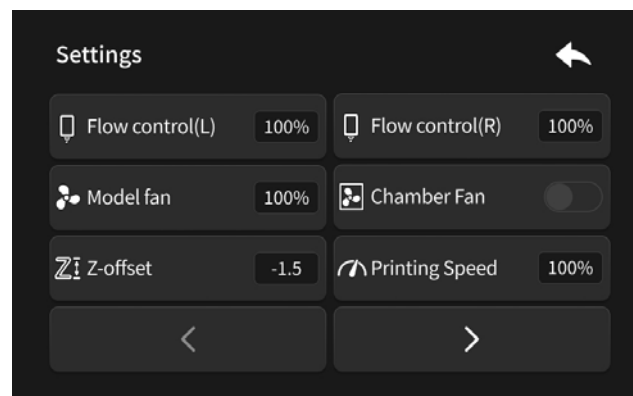
10. Click on Print File.



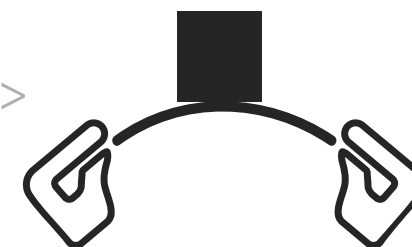
11. Select the file and click on Print.



12. On the print page, you can view a preview of the model and its progress.



13. You can also adjust the parameters by clicking on the Settings during printing.



14. When the printing is finished, slightly bend the platform plate to separate the model from the platform.



Caution:

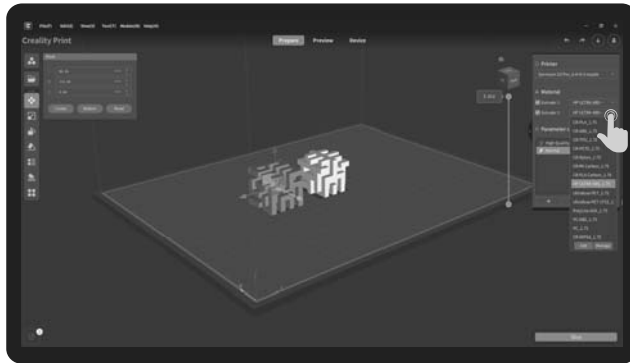
1. Do not plug or unplug the USB flash disk during the printing process.
2. The USB flash disk file system uses the FAT32 format with an allocated unit size of 32KB.



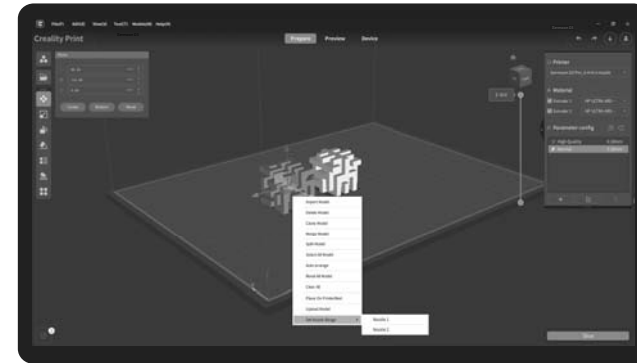
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



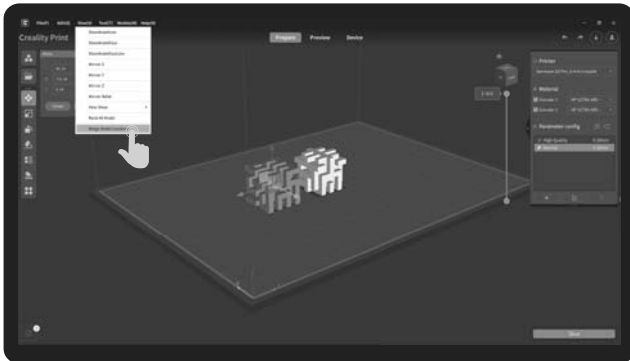
3.3.3 Dual-nozzle slice printing



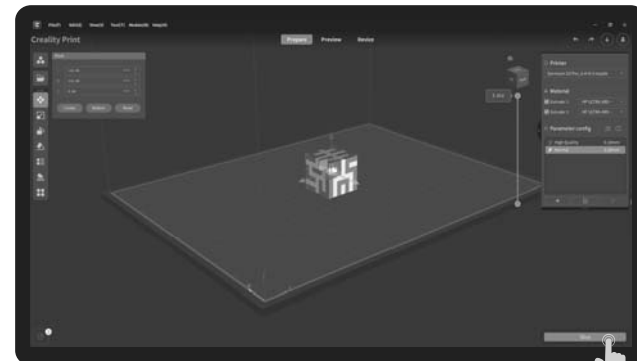
1. Import a model file, set filament type



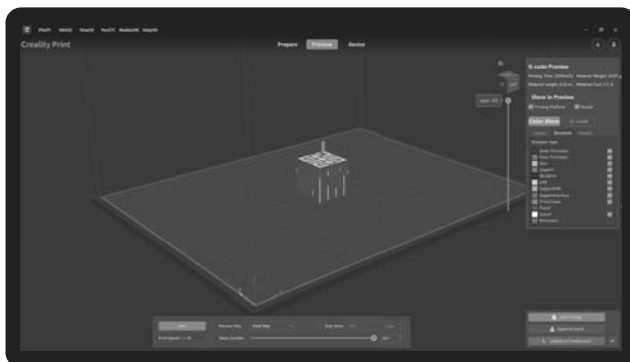
2. Set range for both nozzles separately



3. Click "View" to merge model positions



4. Click "Slice"



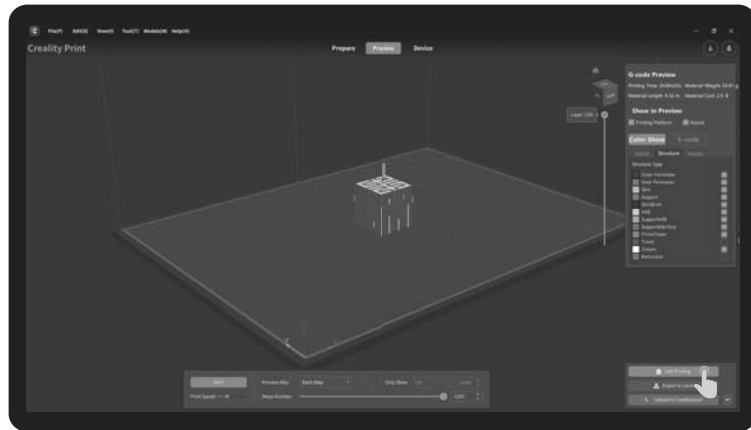
5. After slicing is done, select the printing method



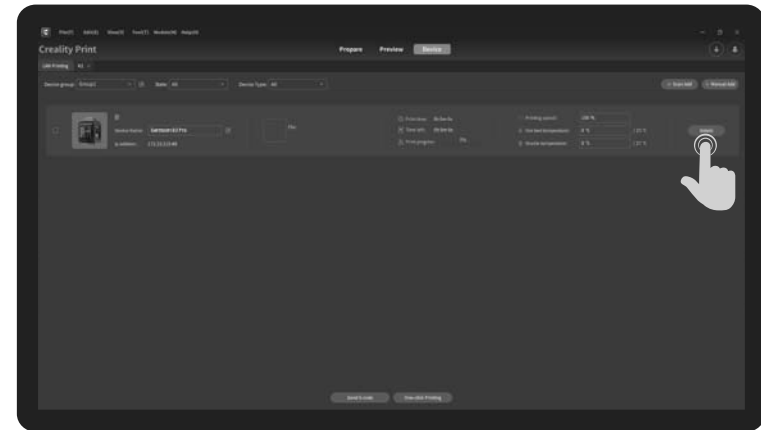
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



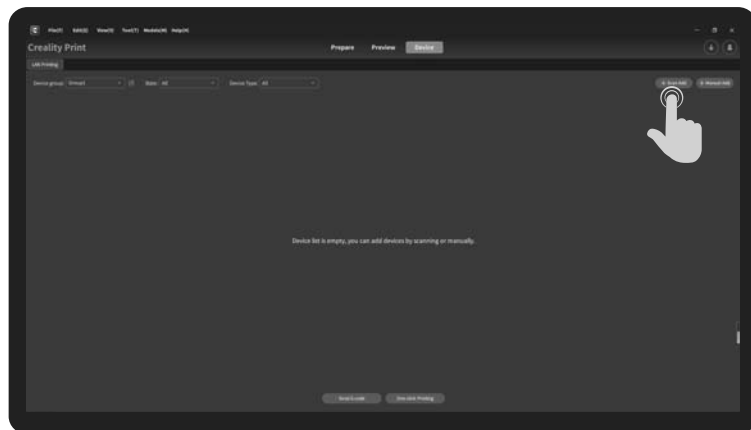
3.3.2 LAN Printing



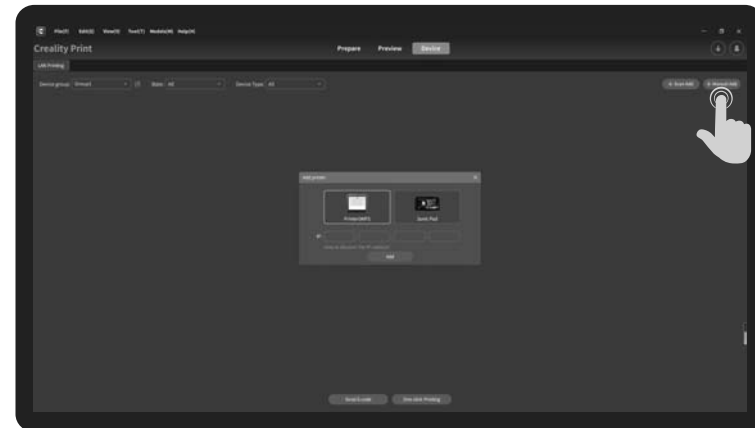
1. After slicing is done, select LAN printing



2. Select the device



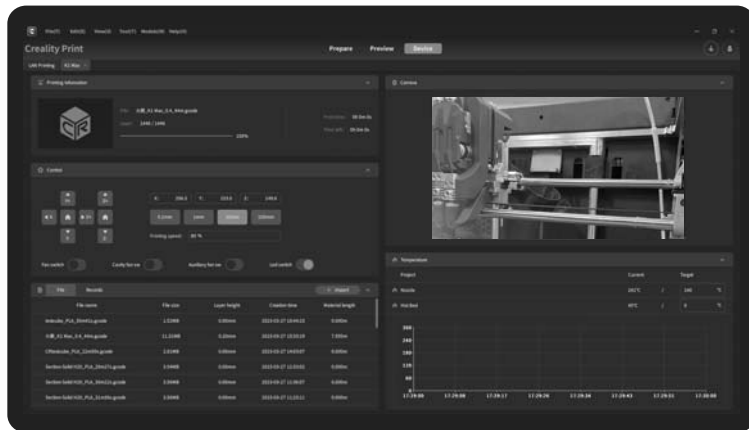
3. Add a device: a. Add by scanning;



3. Add a device: b. Add by manually entering the IP number;



3.3.2 LAN Printing



4 Printing information preview.



The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

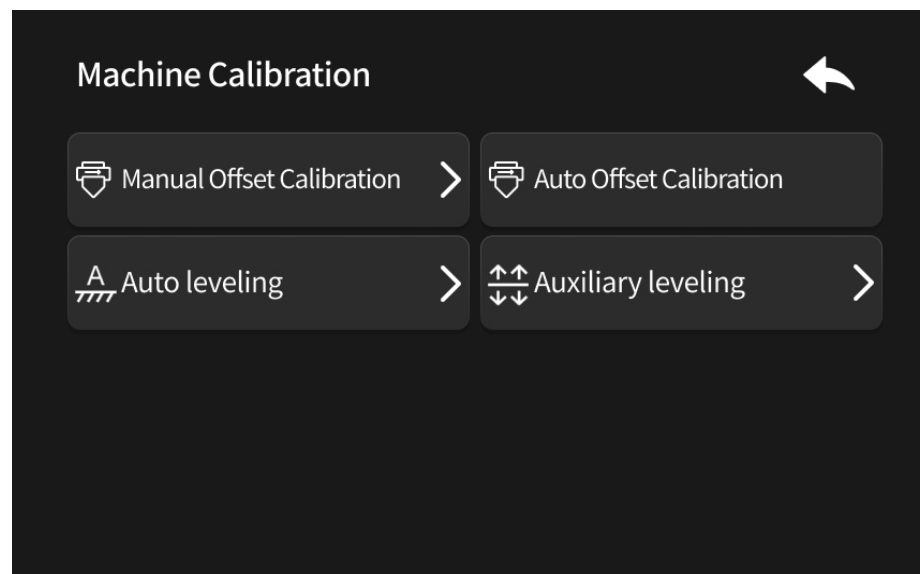
For slicing software downloads and operating instructions, please refer to the following links:

Domestic version: <https://www.crealitycloud.cn/software-firmware/software?type=7>

International version: <https://www.crealitycloud.com/software-firmware/software?type=7>

4. Functional Specification

4.1 Printer Calibration



Manual Offset Calibration: After printing the calibration model, manually enter the compensation value

Auto Offset Calibration: use the automatic offset calibration module for automatic calibration

Auto leveling: when leveling, the printer uses a sensor to detect the flatness of the printing platform and performs the bed mesh algorithm compensation automatically (It is recommended that auxiliary leveling is carried out before auto leveling).

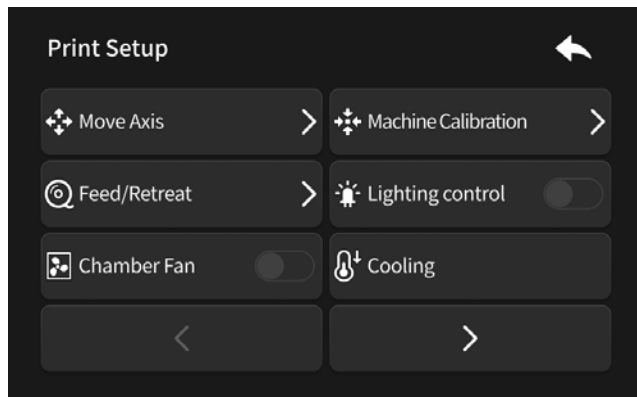
Auxiliary leveling: detect the printing platform using the sensor, and then adjust the printing platform using a hand-tight nut.



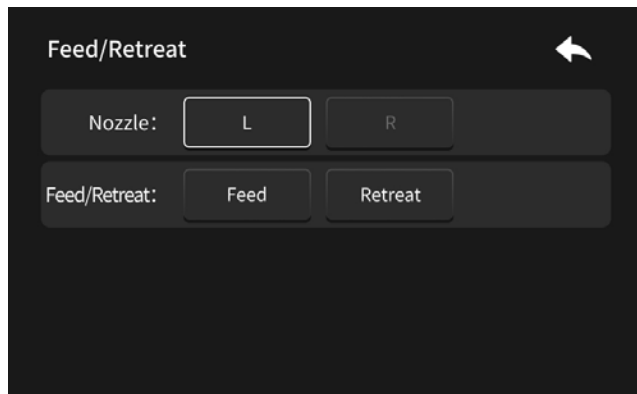
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



4.2 Filament Retreat



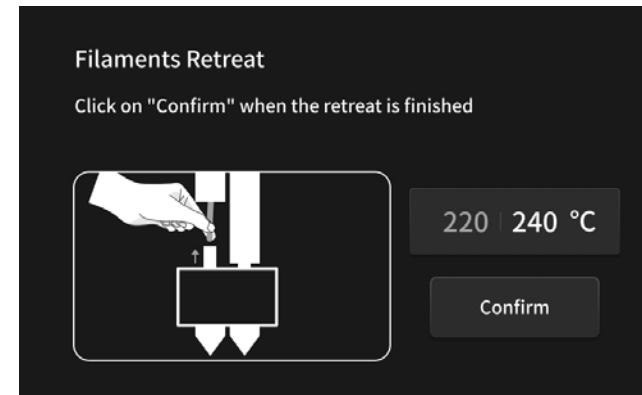
1. Click on Settings → Feed/Retreat.



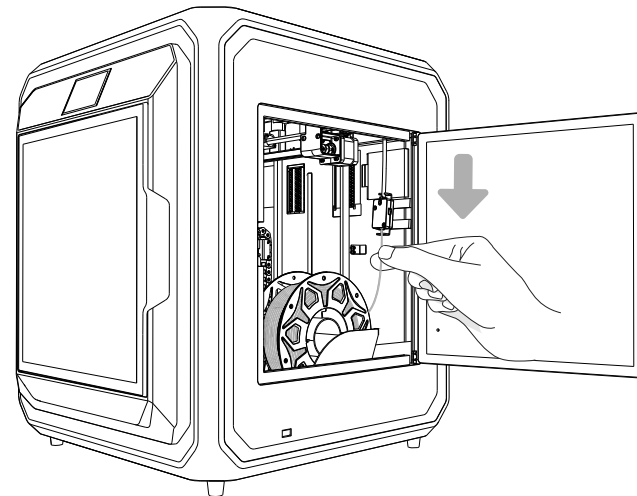
2. Click on Retreat.



The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



3. After retraction is done, remove the filament from the filament sensor (as shown in the figure below).

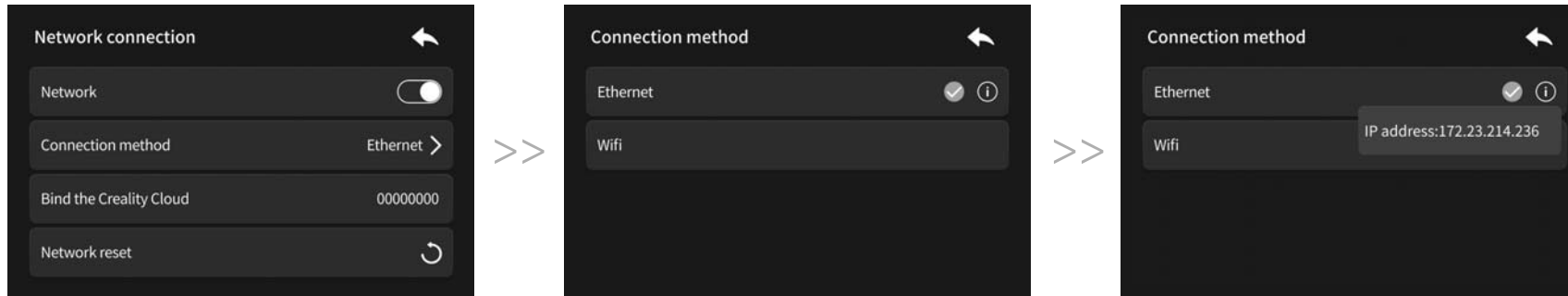




4.3 Network Settings

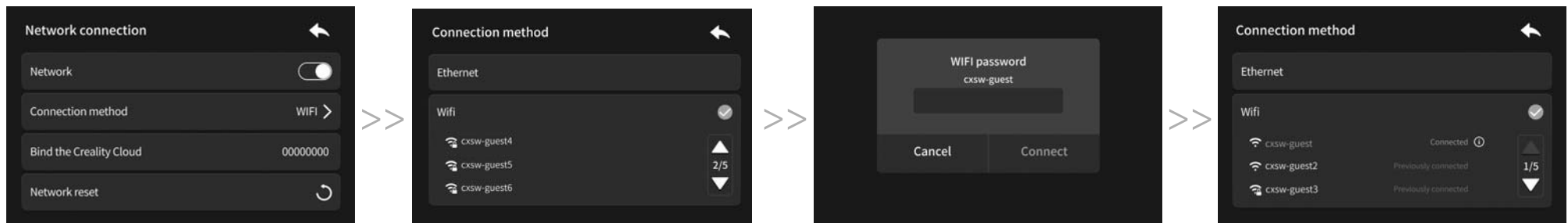
4.3.1 Ethernet Connection

After the network cable is inserted to the machine, click on Print Settings → Network Connection → Connection Method → Ethernet on the homepage of the user interface to finish the connection to wired network.



4.3.2 WiFi Connection

Click Print Settings → Network Connection → Connection Method → WIFI on the homepage of the screen, select the WIFI and enter the password on the homepage of the user interface to finish the connection to WIFI.



Note: If networking is failed, please click on Network Reset.



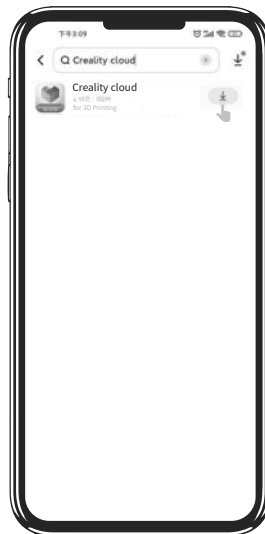
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



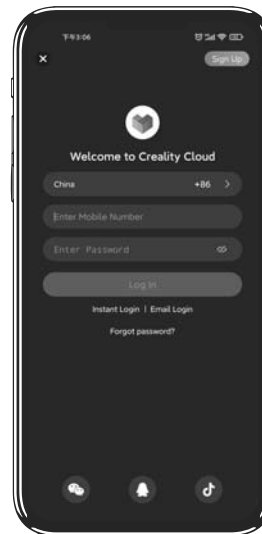
4.4 Bind the Creality Cloud



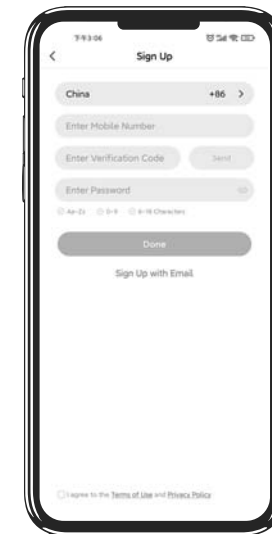
1. Scan the QR code and download the app



2. Download



3. Sign up for an account



4. Log in

4.4 Bind the Creality Cloud



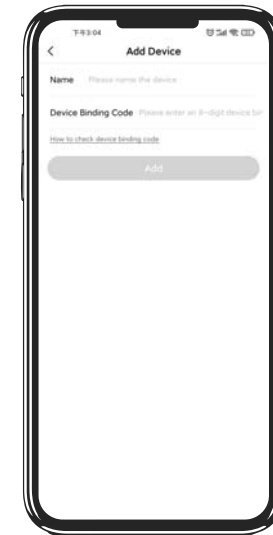
1. Add a new device



2. Choose Sermoon D3 Pro



3. Make sure the device is networked



4. Enter the binding code



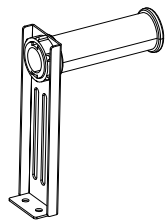
How to view the binding code

Note: The language selection page of the first use guide page will also select the server environment. The Chinese language is the Chinese environment, and the non Chinese language is the international environment. If the binding code cannot be viewed, Please check whether your region is consistent with the server environment selected by the device.

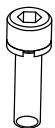


The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

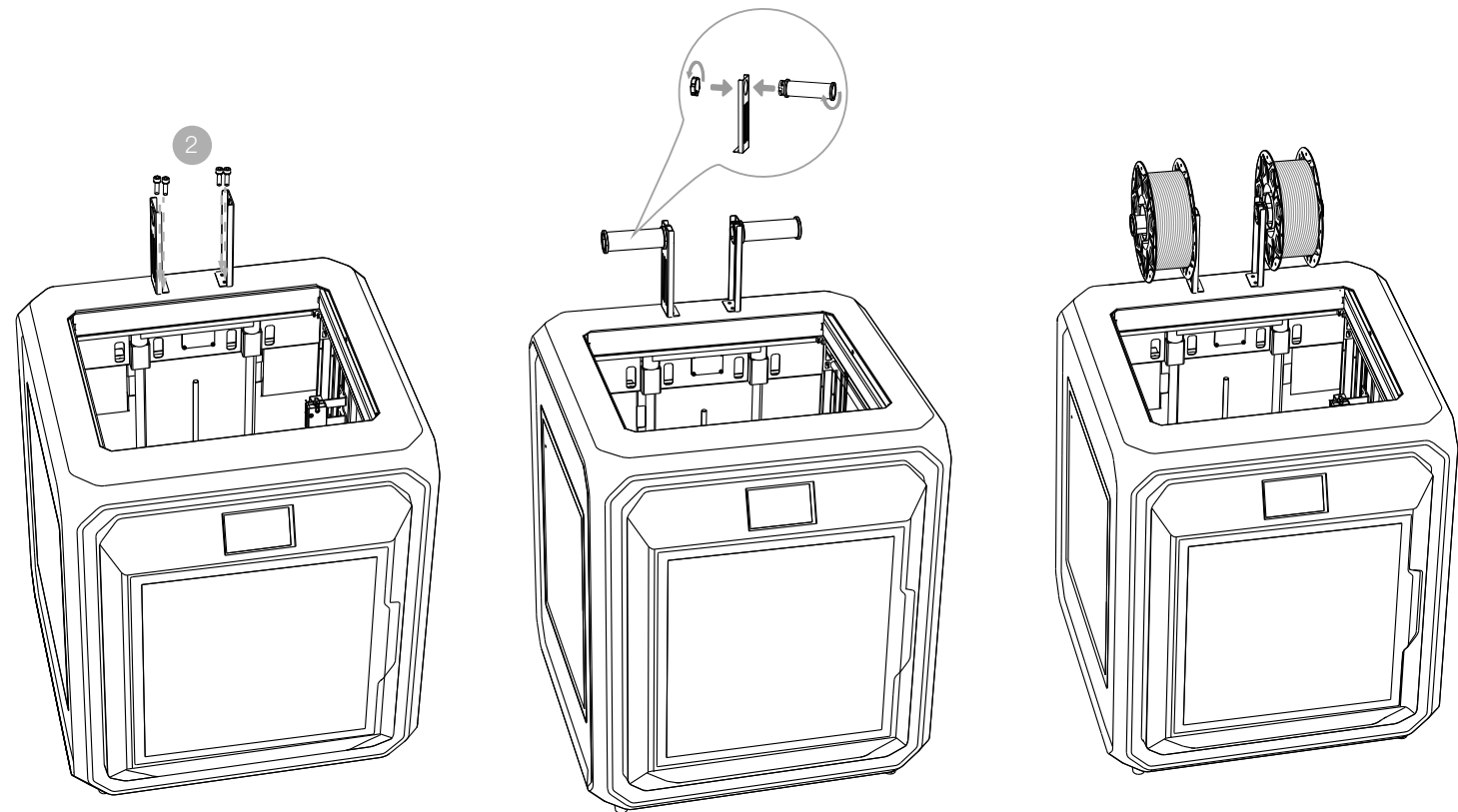
4.5 Description of External Material Rack



1 Material Rack x2



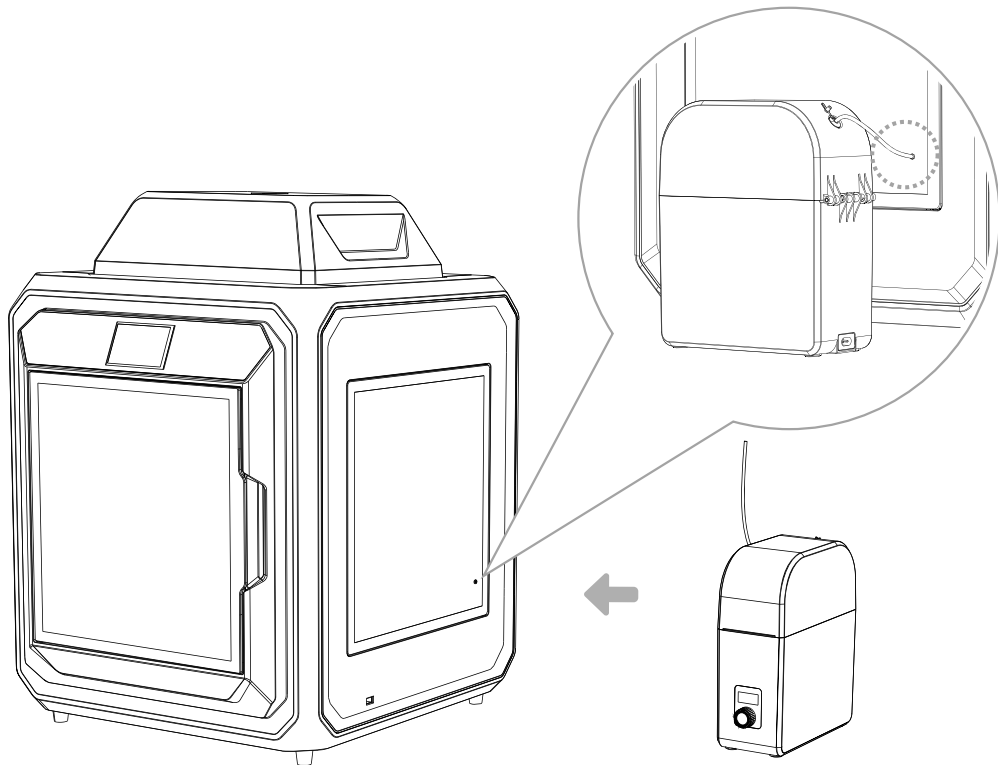
2 Material rack screws
x4



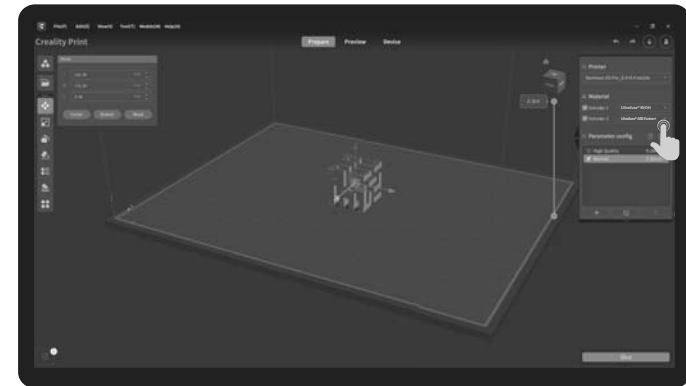
Installation mode of external material rack

4.6 Water-soluble support filament printing

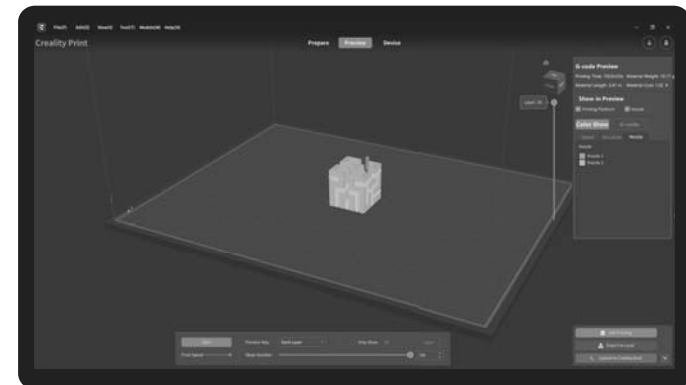
Installation of filament drying box (as shown in the figure below): Thread the Teflon tube provided with the drying box through the door hole to install the filament.



Note: Opened filaments need to be dried in advance according to the recommendations of the filament manufacturer before printing.



Select model filament and support filament



Slicing done



5. Tips and Routine Maintenance



5.1 Maintenance Items

Maintenance items	Maintenance steps	Recommended maintenance frequency
Machine cleanup	Clean the debris inside the machine to ensure that its operation is not affected.	Before each print
Hot end	Replace the nozzle.	Cumulative print time per 500 hours
	Check if the wire output is normal, if not, please check if the extruder is blocked.	After each change of filaments
	Check the nozzle for filament residue, if so, heat the nozzle and remove it with a tool.	Before each print
Printing platform	Check the surface of the platform for residual filaments and glue, if so, clean the surface of the platform.	Before each print
Motion mechanism	XYZ optic axis lubrication.	Cumulative print time per 500 hours
Air filtration	Replace the air filter cartridge.	Cumulative print time per 300 hours
Leveling	Auto nozzle offset calibration	Every 500 hours of accumulated printing time / Every 1 month
	Auxiliary leveling.	Every 1,000 hours of accumulated printing time / Every 2 months
	Auto Leveling.	Cumulative print time per 500 hours After extruder replacement After replacing the printing platform with a new one
Filament replacement	Replacement of filaments of the same kind: follow the normal Retreat – Feed process.	/
	Replacement of different filaments: Preheat to reach the target temperature of the current filament, then retreat it, and replace with the target filament, preheat to the higher filament extruder temperature of the two filaments; feed for 30s until the filament has been completely extruded, and finally set the extruder temperature to the temperature of current filament nozzle.	



5.2 Error code descriptions

Error code instructions	Parameters
E01	Autotune Failed! timeout
E02	Go home failed
E04	EEPROM index Error
E05	EEPROM CRC mismatch
E06	L nozzle heating escaped
E07	L nozzle heating failed
E08	L nozzle thermistor abnormality
E09	Hotbed Thermal Runaway
E10	Hotbed Heating Failed
E11	Hotbed Thermistor Error
E12	Leveling Error
E14	Extruder pressure sensor failure
E15	Abnormal movement of the extruder pressure sensor
E16	R nozzle heating escaped
E17	R nozzle heating failed
E18	R nozzle thermistor abnormality
E19	Chamber heating escaped
E20	Chamber heating failed
E21	Chamber thermistor abnormality
E22	Dual-nozzle calibration module X-axis pressure sensor failure
E23	Abnormal movement of the dual-extruder calibration module X-axis pressure sensor
E24	Dual-nozzle calibration module Y-axis pressure sensor failure
E25	Abnormal movement of the dual-extruder calibration module Y-axis pressure sensor
E26	Dual-nozzle calibration module Z-axis pressure sensor failure
E27	Abnormal movement of the Dual-nozzle calibration module Z-axis pressure sensor

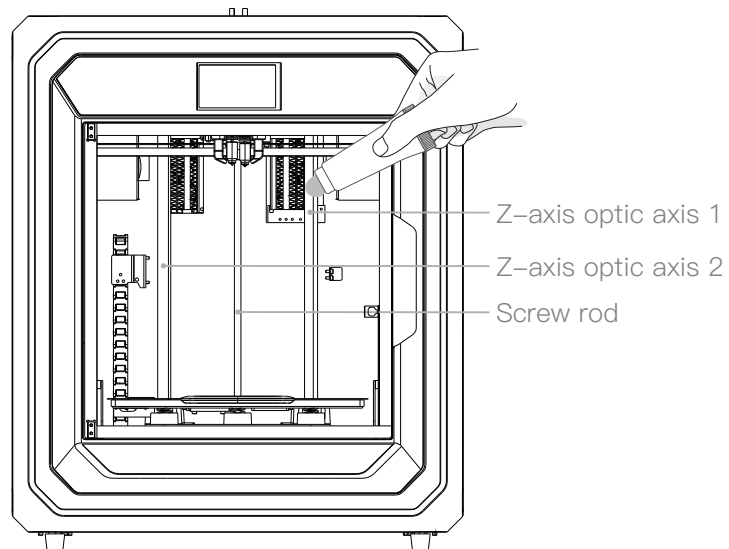
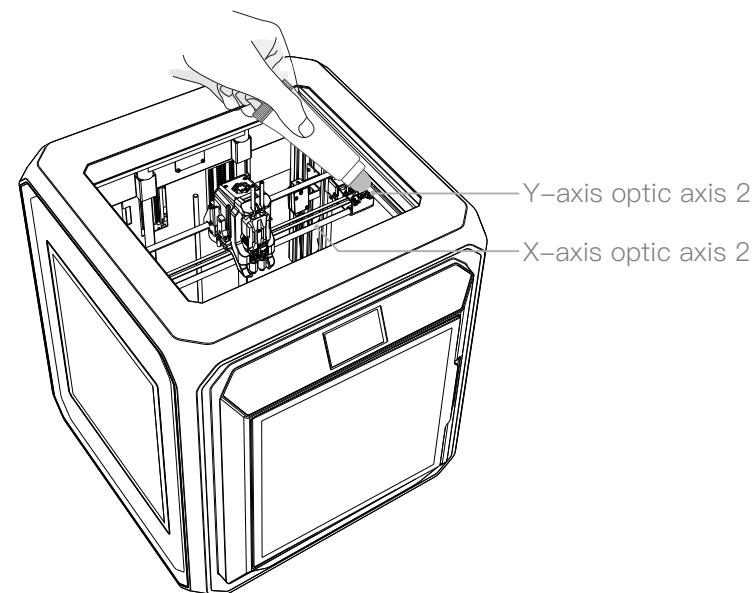
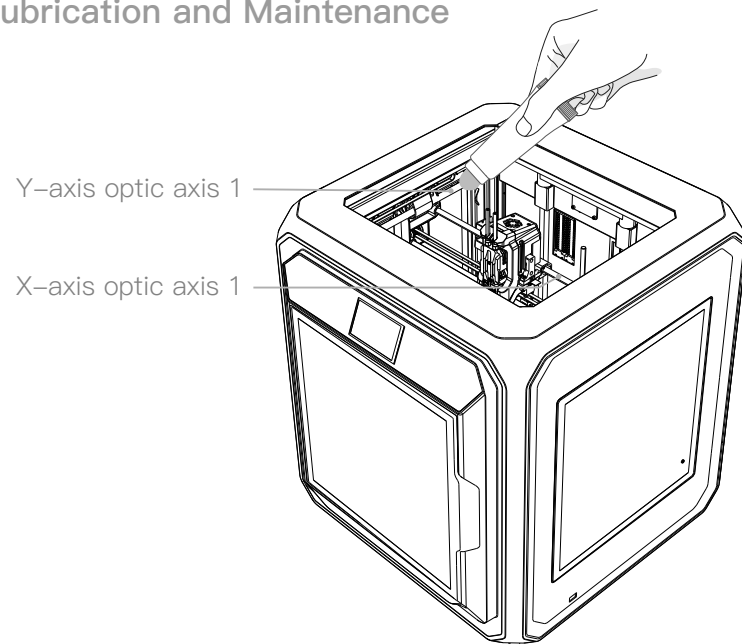
In the event that any of the above problems arise and cannot be resolved:

① Please visit <https://www.crealitycloud.com/product>, click “Products” and select the right model, and then click “Related” to view the tutorials on after-sales service;

② Or contact our after-sales service center at +86 755 3396 5666, or send e-mail to cs@creality.com.

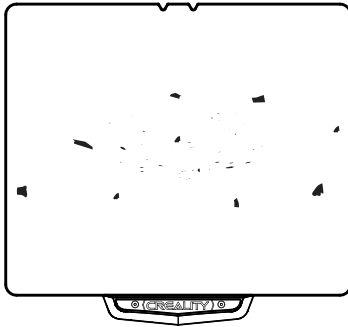
5.3 Maintenance instructions

5.3.1 Lubrication and Maintenance

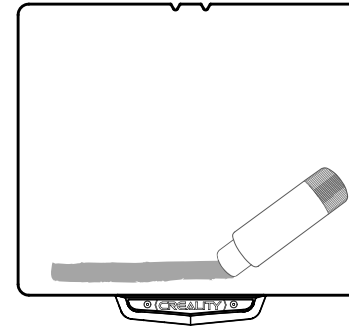


Tips: please grease and lubricate the designated areas regularly (as shown in the picture).

5.3.2 Use and Maintenance of the Printing Plate

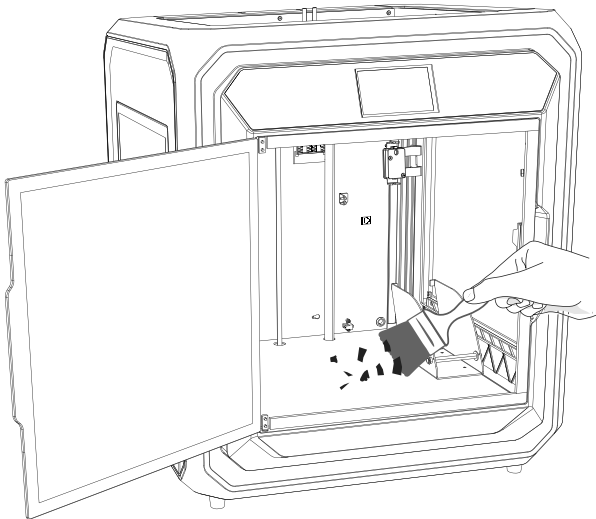


① The residue of the platform filaments can be scraped off with a blade. Be cautious of safety when using.

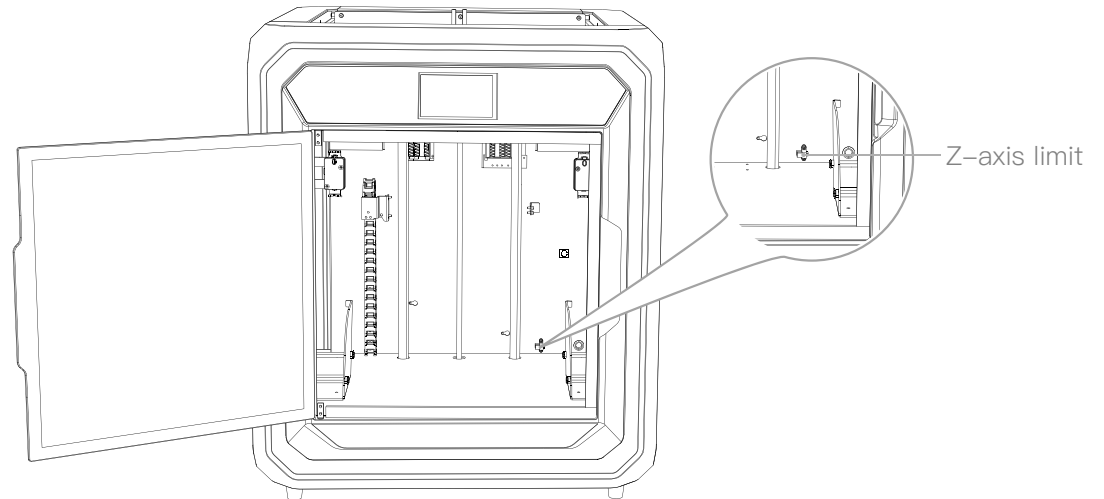


② When the first layer of the model is not glued, it is recommended to apply glue stick evenly on the surface of the platform.

5.3.3 Cleaning of debris inside the chassis



① Clear foreign bodies from the equipment.

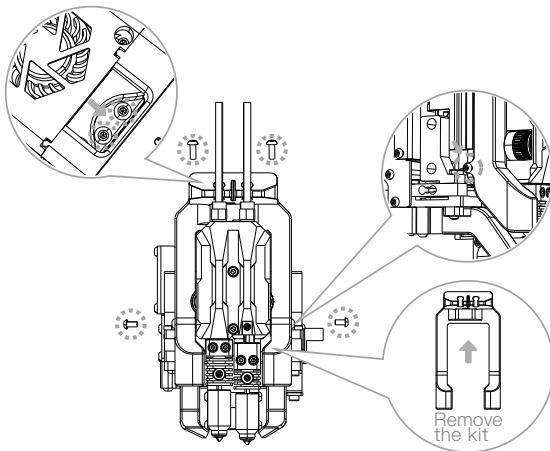


② Check if any foreign objects remain at the Z-axis limit to prevent jamming.

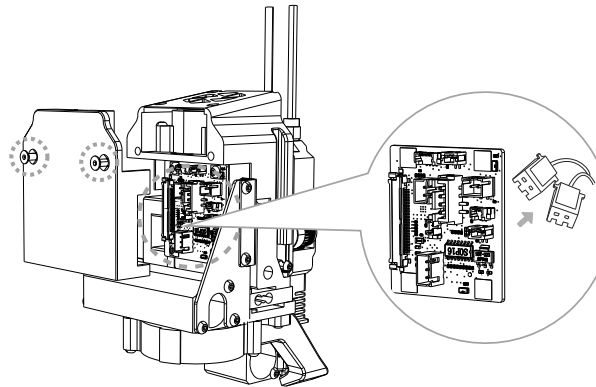


Notice: Since the printing plate is quick-wear, it is recommended to replace the printing plate regularly to ensure that the first layer of the model is adhered.

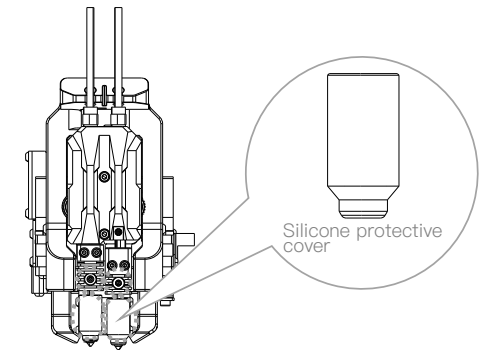
5.3.4 Quick change of hotend



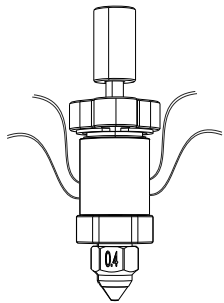
- ① Loosen the screws on the top and both sides of the kit and remove the kit;



- ② Loosen the screws on the back panel, remove the back panel, and disconnect the flat cable connected to the nozzle;



- ③ Loosen the screws on the hotend and remove the silicone protective cover;



- ④ Remove the old hotend and install the new one.



Notes:

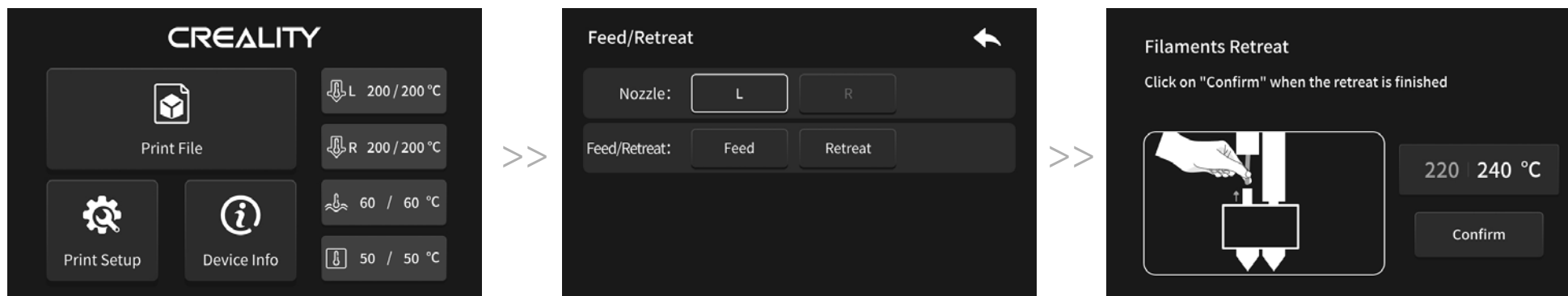
① If there is filament inside the nozzle, preheat the nozzle before replacement. Once the filament softens, quickly remove the hotend assembly. Otherwise, the hotend cannot be removed (removal by force may cause damage to the assembly);

② During filament preheating, the nozzle may be very hot. Be careful not to get burned when replacing the hotend .



5.3.5 The way to clear the clogged dual-nozzle

1. Remove the clogged filament from the nozzle:



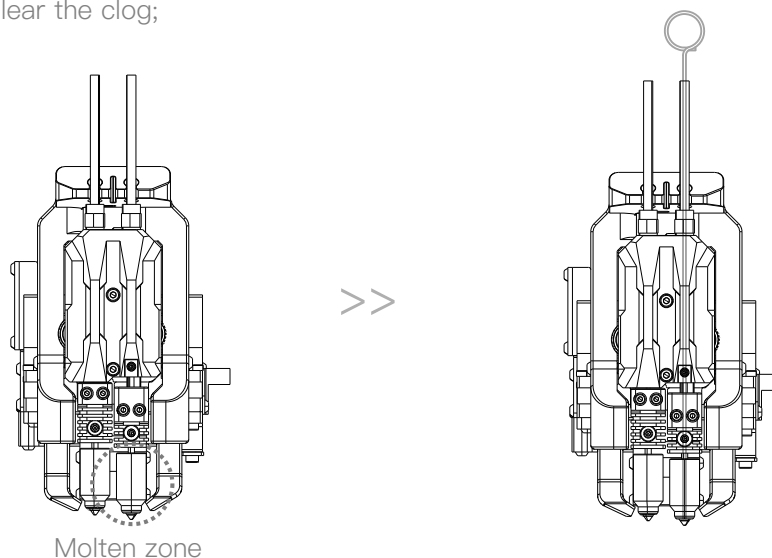
① On the main interface, heat the clogged nozzle to the melting temperature of the filament;

② Enter the feeding interface, select the clogged nozzle (L/R), and click "Retreat";

③ After the retraction is done, remove the filament from the filament sensor.

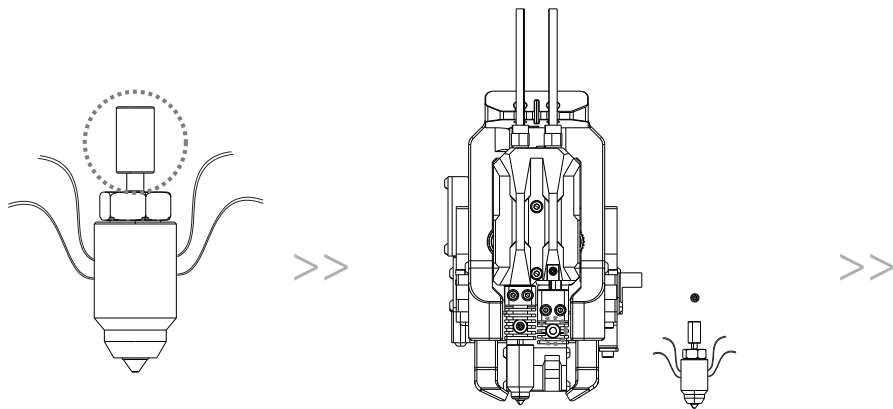
2. Approximately locate the clog: Insert a nozzle cleaner from the top of the extruder's tube connector until it cannot be inserted further. Make a mark on the nozzle cleaner with a marker pen. Remove the nozzle cleaner and compare it to the front of the extruder to determine the approximate location of the clog; Heat the nozzle to the melting temperature of the filament (confirm that it has been switched to the clogged nozzle before heating).

① If the clog occurs in the melt zone: Heat the nozzle to the printing temperature, and insert a nozzle cleaner from the top of the extruder (Note: Once the nozzle cleaner is inserted, do not switch nozzles) to clear the clog;



5.3.5 The way to clear the clogged dual-nozzle

② If the clog occurs at the cold end of the heat break:

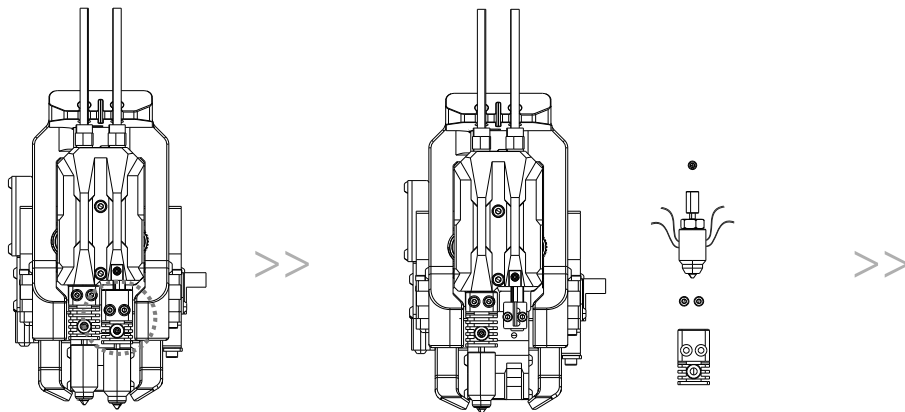


Cold end of the heat break

a. Loosen the top screw on the heatsink of the clogged hotend and remove the hotend (be cautious not to get burned).

b. Continuously heat the hotend to the printing temperature (wait for about two minutes), and then insert a nozzle cleaner from one end of the heat break to clear the clog.

③ Clog occurs in the heat sink:



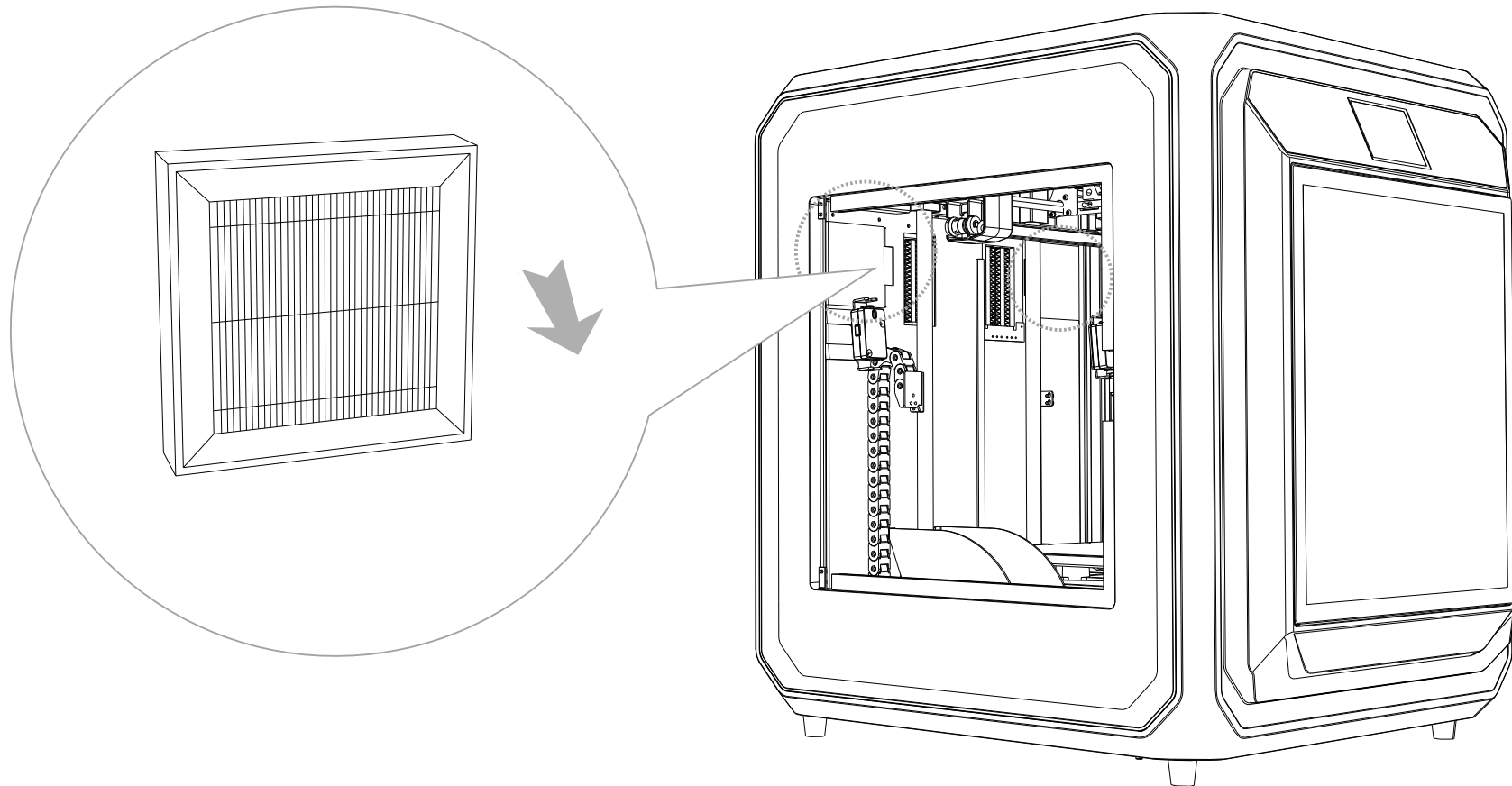
Heatsink

a. Remove the hotend first (as mentioned above), and then remove the two M2.5 screws on the heatsink and remove the heatsink;

b. Heat the heatsink to the temperature at which the filament softens;

c. Insert a nozzle cleaner from the top of the heatsink to clear the clog;

5.3.6 Change the air filter





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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.



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 Crealty 3D Technology Co., Ltd.



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