



# 3D Printer User Manual

V.1.4

## Dear Consumers,

Thank you for choosing our products. For the best experience, please read the instructions before operating the Printer. Our teams will

always be ready to render you the best services. Please contact us via the phone number or e-mail address provided at the end when you encounter any problem with the Printer.

For a better experience in using our product, you can also learn how to use the printer in the following ways:

View the accompanied instructions and videos in the U disk.

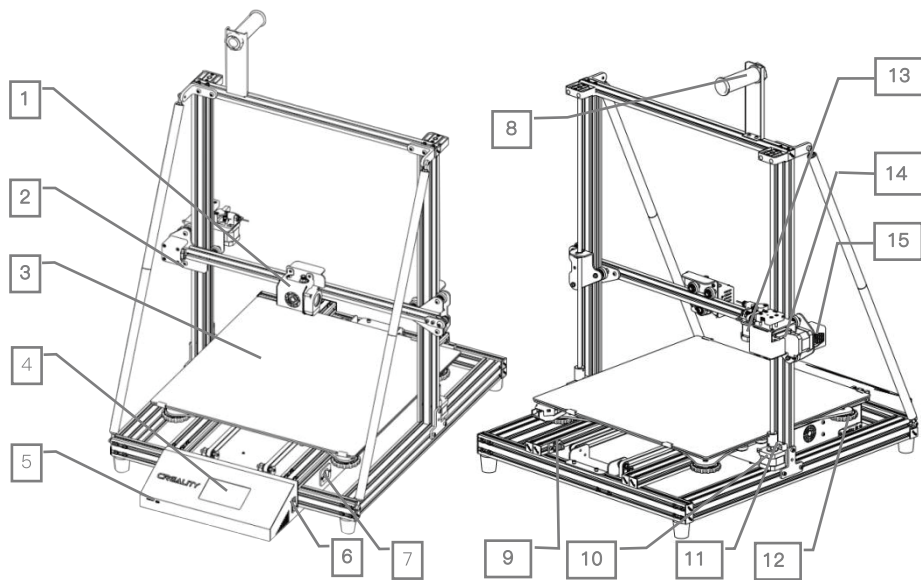
Visit our official website [www.creality.com](http://www.creality.com) to find relevant software/hardware information, contact details and operation and maintenance instructions.

## Firmware Upgrade

Please login the official website <https://www.creality.com/download>, switch the language and select the relevant printer and model and download the required firmware, you can use it after the installation is finished.

- ① Do not use the printer 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, low-dust environment.
- ③ Do not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.
- ④ Please use recommended resin to in case damage of machine.
- ⑤ Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.
- ⑥ Please do not open the plastic cover during usage, otherwise the printing will be interrupted.
- ⑦ Do not wear cotton gloves when operating the printer. Such cloths may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.
- ⑧ Please wait a moment after the print is finished. And please wear gloves to take out the print by tools.
- ⑨ Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame,guide rails, or wheels. Use glass cleaner or isopropyl alcohol to clean the print surface.
- ⑩ Children under 10 years should not use the printer without supervision.
- ⑪ This machine is equipped with a security protection mechanism. Do not manually move the nozzle and printing platform mechanism manually while booting up, otherwise the device will automatically power off for safety.
- ⑫ Users shall comply with related nation and region' s laws, regulations and ethical codes where the equipment or regional laws, regulations and ethical codes where herein refeffed product and produced prints by it is located.

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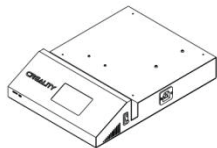


- |                                 |                        |                         |
|---------------------------------|------------------------|-------------------------|
| 1. Nozzle kit & auto leveling   | 6. Power switch        | 11. Coupling            |
| 2. X-axis limit switch          | 7. Power socket        | 12. XL bed-leveling nut |
| 3. Printing platform            | 8. Filament holder     | 13. Extruder (E) motor  |
| 4. Touch screen                 | 9. Y-axis limit switch | 14. Filament detector   |
| 5. Storage card slot & USB port | 10. Z-axis motor       | 15. X-axis motor        |

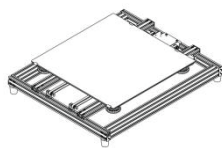
## Parameters

Model	CR-10 Max
Molding Size	450 x 450 x 470mm
Molding Tech.	FDM
Nozzle Number	1
Slice Thickness	0.1mm-0.4mm
Nozzle Diameter	0.4mm 0.8mm
Precision	±0.1mm
Filament	φ1.75mm PLA
File Format	STL/OBJ/AMF
Working Mode	Online or Storage card offline
Slice Software	Creality Slicer/Cura/ Repetier-Host/Simplify3D
Power Supply Spec.	Motherboard 75W, 24V, input: 100-240V AC, output: 24V; Hotbed 750W, 24V, input: 100-240V AC, output : 24V
Machine Power	750W
Hotbed Power	700W
Hotbed Temp.	≤100°C
Nozzle Temp.	≤250°C
Resume Print	Yes
Filament Detector	Yes
Dual Z-Axis	Yes
Auto Leveing	Yes
Language Selection	EN/CN
Operating System	Windows XP/Vista//7/8/10 MAC/Linux

## 2.General List



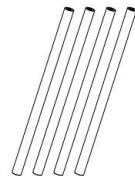
Base Frame



Printing Platform



Gantry Frame



Pull Rod



Tool Box



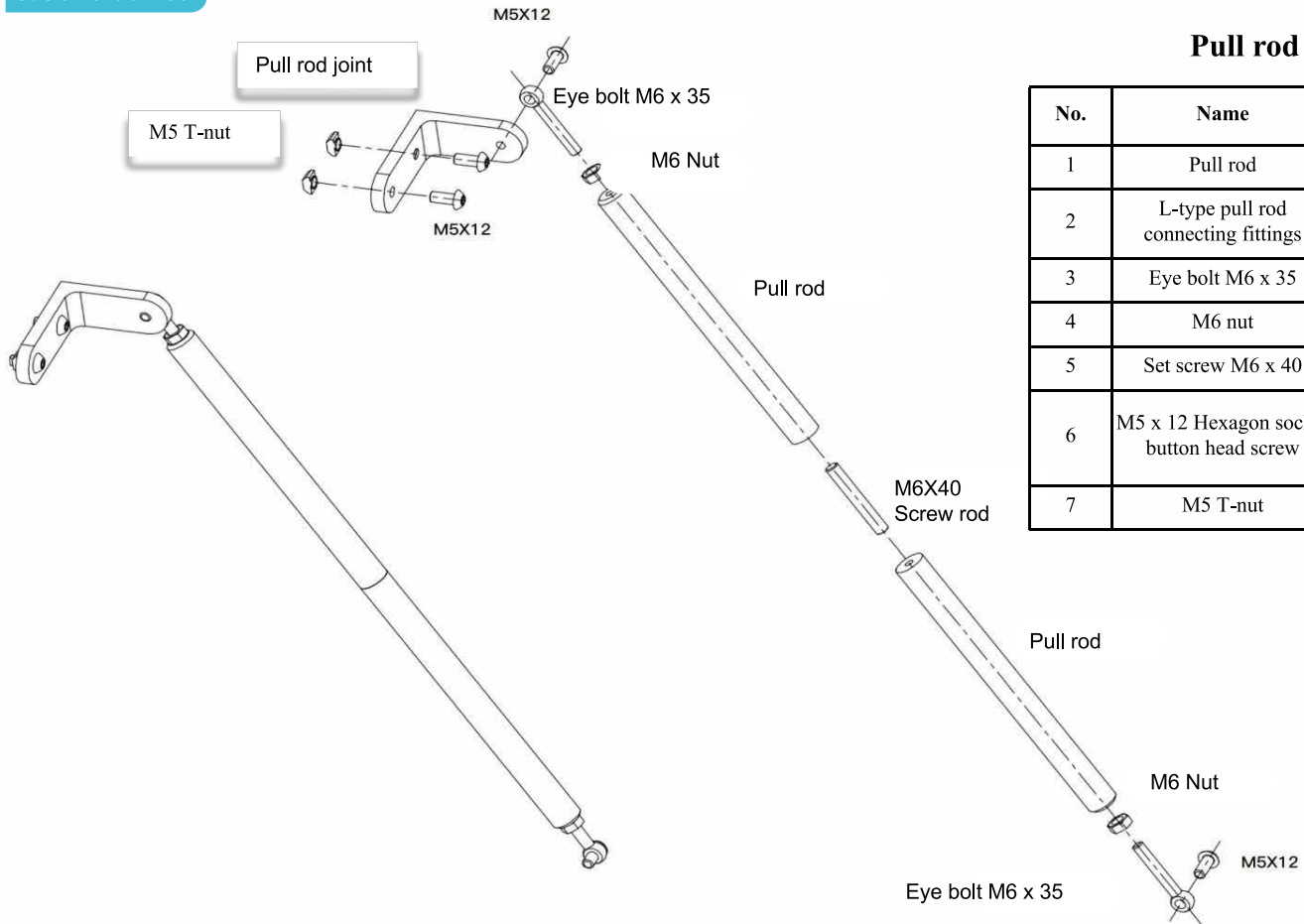
Filament (1kg)

### ◆ Tool List

No.	Image	Name	Qty
1		Wrench & Screw Driver	1
2		Storage Card	1
3		Spatula	1
4		Pliers	1
5		Nozzle Cleaner	1
6		Cable Ties	2
7		Filament Holder	1

No.	Image	Name	Qty
8		Filament Holder Tube with Nuts	1
9		Power Cord	1
10		USB Cable	1
11		M4X20 Hexagon Socket Head Cap Screws	10
12		T-type Fixed block	2
13		Spacer	1
14		Feeler Gauge	1

No.	Image	Name	Qty
15		Spare Parts	1
16		M5x45 Sems Screw	4
17		Hexagon flat round head M4X8	2
18		M4 T-Nut	2
19		Blue line claw	2
20		BL-Touch probe	1



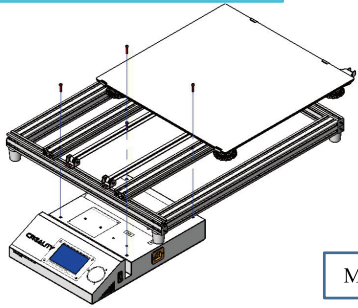
### Pull rod details

No.	Name	Qty
1	Pull rod	4pcs
2	L-type pull rod connecting fittings	2pcs
3	Eye bolt M6 x 35	4pcs
4	M6 nut	4pcs
5	Set screw M6 x 40	2pcs
6	M5 x 12 Hexagon socket button head screw	8pcs
7	M5 T-nut	4pcs

# 4. Device Installtion

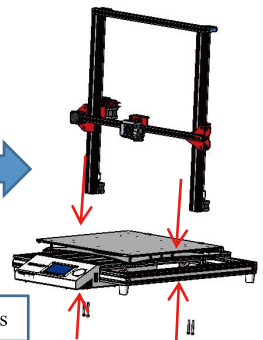


M4X20 Head Cap Screw 4pcs



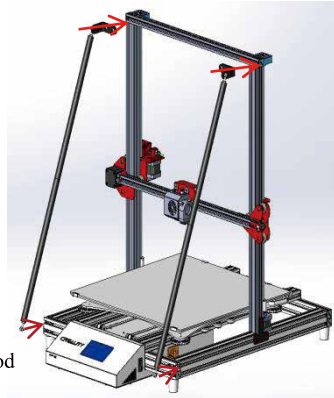
1. Printing Platform Installation

M5X45 4pcs

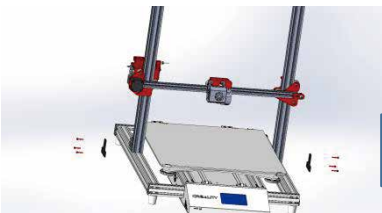


2. Gantry Frame Installation

4. Support Rod Installation

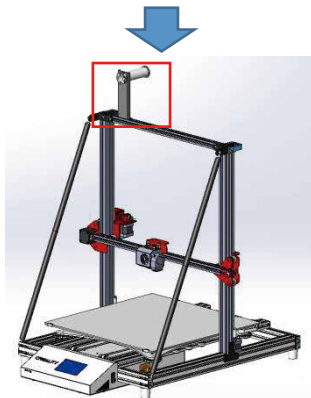


Support Rod 4pcs  
M6 x 40 Screw rod 2pcs  
Eye Bolt M6 x 26 2pcs  
M6 Nut 4pcs  
M5 x 12 Screw 8pcs  
M5 T-Nut 4pcs



3. Gantry Frame Fixation

M4 x 20 6pcs  
T block 2pcs

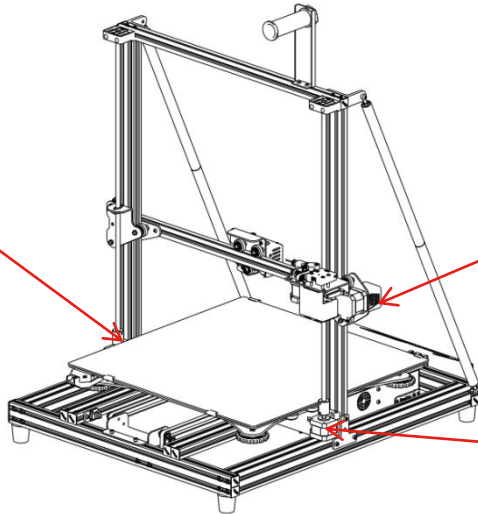
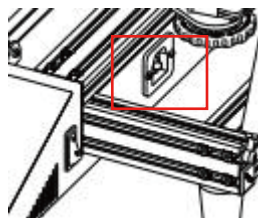
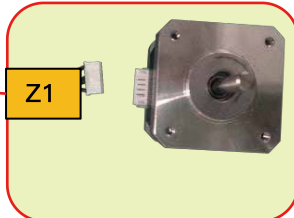
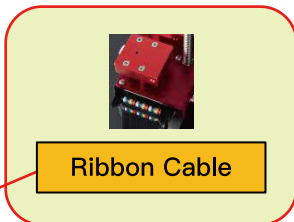
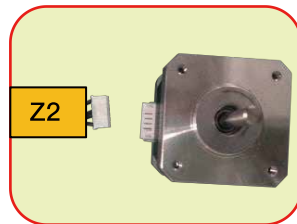


5. Filament Holder Installation

M4X8 Hexagon flat round head 2pcs  
M4 T-Nut 2pcs

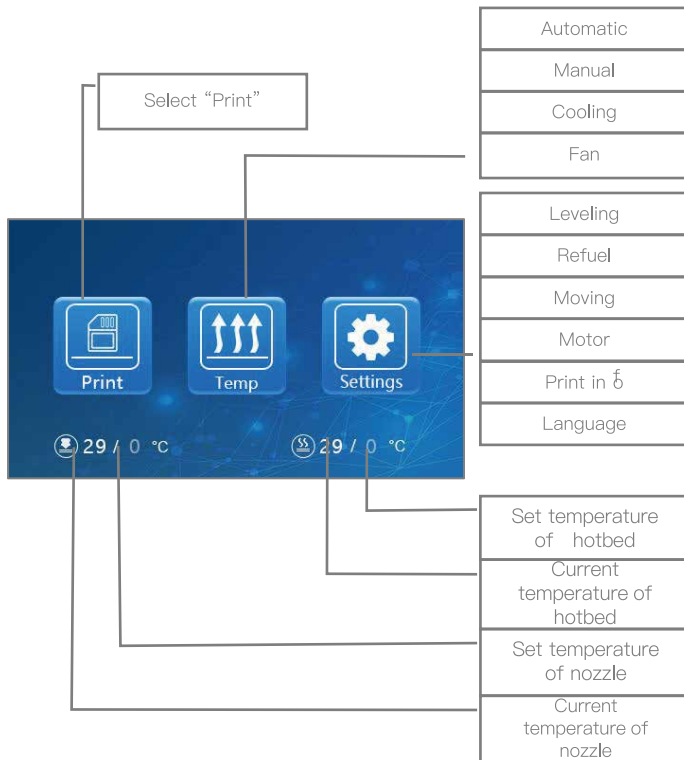


## 5. Cable Connection



\*Plug the power cord into a three-hole power jack.

## 6. Software Installation



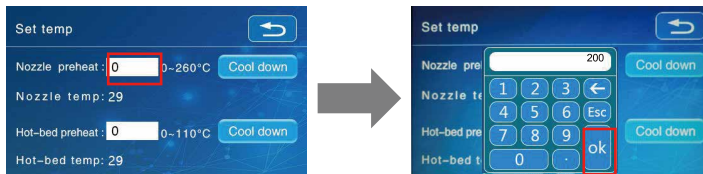
Screen Information					
Main Menu	Sub Menu	Explanation			
Print	Storage Card	Stop			
		Pause/Continue			
		Adjust	Print speed		
			Nozzle temp.		
			Hot-bed temp.		
			Fan		
Temperature up/Stop	Continue/Stop				
Temp	Automatic	PLA \ABS (195°\240°)			
	Manual	Nozzle preheat			
		Hot-bed preheat			
	Cooling	Yes\No			
Fan	On\Off				
Setting	Leveling	Z-axis: Z home, +0.1mm, -0.1mm			
		AUX leveling	Please click numbers (①-⑤) to assisted leveling.....		
		AUTO leveling (switch)			
		Platform measurement (measurement parameters)			
	Refuel	Withdraw			
		Feed			
Moving	X-axis	Y-axis	Z-axis	Z home	
Motor off	Yes\No				
Language	English\Chinese				
Printer info	Device model, firmware version, printing size, official website				

## Preheat

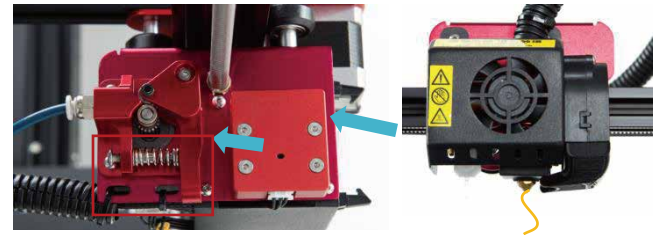
Method 1.



Method 2.



## Feeding

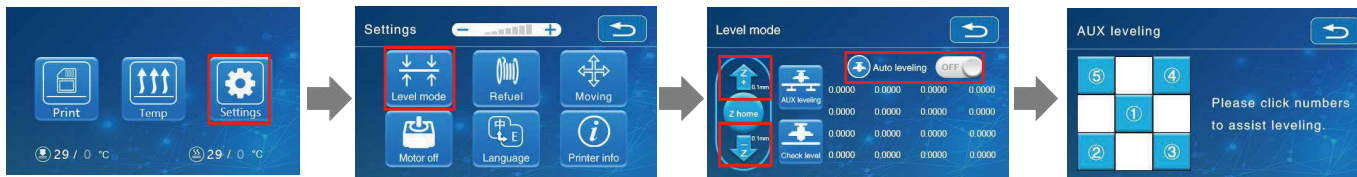


Go through the filament detector to press and hold the extruder spring. Insert the filament to the position of nozzle through the hole on the extruder. Continue feeding until you see filament extrude from the nozzle.

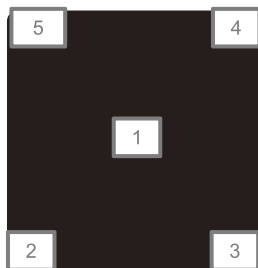
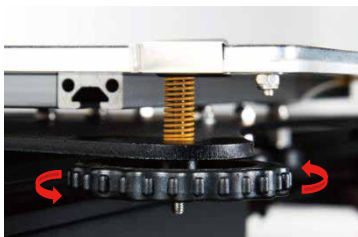
**Replacing Filament During Printing:**

1. Cut the filament near the extruder and feed new filament slowly until new filament is fed into the feeding pipe.  
(Or)
2. Preheat the nozzle and replace the used filament with new filament.

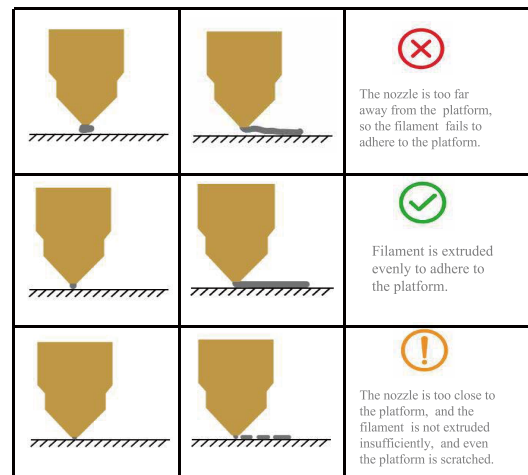
## 8. Bed Leveling



1. Tighten four leveling nuts at the bottom of the platform before initial leveling.
2. Select “Settings” → “Leveling Mode” → “Assisted Leveling”, click number ②.



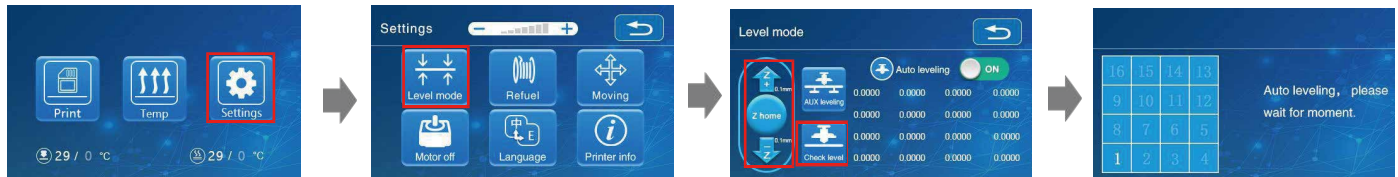
3. Adjust the platform height by turning the knob underneath. Adjust the printing platform and nozzle to enable the two to just fit each other perfectly with a gap of 0.05mm. Use a piece of A4 paper to assist with the leveling to make sure that the nozzle just scratches on this A4 paper.
4. Adjust all leveling nuts with four corners.
5. Click number ① to test if the platform gap is proper.
6. Repeat above steps once or twice if necessary.



## 9. Bed Leveling

### ◆ Automatic leveling

If you need to do automatic leveling, you can change to it in the following interface:



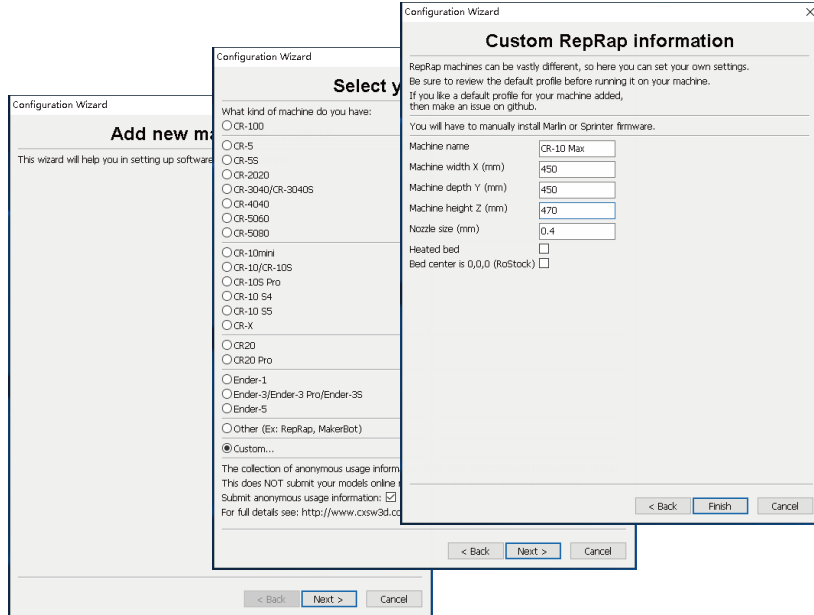
Detailed instructions for use are available in the Storage card!



1. Double click to install the software



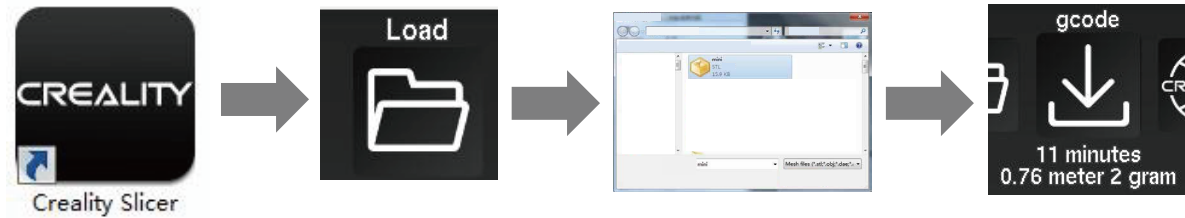
2. Double click to open the software



3. Select language → Next → Select your machine → Next → Finish

Please refer to the Slice Software User Manual in the Storage card for details of software use!

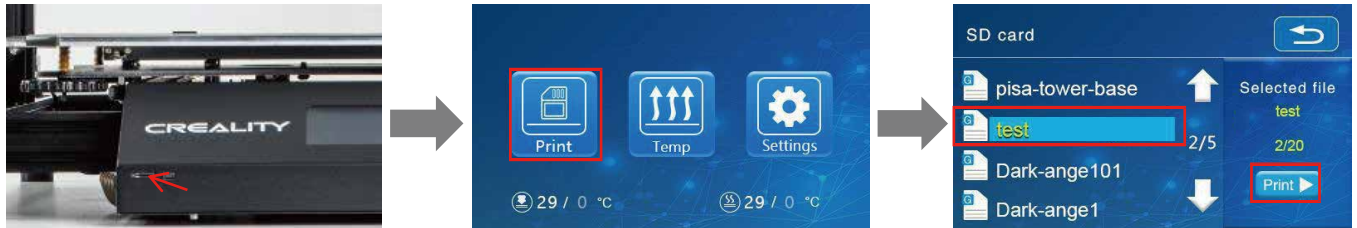
## 1. Slicing



Open the software → Load → Select the file → Wait for slicing to finish ,and save the gcode file to Storage card.

\* File name must be English or number. Don't use Chinese or special symbols

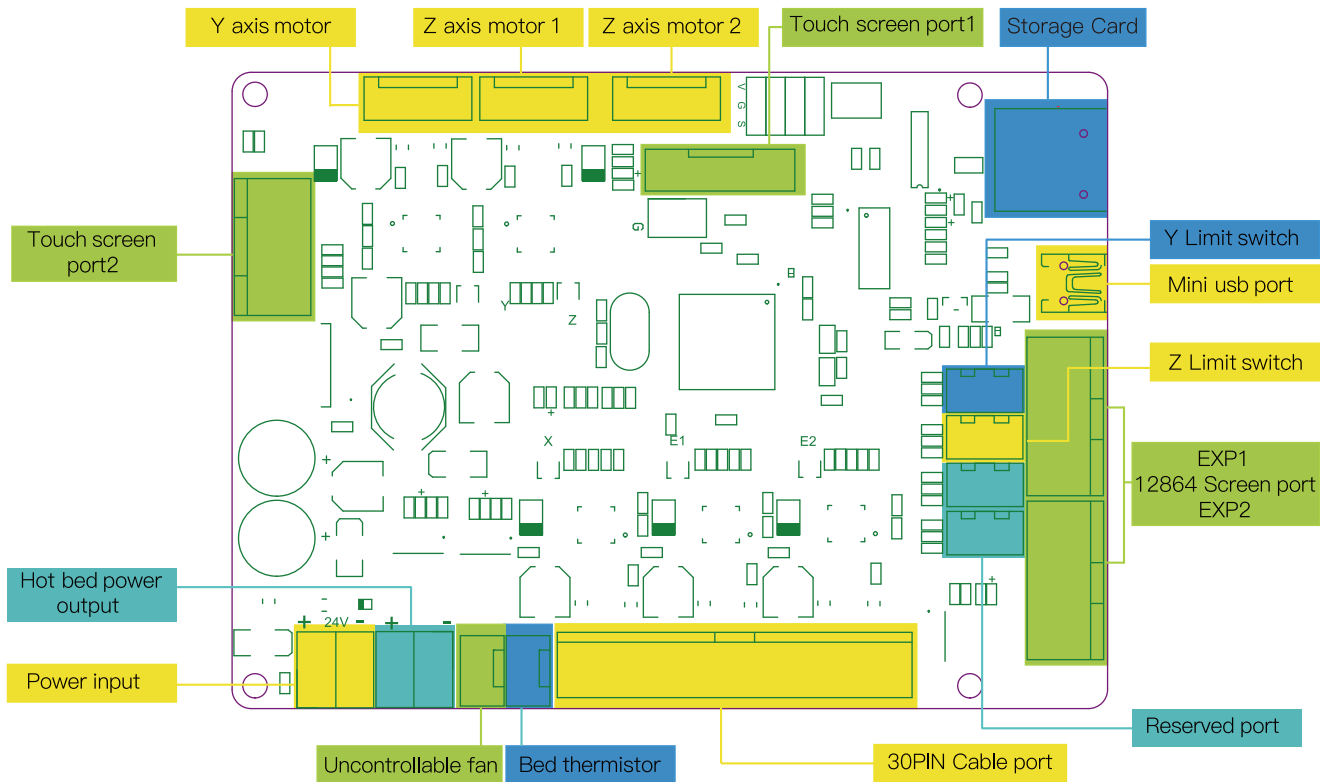
## 2. Printing



Insert the Storage card → Print → Select Model → Print

**Warning:** Please don't insert or remove TF card or SD card during printing.

## 12. Circuit Wiring 电路接线





## 13. FDM 3D PRINTING FILAMENTS



HP-PLA

Upgraded environmentally friendly formula, matte effect, high toughness, and fine printing. The raw materials are imported from the United States, besides, there are rich colors for customers to choose.



CR-PLA CR-PETG  
CR-ABS CR-TPU

Targeting at mid-end users, CR series is with transparent tray plus black-white color box design. Its slight tolerance in wire diameter contributes to stable printing quality. CR series meets your demands of daily design and prototype making.



HC-PLA HC-PETG  
HC-ABS HC-TPU

HC series is cost-efficient. It's widely applicable to general FDM printer product designs on the market to meet your daily design and different prototyping needs.



EN-PLA EN-PETG  
EN-ABS EN-TPU

Ender series is widely applied to general FDM printer design, which meet customers' needs of daily design and different prototyping needs.

## 3D PRINTER UV SENSITIVE RESIN

### Standard Resin

Low shrinkage, fast printing speed, almost odorless, and it's equipped with rigidity and toughness, suitable for printing common product prototypes and display models, that's also highly compatible with LCD printers.

### Low Odor Resin

Low odor, high precision, detail textures are very expressive. - Good fluidity, high printing success rate. Rich colors, to meet the customer's color needs, preferred for animation manual, craft furnishing industry, etc..

### ABS Like Resin

With high hardness, high toughness of physical properties and strong impact resistance, it can be directly drilled on the finished models, mainly used in industrial prototype and other fields.

### Dental Cast Resin

Low shrinkage, due to the low shrinkage characteristics, the size is more accurate. It's not easy to deform under pressure after molding. Used for making porcelain teeth.

### Elastic Resin

Elastic Resin features good elasticity after high-strength extruding or stretching, widely applied to damping and contacting surfaces, etc., preferred to be used by people full of originality and ideas in design.

### Water Washable Resin

The model can be washed with water directly, and it's safe, environmentally friendly, with high surface accuracy, short cleaning time and low material cost. Water Washable Resin is currently one of the favorite new materials for schools, educational institutions and printing enthusiasts.

### Dental Mode Resin

The surface hardness is extremely high, scratch-resistant, and has low shrinkage characteristics. It is mainly used in dental implant restoration and invisible braces printing in medical dentistry.

### Toughness Resin

Toughness Resin is a medium-hard, wear-resistant, and repeatedly stretchable material. It is used in parts which need to be repeatedly stretched in friction devices.

### High Temperature Resin

High Temperature resin is mainly used in making high temperature rubber molds, which can withstand temperatures of about 200°C without cracking and maintain good strength, stiffness and thermal stability.

### Jewelry Cast Resin

Widely applied to jewelry industry. Excellent combustion performance, low expansion coefficient, combustion without residue. Forming process is stable without deformation. The finished product has smooth surface and high precision.

## 14. UV sensitive resin parameter information

Related Parameters	Standard Resin	ABS Like Resin	Dental Cast Resin	Elastic Resin	Water Washable Resin	Dental Mode Resin	Toughness Resin	High Temperature Resin	Jewelry Cast Resin
Viscosity	150–250MPa·s (NDJ-8S Rotational Viscometer (25°C))	200–350MPa·s (NDJ-8S Rotational Viscometer (25°C))	50–170MPa·s (NDJ-8S Rotational Viscometer (25°C))	300–1000MPa·s (NDJ-8S Rotational Viscometer (25°C))	100–350MPa·s (NDJ-8S Rotational Viscometer (25°C))	150–300MPa·s (NDJ-8S Rotational Viscometer (25°C))	150–300MPa·s (NDJ-8S Rotational Viscometer (25°C))	150–300MPa·s (NDJ-8S Rotational Viscometer (25°C))	100–150MPa·s (NDJ-8S Rotational Viscometer (25°C))
Absorption Band	355nm–410nm	355nm–410nm	355nm–410nm	385nm–410nm	385nm–410nm	355nm–410nm	355nm–410nm	355nm–410nm	355nm–410nm
Density	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.13g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.25g/cm <sup>3</sup> (Density meter (25°C))	1.05–1.13g/cm <sup>3</sup> (Density meter (25°C))
Flexural Modulus	1.882–2.385Mpa	1.192–2.525Mpa	1.192–2.525Mpa	1.882–2.385Mpa	1.882–2.385Mpa	1.882–2.385Mpa	1.882–2.385Mpa	1.882–2.385Mpa	1.192–2.525Mpa
Bending Strength	59–70MPa	68–80MPa	49–58MPa	40–70MPa	40–70MPa	59–70MPa	40–70MPa	59–70MPa	49–58MPa
Heat Distortion Temperature	80°C	80°C	75°C	80°C	80°C	80°C	80°C	220°C	65°C
Thermal Expansion Coefficient	95*E-6	95*E-6	95*E-6	95*E-6	95*E-6	95*E-6	95*E-6	95*E-6	95*E-6
Volume Shrinkage	3.72–4.24%	3.72–4.24%	1.88–2.45%	3.72–4.24%	3.72–4.24%	1.56–1.95%	3.72–4.24%	3.72–4.24%	4.06–5.08%
Linear Shrinkage	1.05–1.35%	1.05–1.35%	0.8–1%	1.05–1.35%	1.05–1.35%	0.85–1.05%	1.05–1.35%	1.05–1.35%	1.05–1.35%
Tensile Strength	36–52MPa	42–62MPa	42–62MPa	30–52MPa	30–52MPa	42–62MPa	30–52MPa	36–52MPa	42–62MPa
Tensile Modulus	1.779–2.385MPa	1.86–2.645MPa	1.86–2.645MPa	1.779–2.385MPa	1.779–2.385MPa	1.779–2.385MPa	1.779–2.385MPa	1.779–2.385MPa	1.86–2.645MPa
Elongation at Break	11%–20%	11%–21%	11%–20%	200%	120%	11%–20%	130%	11%–20%	11%–20%
Shore Hardness	84D	75–80D	80–88D	20–30D	80–85D	82D	65–75D	86D	65D
Glass Transition Temperature	100°C	100°C	78°C	100°C	100°C	100°C	100°C	100°C	78°C
Density	1.05–1.25g/cm <sup>3</sup>	1.05–1.13g/cm <sup>3</sup>	1.05–1.13g/cm <sup>3</sup>	1.05–1.25g/cm <sup>3</sup>	1.05–1.25g/cm <sup>3</sup>	1.05–1.25g/cm <sup>3</sup>	1.05–1.25g/cm <sup>3</sup>	1.05–1.25g/cm <sup>3</sup>	1.05–1.13g/cm <sup>3</sup>
Notched Impact Strength	44–49J/m <sup>2</sup>	60–80J/m <sup>2</sup>	44–49J/m <sup>2</sup>	41–48J/m <sup>2</sup>	41–48J/m <sup>2</sup>	41–49J/m <sup>2</sup>	41–48J/m <sup>2</sup>	44–49J/m <sup>2</sup>	44–49J/m <sup>2</sup>

## 15. Filaments Parameter Information

Material		Print Temp (°C)	Bed Temp (°C)	Difficulty	Flexibility	Shrinkage	Ductility	Applicable Models
PLA Series	HP-PLA	190-220	50-60	●	●●	●	●●●	Suitable for 99% FDM models
	HP-PLAx3	190-220	50-60	●	●●	●	●●●	Suitable for 99% FDM models
	CR-PLA	190-220	50-60	●	●●	●	●●●	Suitable for 99% FDM models
	HC/EN-PLA	190-220	50-60	●	●●	●	●●	Suitable for 99% FDM models
ABS		220-260	90-110	●●●●	●●	●●●	●●●	Hot bed is needed, and Creality printer enclosure is recommended for DIY machine
PETG		230-250	60-100	●●●	●●	●●	●●●	Hot bed is needed, and Creality printer enclosure is recommended for DIY machine
TPU		210-240	50	●●	●●●●●	●	●●●●	Direct extrusion models
Silk		190-220	50-60	●	●●	●	●●	Suitable for 99% FDM models
Nylon		230-260	80-90	●●●●●	●●●	●●●●	●●●●	Hot bed is needed, and Creality printer enclosure is recommended for DIY machine
Carbon (Ordinary type)		190-220	50-60	●	●	●	●●	Suitable for 99% FDM models
PDS Advertising word filament-PLA		190-220	50-60	●	●●	●	●●	Creality K5, K8, T5
Low temperature filament-PCL		60-100	-	●	●●●	●	●●●●	Low temperature 3D printing pen



Creality Web



Creality Cloud

SHENZHEN CREALITY 3D TECHNOLOGY CO., LTD.  
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 Official Website: [www.creality.com](http://www.creality.com)  
 Tel: +86 775-8523 4565  
 E-mail: [info@creality.com](mailto:info@creality.com) [cs@creality.com](mailto:cs@creality.com)

[www.creality.com](http://www.creality.com)

[vip.creality.com](http://vip.creality.com)



Hotline:+86 755-85234565

### Warranty Policy ←

- 1-year Limited Warranty since the date of product purchase.
- 6-months Limited Part Warranty for UV light.
- 3-months Limited Part Warranty for 2K Screen.
- No Warranty for the Release Film and Product Gift (U disk, Gloves, Screwdriver, Paper funnel, Brush, etc.)

### What Is Covered? ←

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 CREALITY product
- Proof of Purchase

### What Is Not Covered? ←

CREALITY 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 priory contact local seller or contact us via  
Email: [cs@creality.com](mailto:cs@creality.com) for support.



# WARRANTY

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

Repair

Change

Return

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Serial Number: \_\_\_\_\_ Order Number: \_\_\_\_\_

Channel: Platform  Offline

Date of purchase Day \_\_\_\_\_ Mon. \_\_\_\_\_ Year \_\_\_\_\_



**Note:** Client need filling in basic infor. and return reasons. Repair records shall retain for technicians.



Malfunction And Damage Depiction Or Return And Change Reasons\ Suggestions:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

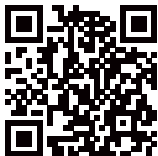
Repair Records:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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 Crealty 3D Technology Co., Ltd.



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