



3D Printer User Manual

V1.0

To Our Dear Users

Thank you for choosing Creality. For your convenience, please read through this User Manual before you start and follow the instructions provided carefully.

Creality is always ready to provide you with high-quality services. If you encounter any issues or have any questions when using our products, please use the contact information at the end of this manual to contact us. To further improve your user experience, you can find more about our devices via the following methods:

User manual: You can find instructions and videos in the USB flash disk provided with the printer.

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.

Firmware Upgrade

1. You can upgrade the firmware directly through the device screen;
2. You can upgrade the firmware via the Creality Cloud OTA;
3. Please visit the official website <https://www.creality.com>, click on Service Center → Firmware/Software Download → Download the required firmware, install and use it.

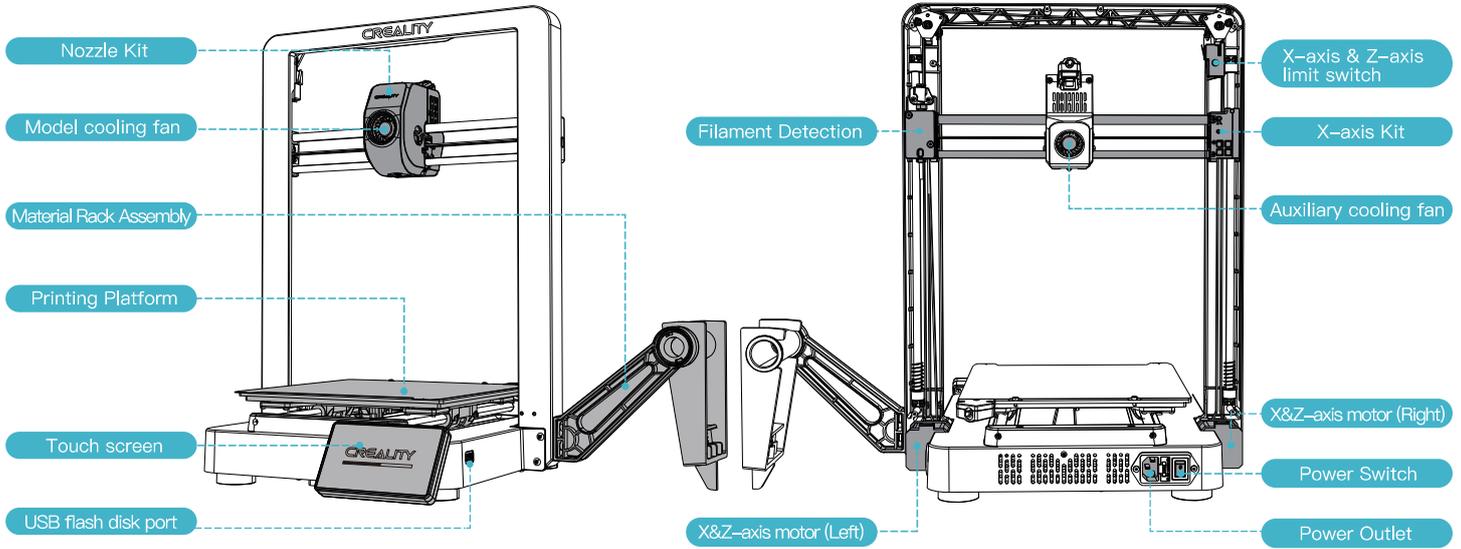
Videos showing the operation of the products and after-sales service

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.

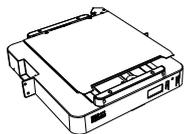
1. Do not use the printer in any way other than described herein in order to avoid personal injury or property damage;
2. Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, cool and dustless environment;
3. Do not expose the printer 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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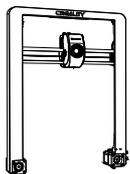
1.About the Printer



2.Parts List



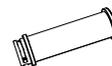
1 Base component



2 Gantry Frame Assembly



3 Touch screen



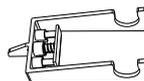
4 Filament tube



5 Material Rack



6 Power cable



7 Anti-tangle material rack



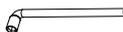
Accessory kit



8 Hexagon Flat Round Head Screw M4*8 x8



9 Tool kit



10 Socket spanner



11 Teflon tube



12 Filament



13 Cutting plier



14 Black tie x5



15 Wire Clip x3



16 Extruder cable cover



17 Nozzle cleaner



18 USB flash disk



19 Quick Installation Guide



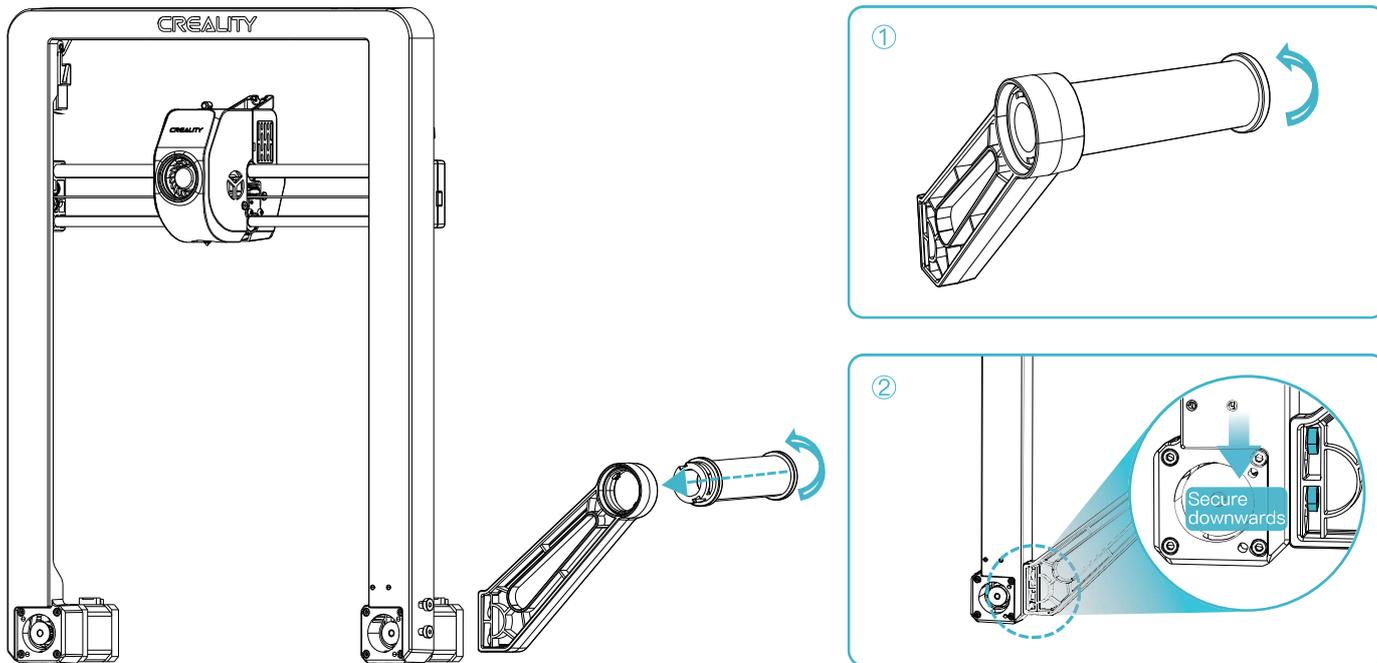
20 After-sales Services Card

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

3.Assembly Procedure

3.1 Material Rack Assembly Installation

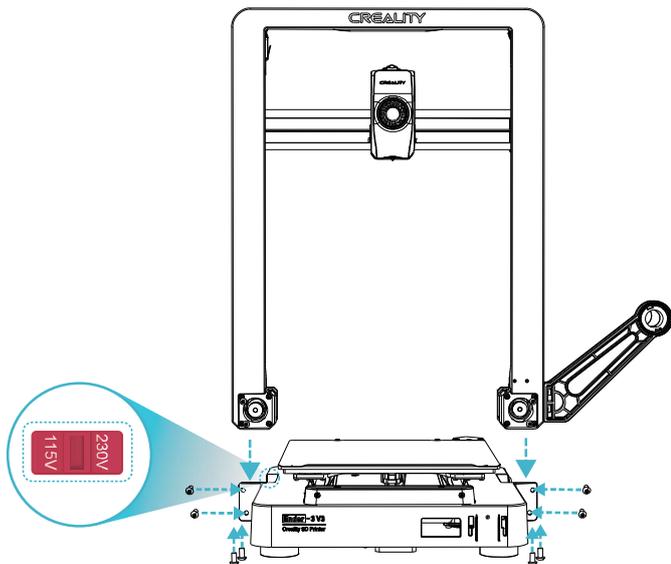
- ① Install the material rack and material barrel according to the diagram;
- ② Align the installed material rack component holes with the locking positions to the immediate right of the gantry frame and secure them downwards smoothly.



3.Assembly Procedure

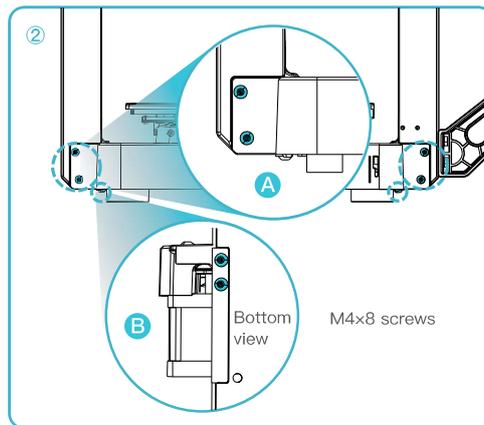
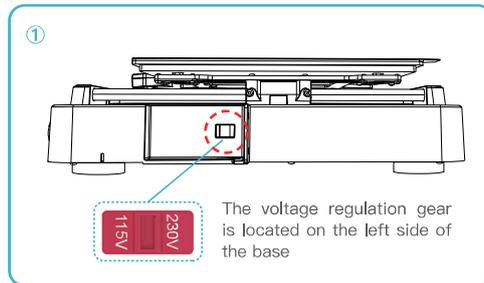
3.2 Gantry Frame Assembly Installation

- ① Select the correct voltage mode based on the local power grid voltage;
- ② Place the gantry frame assembly into the slots on the base: A. First, use four M4×8 screws to align and secure the left and right screw holes on the base; B. Then, use four M4×8 screws to align and secure the screw holes on the bottom of the base.



Caution

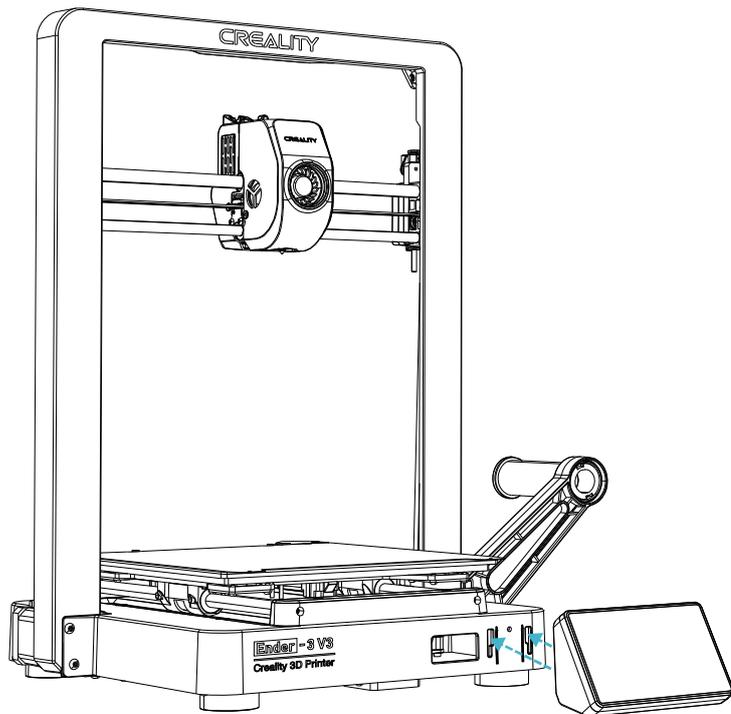
- Please ensure the correct position for the power supply switch and mains before supply connection, in order to avoid damage to the device.
- If the mains between 100V and 120V, please select the 115V for the power supply switch.
- If the mains between 200V and 240V, please select the 230V for the power supply switch (default is 230V).



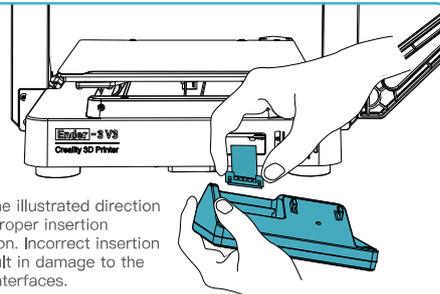
3.Assembly Procedure

3.3 Touch screen Installation

- ① Connect the touchscreen to the base screen using the flexible flat cable;
- ② Snap the buckle on the back of the touch screen into the slots on the base.

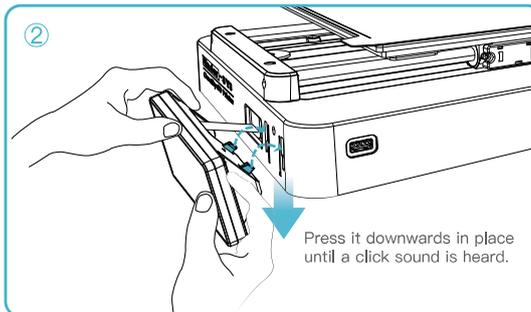


①



Follow the illustrated direction for the proper insertion orientation. Incorrect insertion may result in damage to the screen interfaces.

②



Press it downwards in place until a click sound is heard.

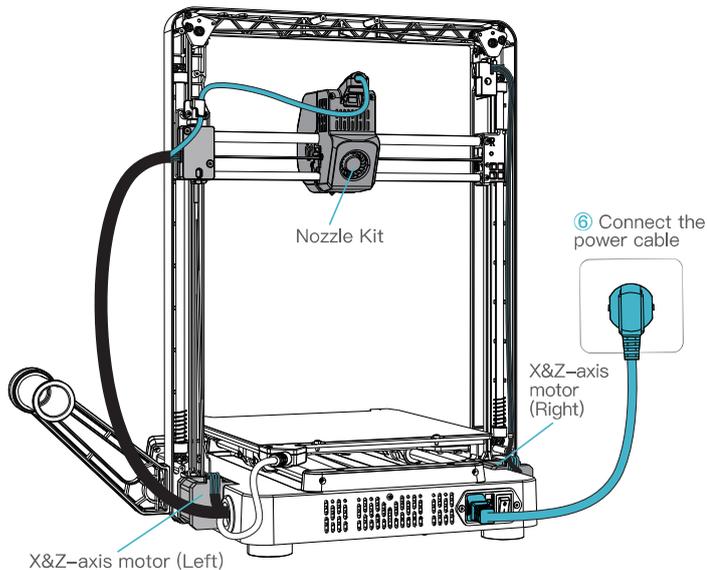


Tips:

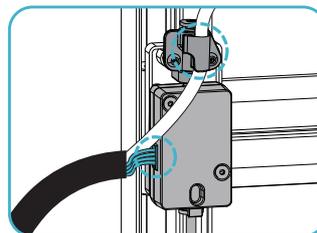
- ① Do not power up the machine while the touch screen is connected or disconnected from the connection cable;
- ② Gently pull the flexible flat cable of base screen, being cautious to avoid breaking it.

3.Assembly Procedure

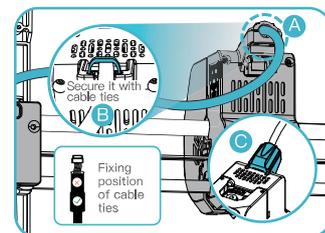
3.4 Equipment Wiring



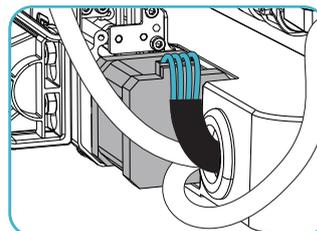
⑥ Connect the power cable



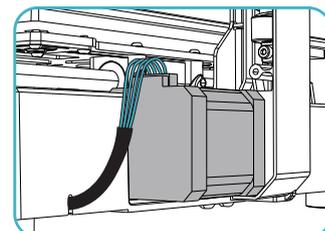
① First connect the filament detection line, then clip the nozzle line into the wire clip above the filament detection.



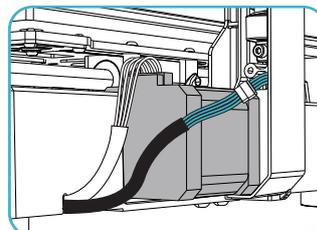
② A. Connect the extruder kit first; B. Fix the extruder cable with cable ties; C. Install the extruder cable cover;



③ Connect the X&Z-axis motor (left);



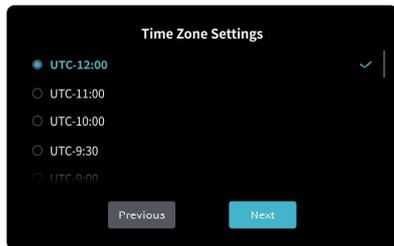
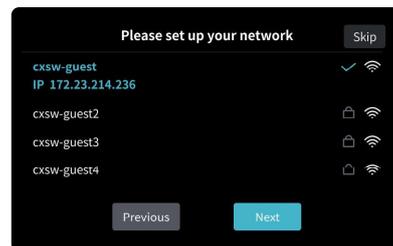
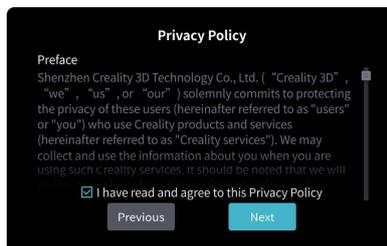
④ Connect the X&Z-axis motor (right);



⑤ Connect the limit switch cable.

4.About the Power-on Guide and User Interface

4.1 Power-on guide



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.About the Power-on Guide and User Interface



Tips:

If any abnormalities occur during the self-check process, please refer to the FAQ to check for possible machine malfunctions; Alternatively, scan the QR code for “fault reporting” to report the machine issue and seek assistance from the after-sales service for problem resolution.

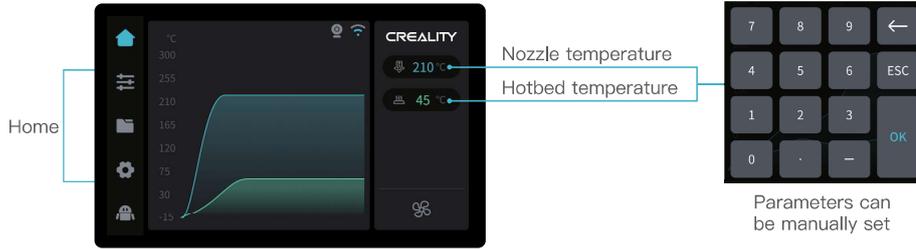


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4.About the Power-on Guide and User Interface



4.2 About the User Interface



* You can configure functions such as extruder temperature and hotbed temperature through the homepage;



* You can configure functions such as axis movement/temperature control, extrude/retract, and fan cooling through the preparation interface.

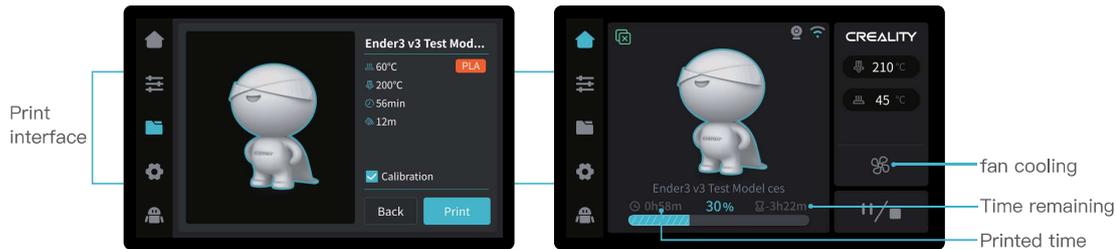


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4.About the Power-on Guide and User Interface



- * Press and hold on the model to select multiple models and copy them to a USB flash disk
- * Local and USB flash disk model files can be managed via the print file preview interface.



- * Click on the model file to access its details
- * Checking “Calibration” can improve print quality



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4.About the Power-on Guide and User Interface



Set

Customer Service

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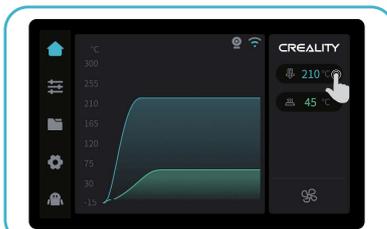
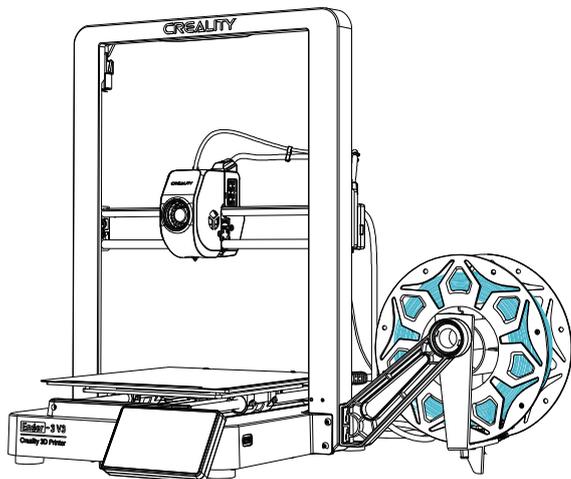
* You can configure functions such as system and network settings through the settings interface.

Error Code	Time of Occurrence	Operate
3002	2023/02/06 17:06:45	Details
3001	2023/02/05 09:52:33	Details
3007	2023/02/04 23:50:08	Details
3006	2023/02/03 16:36:06	Details

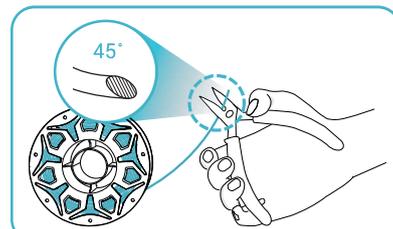
* You can view FAQs, manuals, error history and upload Log through the customer service interface .

5.First Printing

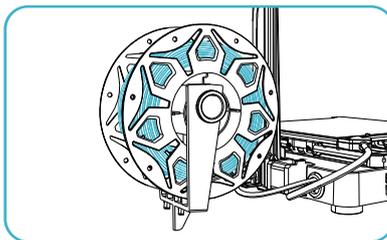
5.1 Filament Loading



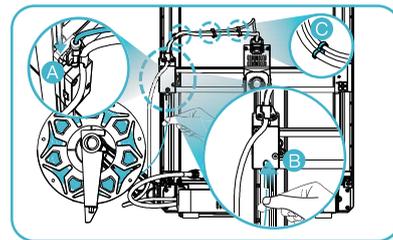
① Input the nozzle temperature on the screen and wait for it to heat up to the target temperature;



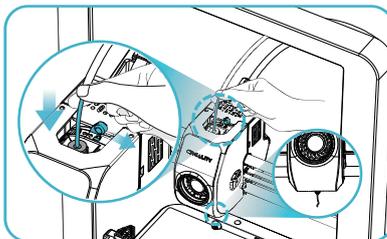
② Cut the front of the filament at 45° and break it off straight;



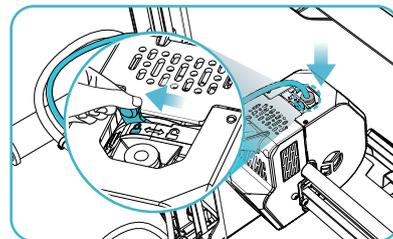
③ Arrange the filaments as shown in the picture, and then install the anti-tangle material rack;



④ A. Connect the Teflon tube to filament runout sensor; B.And thread the filament into filament detection port until it passes through the Teflon tube; C. Fix the Teflon tube with extruder cable with cable clips.



⑤ Unlock the DIP switch and thread the filament into the extruder kit until the filament is extruded from the nozzle;

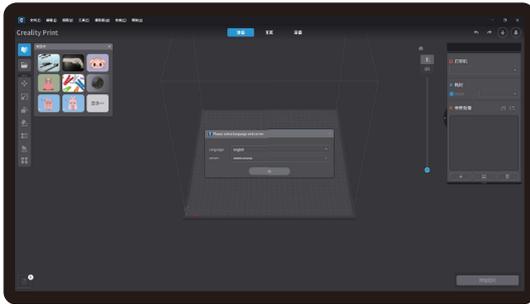


⑥ Lock the DIP switch, and insert the Teflon tube into the upper joint of the extruder kit.

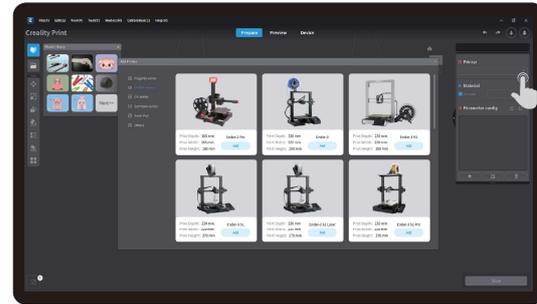
5.First Printing

5.2 LAN printing

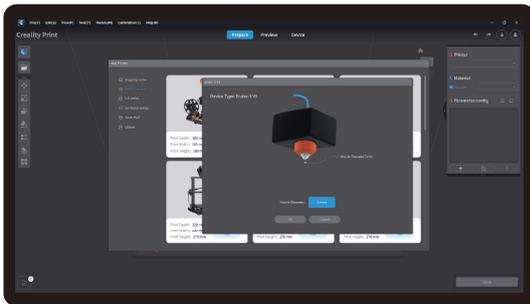
- ✧ Install Creality Print slicing software by opening the random data on the USB flash disk.
- ✧ Log in to the official website to download for installation: <https://www.crealitycloud.com/software-firmware/software?type=7>



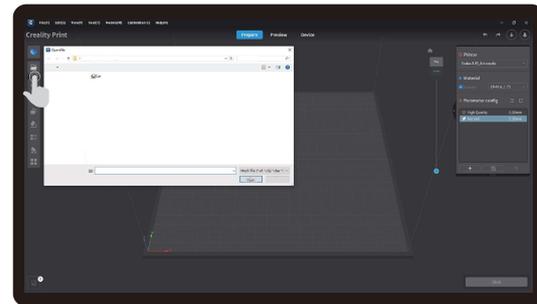
① Select “Language” and “Server”



② Add the printer



③ Confirm the nozzle diameter

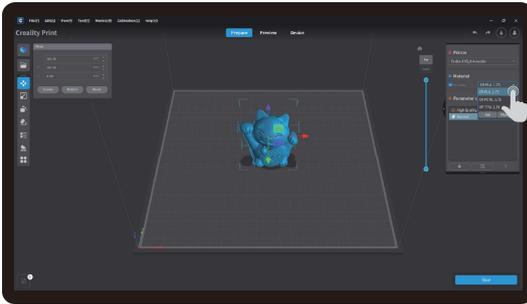


④ Import model files

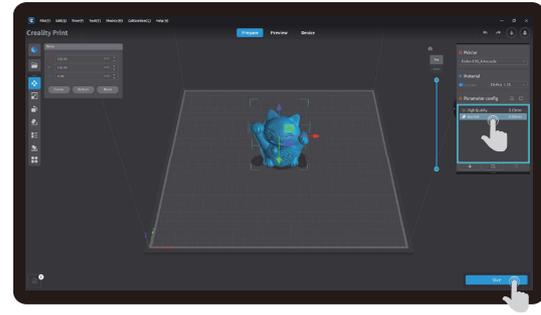


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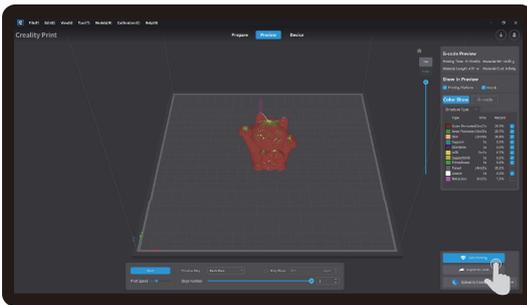
5.First Printing



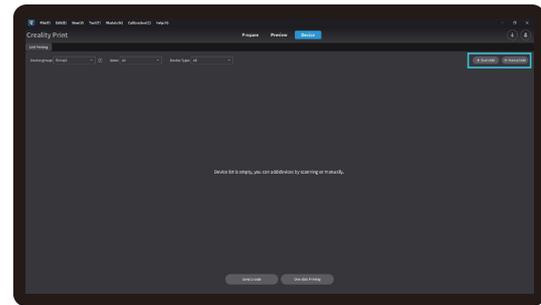
⑤ Set up material type



⑥ Set the print layer height and click on "Slice"



⑦ After slicing is done, click on "LAN printing"

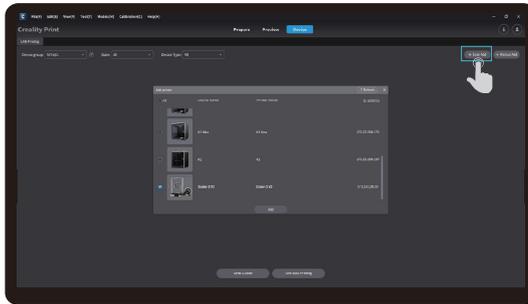


⑧ Add equipment: can be added either by "Scan Add" or "Manual Add".

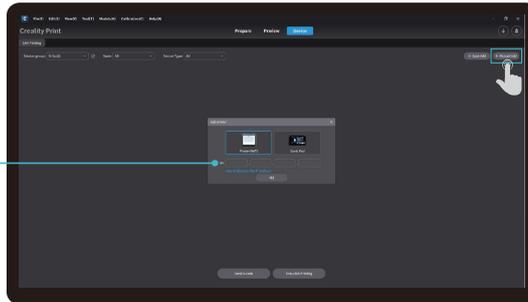


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5.First Printing



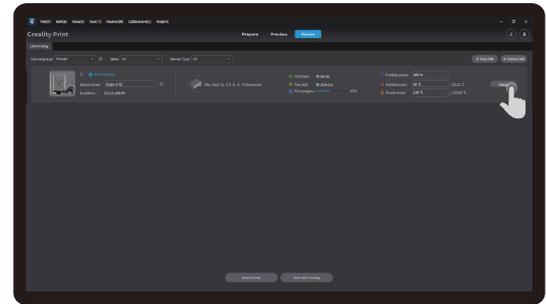
⑧ Add a device: a. Add by scanning → Select a device



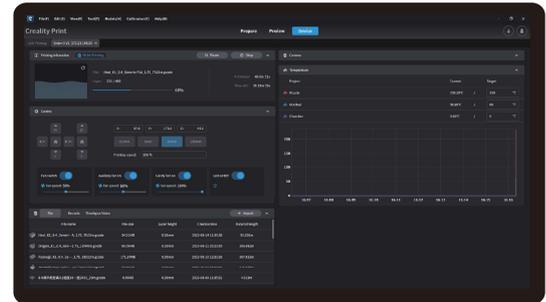
⑧ Add a device: b. Add a device by manually entering the IP address



Click "Settings" → "Network" to view the IP address



⑨ Device List



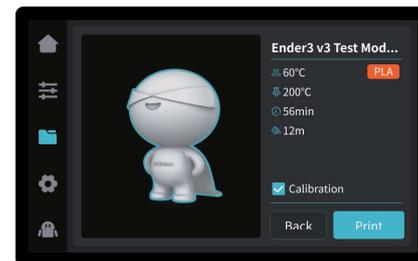
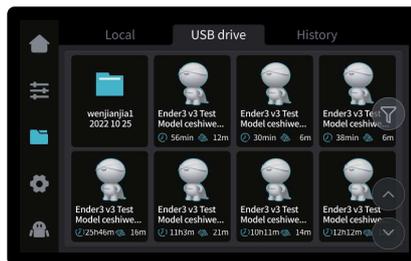
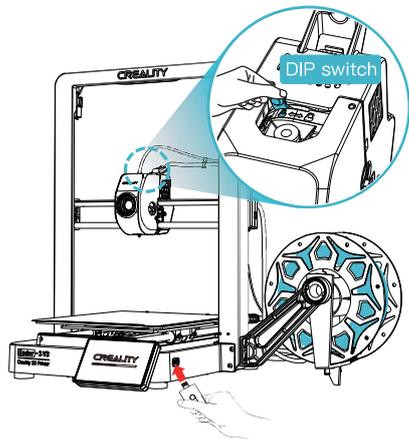
⑩ Equipment printing information details



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5.First Printing

5.3 USB flash disk Printing



② Select the model from the USB flash disk

③ Click on “Print”

① Insert the USB flash disk into USB port



Tips:

- ① Keep the dip switch locked before printing.
- ② For details on using the software, please refer to the slicing software user manual on the USB flash disk.
- ③ Saved files must be placed in the root directory (not a subdirectory) of the USB flash disk.
- ④ It is recommended to use Latin alphabet, numbers, and common characters for the file names.



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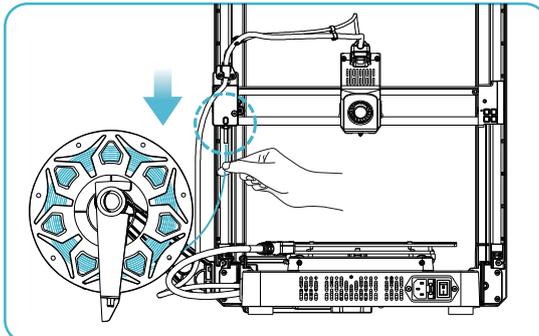
6.Functional Specification

6.1 Filament Retrait

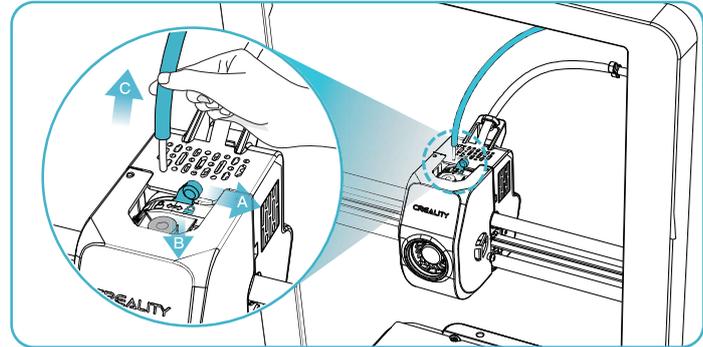
Method 1: Manual retract



- ① Input the nozzle temperature on the screen and wait for it to heat up to the target temperature;



- ③ Remove the old filaments by pulling them out from the back of the machine to replace with new ones.



- ② A. Unlock the dip switch; B. Hold the Teflon tube connector above the extruder; C. Pull out the Teflon tube;



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6.Functional Specification

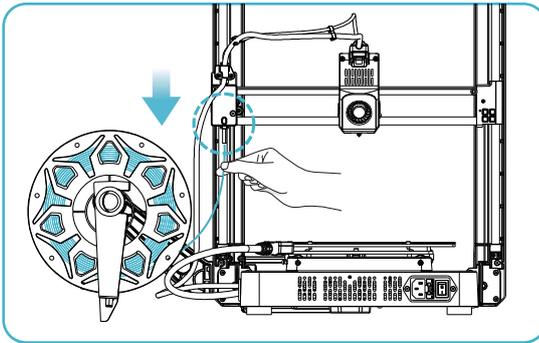
Method 2: Auto retract



① Click on “Retract”;



② Waiting for the retraction process to complete;



③ Remove the old filaments by pulling them out from the back of the machine to replace with new ones.

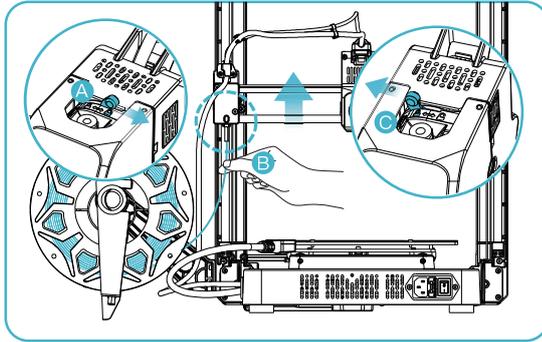


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6.Functional Specification



6.2 Auto extrude



- ① A.Unlock the DIP switch; B.Insert the filament into the deepest part of the Teflon tube until it cannot be moved; C.Lock the DIP switch.



- ② Click on “Extrude”;



- ③ Waiting for the extruding process to complete.



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7. Equipment Maintenance

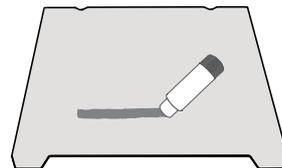
7.1 Platform plate removal and maintenance



- 1 a. When printing is finished, wait for the platform plate to cool before removing the printing platform with the model attached;
b. Slightly bend the platform with both hands to separate the model from the platform.



- 2 If there are residual filaments on the platform plate, scrape them off lightly with a blade and print again.



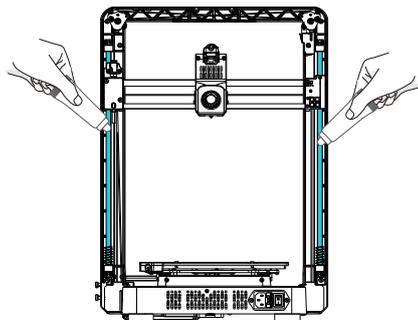
- 3 If the first layer of the model is not properly glued, it is recommended to apply solid adhesive evenly on the surface of the platform plate before preheating for printing.



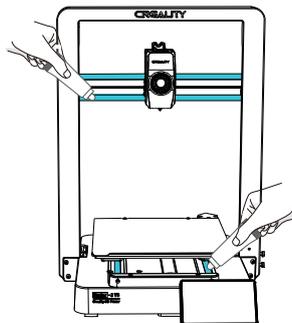
Tips: 1. Don't bend too much for daily use to prevent deformation and unusability;
2. The printing platform is a perishable part, and it is recommended to replace it regularly to ensure that the first layer of the model sticks properly.

7.2 Optical axis maintenance

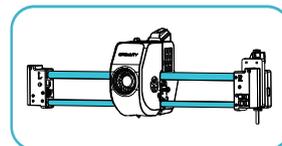
It is recommended to purchase lubricating grease for regular maintenance of the optical axis area.



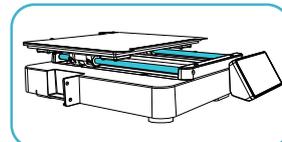
Optical axis area of Z direction



Optical axis area of X & Y direction



Optical axis area of X direction



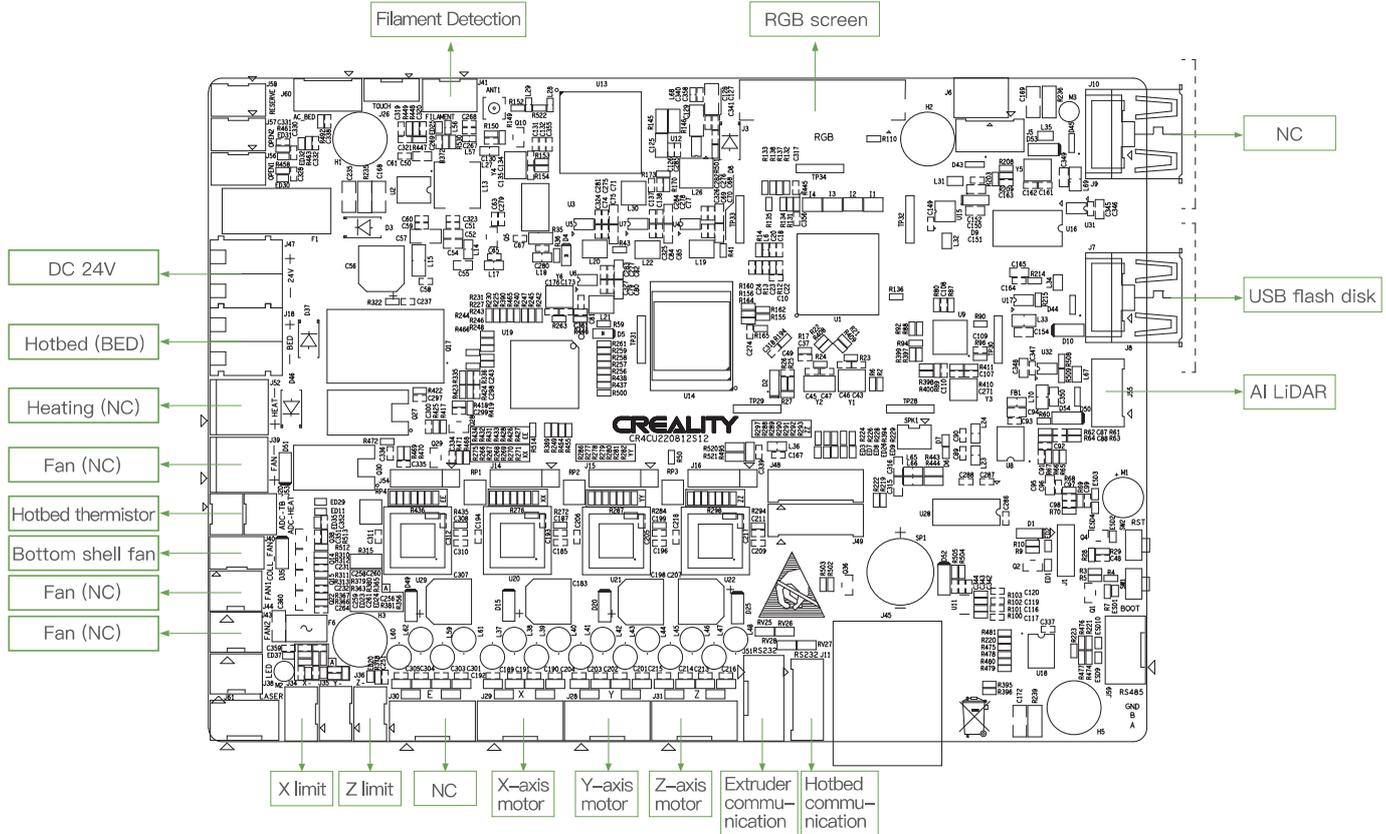
Optical axis area of Y direction

8. Equipment Parameters



Equipment Parameters	
Model	Ender-3 V3
Modeling Technolog	FDM
Modeling Dimensions	220*220*250mm
Leveling Method	Auto-leveling
Number of Nozzles	1pcs
Extruder Diameter	0.4mm
Slice Thickness	0.1-0.35mm
Precision	±0.2mm
Nozzle Temperature	≤300°C
Hotbed Temperature	≤110°C
Filaments	PLA/TPU/PETG/ABS/PLA-CF/PETG-CF/CR-carbon
Rated Power	350W
Input voltage	100-120V~, 200-240V~, 50/60Hz
Filament Detection	YES
Power Loss Recovery	YES
Printing Method	USB flash disk Printing / LAN printing / Cloud printing
Print file format	Gcode
Slicing Software	Creality Print
Operating Systems	Windows/MAC OS
Language	中文/ English/ Español/ Deutsche/ Français/ Русский/ Português/ Italiano/ Türk/ 日本語/ 한국어

9.Circuit Wiring



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.

Due to the differences between different machine models, the actual objects and the images can differ. Please refer to the actual machine. The final explanation rights shall be reserved by Shenzhen Creality 3D Technology Co., Ltd.



SHENZHEN CREALITY 3D TECHNO LOGY CO.,LTD.

18th Floor, JinXiuHongDu Building, Meilong Road, Xinniu Community,

Minzhi Street, Longhua District, Shenzhen City, China.

Official Website: www.creality.com

Tel: +86 755-8523 4565

E-mail: cs@creality.com



R 214-230341

