



# **USER MANUAL**

Creality Hi 3D Printer



#### 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:

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 "Support  $\rightarrow$  Download Center", select the corresponding model to download the required firmware, (Or click on "Creality Cloud  $\rightarrow$  Downloads  $\rightarrow$  Firmware"), after installation is complete, you can use it.

#### Product Operation and After-Sales Service Information

1. You can log in to the Creality Official Wiki (https://wiki.creality.com) to explore more detailed after-sales service tutorials.

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



### NOTES

Do not use the printer in any way other than described herein in order to avoid personal injury or property damage;
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;

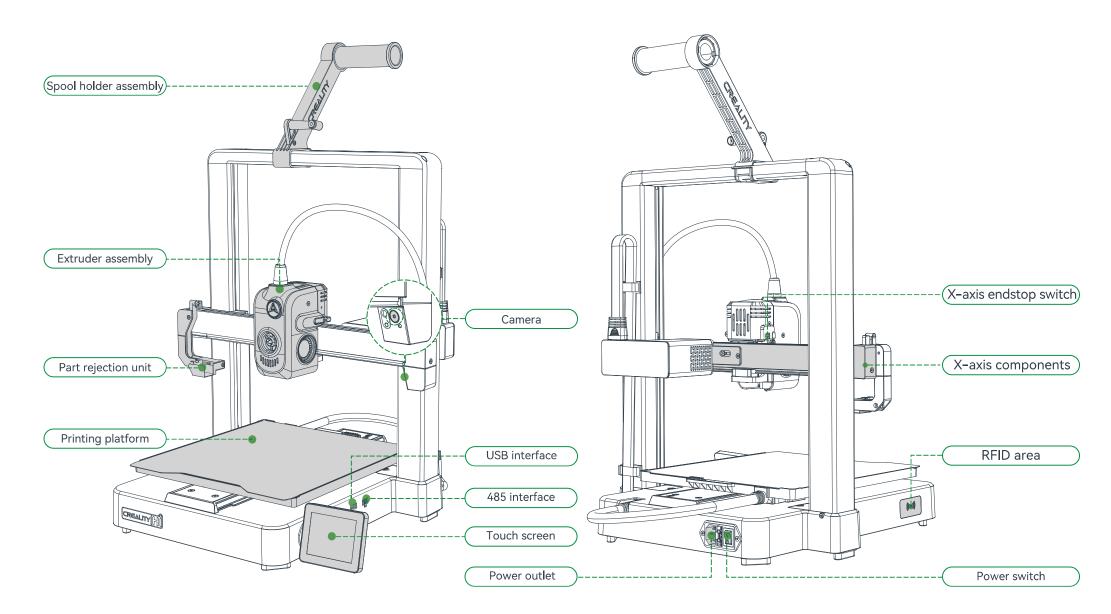
11. Users should comply with the laws and regulations of the corresponding countries and regions where the equipment is located (used), abide by professional ethics, pay attention to safety obligations, and strictly prohibit the use of our products or equipment for any illegal purposes; Creality will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

12. Tip: Do not plug in or unplug wires on a charged basis.

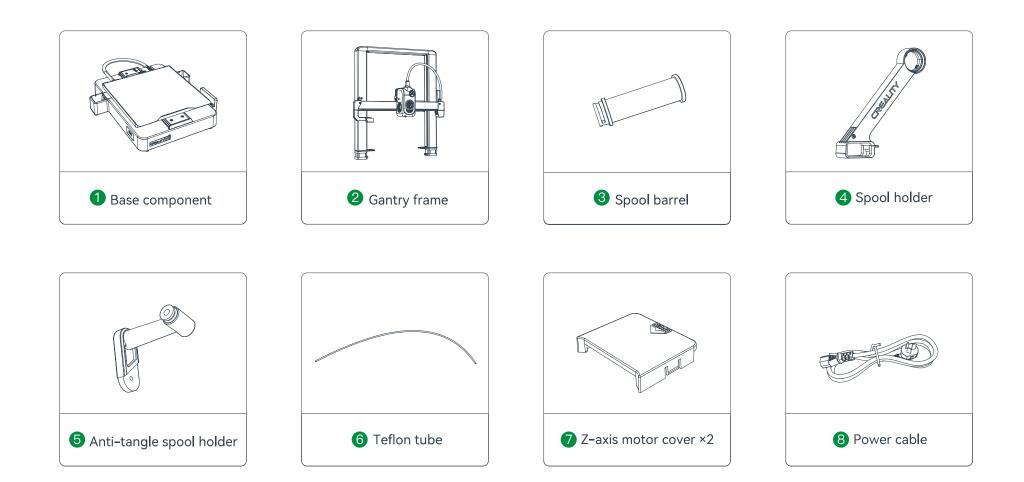
# Contents

1. About the Printer • • • • • • • • • • • • • • • • • • •
2. Parts List ••••••••••••••••••••••••••••••••••••
3. Assembly Procedure · · · · · · · · · · · · · · · · · · ·
3.1 Install Gantry Frame Assembly ••••••••••••••••••••••••••••••••••••
3.2 Gantry Frame Motor Wiring · · · · · · · · · · · · · · · · · · ·
3.3 Install Spool Holder Assembly and Rotate Screen •••••••••••••••••••••••••••••••••••
3.4 Equipment Wiring ••••••••••••••••••••••••••••••••••••
3.5 Connecting CFS · · · · · · · · · · · · · · · · · · ·
3.6 Connecting Multiple CFSs for Use · · · · · · · · · · · · · · · · · · ·
4. About the Power-on Guide and User Interface ••••••••••••••••••••••••••••••••••••
4.1 Power-on guide • • • • • • • • • • • • • • • • • • •
4.2 Overview of Equipment Interface ••••••••••••••••••••••••••••••••••••
5. First Print · · · · · · · · · · · · · · · · · · ·
5.1 Spool Holder Filament Editing/Loading ••••••••••••••••••••••••••••••••••••
5.2 CFS Filament Editing/Loading • • • • • • • • • • • • • • • • • • •
5.3 LAN Printing ••••••••••••••••••••••••••••••••••••
5.4 Creality Cloud printing ••••••••••••••••••••••••••••••••••••
5.5 USB flash disk Printing ••••••••••••••••••••••••••••••••••••
6. Functional Specification · · · · · · · · · · · · · · · · · · ·
6.1 RFID Filament Recognition ••••••••••••••••••••••••••••••••••••
6.2 CFS Filament Management/Loading/Unloading ••••••••••••••••••••••••••••••••••••
6.3 Auto Retraction ••••••••••••••••••••••••••••••••••••
7. Equipment Maintenance • • • • • • • • • • • • • • • • • • •
7.1 Platform plate removal and maintenance • • • • • • • • • • • • • • • • • • •
7.2 Optic Axis Maintenance ••••••••••••••••••••••••••••••••••••
7.3 X-axis Belt Tension Adjustment · · · · · · · · · · · · · · · · · · ·
7.4 Teflon tube Replacement ••••••••••••••••••••••••••••••••••••
8. Specifications · · · · · · · · · · · · · · · · · · ·

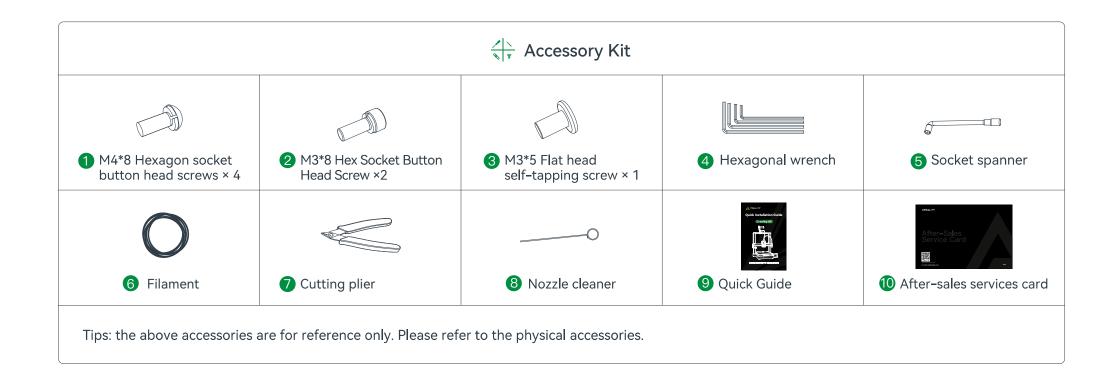
# 1. About the Printer



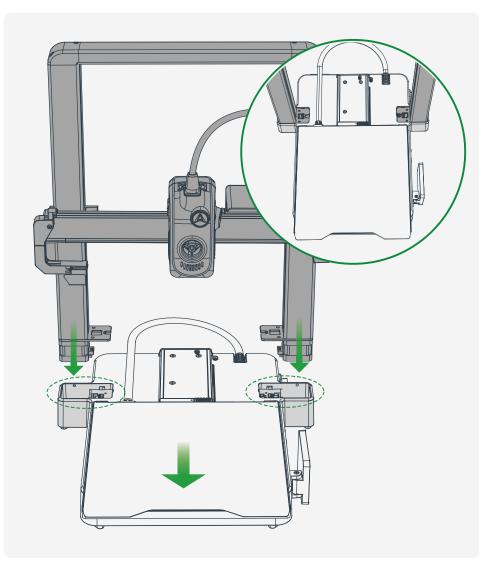
2. Parts List



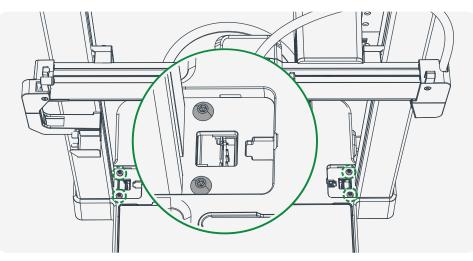
### 2. Parts List



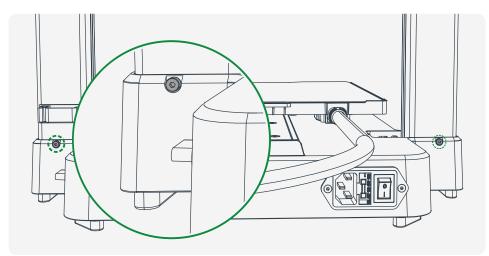
#### 3.1 Install Gantry Frame Assembly



1 Push the platform plate forward to expose the side slots, then place the gantry frame into the base slots;

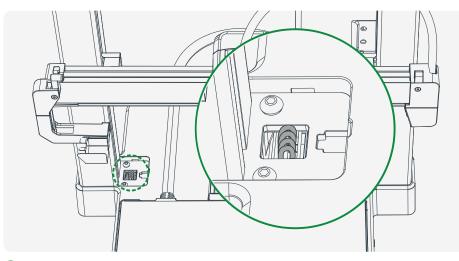


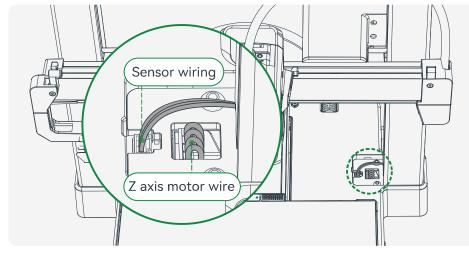
2 Align the gantry frame with the base holes and tighten with four M4\*8 screws;



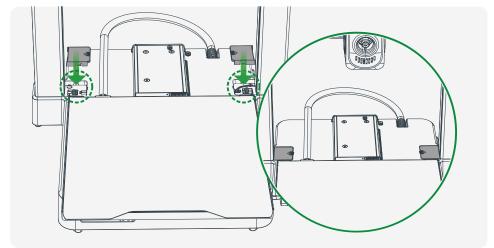
- **3** Use two M3\*8 screws to lock against the holes on the back side of the base.
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#### 3.2 Gantry Frame Motor Wiring





Connect the left Z-axis motor wire;



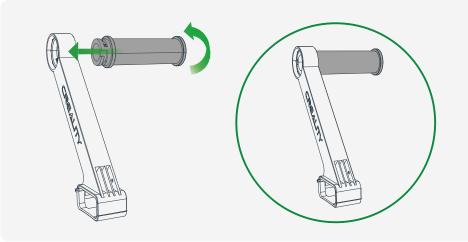
**3** Install the Z-axis motor covers.

2 Connect the right Z-axis motor wire and sensor wire;

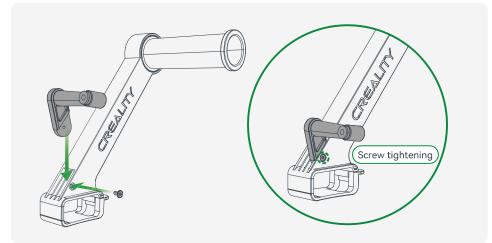
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When installing the Z-axis motor covers, make sure the wires are pressed into the bottom of the wire channel to avoid the motor covers pinching the wires.

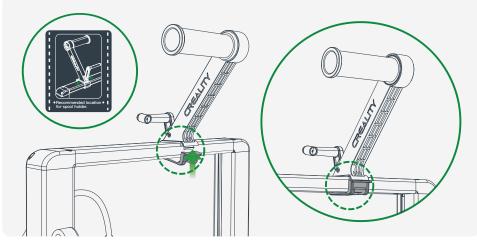
#### 3.3 Install Spool Holder Assembly and Rotate Screen



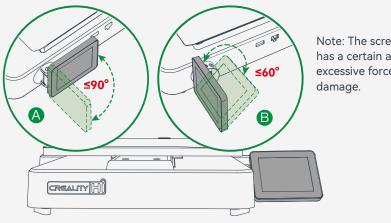
1 Install the spool holder and spool barrel according to the diagram;



2 First fix the anti-tangle spool holder onto its assembly according to the diagram, and then tighten it with a M3\*5 screw;



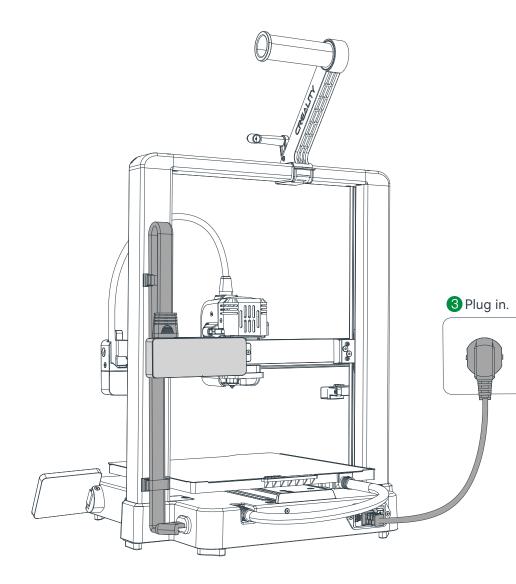
3 As indicated by the label on the gantry frame marked "Recommended installation position for spool holder", attach the spool holder assembly to the top of the gantry;

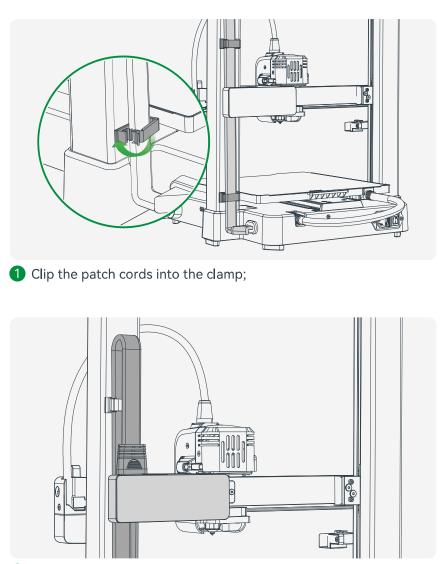


Note: The screen rotation has a certain angle limit, excessive force may cause

4 Rotate the screen to the front according to the diagram.

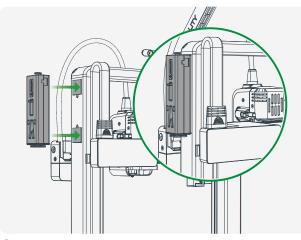
### 3.4 Equipment Wiring



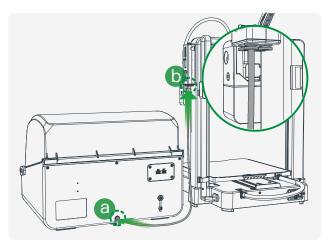


**2** Connect the patch cords to the X-axis motor.

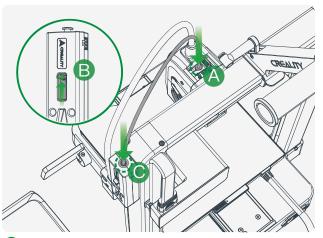
#### 3.5 Connecting CFS



Follow the diagram to remove the adhesive and stick it to the corner of the gantry, then install the buffer on the gantry (pay attention to the direction of the buffer).

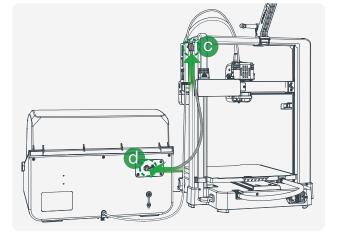


2 First, cut a 60cm piece of Teflon tubing. Then insert one end of the Teflon tubing into the CFS consumable outlet (position a); insert the other end into the buffer (position b, it can be inserted into any one of the four holes).

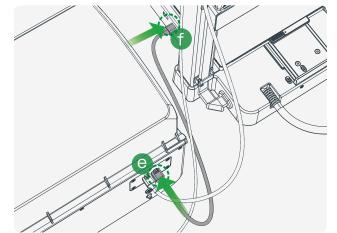


**3** First, cut a 65 cm Teflon tube, then follow steps A, B, and C to connect the buffer and Creality Hi.

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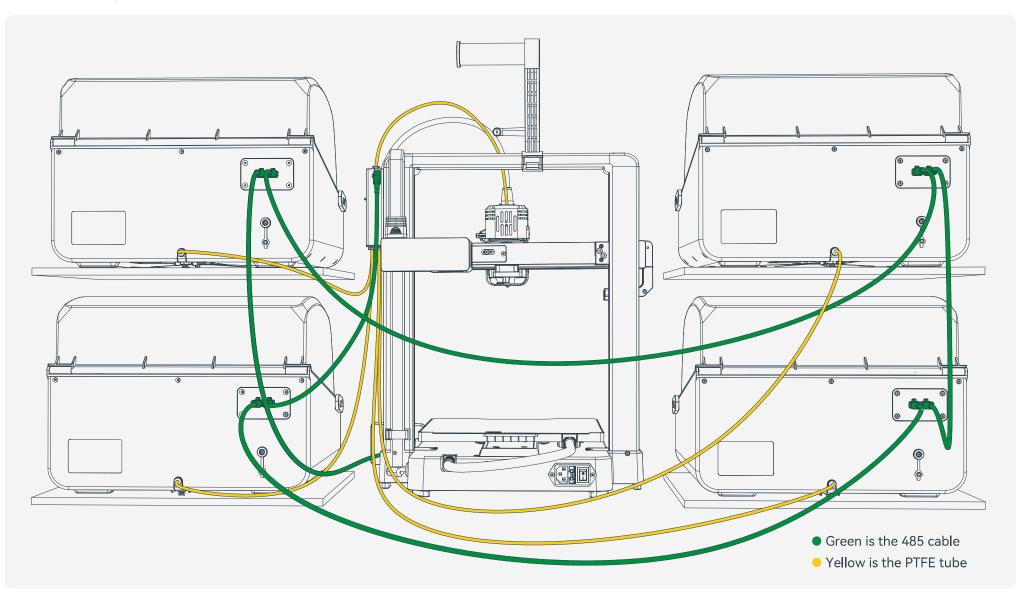
• Connecting CFS to Buffer 485 Communication Line: Note, insert the bent connector into position C on the buffer and the straight connector into position D on the CFS (either of the two 485 ports on the CFS can be used).



Connecting the communication cable between CFS and Creality Hi 485: This cable has 6-pin straight connectors on both ends, with no distinction between front and back. One end should be plugged into position e on the CFS, and the other end should be plugged into position f on the machine interface. (1) The above cutting dimensions of the Teflon tube are calculated based on the optimal distance of 15–20cm that needs to be maintained between CFS and Creality Hi, and are provided for reference only;

(2) If the ends of the cut Teflon tube are deformed, they need to be manually restored to a circular shape, otherwise, it may easily cause jamming.

### **3.6 Connecting Multiple CFSs for Use**

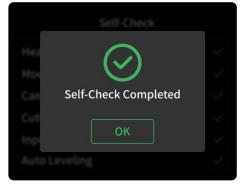


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#### 4.1 Power-on guide

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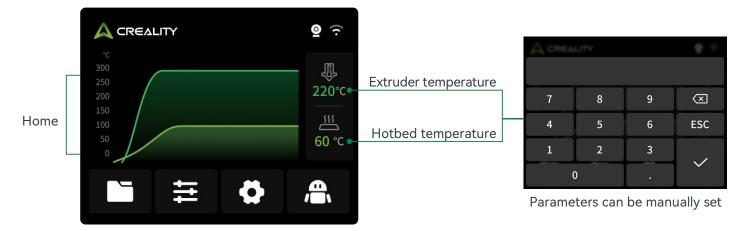


If any abnormalities occur during the self-check process, please refer to the FAQ to check for possible machine malfunctions; Alternatively, scan the QR code for "fault reporting" to report the machine issue and seek assistance from the after-sales service for problem resolution.

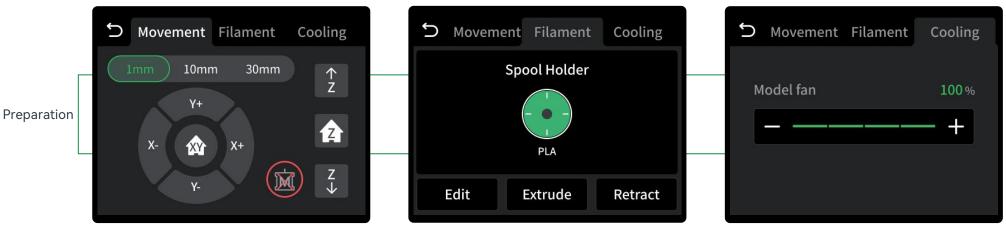
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The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

#### 4.2 Overview of Equipment Interface



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

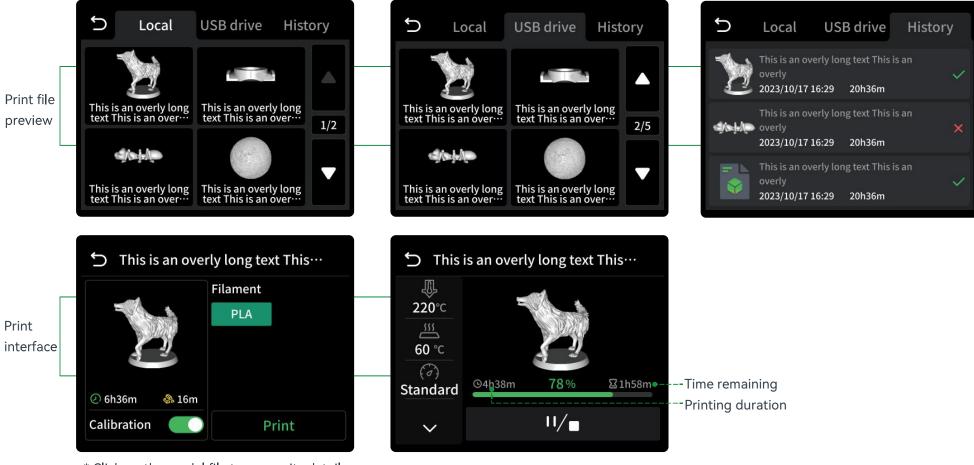


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\*Functions such as axis movement, filament editing/extrusion/retraction, cooling, etc., can be set via the preparation interface.

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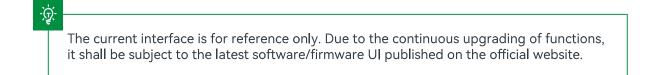
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

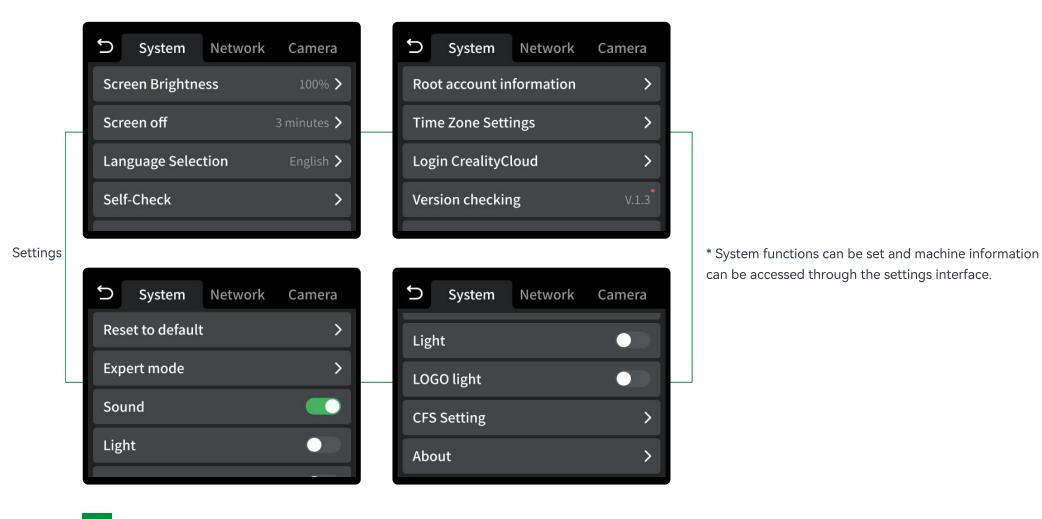


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\* Click on the model file to access its details

\* Checking "Print calibration" can improve print quality

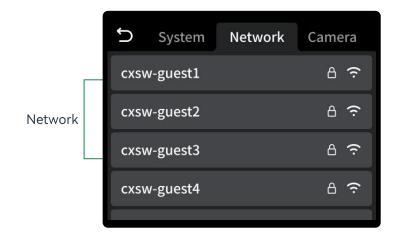


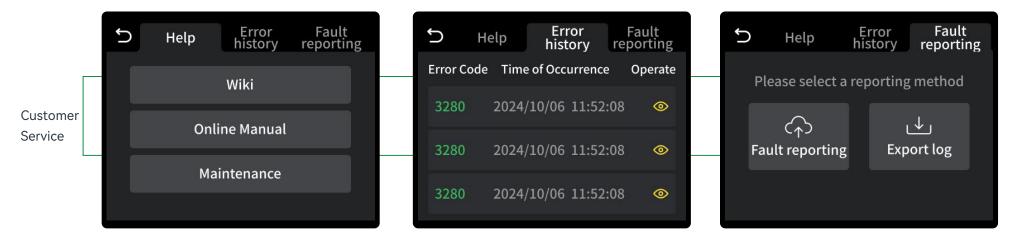


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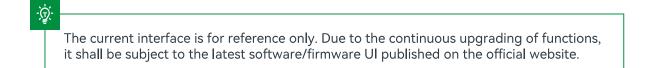
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The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

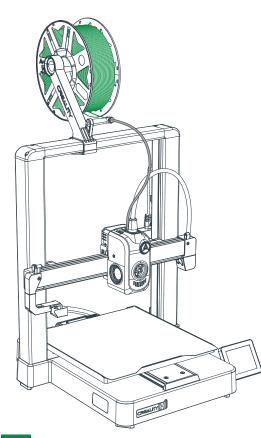




\* FAQs, manuals, error history, upload logs, etc. can be viewed through the customer service interface.

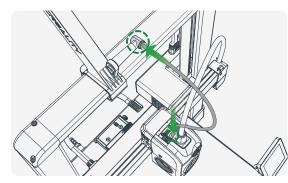


#### 5.1 Spool Holder Filament Editing/Loading

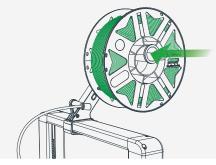


Before clicking to feed the material, you may gently pull the material outward. If you can't pull the material out, it means the gear has already gripped the material, so click the feed button on the screen to proceed normally. If you can pull the material out, you will need to repeat step (3).

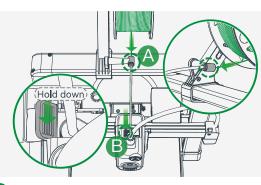
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1 Install the Teflon tube;



**2** Hang the filament onto the spool holder assembly;



3 A. Thread the consumable through the anti-tangling material rack; B. Hold down the extruder wrench while inserting the consumable into the Teflon tube as deeply as it will go, then release.



Movement Filament Cooling Spool Holder PLA Edit Extrude Retract

Click on "Extrude";

Click on "Filament"→ "Edit", then set the filament brand, type, name, and color, and finally click OK to save the settings;(RFID consumables do not require editing)

Extrude

Nozzle Heating Check filament position Feed the new filament

Feed Filament Flush old filament Extruding completed Extrusion completed;

Waiting for the extruding process to complete;



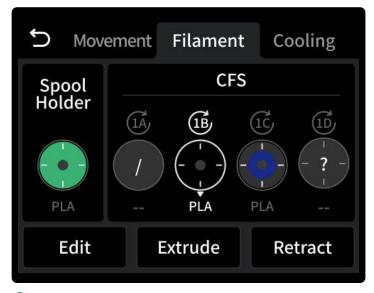
Filament extrusion from the nozzle

indicates successful extrusion;

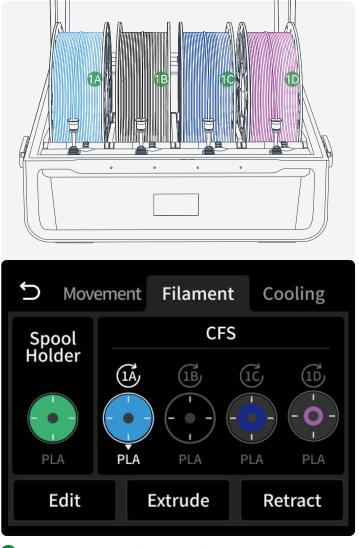
4 Set the filament information on the screen, dick on "Extrude" to complete the automatic extrusion.

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#### 5.2 CFS Filament Editing/Loading



Put in filament and wait for tightening (RFID filament does not need to be edited, in case of non-RFID filament, "?" will be displayed after reading, and filament needs to be edited manually);



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2 Check whether the filament information displayed on the screen corresponds to the filament in CFS.

#### 5.3 LAN Printing

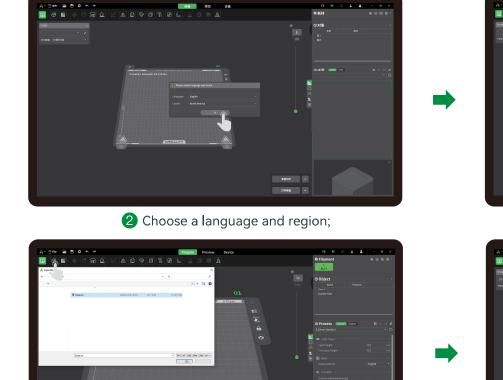


 Scan the QR code below to download the latest slicing software;

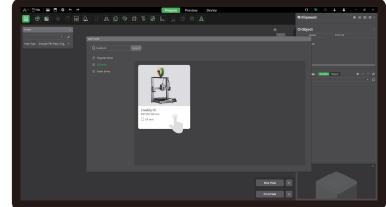




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4 Import a model file;



3 Choose a model;

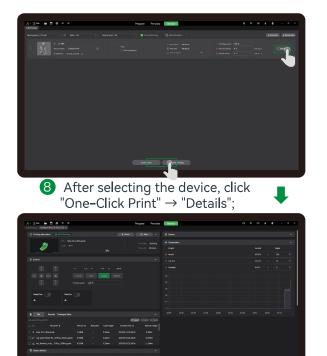


**<sup>(5)</sup>** Open the model and click on "Slice Plate";

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.



**6** Select "LAN Printing"  $\rightarrow$  "Multi-Machine Control";



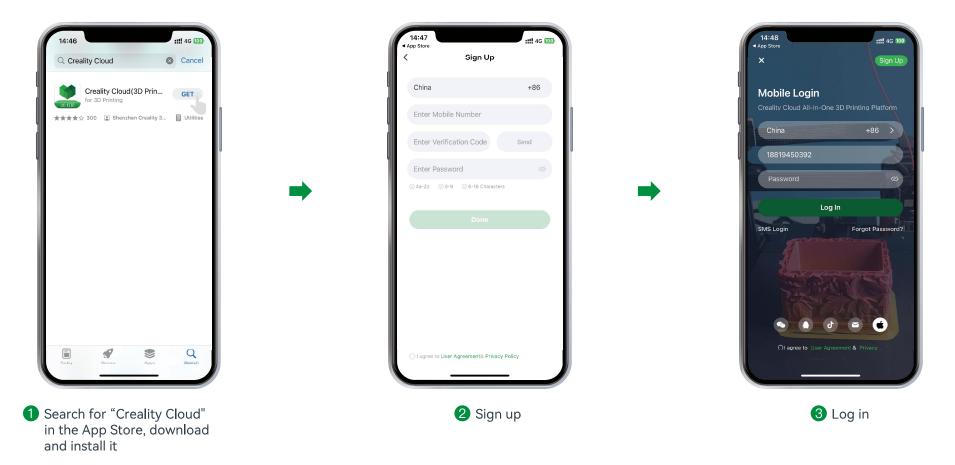


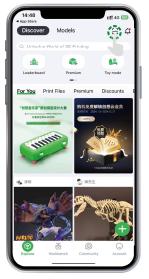


The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

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#### 5.4 Creality Cloud printing



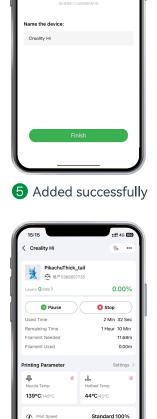


### 4 Add a new device





9 Select a device



Success



the homepage



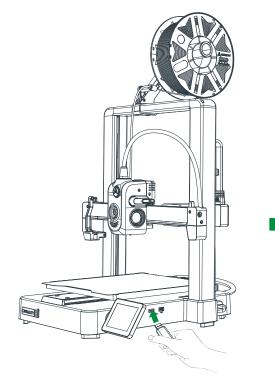


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The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website. ->>>

9 Printing...

#### 5.5 USB flash disk Printing



1 Insert the USB flash disk into USB port



**2** Select the model from the USB flash disk

This is an overly long text This…
Filament
PLA
6h36m 
 16m
 Calibration 

Print

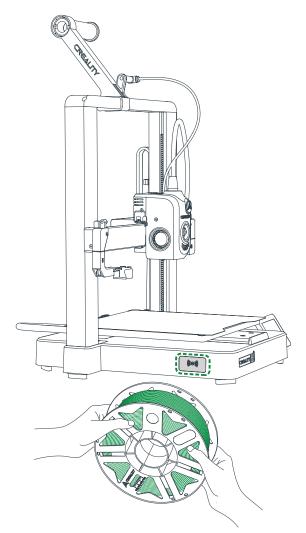
3 Click on "Print"

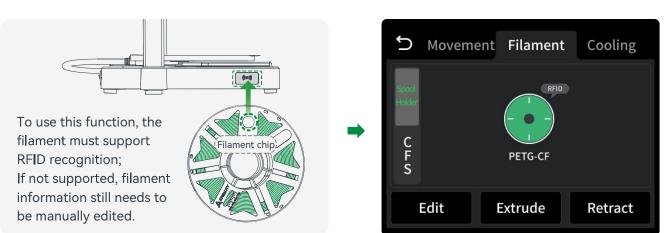
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### 6. Functional Specification

#### 6.1 RFID Filament Recognition





Align the chip on the filament with the RFID recognition area on the machine to scan and automatically read the filament information;

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① Please use the RFID scanning function when the machine is not printing, as filament information will not be automatically recorded while printing;

Filament information read successfully.

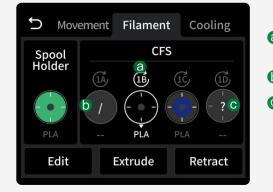
② A "beep" sound indicates successful filament information reading;

③ The RFID-scanned filament information appears on the display screen. The user can click to edit, and after editing, click "OK" to save the filament information. At this point, the user can remove the old filament and replace it with a new one.

### 6. Functional Specification

#### 6.2 CFS Filament Management/Loading/Unloading

To avoid filament spool getting stuck, do not use cardboard spool with untreated edges or cardboard spool that are deformed as a whole;

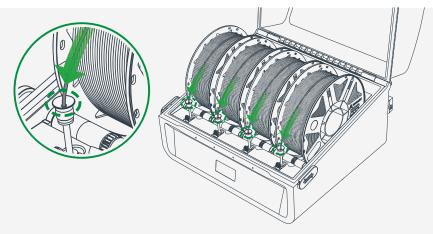


(a) is the Refresh RFID button, which can be used to read filament. If the reading is successful, the remaining filament and filament color will be displayed. If the reading fails, the filament editing button will be displayed, and the filament will be displayed as "?";

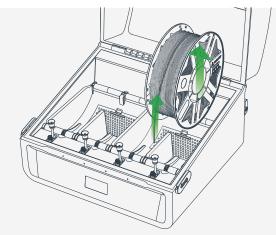
**b** is the empty slot state, displayed as "/", and editing is not supported;

• is the state where RFID is not read, the filament display "?". At this time, you need to click the edit button to manually edit the filament information;

Introduction to the filament management interface: The filament management page is divided into two parts: the spool holder [left] and the CFS [right]. The code above the filament in the CFS, such as 1A, indicates the slot number;



Loading filament: Put the filament into the CFS, align the filament head with the Teflon tube of corresponding silo, push it in gently, and let go after feeling the pulling force. The filament will be automatically loaded.



Unloading filament: First, make sure that the filament is not in the extruder, in this case, just pick up the filament and pull it out; if it is in the extruder, click the Retract button first, wait for the filament to return to the CFS, and then take out the filament.

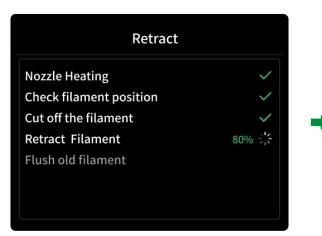
2 Load/unload filament.

### 6. Functional Specification

#### 6.3 Auto Retraction



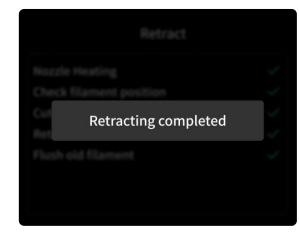
Click on "Retract";



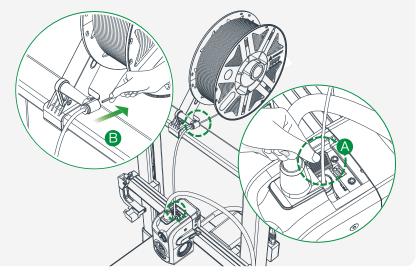
**2** Wait for the retraction to complete;

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Retraction completed;



4 A. Press down on the wrench; B. Remove the filament;

Do not manually retract the filament. Pulling out the filament manually may leave residue inside the extruder, and cause a blockage!

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.

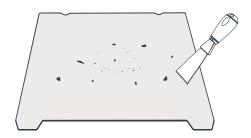
24

### 7. Equipment Maintenance

#### 7.1 Platform plate removal and maintenance



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.



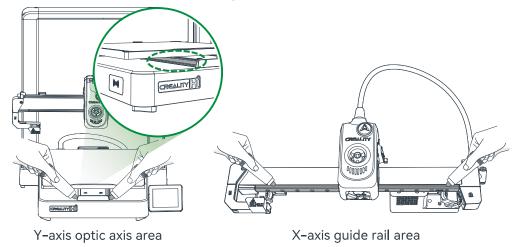
2 If there are residual filaments on the platform plate, scrape them off lightly with a blade and print again.

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- 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.

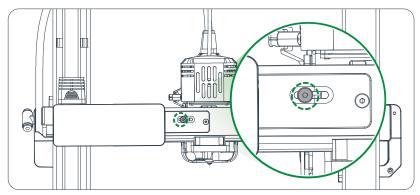
#### 7.2 Optic Axis Maintenance

It is recommended to purchase lubricating grease for periodic lubrication maintenance of the optic axis and guide rail areas.



#### 7.3 X-axis Belt Tension Adjustment

If the cutter fails to cut through the filament, adjust the X-axis belt tension; Loosen the screws as shown in the diagram to automatically release the belt tension, then tighten the screws.



# 7. Equipment Maintenance

#### 7.4 Teflon tube Replacement

During multi-color printing, a worn teflon tube can cause feeding issues. We recommend users check the condition of the teflon tube weekly. If any wear is found, please replace it promptly to avoid affecting normal printing.

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https://wiki.creality.com/en/cr-series/creality-hi



For more detailed maintenance and repair guidance, please visit the Creality official wiki.

# 8. Specifications

	Specifications
Scanning model	Creality Hi
Modeling technology	FFF
Modeling dimensions	260*260*300mm
Leveling method	Auto Leveling
Number of extruder	1
Extruder diameter	0.4mm
Slice thickness	0.1–0.35mm
Nozzle temperature	≤300°C
Hotbed temperature	≤100°C
Filament type	Hyper-PLA/PLA/TPU/PETG/ABS/PLA-CF
Rated power	1150W
Rated voltage	100-240V~, 50/60Hz
Filament detection	Yes
Power loss recovery	Yes
Working mode	USB flash drive printing/LAN printing/Cloud printing
Print file format	Gcode
Slicing software	Creality Print
Operating system	Windows/MAC OS
Language	中文/ English/ Español/ Deutsche/ Français/ Русский/ Português/ Italiano/ Türk/ 日本語/ 한국어

27

#### **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 TECHNOLOGY 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

