# CreatBot

# CreatBot PEEK-250
## User manual
English V1.0

Henan Creatbot Technology Limited

# CONTENTS

## Icon conventions

Tip icon to remind users to have a good method or technique.

Note icon, to remind the user must be given adequate attention.

Prohibition icons, prevents users from unauthorized operation.

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# Notice

## Read First

Thank you for choosing CreatBot 3D printer!

This manual contains important information about the installation, use, maintenance and common problems of CreatBot 3D printer. Please read this manual carefully before using 3D printer. All losses caused by the breach of the notes and the operation process of the operation process will be borne by the user. Please use the filament provided by CreatBot, or high quality filament by third manufacturers. Due to the use of third party inferior material caused by the failure of the printer, the loss will be borne by the user.

Software running environment, 2G or above processors, at least 1G memory, compatible with Windows, MAC, or Linux, please use memory as much as possible.

I wish you have fun with CreatBot 3D printer!

## Danger Warning

The nozzle's temperature will reach 420 degrees,  don't touch.

The platform's temperature will reach 100 degrees,  don't touch.

Please make sure that the printer connected to the ground.

Do not attempt to open the case, be careful of electric shock.

## Working Environment

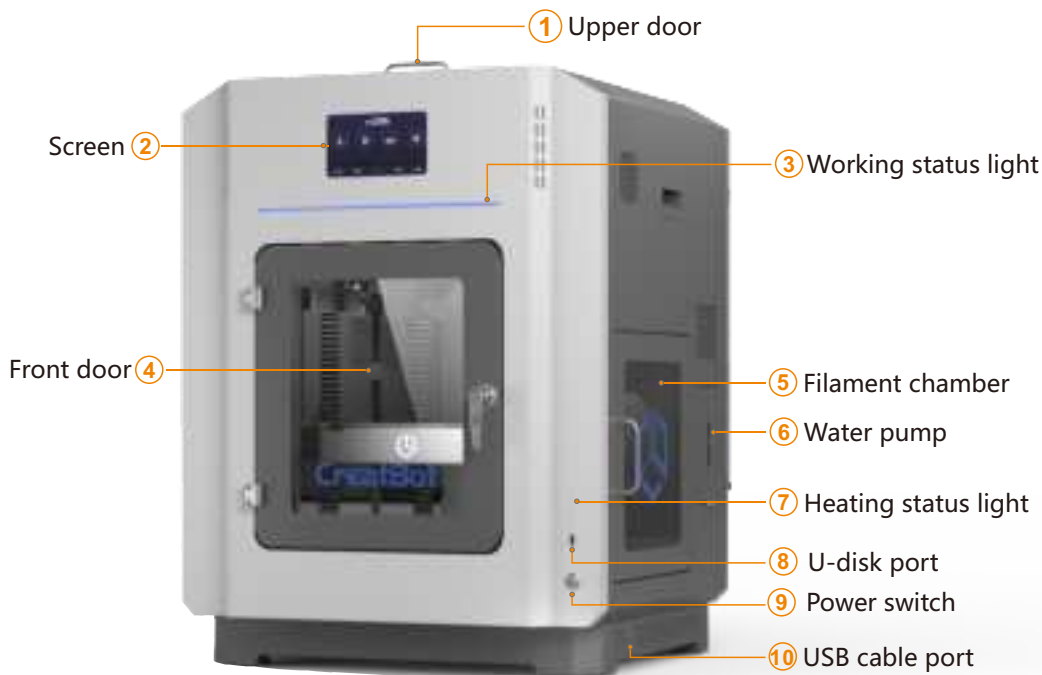The 3D printer can work in the indoor environment of 5 ℃ to 30 ℃.

Long-term not use of the printer, be sure to keep off dust, moisture.

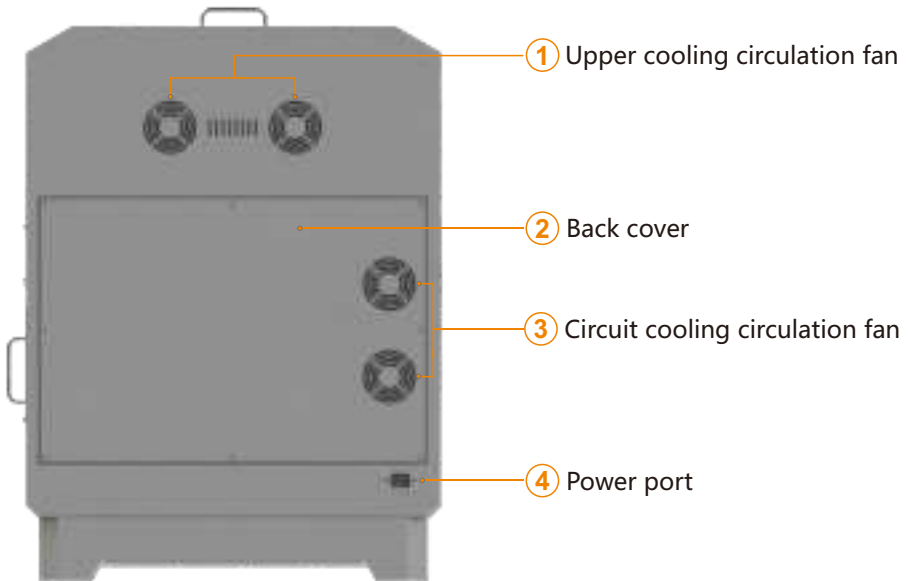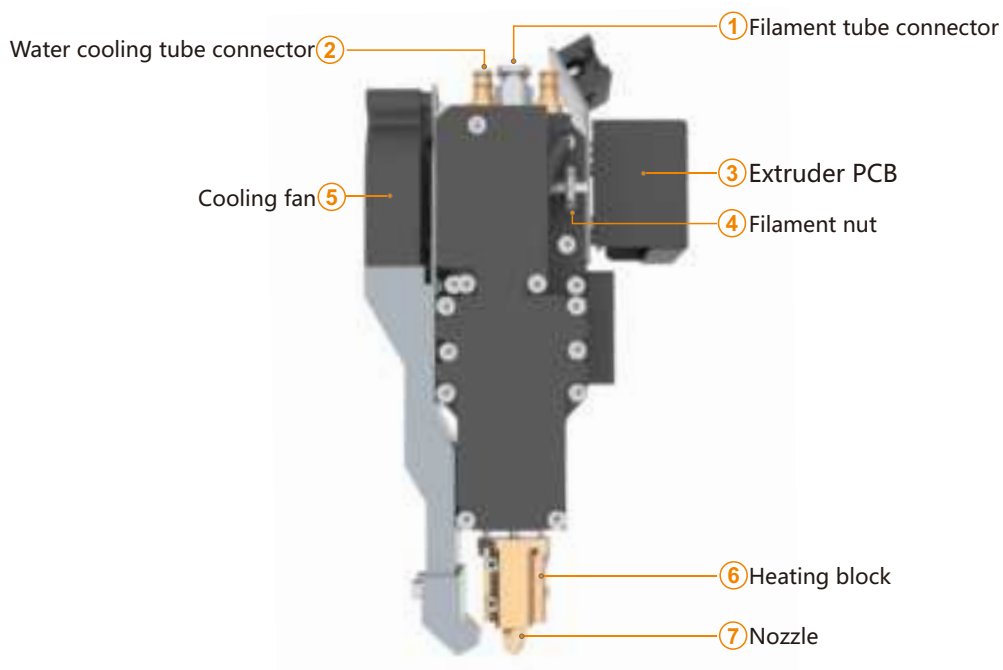Long-term not use of the filament, please be sealed to prevent deterioration.
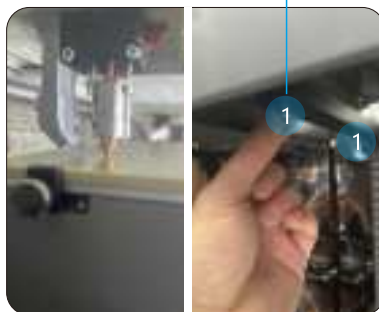
# CreatBot

## Machine Diagram

Front

① Upper door

Screen ②

③ Working status light

Front door ④

⑤ Filament chamber

⑥ Water pump

⑦ Heating status light

⑧ U-disk port

⑨ Power switch

⑩ USB cable port

# Machine Diagram

Rear



① Upper cooling circulation fan

② Back cover

③ Circuit cooling circulation fan

④ Power port

# Machine Diagram

Extruder

Water cooling tube connector ②

① Filament tube connector

③ Extruder PCB

④ Filament nut

Cooling fan ⑤

⑥ Heating block

⑦ Nozzle

# Printer Operation

## Leveling Platform

Leveling nuts



1. Turn on printer.
2. Click "Move" > "All home" on the screen.
3. Move the extruder by hand to 4 corners of bed, and check the distance between nozzle and bed. Tighten or loosen 4 adjusting nuts below the bed to make sure the distance between nozzle and bed is around 0.1mm with feeler blade or approximately the thickness of one business card in all corners to ensure the bed is Leveled.

# Printer Operation

## Load Filament


Preheat head


Straightened filament

     1. Preheat nozzle.

     2. Straighted filament and check the filament do not self-winding.

     3. Thread the filament through the filament sensor and manually load the filament until it into the extruder.

     4. Click "Load", until the filament come out from the nozzle.

     5. Click "Done".

⚠️ *Notice*: *Pressed filament too tight or too loose will affect normal wire feeding.*

# Printer Operation

## Unload/Change Filament



Unload filament menu



Preheat head



Pull out filament

1. Enter "Filament" menu, click "Unload".

2. Wait for the nozzle heated to the suitable temperature.

3. After reaching temperature, extruder will extrude a little filament, then unload the filament from extruder.

4.Pull the filament out of the tube.

# Printer Operation

## Touch screen

| | |
|---|---|
| 210°C <br> 25°C | **Touch and set up the temp of the nozzle.** <br> 210°C Preset nozzle temperature <br> 25°C Current nozzle temperature |
| 110°C <br> 45°C | **Touch and set up the temp of the hotbed.** <br> 110°C Preset platform temperature <br> 45°C Current platform temperature |
| 70°C <br> 25°C | **Touch and set up the temp of the Chamber.** <br> 70°C Preset Chamber temperature <br> 25°C Current Chamber temperature |

# Printer Operation

## Touch screen

| Main Menu |
| --- |



| | | | | |
| --- | --- | --- | --- | --- |
| 🌡️ | preheat | | 💾 | Open U-disk |
| 🌡️ | Cool down | | 💾 | USB unavailable |
| 🔵 | Filament menu | | Z⬆ | bed up |
| ✛ | Move axis | | Z⬇ | bed down |
| ▷ | resume | | ⬜ | stop |
| ⚙️ | Setting | | ⏸️ | pause |

# Printer Operation

## Touch screen

| | |
|---|---|
|  | Adjust. During printing, you can click itto adjust the print speed fan speed andthe extrusion. |

| | |
|---|---|
|  | Current printing progress |

| | | |
|---|---|---|
| change | pause | stop |



print speed： 100%
flow rate： 100%
colling fan speed： 100%

# Printer Operation
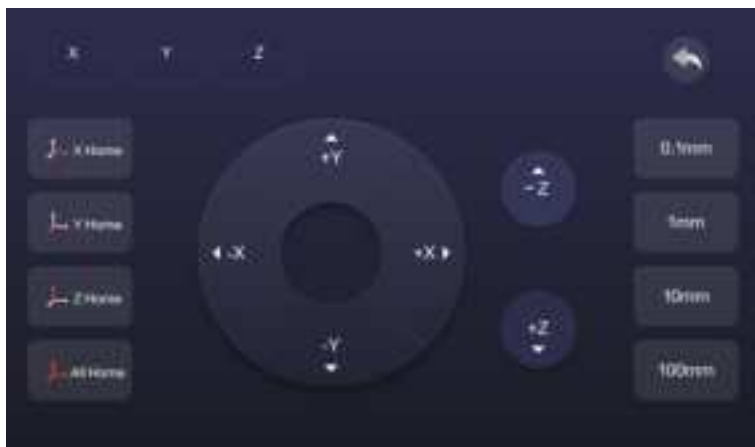
| | | | |
|---|---|---|---|
| X Home | Move X to home | 0.1mm | Minimum units |
| Y Home | Move Y to home | 1mm | |
| Z Home | Move Z to home | 10mm | |
| ‖ Home | All axis to home | 100mm | |

| | | |
|---|---|---|
| ⇕ Move Y axis | ◁▷ Move X axis | ⇕ Z down/up |
| ↩ Back | | |
| X  Y  Z | X,Y,Z current position of hotend. | |

![CreatBot logo]

# Printer Operation
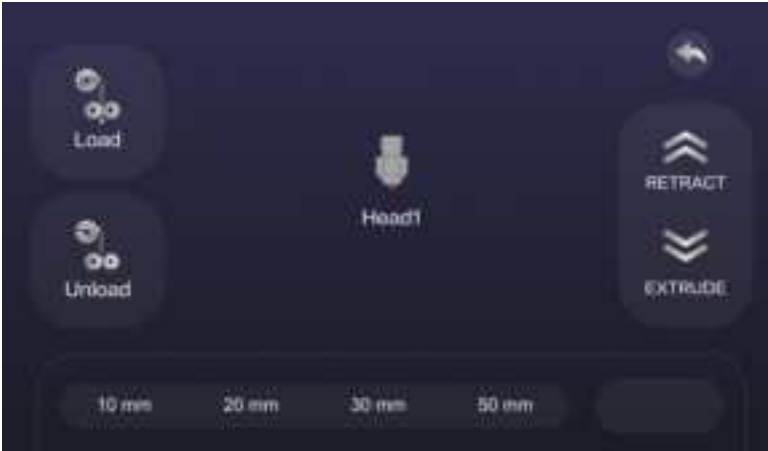
| | |
|---|---|
| ![extruder icon] | extruder |
| ![up/down arrows] | Extrude filament    /    Retract filament |
| ![back icon] | Back |
| ![value field] | Click and enter a value |

![Load icon] Load    ![Unload icon] Unload          load/unload

| 10 mm | 20 mm | 30 mm | 50 mm |
|---|---|---|---|

Adjust  value when extrude/retract filament

# Printer Operation

SD Card/U-disk
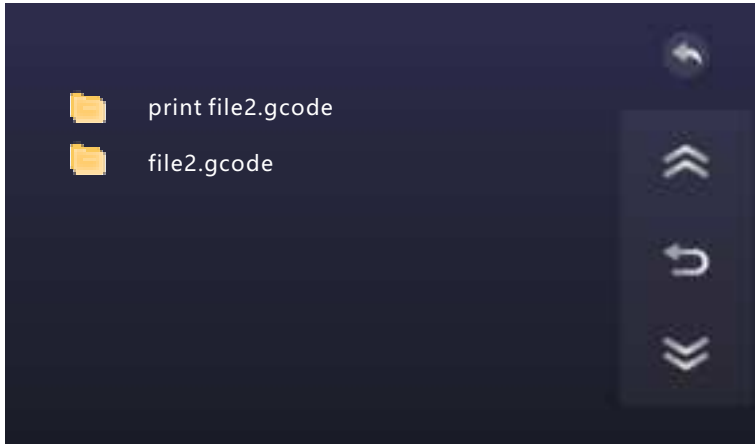
| | print file2.gcode |
|---|---|
| | file2.gcode |

| | Click and choose a file to print |
|---|---|
| | Last page |
| | Superior menu |
| | Next page |
| | Back |

# Printer Operation

| Time used 0000:00:00 | Print time used |
|---|---|
| Firmware 6.1.XXXXXX | Firmware version |
| UI version 6.1.0 | UI version |
| (back icon) | Back |

# Printer Operation
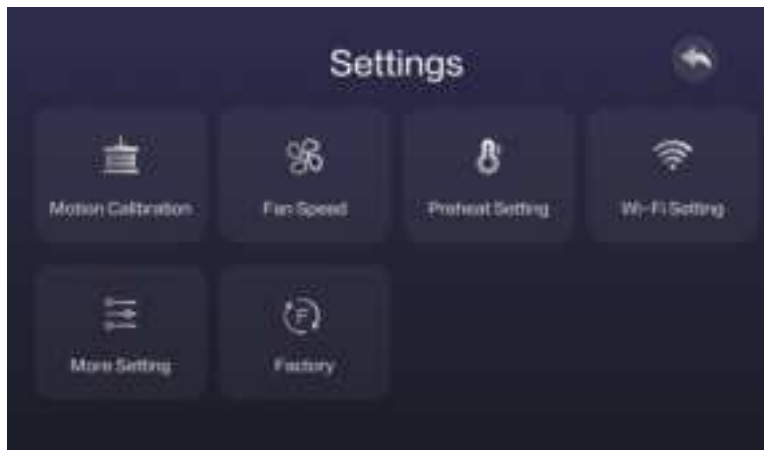
X/Y/Z and exturder motor setting (range:5-9999)

| | Save | | Back |
|---|---|---|---|
| | | | |

The values in the picture are not real values, the real values refer to the printer default values

**CreatBot**
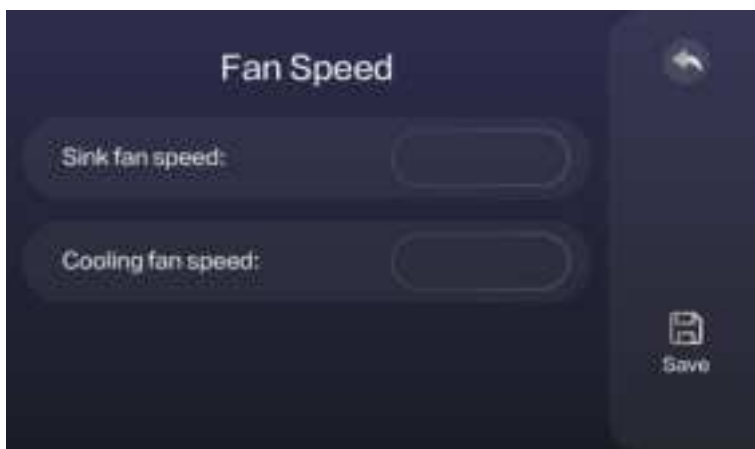
# Printer Operation

sink fan speed      (range:1-100)
cooling fan speed (range:1-100)
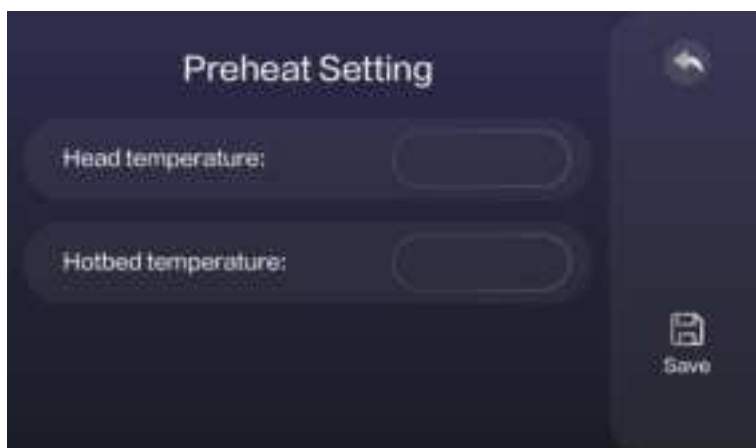


head temperature      (range:0-420)
hotbed  temperature  (range:0-100)

# Printer Operation

Enter the WiFi name and password, and click Connect. The printer will automatically connect to WiFi.

Only supports 2.4GHz Wi-Fi.

# Frequently Asked Questions

## Hardware Troubleshoot

**1.  Display "MINTEMP" ?**
The environment is too low, or temperature sensor is damaged, please keep the room temperature above 0℃.

**2.  Display "MAXTEMP" ?**
Temperature of nozzle or bed too high, or temperature sensor is damaged, please keep their temperature in a suitable range.

**3. USB connection problems ?**
Please specify the correct port and baud rate (250000), or change a shorter USB cable.

**4. Nozzle heats up too slowly ?**
Temperature in door is too low, or use a fan duct, or  turn up output voltage (24.5v).

**5. Print head stuck ?**
Clean the guide rail and add lubricating oil.

**6. Print head can not move ?**
Stepper motor chipset burned, or belt damaged, or belt wheel screw loose.

**7. Print head hit the framework ?**
Corresponding axis stop limit or circuit fault.

**8. Unable to power on ?**
Power switch is damaged or fuse is burned, and please check whether the power adapter is working properly or power check board is damaged.

## Printing Troubleshoot

**1. How to set the temperature of the nozzle ?**
Different filament temperature is different, general as follows:
PLA temperature 190℃~210℃,bed 45-60℃.
ABS temperature 230℃~250℃,bed 80-100 ℃.
You must leave enough time for filament heating, so the faster printing speed need the higher temperature, 60mm/s temperature need raise about 10℃. In the same way, larger thickness need higher temperature.

**2. How to set the temperature of the hot bed ?**
The main purpose of the hot bed is to prevent model wrapped, PLA need about 45℃ and 70℃ for ABS is enough, but due to the environment and filament, we often need to increase the temperature, the highest temperature

# Printing Troubleshoot

not over 120℃, and you can close the bed above 100mm except printing ABS or other high-temperature required filaments.

**3. The model not stick on the platform ?**
Please paste masking paper or Kapton tape on the platform, or the nozzle is too far away from the platform, or the bottom of the model is not flat.

**4. No or less silk coming on the first layer ?**
The distance between nozzle and platform is too small, or the filament has not been sent to the nozzle.

**5. Why nozzle is not spit silk ?**
The filament is not pressed or too tight, or print temperature is too low, or the filament feeder not working.

**6. How to prevent model become warped ?**
Increase hot bed temperature or use Kapton, or change platform adhesion type to Raft, or cover the baffle, or reduce indoor ventilation.

**7. How far from nozzle to platform appropriate ?**
Distance should be 0 in theory, but there is no absolutely flat platform, so the distance should +-0.1mm. Finally, with the actual printing effect as the standard, too close will lead to a silk blocked, too far will cause the model not stick on the platform.

**8. How to determine whether the temperature is too high ?**
PLA temperature is too high will appear liquefaction, ABS will be the carbide, that will block the nozzle.

**9. What reasons will causing nozzle blocked ?**
Filament are impurities or print environment dust too much, bad of thermal conductivity between the nozzle and the heating block.

**10. Model surface is loose with crack ?**
The layer is too high or the printing speed too fast, nozzle temperature too low or filament press nut too loose, or filament is wrapped.

**11. How to print a small model ?**
Multiple the model, and print them at a time.

**12. Dual color model not aligned ?**
Adjust offset of second nozzle in machine settings.

**13. Dual color model color interference ?**
Align two nozzle in vertical direction

**14. There is too much silk drag on the model ?**
Please enable filament retraction, and specified proper retract speed, and distance, the retract distance should not less than 4mm, and the speed not less than 10mm/s.

# CreatBot

Quality · Experience · Service

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