



 ARTILLERY

# M1 Pro Product Manual

V1.0.0

(Subject to the actual product)



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ARTILLERY Official Website

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Thank you for you select and use ARTILLERY intelligent equipment. Please make sure to completely read this manual before use and strictly follow the operating standards before use to make ensure the operating safety and the best operating experience. ARTILLERY customer service team provide the professional technical support to you around the clock.

If meeting any problems, you can contact us according to the phone and email on the manual. We will provide multiply dimensional learning source to help you completely develop the equipment performance:

1. Find out the relate sources such as operating guide of the slicing software and Artillery3D slicing software and others in SD card.
2. Visit ARTILLERY official website([www.artillery3d.com](http://www.artillery3d.com)) to obtain the relate information such as software, hardware, equipment operation, equipment maintenance and others.

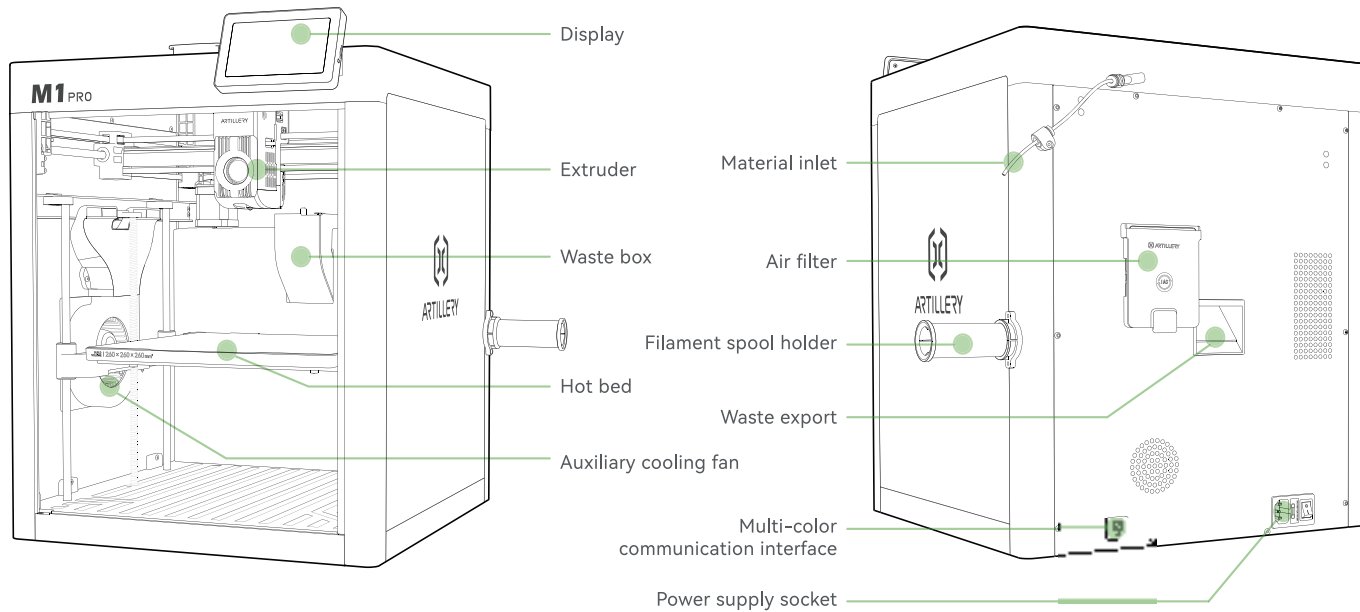
#### Operating notices

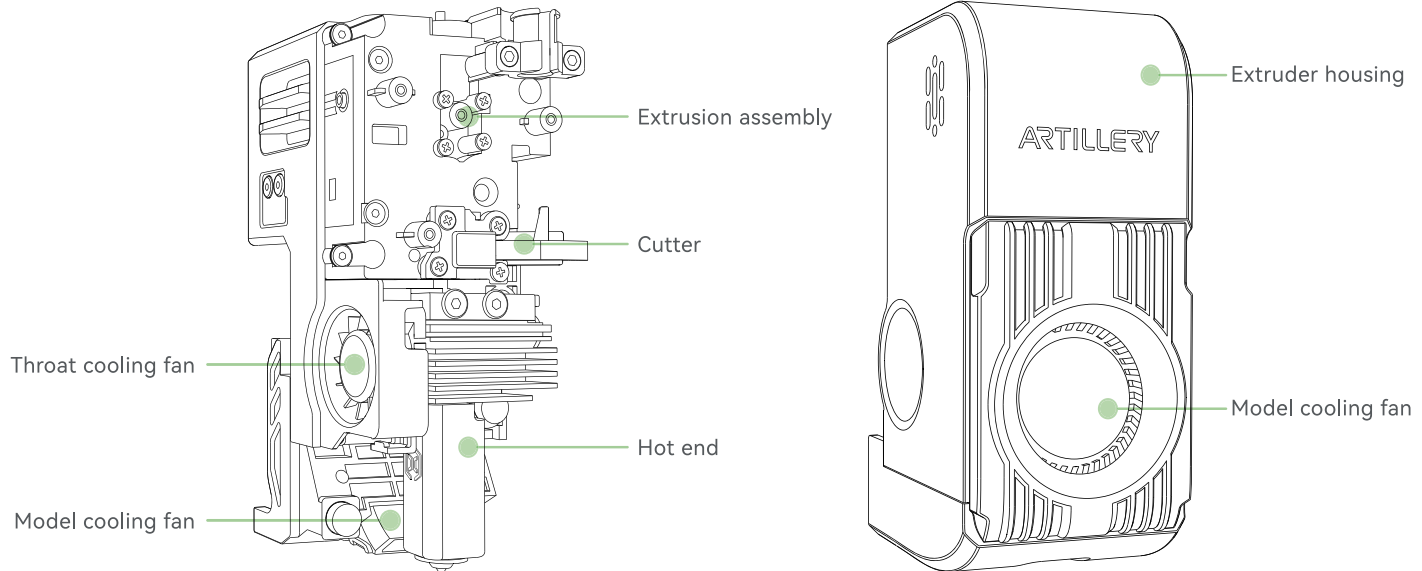
1. Please don't try to use the methods not described in any operating instruction to use this machine, avoid it caused the unexpected human body hurt and property loss;
2. Please don't place this machine in the inflammable and explode environment or nearby the high heat source, advise to place in the air venting, cool and few dust environment;
3. Please don't place in the environment where bigger vibration or other unstable environment, the machine shaking will affect the printing quality of the printer;
4. Advice to use the factory recommended filament, avoid it caused the extruder head blocked and machine damaged;
5. Please don't use the power cords from the other products as replacement during installation. Please must use this machine attached special power supply wire, and make ensure the power supply plug correctly insert into the three holes socket with grounding wire;
6. Please don't touch the nozzle, hot bed and cavity heating module when printer working, to prevent it occur high temperature scald and caused human body hurt;
7. Please don't wear gloves, loose clothing or accessories when operating the machine, prevent the motion components caused squeeze and cutting hurt to human body;
8. Utilize the rest heat of the nozzle and assisted by the tool to completely clean the filaments on the nozzle in time after printing finished, please don't directly use hands touch the nozzle when cleaning, prevent it occur scald;
9. Frequently process product maintenance, scheduled use dry cloth to process machine body clean of the printer under the situation that power off, wipe off the dust, sticked printing materials and foreign object on the guide rail;
10. Children under 10 years old should not use this machine without adult supervision.
11. The users must strictly follow the equipment locate country/region and local laws and regulations, strictly follow the professional ethics rules, and practically perform the safety guarantee duties. The products and equipment of this company only limit at legal application, strictly prohibit to out of line use through any methods. If against the above stipulates and caused any legal results, all are self undertook the responsibilities by the party who against rules, this company not undertook any joint liabilities;
12. Please directly cut off the power supply if meeting emergency situation

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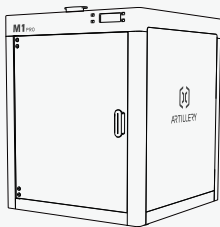
## 1.1 Equipment profile



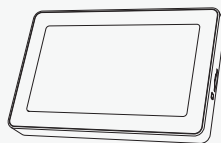


## 1.2 Accessories list

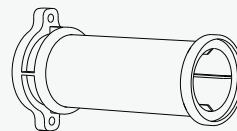
### Main accessories list



① Main machine\*1



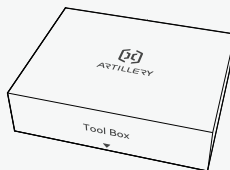
② Display\*1



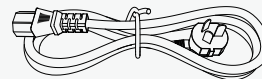
③ Filament spool holder\*1



④ PEI print panel (pre-installed) \*1

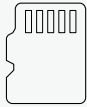


⑤ Tool box\*1

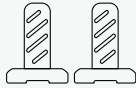


⑥ Power supply wire\*1

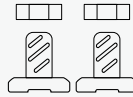
## Tool box accessories list



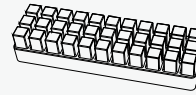
① SD card\*1  
(pre-installed)



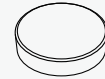
② M3\*8 screw\*2



③ M3\*6 screw\*2+M3 nut\*2



④ Nozzle wipe silica gel pad\*1



⑤ φ10X5 magnet\*1



⑥ Hexagon spanner  
H2.0 \*1



⑦ Hexagon spanner  
H1.5 \*1



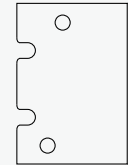
⑧ Through needle\*1



⑨ Cross screw driver\*1



⑩ Metal grease\*1



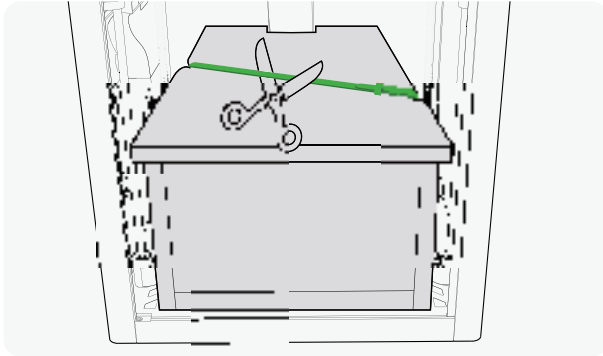
⑪ Blade\*1

## 1.3 Equipment parameters

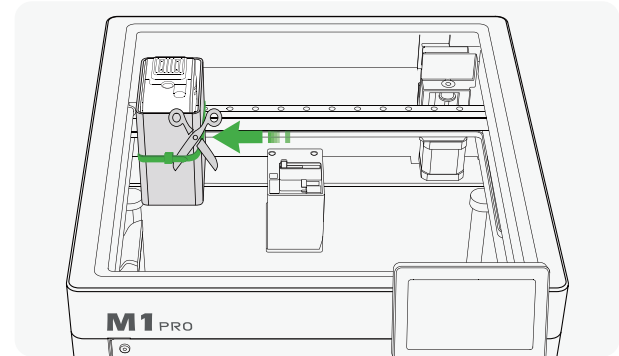
Technical parameters			
Product model	M1 Pro	Filter fan	Open loop control
Printing technology	FDM	Air filter	Honeycomb active carbon filter (internal and external circling)
Printing size	260*260*260 (mm <sup>3</sup> )	Hot end	Full metal
Machine body size	437*389*494 (mm)	Nozzle	Harden steel
Printing precision	± 0.1 mm	Nozzle diameter (default)	0.4 mm
Printing speed	≤600 mm/s	Nozzle diameter (optional)	0.2 mm、0.6 mm、0.8 mm
Maximum acceleration	20000 mm/s <sup>2</sup>	Filament diameter	1.75 mm
Rated voltage	100-120VAC/200-240VAC 60/50Hz	Heating method	Aluminum base plate heating
Rated power	1150W	Power loss recovery	Support
Nozzle temperature	≤320°C	Filament run out detection	Support
Hot bed temperature	≤120°C	Air printing detection	Support
Cavity temperature	≤60°C	Automatic leveling	Support
Extruder gear	Harden steel (55HRC)	Vibration compensation	Support
Display	4.3 inch color touch screen	Lighting lamp	Support
Operating and control interface	Display, PC application program	Support document format	STL / OBJ / 3MF
Main body frame	Cast aluminum and aluminum section material	Slicer software	Orca Slicer / Artillery Studio / Artillery 3D
AI camera	Delay shooting+chow mein +foreign object test	Software updating	OTA / SD card
Construction plate surface compatibility	Veins PEI plate (cooling plate/engineering plate/high temperature plate)	Supported filament	Support: PLA/PETG/ABS/ASA/PVA/PET/TPU
Component cooling fan	Open loop control		Able to print: PA/PC
Cavity temperature adjustment fan	Close loop control		
Hot end fan	Close loop control		Not recommend: carbon/glass fibre reinforced filament
Auxiliary cooling fan	Close loop control		

## 2.1 Unlock tool box, unlock tool head, unlock hot bed, Shovel knife assembly

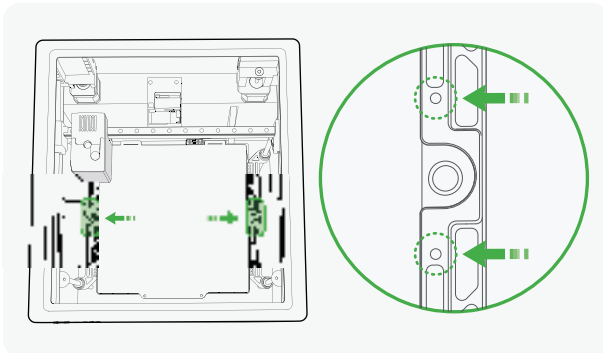
1. Shear off the fix ribbon between the pearl wool and hot bed, then pick out tool box.



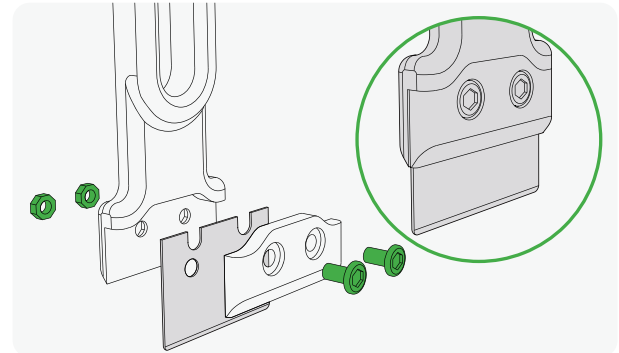
2. Shear off ribbon, then remove the hard paperboard on the tool head



3. Use H2.0 hexagon spanner to twist off four pieces fix screws of the hot bed, then remove the free marks glue which fix PEI panel.

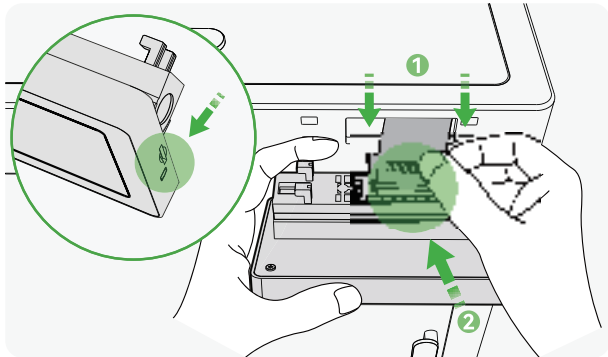


4. Click on the screen " " → "SD card"/"Local File" and select "Shovel knife.gcode" to print the shovel knife model. Assemble the shovel knife using M3x6 screws and M3 nuts as shown in the figure. (Print after the machine is used normally)

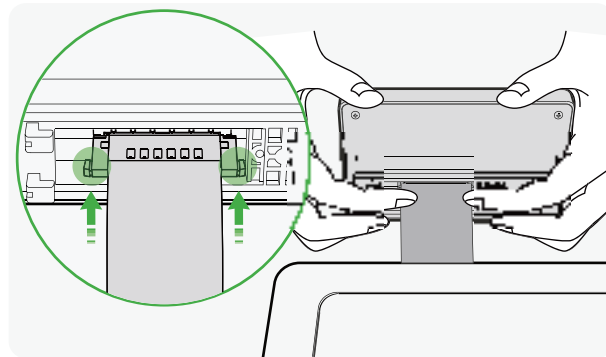


## 2.2 Display installation

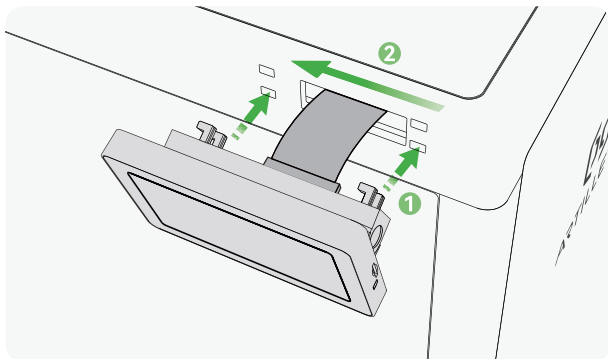
1. Left hand hold the indicator (SD slot side rightward), right hand hold the winding wire outward lightly drawn to suitable distance.



2. Accurately align to the winding wire and screen butt joint, hands index fingers evenly load to press it in.

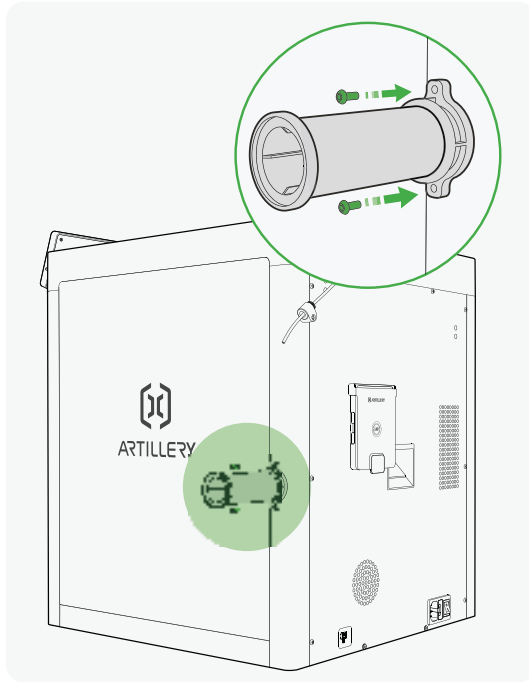


3. According to the diagram shown sequence, insert the display into the slot of the printer, leftward tightly pushed.

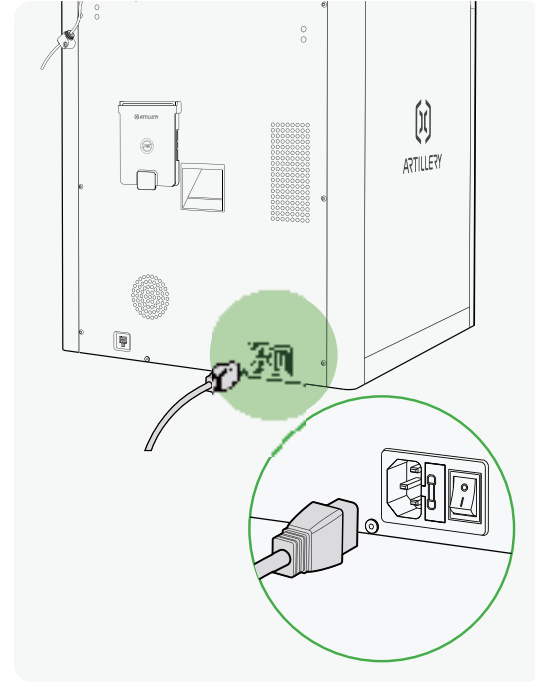


## 2.3 Filament spool holder installation

1. Use H2.0 hexagon spanner, make two pieces M3×8 screws (2# screw pack) to install the filament spool holder to side of the machine.

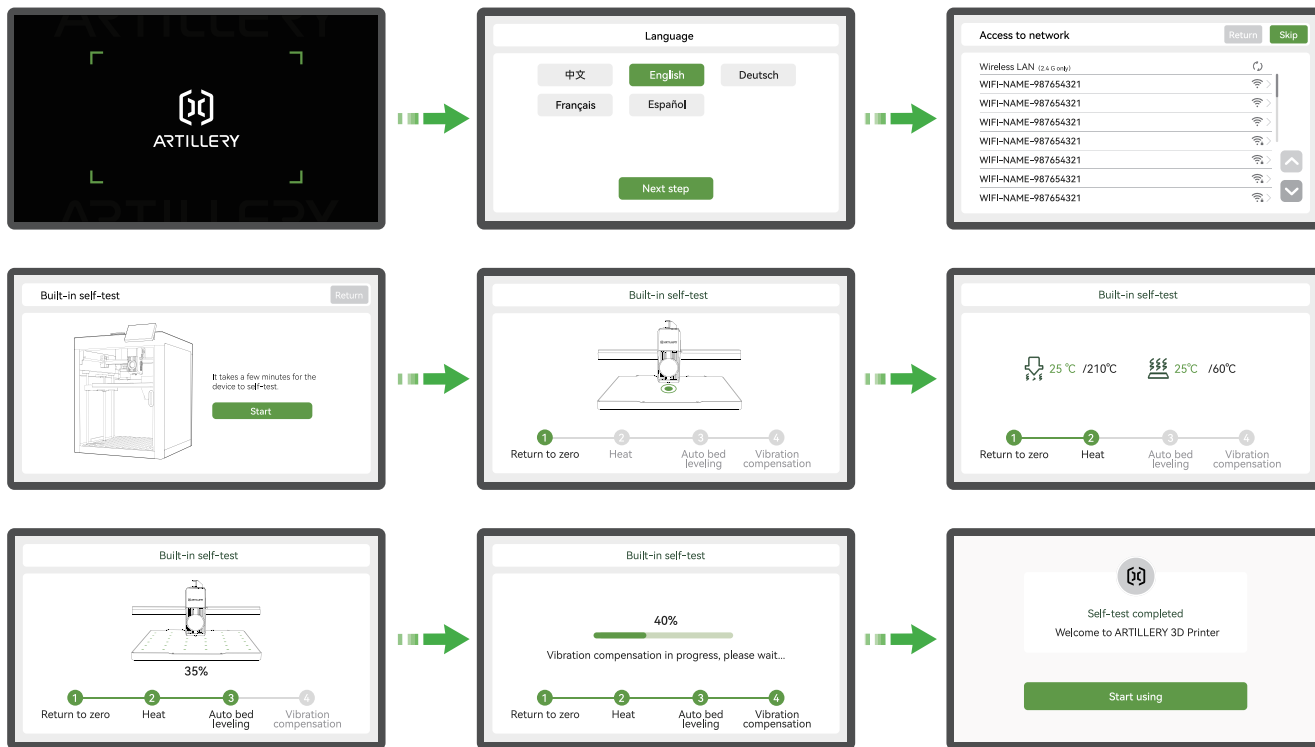


2. Connect the power supply by plugging one end into the machine's back port and the other into an outlet, start machine after confirmed it firmly connected.



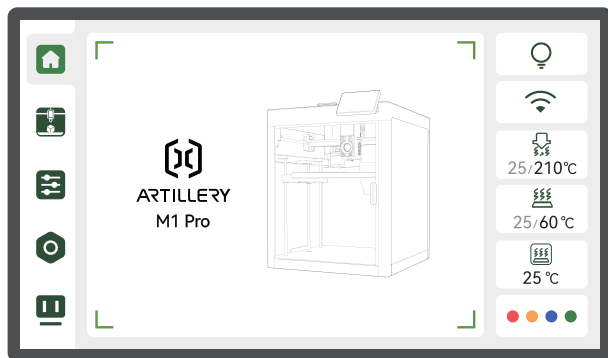
### 3.1 Start machine guide

Operate according to the screen reminding after start machine.

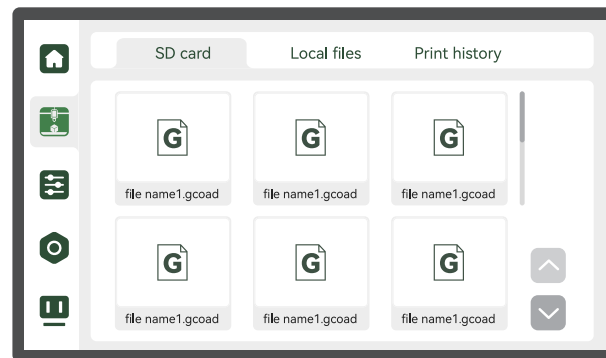


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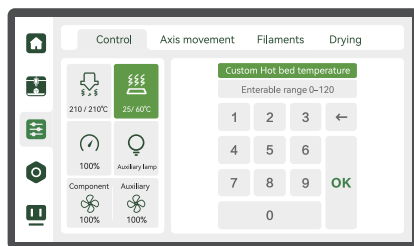
## 3.2 Machine screen interface profile



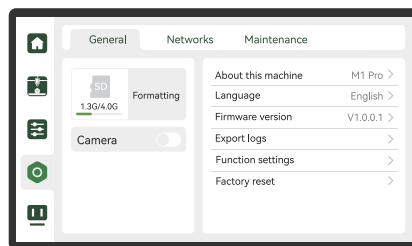
Homepage



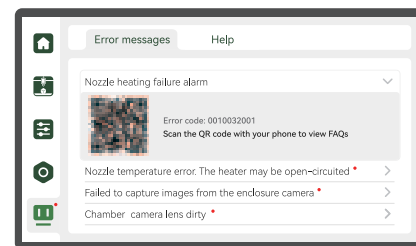
Printing page



Control page



Setting page

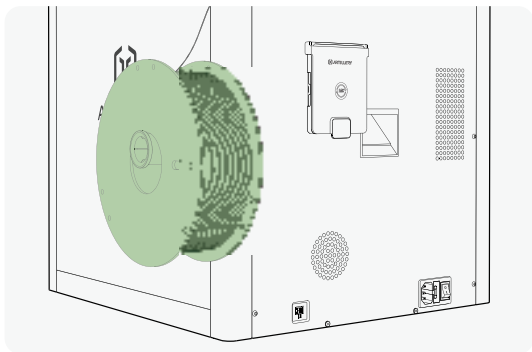


Help page

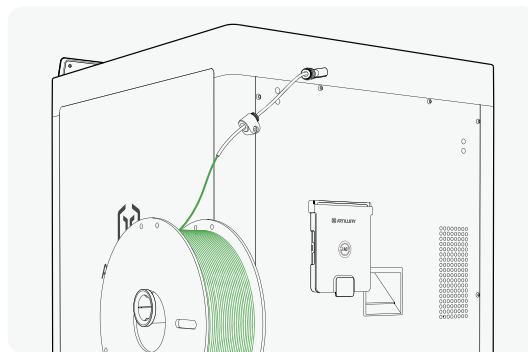
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### 3.3 First time printing

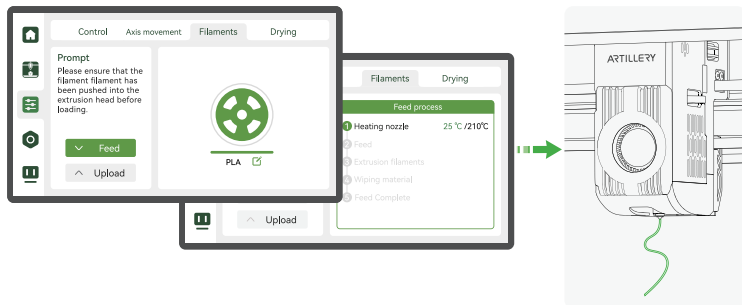
1. Place the filament on the machine side filament spool holder.




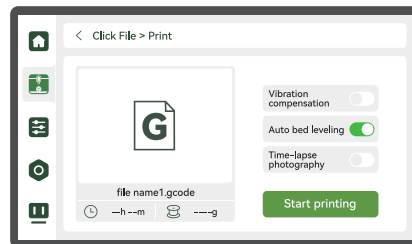
2. Make the filament pass through PTFE pipe, push gently until it stops.



3. Click "  " → "Filament" → "Feed" step, gently push the filament, wait for the extruder to suck in the filament, and see the filament flow out of the nozzle.



4. Click "  ", select one model to print (advice to calibrate the auto bed leveling once before each print).



(Subject to the latest version)

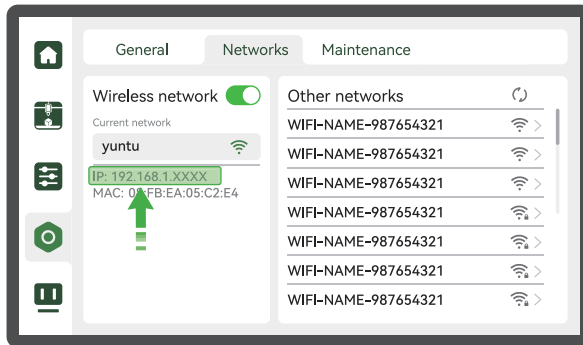
## 3.4 Slicing software

### 3.4.1 Slicer download and machine binding

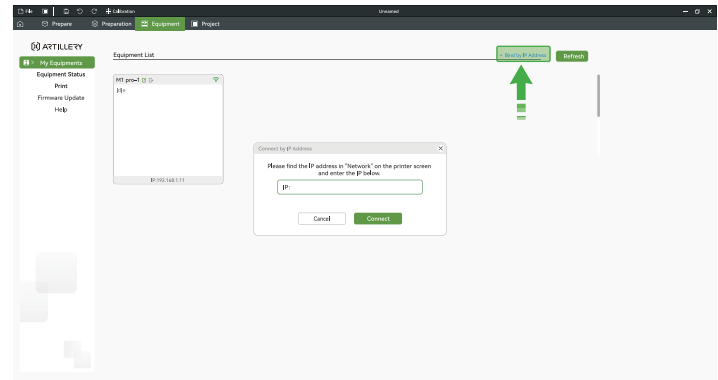
1. Please download from official website ([www.artillery3d.com](http://www.artillery3d.com)) or copy the latest version cut slice software from the documents in SD card.



2. Click "  " → "Network", check the IP address.




3. Binding machine IP on cut slice software.



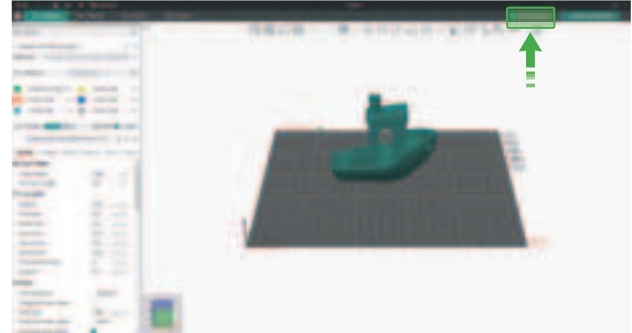
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## 3.4.2 Slicing and printing documents

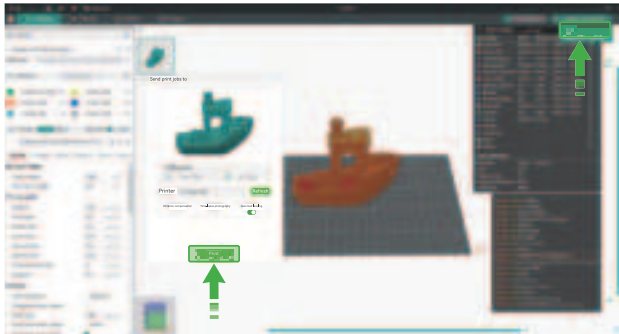
1. Click up “” on the top menu column of view pane and lead in model. (Support documents include: 3mf, stl, stp, step, obj.)



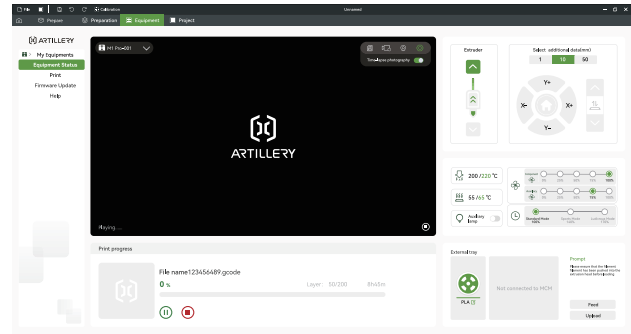
2. Click “Slice plate / Slice all” at up right corner of the screen.



3. Select printer and send to print after finish cut slice. (Advice open “Auto bed leveling” when every one time send to print)

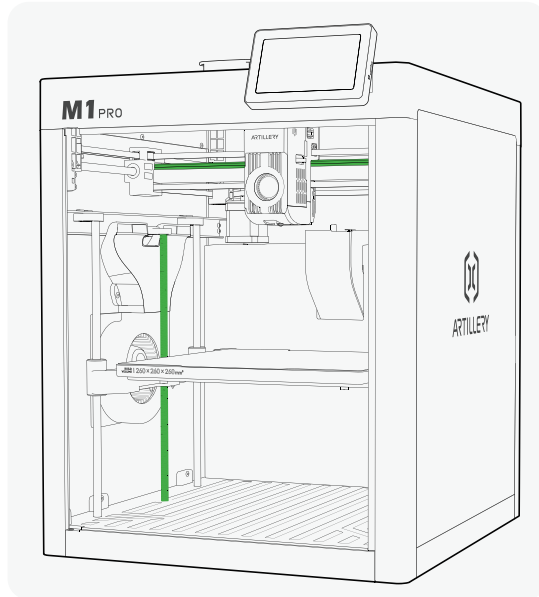


4. Able to process remote monitor your printing process on “Equipment” interface, and pause/stop printing when need.

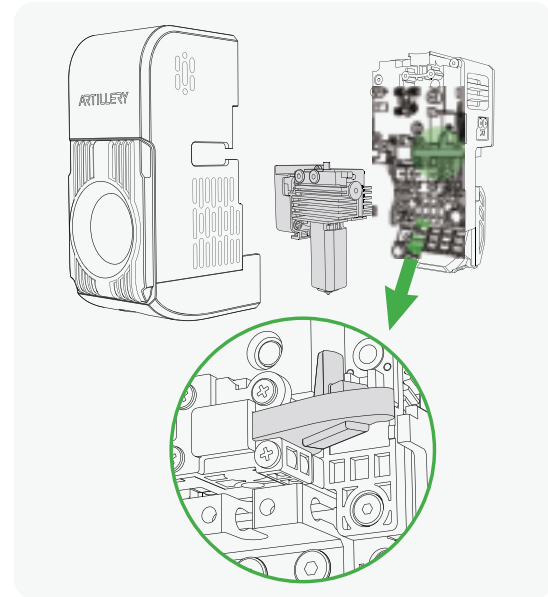


(Subject to the latest version)

## 4.1 Printing notices



- 1 Need scheduled to check the guide rail and screw rod lubricating grease status, avoid that oil grease exhausted or powder dust/chips accumulation affect running. Advice to use the original special lubricating grease to clean and maintain.

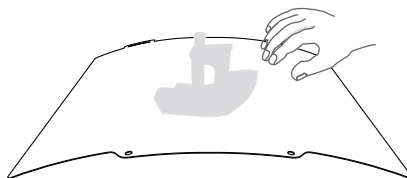


- 2 Frequently cut off the consumption materials will caused the cutter wear and deactivation, affect the cutting performance, need scheduled check and renewal in time.

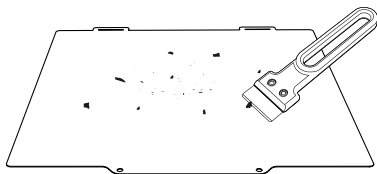
## 4.2 Daily maintenance

### Warmly Reminding

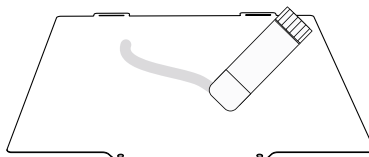
The PEI sheet is a consumable part, and it is recommended to replace it periodically to ensure proper first-layer adhesion.



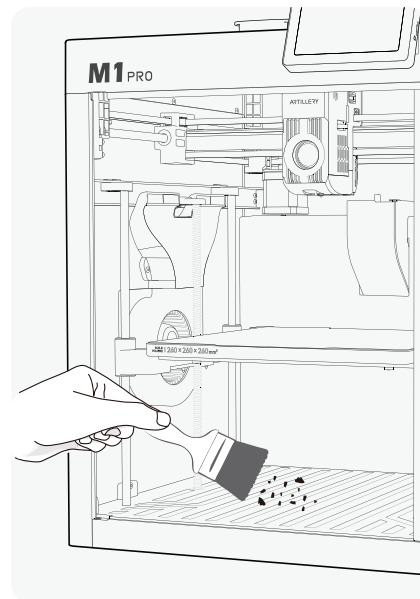
- 1 Pick out along with PEI panel after the model has cooled. Light bending panel (avoid over bending caused deformation), make the model and panel separated.



- 2 Advice to use shovel clean the PEI panel surface residuals (need control the force when operating, avoid it damage the panel coating layer).



- 3 Advice evenly coating solid gel on the PEI panel when printing small scale model, to reinforce the first layer adhere force.



- 4 Need scheduled clean the residuals in the printer.

If you encounter any issues during use that cannot be resolved:

- 1 Able to login ARTILLERY official website ([www.artillery3d.com](http://www.artillery3d.com)) to search the information relate software, hardware, contact, equipment operation, equipment maintenance and others.
- 2 Please contact us according to the phone and email at end of the manual.

Maintain instruction		
Machine clean	Clean the residuals in the machine, make ensure the machine motion will not be affected.	Before every one time printing
Nozzle	Check whether discharge wire normally, if abnormal then please one by one check whether block head.	After every one time renewal filaments
	Check whether nozzle has residuals, if has then use tool remove it after heating nozzle.	
PEI panel	Check whether PEI panel has residuals and glue, if has then please clean PEI panel.	Before every one time printing
Motion mechanism	Spindle, guide rail and helical rod lubrication.	Accumulate print time per 500 hours
Built-in self-test	Vibration veins optimize.	Accumulate print time per 300 hours
Renewal filaments	Follow the normal upload-feed process.	

### 4.3 After sales service

Our company provides a one-year limited warranty for the M1 Pro complete machine (excluding consumable parts). You can visit the ARTILLERY official website ([www.artillery3d.com](http://www.artillery3d.com)) to find more tutorials on machine operation and maintenance.

For after-sales service, users can send an email to the customer email address bound in the system. Upon receiving the email, the system will generate a ticket, and customer support will respond via email. Email address: [support@artillery3d.com](mailto:support@artillery3d.com). You can also scan the QR code below to submit a ticket.



**FCC Warning:**

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.

**Caution:** Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.



## Artillery Co., Limited

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Web: [www.artillery3d.com](http://www.artillery3d.com)