ANYCUBIC

ANYCUBIC PHOTON M3 PLUS

◉ User Manual

ANYCUBIC PHOTON M3 PLUS

Dear customer,

Thank you for choosing ANYCUBIC products.

Maybe you are familiar with 3D printing technology or have purchased ANYCUBIC printers before, we still highly recommend that you read this manual carefully. The installation techniques and precautions in this manual can help you avoid any unnecessary damage or frustration.

Please visit https://www.anycubic.com/pages/contact-us to contact us if you have any question. You can also gain more information such as software, videos, models from the website.

ANYCUBIC support center

Team ANYCUBIC

Safety Instructions

Always follow the safety instructions during assembly and usage,to avoid any unnecessary damage to the 3D printer or individual injury

Please contact our customer service first if you have any issue after receving the products.

Be cautious when using the scraper. Never direct the scraper towards your hands.

In case of emergency, please immediately cut off the power of ANYCUBIC 3D printer and contact the technical support.

ANYCUBIC 3Dprinter includes moving parts that can cause injury.

It is recommended to use protection glasses when cleaning/ sanding the printed models to avoid small particles contacting eyes.

Keep the ANYCUBIC 3D printer and its accessories out of the reach of children.

Vapors or fumes may be irritating at operating temperature. Always use the ANYCUBIC 3D printer in an open and well ventilated area.

ANYCUBIC 3D printer must not be exposed to water or rain.

ANYCUBIC 3D printer is designed to be used within ambient temperature ranging 8℃-40℃, and humidity ranging 20%-50%. Working outside those limits may result in low quality printing.

Do not disassemble ANYCUBIC 3D printer, please contact technical support if you have any question.

Contents

Technical Specification

Printing

Model	Anycubic Photon M3 Plus
Operation	5-inch capacitive touch screen
Software	Anycubic Photon workshop
Connectivity	USB memory stick, Anycubic Cloud

Specifications

Technique	LCD Shadow Masking
Light source	UV-LED (wavelength 405nm)
XY Resolution	34.4μm 5760*3600 (6K)
Z axis Accuracy	0.01mm
Suggested Layer Thickness	0.01 ~ 0.15mm
Suggested Print Speed	MAX 100mm/h
Rated power	120W

Physical Dimensions

Dimension	360mm (L) *290mm (W) 475*mm (H)
Build volume	197mm (L) *122mm (W) *245mm (H)
Materials	405nm UV-resin
Net weight	~12 kg

Recommended Printing Parameters

Layer Thickness   0.05 mm

Normal Exposure Time   1.5 s

Off Time   0.5 s

Bottom Exposure Time   23 s

Bottom Layers   6

Z Lift Distance   6 mm

Z Lift Speed   6 mm/s

Z Retract Speed   6 mm/s

Anti-alias   1

Note:

The recommended printing parameters above is for reference only,
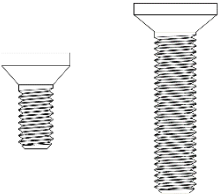
which is more suitable for Anycubic resin.

Packing List

	Print platform 1PC	Resin vat 1PC
Anycubic Photon M3 Plus	WIFI Antenna 1PC	USB memory 1PC

Mask 1PC	Gloves 3Pairs	Funnel 5PCS	Scrapers 2PCS

Tool kit	Leveling paper 1PC	Screen protector kit	Assembly Instruction 1PC

Power adaptor	M3*5 spare screws M4*12 spare screws	Auto-feed unit (with Screws:M3*6 2PCS,M3*8 2PCS)	

Product Overview

Platform securing knob

Z lead screw

Platform bracket

Printing Platform

Auto-feed unit

Wi-Fi Antenna

Vat retaining screw

Resin vat

Power port

Power switch

Touch screen

USB port

Network port

Cover

Sticker

Resin-holding bracket
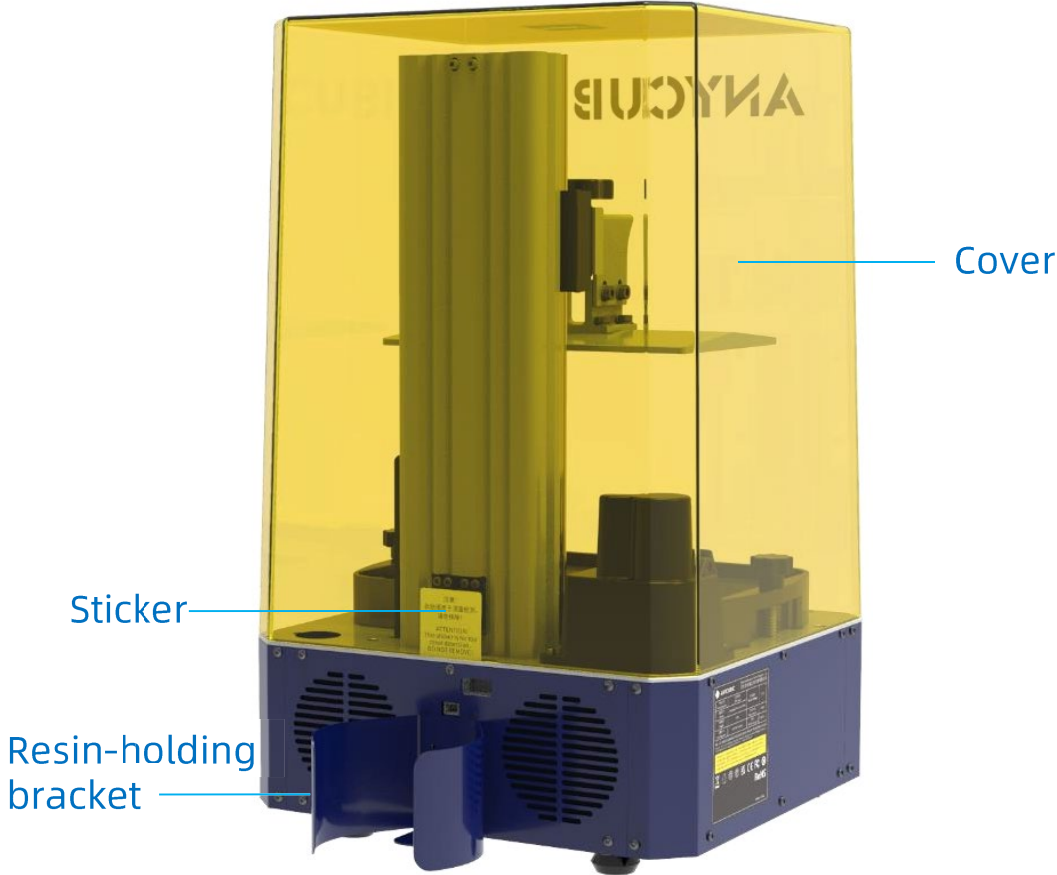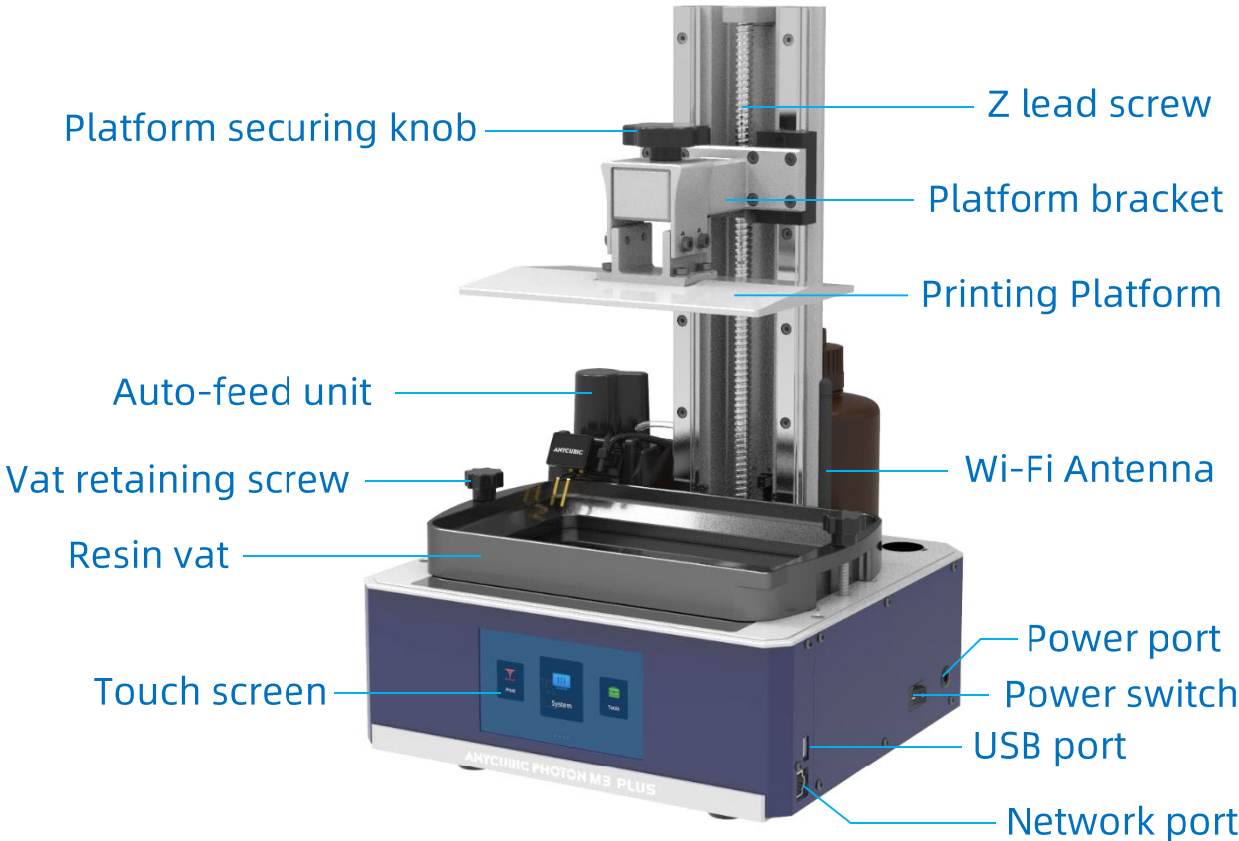
Product Overview

Auto-feed unit

Air port (I)

Feeding port (II)

needles

Air port (I)

Feeding port (II)
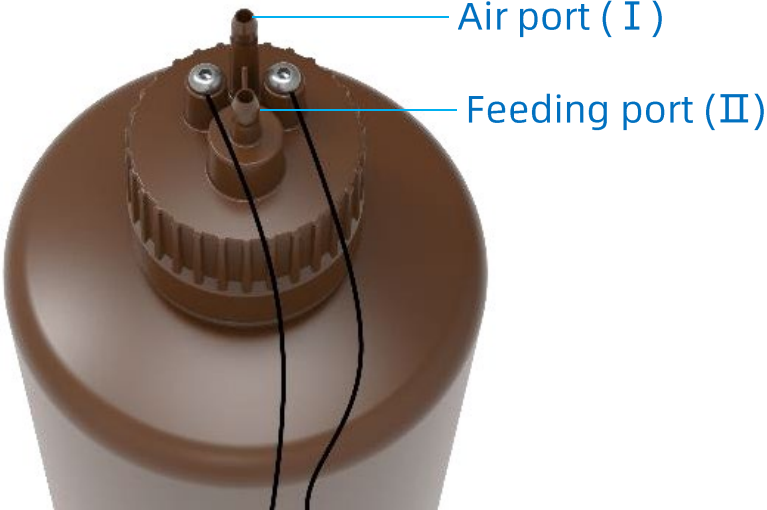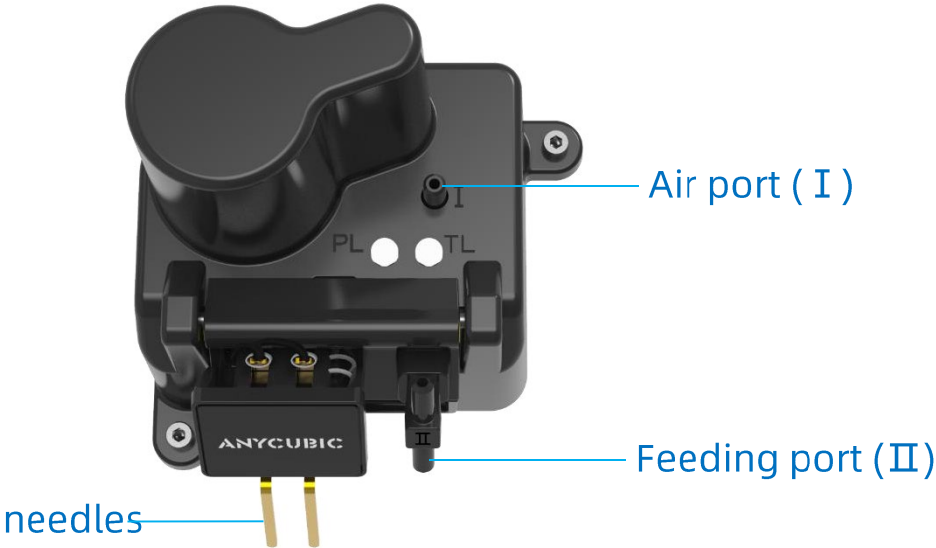
Menu Directory

Home menu
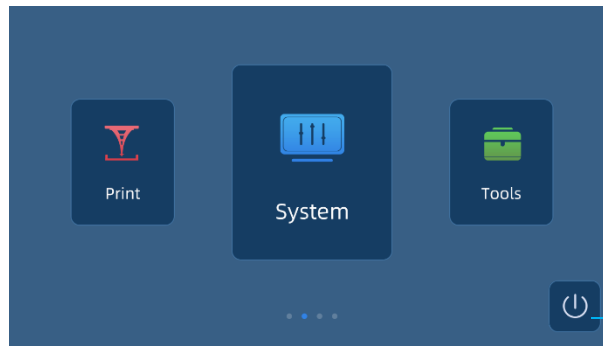
Click to shut down

Click to choose

Print
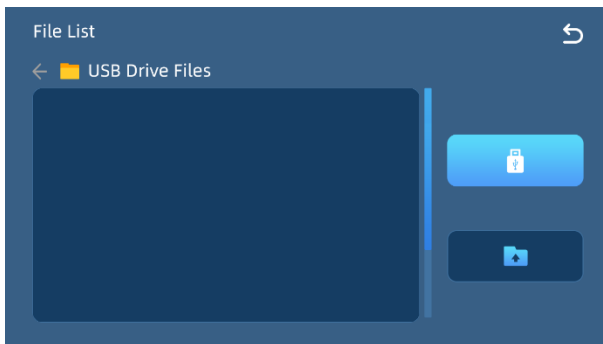
Tools
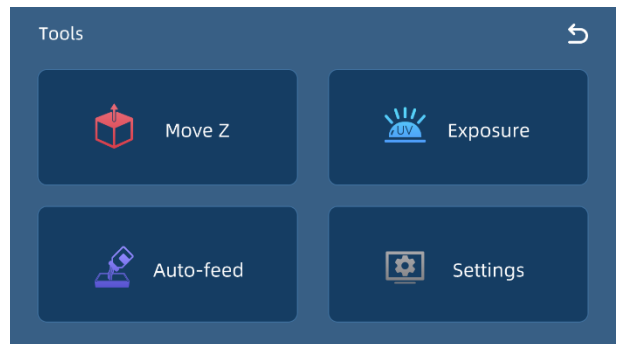
System
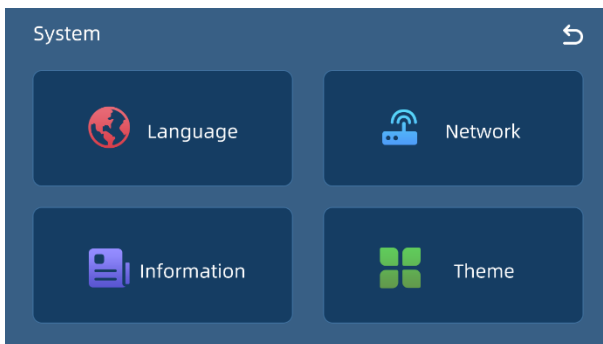
Cloud
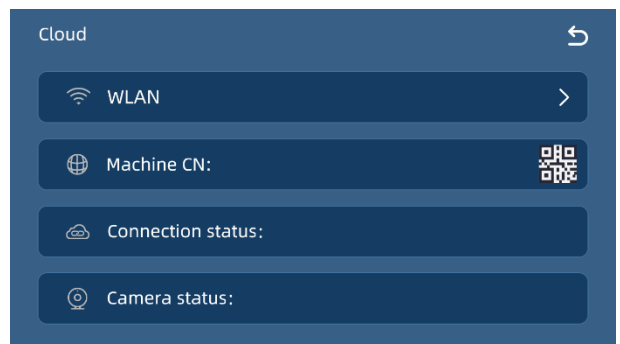
Menu Directory

Print

File List:

Return to Home Menu

Local files

USB drive files

Click File

Click Files

Return to File list
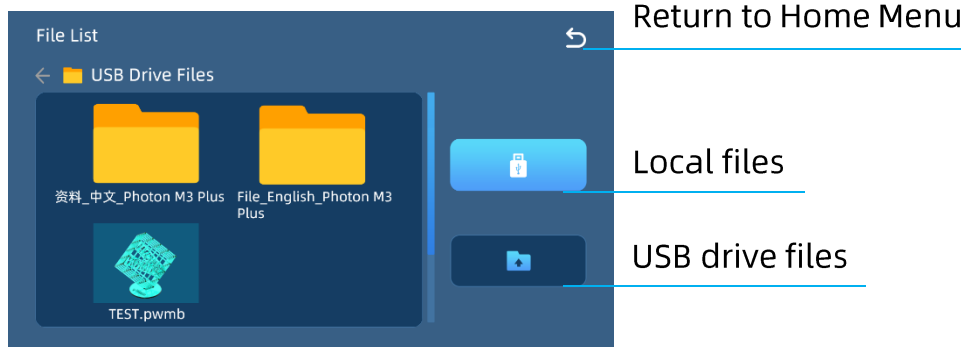
Preview & information of the print object

Delete the current file

Click to start printing

System

Language：

Return to System

Switch language

Theme：

Return to System
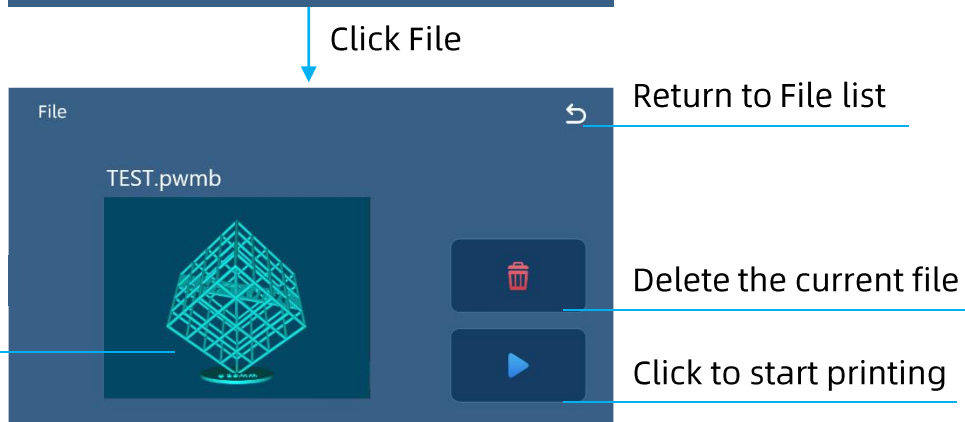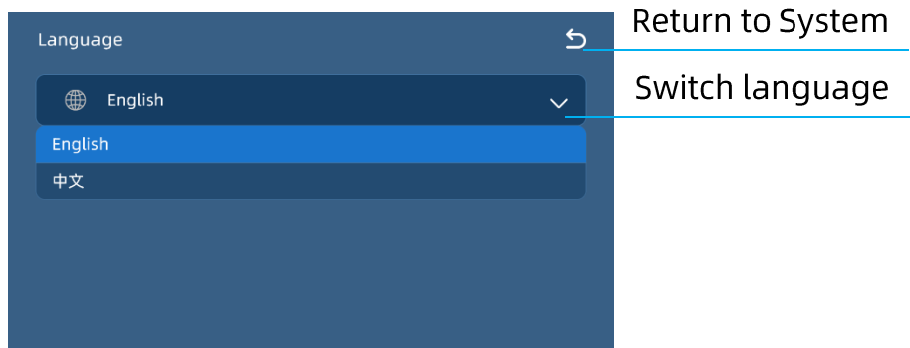
Switch theme
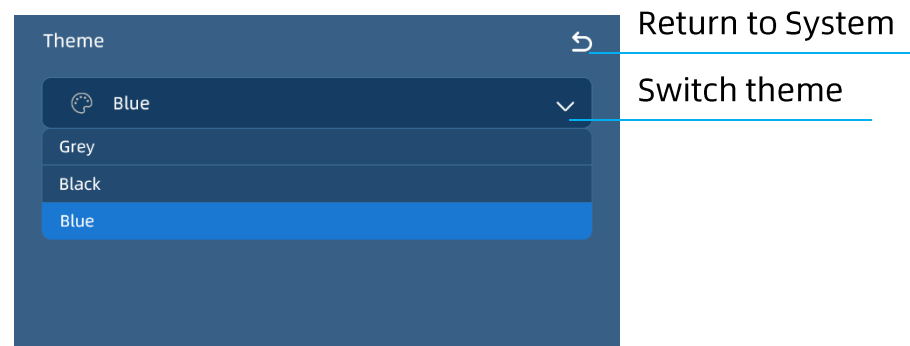
Menu Directory

Information：

Machine type	Return to System
System version	Click to check for update
Serial number	
Official website	

Information

Machine:
Version information:
Version serial number:
Service:

Version check

Click to check for update

Software update：

Version Detection — Return to Information

The current version	Current version:
	Local upgrade:　upgrade — Update by USB files
	OTA upgrade:　upgrade — Update by OTA files
TIPS for update	TIPS:

Network：

Network — Return to System

	IP: — IP Address
	MAC: — MAC Address
Wired/wireless connection	Connection mode:
	SSID: — SSID

Tools

Move Z:

Move Z

Return to Tools

Move Z by 0.1mm/1mm/10mm

| 0.1mm | 1mm | 10mm |

Move Z axis upwards

Move Z axis downwards

Stop moving Z axis

Z=0

Return to Zero

Reset the zero point

Auto-feed：

Auto-feed

Return to Tools

Feed in

Turn on/off feed-in

Show whether the resin in bottle is enough

Feeding speed

Set feeding speed

Resin in bottle

Exposure：

Exposure

Return to Tools

S

Set exposure time

Select one image to expose

Next

Click to expose

Machine settings：

Machine Settings   ↺

Door deteciton

Return to Tools

Enable/disable
the door detection

Cloud

cloud：

Cloud   ↺

WLAN   ＞

Machine CN: [QR]

Connection status:

Camera status:

Machine CN

Return to Home Menu

Enter to network settings

Click to open CN QR code

Server connection status

show camera is on/off

Click to set up network

Network settings：

Network Settings   ↺

WLAN

SSID: WLAN list

Password: OK

Status:

Select or enter
SSID of WIFI

Enter WIFI password

Return to System

Turn on/off
WIFI connection

Click enter to connect
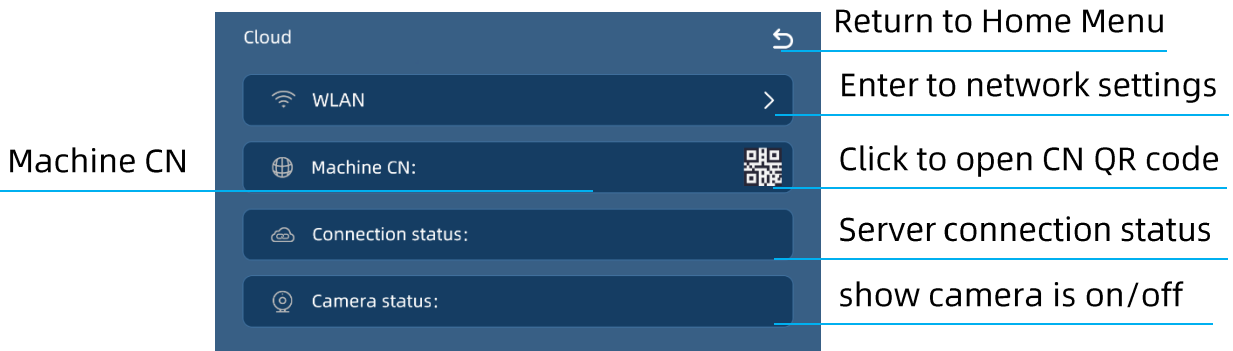
WIFI connection status
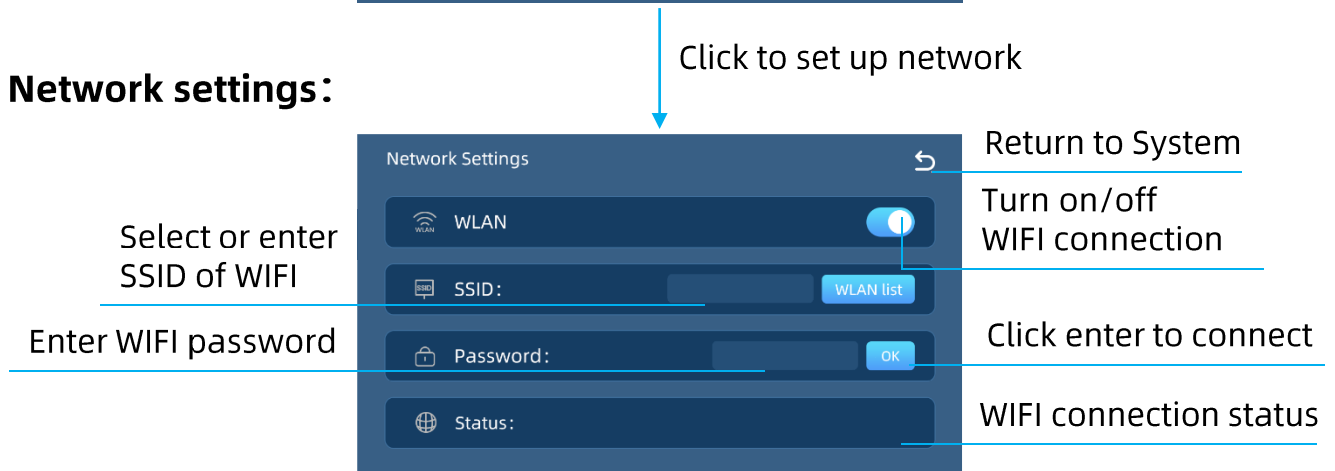
Assembly and Leveling Instructions

1. Unpack the machine and take out the accessories. Skip to Step 7 if you do not want to install auto-feed unit first.

2. Turn the machine back. Remove the black square cover upon the base and take out the wire below.

3. Connect the wire to resin sensor, then install the sensor and resin-holding bracket.

M3*8mm

M3*6mm
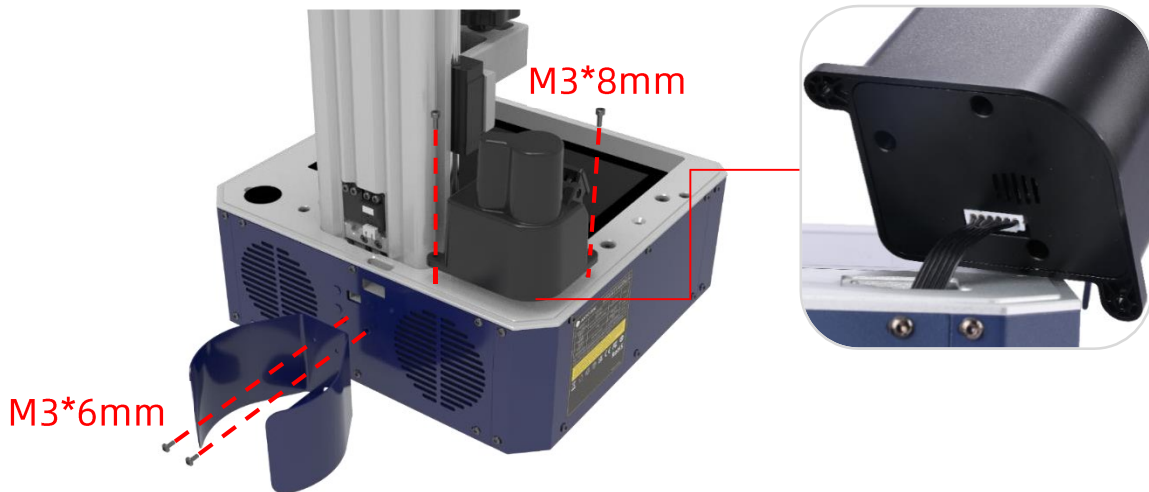
4. Insert the cap part into **Anycubic 1kg resin bottle** and tighten it.
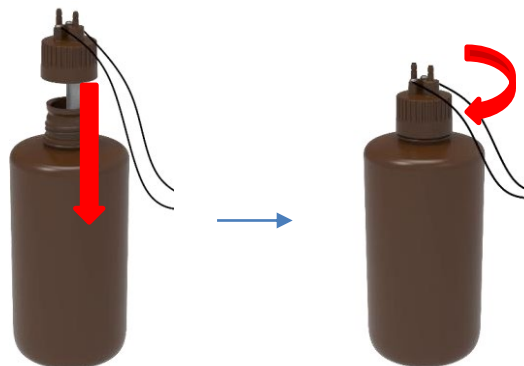
Assembly and Leveling Instructions

5. Pass two pipes through the limit hole on the back of the machine from the bottom up. Connect ports Ⅱ with feeding pipe (black) and connect ports Ⅰ with air pipe (transparent) . Please completely follow this way of connection to avoid the damage of auto-feed unit. Then, connect the cap part wire to machine.

Ⅰ

Air pipe

Ⅰ

Ⅱ

Ⅱ

Feeding pipe
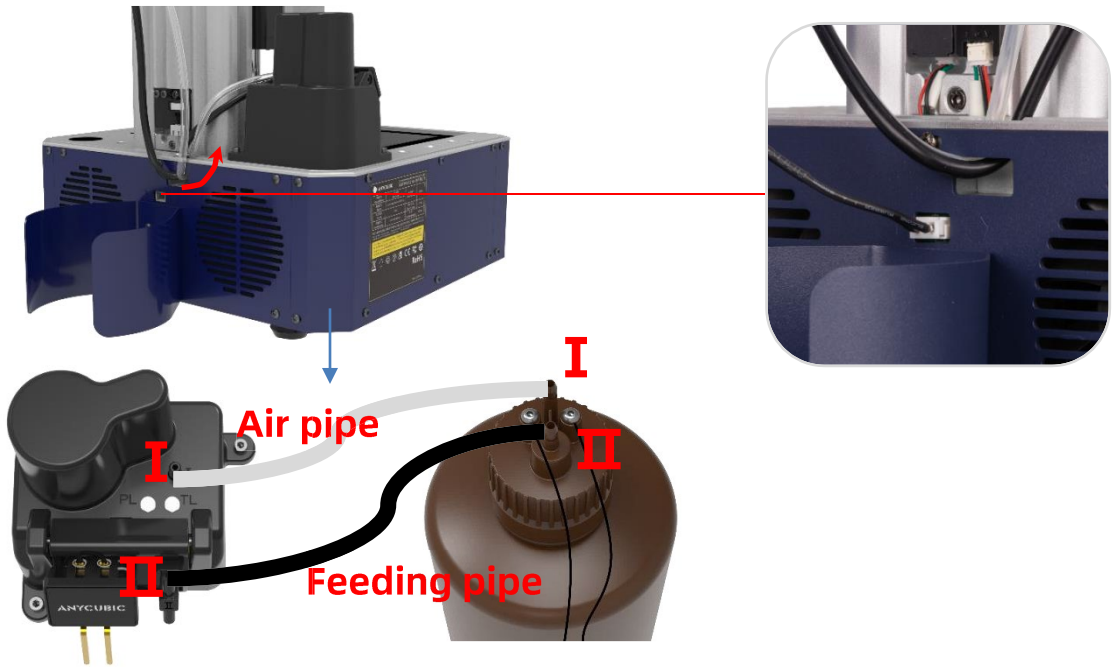
6. Place resin bottle on the bracket.
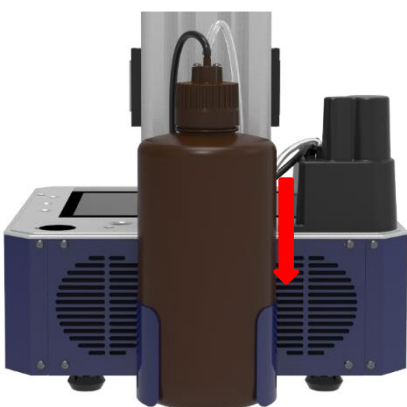
TIPS: When you change resin, it is recommended to tighten the cap through rotating bottle to avoid blockage caused by twisting pipes.

7. Turn the machine back to the front. Then plug in the power cord and turn on the printer.
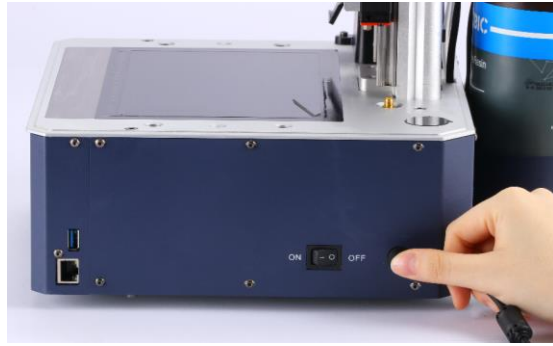
8. Rise the Z axis to a certain height to ensure that the curing screen will not be scratched when the printing platform is installed.
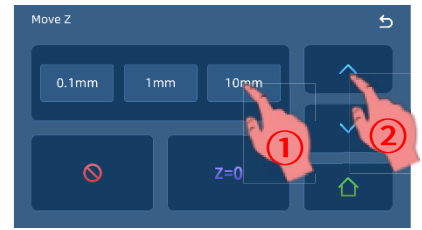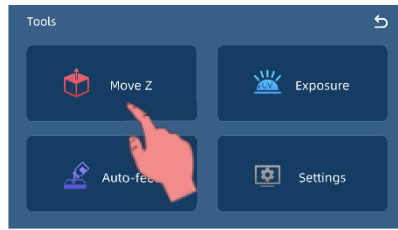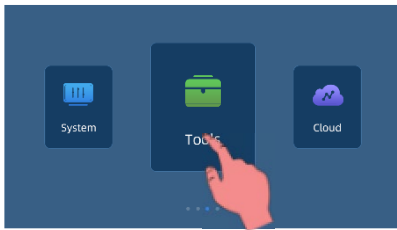
9. Tear off the protective film before leveling and printing.
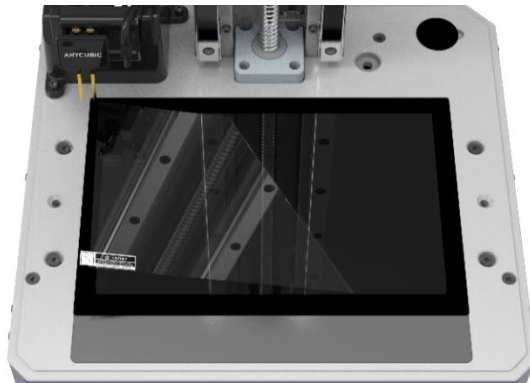
10. Loosen the four screws on the printing platform.
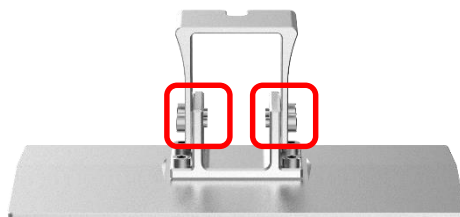
Assembly and Leveling Instructions

11. Install and secure the printing platform.
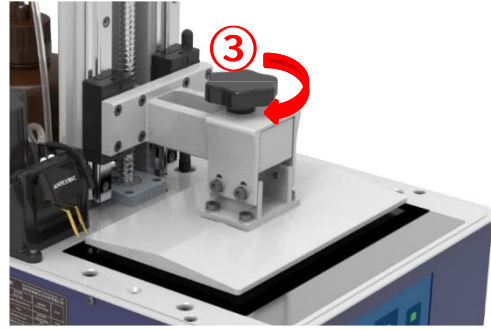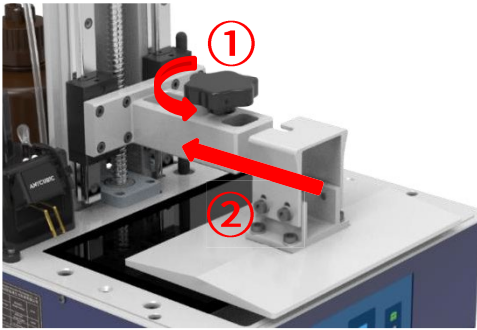
12. Place the leveling paper on the curing screen. Then click [⌂] on the touch screen. Wait for descent of Z axis.
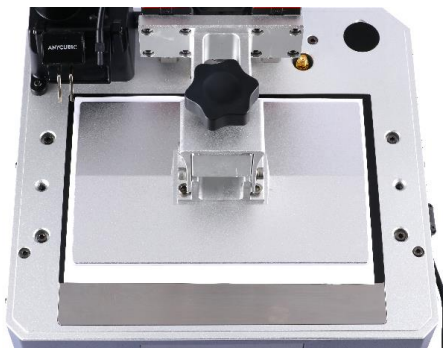
13. Press on top of the platform gently, and then tighten the four screws to secure the platform.
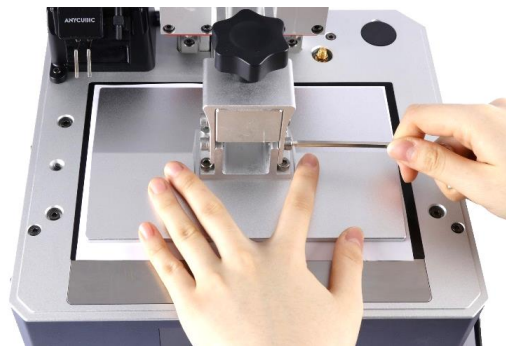
14. Lastly, click "Z=0" and confirm to save the zero position. Click "Enter" and Z axis will automatically lift up. Then, take out the paper.
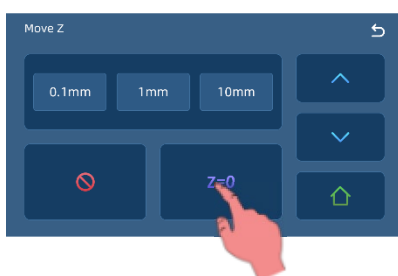
15. Raise printing platform until the curing screen can be observed completely. Return to Tools menu and click "Exposure". Select an image, set the test time and then click "Next". The corresponding image should be displayed completely on curing screen.
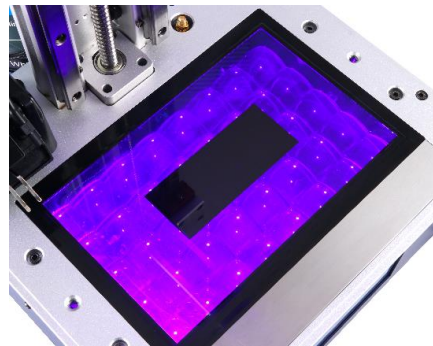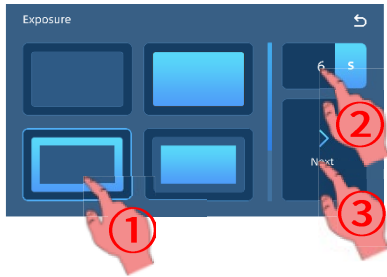
16. Install resin vat with both needles being set in it.
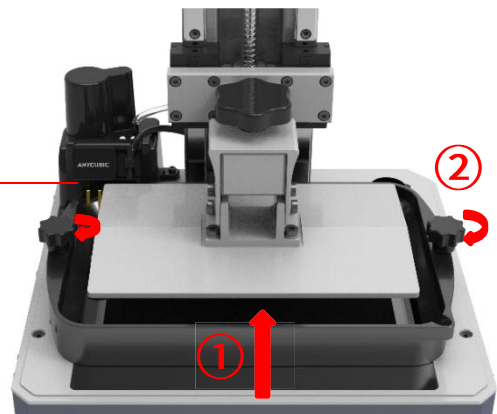
17. Install WIFI antenna.
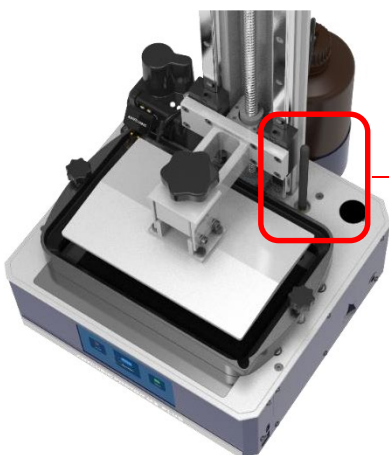
Auto-feed

1. Instructions

Ensure the auto-feed unit has been installed and the resin in bottle is enough to print. Click "Tools" → "Auto-feed" → "Feed in". It will feed in automatically if resin in the vat is sufficient during printing. Click "feeding speed" to set the speed.
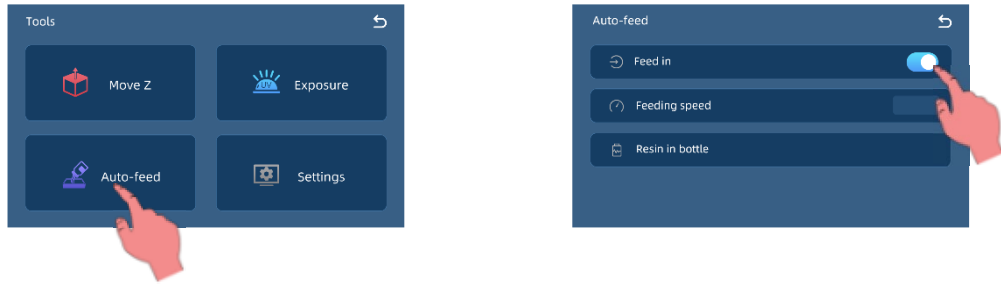
- Auto-feed only works when machine is printing.
- The unit feeds every five minutes normally.
- Green light indicates that the unit has been powered.
- Red light indicates that resin is not detected by needles. When needles detects resin, the light goes off.

Detection light
Power light
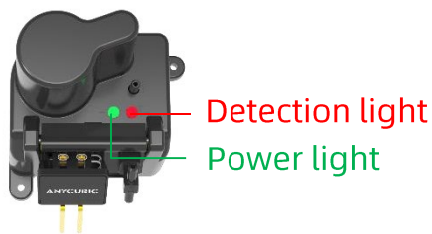
If the insufficiency of the resin in bottle is detected when it is printing, the machine will beep to warn and disable auto-feed function. Please add or change resin first and click auto-feed button to enable it if necessary.
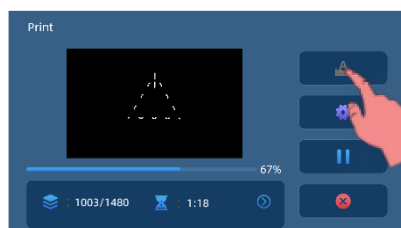
Click auto-feed button to enable the function after add or change resin

Notice:

1. If you use non-Anycubic resin, it is suggested to check whether red light goes out normally when resin reaches both needles before printing. If not, the resin cannot be automatically fed.

2. To save resin, pour the remaining resin that is out of the reach of pipes to resin vat.

3. **DO NOT vigorously shake or turn over the resin bottle when cap part is installed. If the inside of cap is stained by resin, please immediately clean it to avoid malfunction or damage of auto-feed unit.**

2. Troubleshooting

Issues	Troubleshooting		Solution
Do not feed in during printing	Red light is off	The resin in vat reaches both needles	Wait until the resin is insufficient.
		The resin in vat does not reach both needles	The power light(green) is off, reconnect the wire under detection unit.
			Two needles touch each other. Please contact the tech support.
			Resin abnormally gets into the air pipe to cause malfunction of the unit. A replacement is needed.

Auto-feed

Issues	Troubleshooting		Solution
Do not feed in during printing	Red light is on	Waiting status	It feeds every five minutes normally. Wait for the next feeding.
		Feeding status	The wrong connection of air pipe and feeding pipe cause malfunction of auto-feed unit. A replacement is needed.
The machine shows resin in bottle is insufficient and disable auto-feed function	Resin in bottle is insufficient		Add resin to bottle
	Resin in bottle is sufficient but machine shows its status as No Resin	The two screws on the cap is loosened	Tighten the screws
		The wire connecting cap and machine is disconnected	Connect the wire to machine
		Nothing wrong with screws and wire	The resin cannot be used for auto-feed

Auto-feed

Issues	Troubleshooting	Solution
Consistent feeding cause overflow of resin	Red light does not go off when resin reaches both needles	The resin cannot be used for auto-feed unit
	The lowest points of needles is rose	Check whether you completely follow the assembly instructions
		Two needles are distorted. Please contact the tech support.

*Please contact the tech support if the troubleshooting above cannot solve your problem.

1. Print

*Please check FEP film carefully before and after every printing. If the FEP film is broken, replace it immediately to avoid further damage to machine.

Wear masks and gloves (to avoid direct skin contact with resin), and slowly pour the resin into the vat. The resin cannot exceed the vat's maximum scale.

Then, put on the cover and the side with sticker needs to face backward. Insert the USB memory into the USB port, print the test file in it. Or connect the machine to Anycubic Cloud and remotely control the printing.

The printing time on the screen is for reference only, we make no guarantee that it is the actual printing time.

Do not exceed the maximum scale on the vat

Sticker

If it is necessary, click "Pause" to pause the printing and wait for platform rising automatically. Then click "Start" to resume printing.
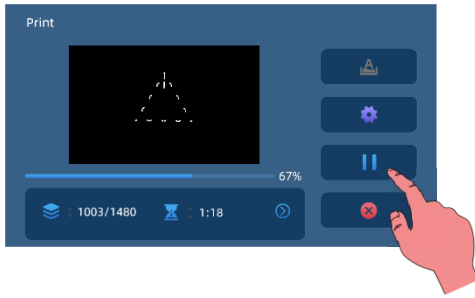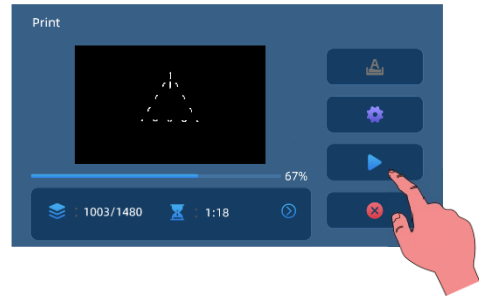
click to pause   click to start

2. File list

File list is consist of USB driver file list and local file list. The print files sent remotely from Anycubic Cloud will be saved to local file list.

The first two level directory can be checked. For example, insert USB drive and then select USB drive file to open its first level directory. And click the file icon to open the second level directory.
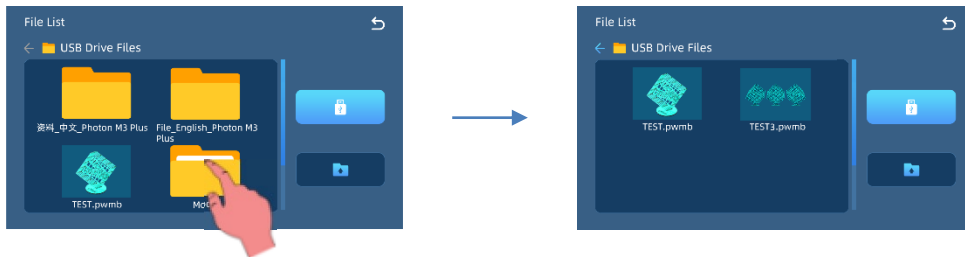
3. Machine settings

Click Settings in Tools interface to enable/disable door detection function.

Door detection function is disabled by default. If this function is enabled, the printer can detect whether the cover is on or not. Printing will pause when the cover is removed, and will continue when the cover is put back.

enable/disable door detection
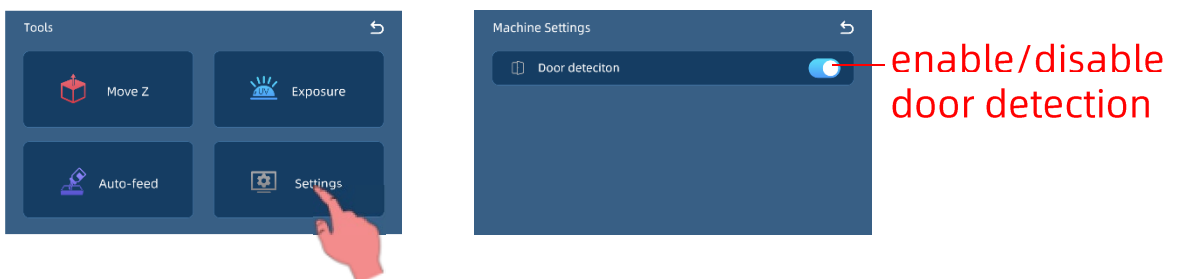
4. Handling models and residues

After printing, wait until the resin stop dropping from the platform and then unscrew and remove the platform. The model can be removed by scraper carefully. The removed model should be washed with ethanol 95vol% concentration. The printed model may need post curing to achieve better hardness by direct **sunlight** or UV-curing box.
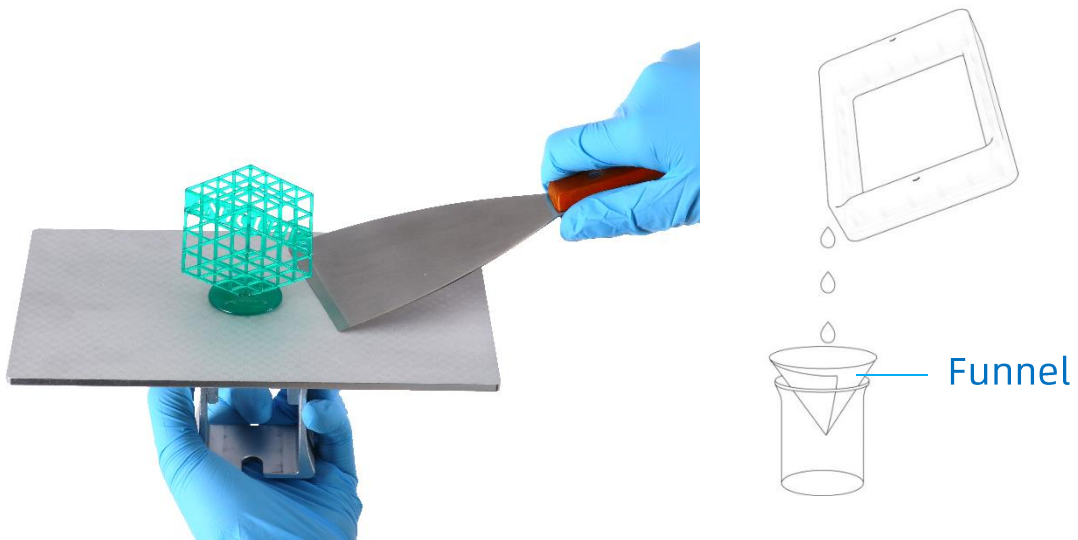
Funnel

【**IMPORTANT**】 Inevitably, in case of incomplete curing or failed prints, there might be some cured resin left in the vat. It is suggested to filter the resin by a funnel and then store the liquid in a sealed container. The residues left on the platform or in the vat can be wiped off with paper towel.

Before each prints, please ensure there is no solid residues in the vat or on the platform, otherwise the FEP film may be crushed and broken during printing.

5. Power off

If you want to power off the 3D printer completely after printing, please click the icon in home menu to shut down, then turn off the power switch and disconnect the power cord. Otherwise, it may cause data loss and malfunction.
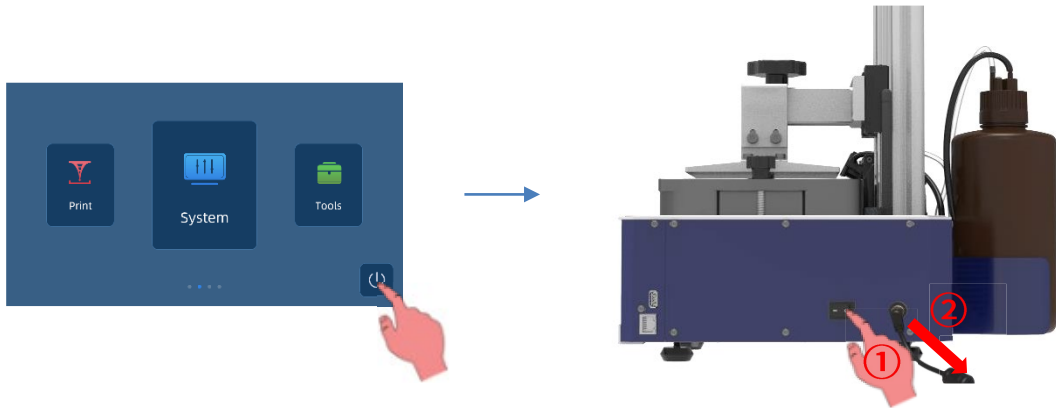
Slicing Software Overview

3D printer reads sliced file and prints models. It is necessary to convert 3D files (stl./obj.) into sliced files for machine to recognize. Software that realize the process is called slicing software, for example, Anycubic Photon Workshop.

Anycubic Photon Workshop can be used to export sliced file. You should select **Anycubic Photon M3 Plus** as machine type first, then manipulate the model and set the parameters. Lastly, export the sliced file (**.pwmb**).

The instruction of Anycubic Photon Workshop has been saved in the USB memory, it is recommended that read it carefully if it is the first time for you to use Anycubic Photon Workshop.
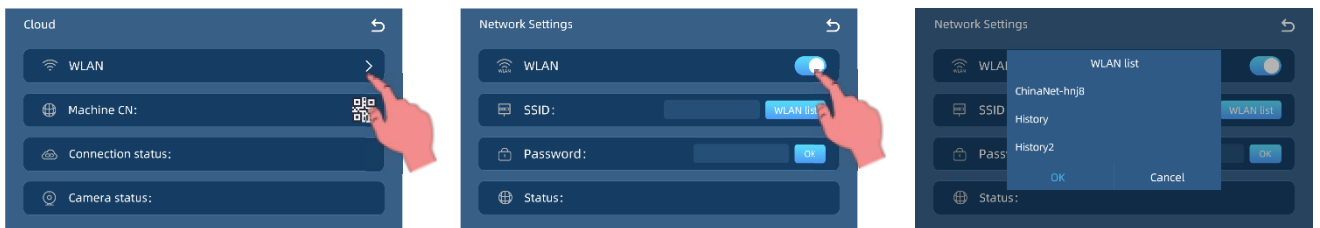
Anycubic Cloud

1. Connect Anycubic Photon M3 Plus to Anycubic Cloud to upload and manage printing over WIFI and Ethernet.

*   Connect with Ethernet: Plug one end of the network cable into the network port.
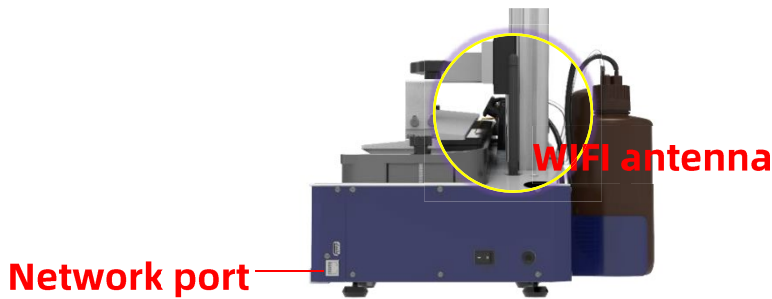
*   Connect with WIFI: Install the antenna first. Click "Cloud"→"WLAN", turn on to search for available network and select one. Then, enter the password and click OK to connect.

2. Visit **https://cloud.anycubic.com** on PC to access Anycubic Cloud. To download the application, search "Anycubic Cloud" in App Store or Google Play. Then, sign up and log in.

3. Open Anycubic Cloud – workbench – 3D printers, click "Add Printers". Open Cloud interface on the printer, check Machine CN and enter it to "Add Printers" interface in Anycubic Cloud; or click "   " icon and then scan QR code with your smart phone. Lastly, confirm to add printers.

QR code is
displayed here
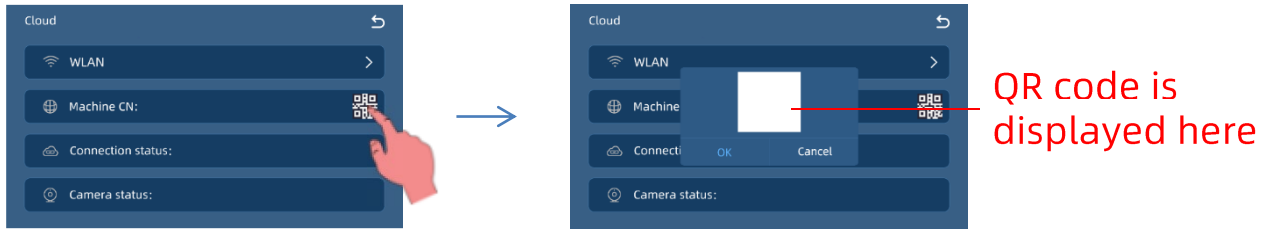
4. When printer is added successfully, you can control printing remotely. If necessary, you can install an extra camera unit to monitor printing in real time.

FAQ and Machine Maintenance

1. FAQ

(1) Model do not stick to platform

➢ Bottom exposure time is insufficient, increase the exposure time.
➢ Contact area between the model and platform is small, please add raft.
➢ Bad leveling.

(2) Layer separation or splitting

➢ The machine is not stable during printing.
➢ FEP film in the vat is not tight enough or it need a change for new one.
➢ The printing platform or resin vat is not tightened.
➢ The lift speed is too fast.
➢ The printing object is hollowed without punching.

(3) Layer shift

➢ Add supports.
➢ Reduce the lift speed.

(4) Floccules left in resin vat

➢ The exposure time is too long. Reduce the normal exposure time and bottom exposure time.

2. Machine maintenance

(1) If Z axis make noisy sound, please apply lubricant to Z lead screw.

FAQ and Machine Maintenance

(2) Clean off the residues cured on FEP film when the printing fail: Set full-screen exposure for 20s and then remove the cured resin sheet to protect the film. Do not use sharp objects to scrape off the residues on the FEP film.


(3) Be careful when remove the platform, do not let it fall onto the curing screen.
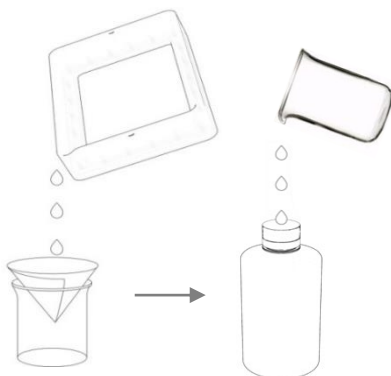
(4) Do not left the resin in the vat for over two days if not using it. Please filter and store the resin properly.

(5) Firmware update: Click "System"→"Information" →"Version check" to check whether the current firmware can be updated. To update firmware, you can copy latest firmware file to USB driver and then click Local upgrade button. In addition, update the firmware by OTA upgrade.
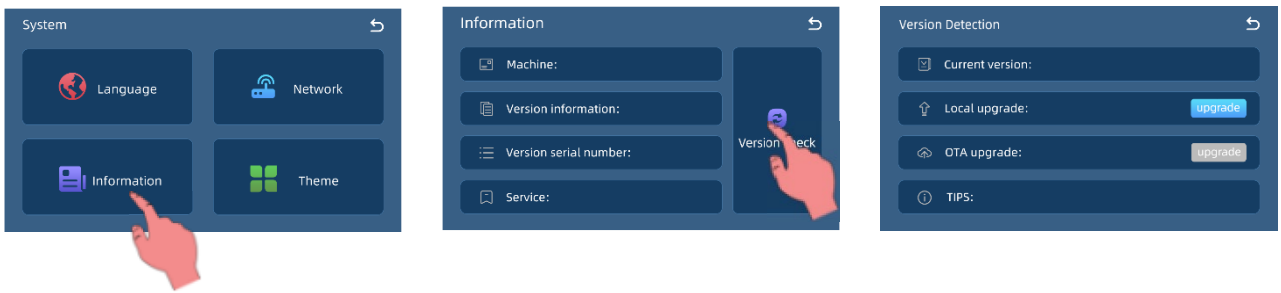
(6) After printing, please clean up the platform **(wipe with paper towels or wash with alcohol),** and ensure no residue left before next print **(filter the residue with funnel).**

(7) If the outside of printer is stained with resin, use alcohol to clean.

(8) To switch the resin colors, please clean the original resin vat first.

Thank you for purchasing ANYCUBIC products! Under normal usage and service, the products have a warranty period up to one year. Please visit ANYCUBIC support center(support.anycubic.com/en) to report any issue with ANYCUBIC products. Our professional after-sale service team would respond within 24 hours and solve the issues.