

# **3D Printer User Manual**



#### Dear consumers

Thank you for choosing the product of Piocreat3D. For your convenience, please read this manual carefully before use and operate strictly according to the instructions in the manual.

The Piocreat3D team is always ready to provide you with quality service. No matter what problems you encounter during use, please contact us by phone or email at the end of the manual. In order for you to better experience our products, you can also obtain equipment operation knowledge from the following methods:

Random instructions: You can find relevant instructions and videos in the U disk.You can also log in to the official website of Piocreat3D (www.piocreat3d.com) to find relevant software and hardware, contact information, equipment operation, equipment maintenance and other information.

#### Product operation and after-sales service video

Contact after-sales for processing: Hotline: +86 0755-2103 9743, E-mail: after@piocreat3d.com

#### NOTES

|   | >    |
|---|------|
| Do not try to use the machine in any way not described in the instructions to avoid accidental personal injury and property loss;   |      |
| 2 Do not place the machine in flammable and explosive materials or near high heat sources. Please place the machine in a ventilated, cool and dust-free environment;  |      |
| On not place the printer in a vibrating or other unstable environment. The shaking of the machine will affect the printing quality of the printer;  |      |
| It is recommended to use Piocreat recommended consumables to avoid clogging the extruder and damage to the machine;   |      |
| <ul> <li>Do not use other product power cords instead during installation. Please use the power cord included with the machine. The power plug must be plugged into a three-hole socket was a ground wire;</li> </ul>   | rith |
| 6 Do not touch the nozzle and hot bed when the printer is working to prevent high temperature burns and personal injury;  |      |
| 🕖 Do not wear gloves or wraps when operating the machine to prevent movable parts from being squeezed and cut to human parts;   |      |
| After printing, use the residual heat of the nozzle to clean the consumables on the nozzle with tools in time. Do not touch the nozzle directly with your hands when cleaning to preve burns;   | nt   |
| 9 Perform product maintenance regularly. Clean the printer with a dry cloth regularly when the power is off, and wipe off dust, sticky printing materials, and foreign objects on the guide rails;  |      |
| ① Children under the age of 10 should not use the machine without supervision to avoid personal injury;   |      |
| Users should abide by the laws and regulations of the country and region where the equipment is located (where it is used), abide by professional ethics, pay attention to safety obligations, and strictly prohibit the use of our products or equipment for any illegal purposes. Our company is not responsible for any relevant legal liabilities that should be borne by violato | rs.  |
| 🕑 Warm reminder: Do not plug or unplug wires when they are powered on.  | ^    |

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# 1. Introduction

| 2<br>3<br>PICCREAT |  |
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|                    |  |

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| (      |   |                     |   |                |                            | 1 |
|--------|---|---------------------|---|----------------|----------------------------|---|
| 1      | 1 | Top door            | 6 | Start          | 11 Start button 2          |   |
|        | 2 | Nozzle 1            | 7 | Screen 1       | 12 Material rack 1         | į |
| i<br>I | 3 | Nozzle 2            | 8 | USB            | 13 Material rack-2         | 1 |
| 1<br>1 | 4 | Printing platform 1 | 9 | Screen 2       | 14 Secondary feeding group |   |
| 1<br>1 | 5 | Printing platform 2 | 1 | 0 Power switch |                            |   |
| l -    |   |                     | 1 | 1              |                            | 7 |

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# 2. Equipment parameters

| Basic Parameters          |                                |  |  |
|---------------------------|--------------------------------|--|--|
| Model                     | IPX2                           |  |  |
| Printing size             | 320×190×200mm                  |  |  |
| Molding technology        | FDM(Fused deposition modeling) |  |  |
| Nozzle number             | 2                              |  |  |
| Number of hot beds        | 2                              |  |  |
| Nozzle diameter           | 0.8 (0.4,0.6mm optional)       |  |  |
| Printing accuracy         | ±0.1mm/100mm                   |  |  |
| Printing materials        | TPU-95A/90A/85A/80A/,TPE-83A   |  |  |
| Support file formats      | STL、OBJ、3MF                    |  |  |
| File transfer             | U disk/WIFI                    |  |  |
| Slicing software          | Piocreat Slicer                |  |  |
| Nozzle temp               | ≤300°C                         |  |  |
| Hot bed temp              | ≤100°C                         |  |  |
| Diameter of consumables   | 1.75mm                         |  |  |
| Language                  | English/Chinese                |  |  |
| Computer Operating System | Windows/MacOS                  |  |  |
| Rated Power               | 600W                           |  |  |

#### 3. Package content



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Tips: the above accessories are for reference only, in kind prevail!

#### 4. Assembly steps

- 1 Connect the touch screen and the base screen cable; please plug in according to the direction shown in the figure;
- 2 Insert the clips on the back of the touch screen into the slots on the base and press down to the bottom.



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- 1 Do not power on the machine when the touch screen is connected or disconnected;
- ② Gently pull the base screen cable and be careful not to break it.





#### 5. Boot

1 Connect the power cord, tap the start button on both sides of the screen to turn on the computer, and then follow the on-screen power-on instructions to select and confirm. Both screens can perform power-on self-test at the same time.

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The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.

#### 5. Boot

2 Entering the power-on self-test process will take about 15 minutes, please wait patiently.



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| Self-c | heck completed |
|--------|----------------|
|        | ок             |
|        |                |

#### Kind tips:

If an abnormality occurs during the self-check process, you can first refer to the FAQ to check the cause of the machine failure; or resolve the machine failure through after-sales service. The current interface is for reference only. Due to the continuous upgrading of functions, the latest software/firmware UI on the official website shall prevail. 11

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\* You can set the nozzle temperature and hot bed temperature on the home page;

Parameters can be set manually;

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\* You can set axis movement/temperature, feeding and retracting, fan cooling and other functions through the preparation interface

The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.

#### 7. Consumables assembly



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



2 Cut the front end of the consumables at 45°;



3 As shown in the figure, place the consumables on both sides on the two side material loading inside the door, and pass the consumables from bottom to top into both sides of the secondary feeding group;



4 Press down the extrusion clamps on both sides of the secondary feeding group, and connect the filament to the nozzles on both sides after it passes through completely;

#### 8.1 Material return



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



3 Simply pull out the old consumables from the back of the machine and replace them with new ones.



2 A. Press down the nozzle extrusion clamp handle; B. Press the Teflon pipe joint above the extruder and pull out the Teflon pipe;

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Method 1: Manual return

The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.

#### ·>>>

#### 8.1 Material return

Method 2: Automatic material return



1 Click "Retract";



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2 Waiting for return to be completed;



3 Pull out the old consumables from the back of the machine and replace them with new consumables.

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The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.

#### 8.2 Automatic feeding



1 After the filaments are assembled, A. press down the extrusion clamp handle of the nozzle;

B. insert the filament into the deepest part of the Teflon tube until it cannot move, and then release the extrusion clamp handle;



The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.



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2 Click "Extrude";



3 Wait for the feed to complete.

## 9. First Print

# 9.1 LAN printing

Open the random data in the USB disk to install the slicing software and bind the machine;



1 Click Settings on the machine screen to view the machine network IP;



3 Click "Single disk slicing", and after slicing is completed, click "LAN printing";



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2 Select the device in the slicing software to manually add and enter the machine IP binding



4 Select the bound printer, check the printer and consumables information, and click "One-click Print".



The current interface is for reference only. Due to continuous functional upgrades, the latest software/firmware UI on the official website shall prevail.

#### 9. First Print

## 9.2 USB flash drive printing



1 Insert the USB drive into the USB port;



2 Select USB model;



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3 Click "Print".



#### 10. Maintain

#### 10.1 Platform plate mold taking and maintenance



1 A. After printing is completed, wait until the platform plate cools down before removing the printing platform with the model attached;

B. Use both hands to slightly bend the platform to separate the model from the platform;



2 If there is residual consumables on the platform, you can use a scraper to gently scrape it off before printing;



3 If the first layer of the model is not sticky, it is recommended to evenly apply solid glue on the surface of the platform and then preheat and print.

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1. Do not bend it too much in daily use to prevent deformation and unusability;

2. The printing platform is a consumable part. To ensure the adhesion of the first layer model, it is recommended to replace it regularly.

#### 10.2 Optical axis maintenance

It is recommended to purchase grease to lubricate and maintain the optical axis area regularly.



X-axis and Y-axis areas



Z-axis area

#### 10. Maintain

#### 10.3 Maintenance Project

According to the use or prompt of the equipment, the equipment needs to be maintained regularly. The cycle and content are as follows:

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| Care and Maintenance Instructions  |  |  |  |  |
|--|--|--|--|--|
| Weekly maintenance   | <ol> <li>Lubricate the X/Y linear guide rails, clean the nozzles, and clean the fans;</li> <li>Clean the printing platform;</li> <li>Check whether the nozzle discharge is smooth and clean it;</li> </ol>   |  |  |  |
| 1. X/Y linear slide, Z-axis ball screw clean and oil lubrication;2. Whether X/Y/Z synchronous belt is loose, deformed or worn;3. Whether the nozzle fixing screw is loose;4. Whether the top wire of X/Y/Z synchronous wheel is loose;5. Whether the Y coupling fixing screw is loose;6. Auxiliary leveling, Z-axis compensation value confirmation; |  |  |  |  |
| Annual maintenance   | <ol> <li>X/Y linear slide, Z-axis ball screw clean and oiled.</li> <li>Limit switches are sensitive, joints are not loose;</li> <li>Whether the nozzle fixing screws are loose, the moving parts top wire coupling key check;</li> <li>Check the nozzle wear and tear, replace the nozzle.</li> <li>Clean up the fan dust.</li> <li>Nozzle adapter plate terminals to check the degumming situation.</li> <li>X/Y drag chain line wear check, found broken in time to replace;</li> <li>Replace the wind guide with broken parts in time;</li> </ol> |  |  |  |

#### 11. After-sales service card

#### Warranty Policy $\leftarrow$

- 1-year Limited Warranty since the date of product purchase.
- No Warranty for the Consumables and Toolbox(Blade, Needle, Cable ties, U disk, Socket wren, Nozzle).

#### What Is Covered? $\leftarrow$

Any defects in material, workmanship of product will be covered until you provide any relating documents and information, including but not limited to:

- User of the product are in the country of purchase
- Defective product is a PIOCREAT product
- Proof of Purchase

## What Is Not Covered? $\leftarrow$

PIOCREAT does not guarantee the service as a result of:

- 1. The proof of purchase being altered or made illegible.
- 2. The product label or serial number on the product being altered or made illegible.
- 3. Normal wear of accessories or consumables for use as release film.
- 4. Malfunction or damage caused by personal retrofitting, or improper installation and usage.
- 5. Malfunction or damage caused by use in non-recommended working environments.
- 6. Malfunction or damage caused by overuse (overload) or wrong maintenance (damp, mildew, etc.)
- 7. Malfunction or damage caused by Force Majeure (fire hazard, earthquake, lightning and floods, etc.)
- 8. Malfunction or damage caused by the use of other brand parts or consumable.

## Technical Support ←

Please enjoy our technical support of the whole lifetime (Except technical problem beyond product itself) after purchase the product while product documents as user manual attached in U disk for instruction.

Please provide product Serial Number when apply for technical support.

#### Kindly Notification ←

Please read the user manual and warranty card carefully before the use. For any service, Please priorly contact local seller or contact us via Email: after@piocreat3d.com for support. See www.piocreat3d.com / for specific warranty information

about your product and procedures to act on a warranty claim.



# WARRANTY

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

| Repair 🗆                                | Change                           | Return 🗆              |   |
|---|----------------------------------|-----------------------|---|
| Name:                                   | Telephone:                       |                       | Malfuction And Damage Depiction Or Return And Change Reasons\<br>Suggestions: |
|   |                                  |                       |   |
| Serial Number:                          | Order Number:                    |                       | Bepair Records:   |
| Channel: Platform<br>Date of purchase D | □ Offline □<br>ayMonYear_        |                       |   |
| $\downarrow$<br>Note: Client need filli | ng in basic infor. and return re | asons. Repair records | shall retain for technicians.   |

| Notes |  |
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Due to the differences between different machine models, the physical objects and the final images can differ. The final explanation rights shall be reserved by **Shenzhen Piocreat 3D Technology Co., Ltd.** 

Shenzhen Piocreat 3D Technology Co., Ltd.



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