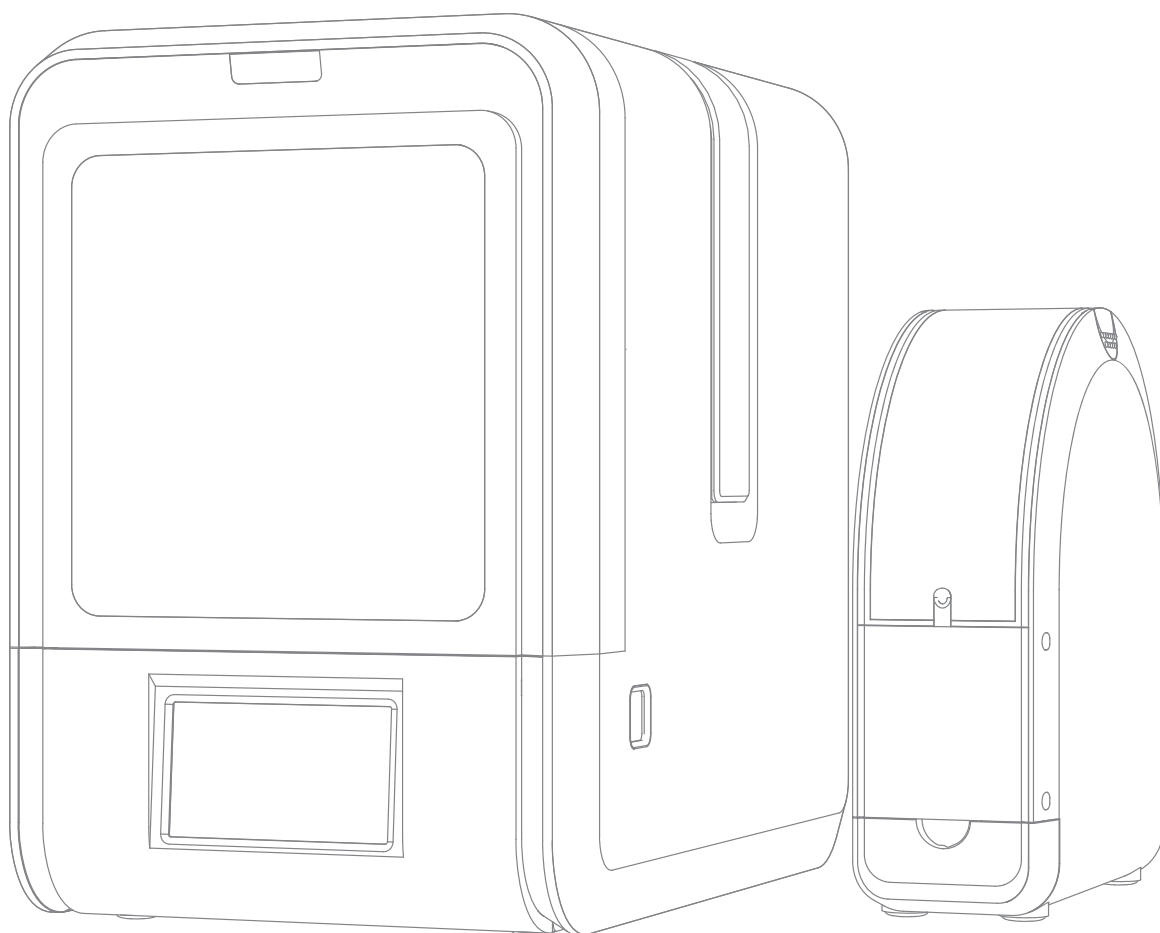


UP mini 2

User Manual

V0.1



Index

Chapter 1 Product Description

Chapter 2 Prepare for Your First 3D Print

Chapter 3 Product Activation

Chapter 4 Machine Settings

Chapter 5 Print Settings

Chapter 6 Calibration and Other Options

Chapter 7 Techniques and Troubleshooting

Safety Precautions

1\ The UP mini 2 3D printer requires the power adapter provided by the original manufacturer, otherwise the machine could be damaged or even cause a fire hazard. Please also keep the power adapter away from water and out of high temperature environments.

2\ During printing, the nozzle of the printer will reach 260°C and the print platform could reach over 70°C. Please do not touch these parts with your bare hands while they are hot—not even with the heat resistant gloves included with the machine—as the temperature could damage the gloves and injure your hands.



Warning label:
High Temperature, do not touch!

3\ During printing, the printhead and other mechanical parts move at high speeds. Touching these parts while they are moving could cause injuries.



Warning Label:
Moving parts, do not touch!

4\ Please wear goggles when removing the supporting material from models and detaching models from the perf board.

5\ When printing with ABS and PLA, the plastics will create a light odor. Please run the printer in a well-ventilated environment. We also suggest you put the printer in an environment with a stable temperature as unwanted cooling could cause adverse effects to the print quality. When printer is extruding filament, make sure there is enough space between print head nozzle and the platform. Otherwise the nozzle could be blocked.

Printing Environment

As light odor will be produced during printing, please run the printer in a well-ventilated environment. The UP mini 2's ideal working temperature is between 15°C and 30°C with a relative humidity between 20–50%.

Printing at temperatures out of this range could cause adverse effects to the printing process. When using the “Extrude” function, keep at least 50mm between the nozzle and the platform. If too close, the nozzle may get blocked.

One Year Warranty

Beijing Tiertime Technology Limited (Tiertime) and its authorized resellers warrants to the original purchaser that this product is free from defects in material and workmanship.

Tiertime or its resellers will for one year, at its option, repair or replace at no charge for parts and labor from the date you purchased the product from Tiertime or a reseller. Nozzles and Print Boards are warranted for ninety (90) days.

- Tiertime reserves the right to determine the validity of all warranty claims.
- Warranty is void if the product serial number has been altered or removed.
- Warranty is void if the product has been misused or damaged or if evidence is present that the product was altered, modified, or serviced by unauthorized service people.

Compliance

FCC

ROHS

CE

Unpacking

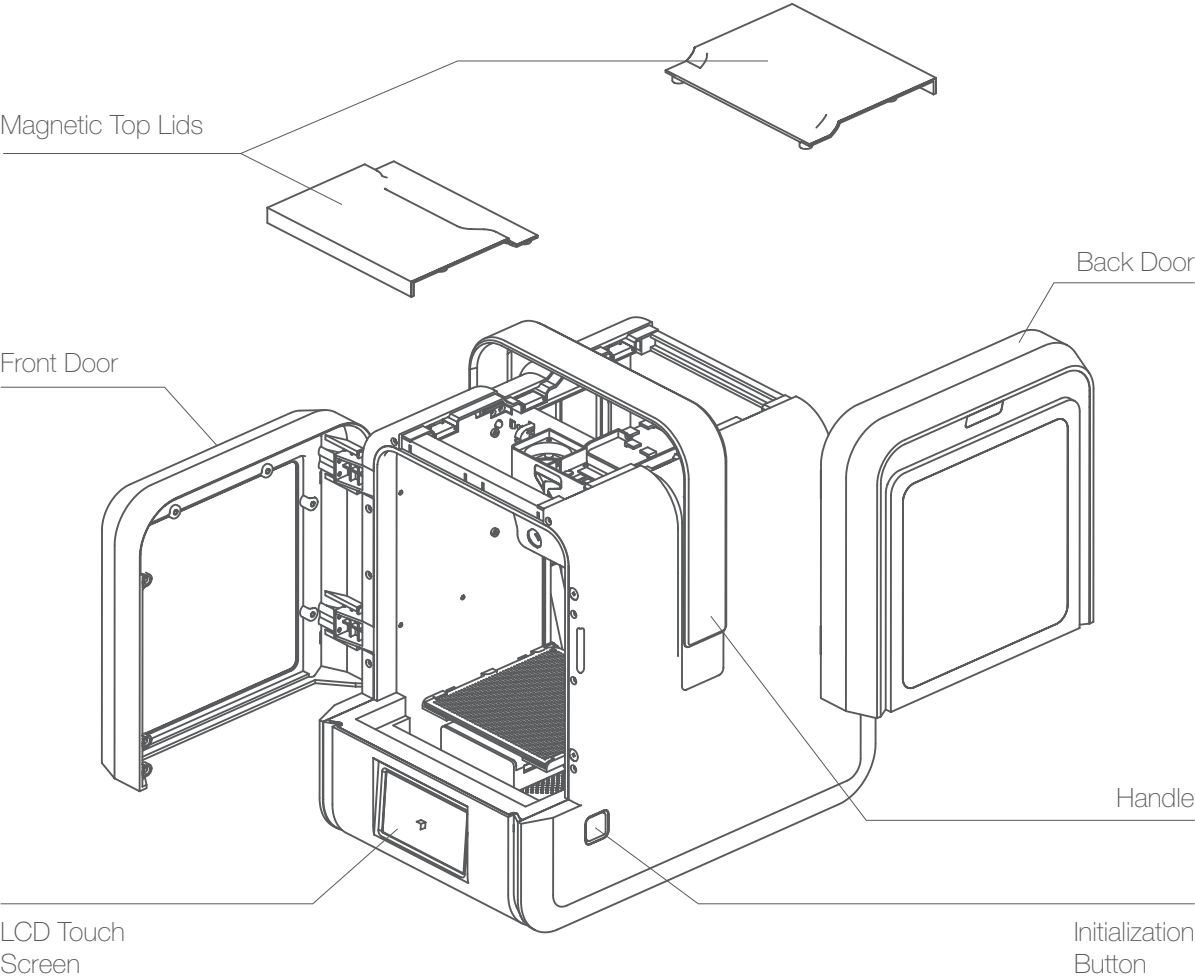
Package Content

			
UP mini 2	Spool and Toll Holder	Perforated Print Board (Perf Board)	UP Flex Print Board
			
Protective Gloves	Power Adapter	Power Cable	Scraper
			
USB Cable	Hex Keys 2.0mm, 2.5mm	Plier	ABS Filament
			
Nozzle Wrench	Micro SD and Reader	Print Head Nozzle	

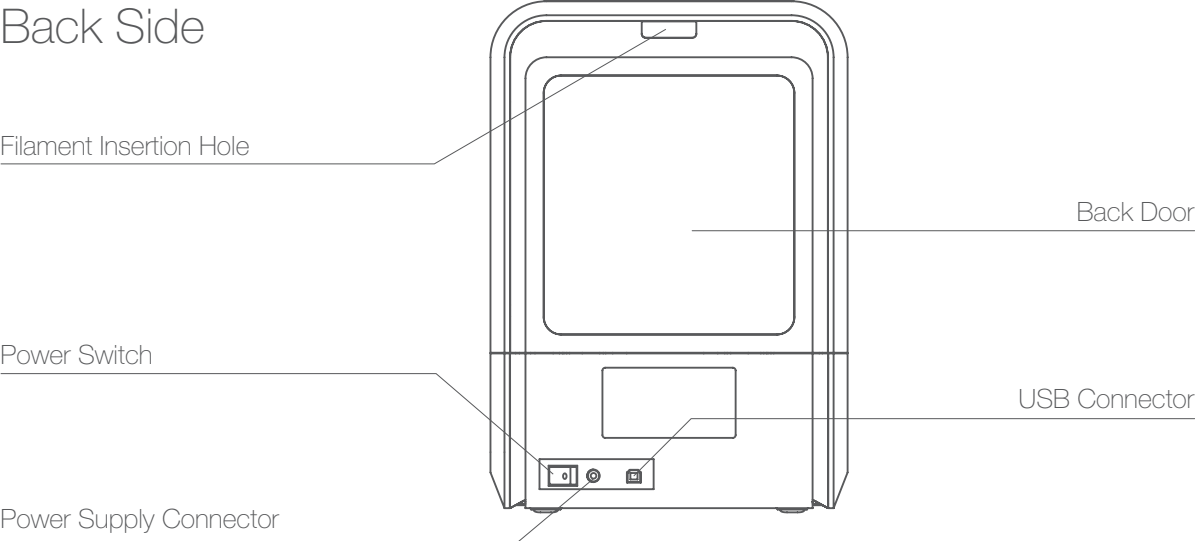
If anything is missing, please contact your local distributor or at support@pp3dp.com

Product Description

Front Side



Back Side



Filament Spool Holder

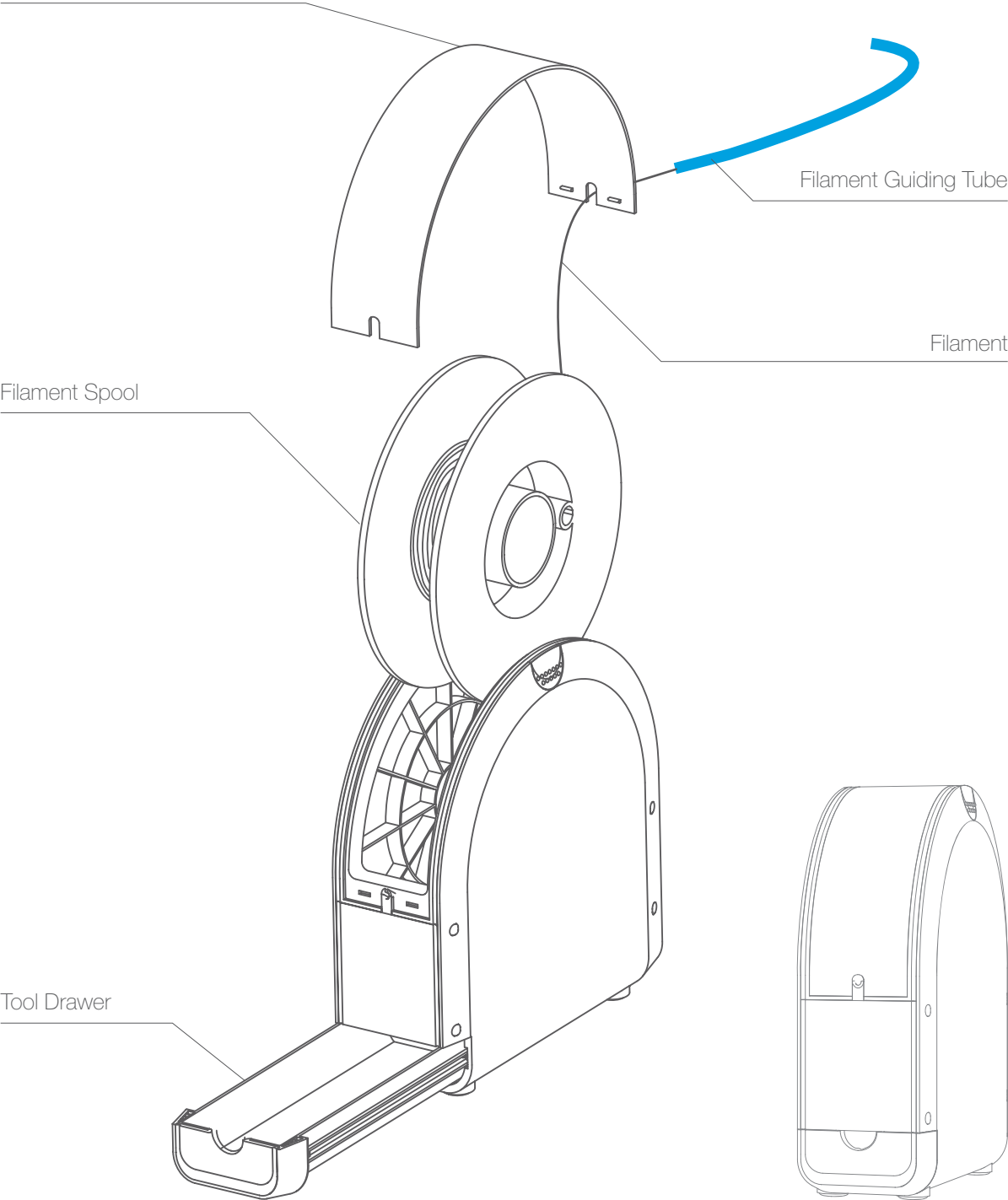
Spool Hold Lid

Filament Guiding Tube

Filament

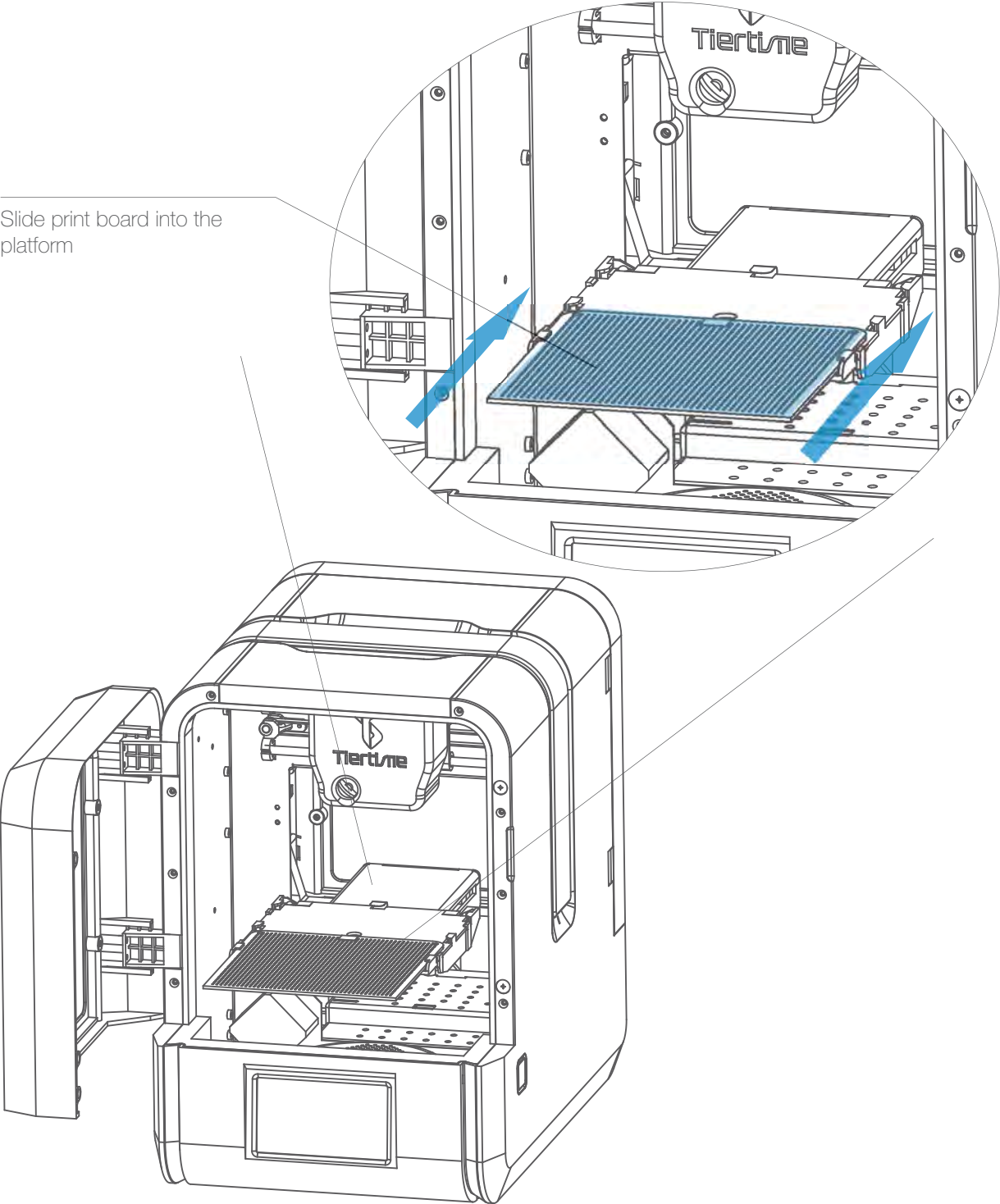
Filament Spool

Tool Drawer

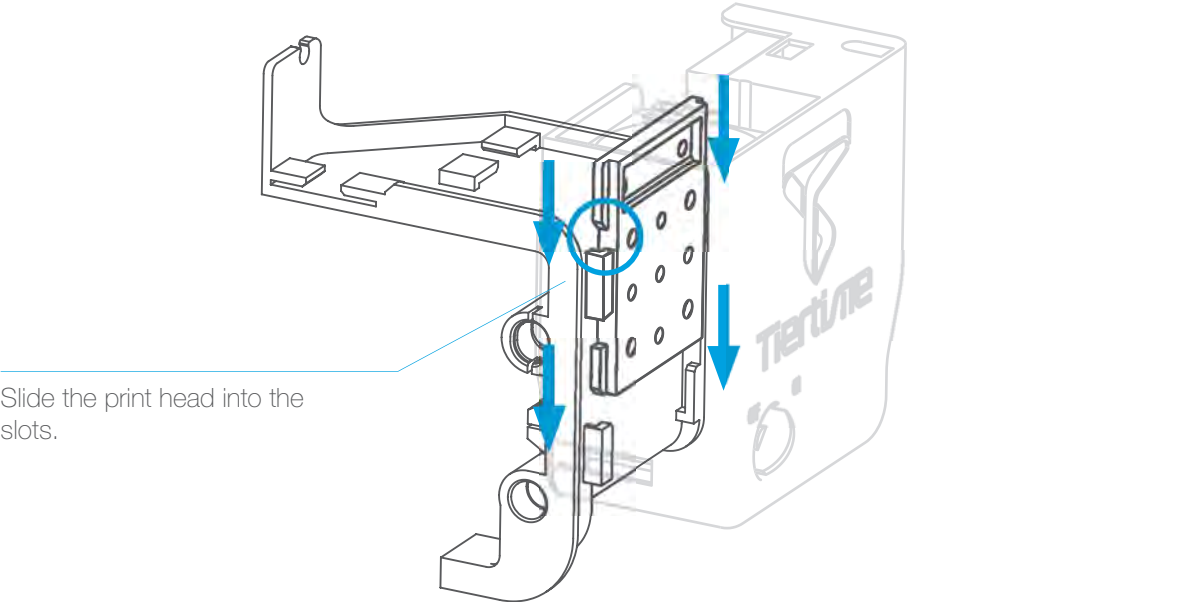
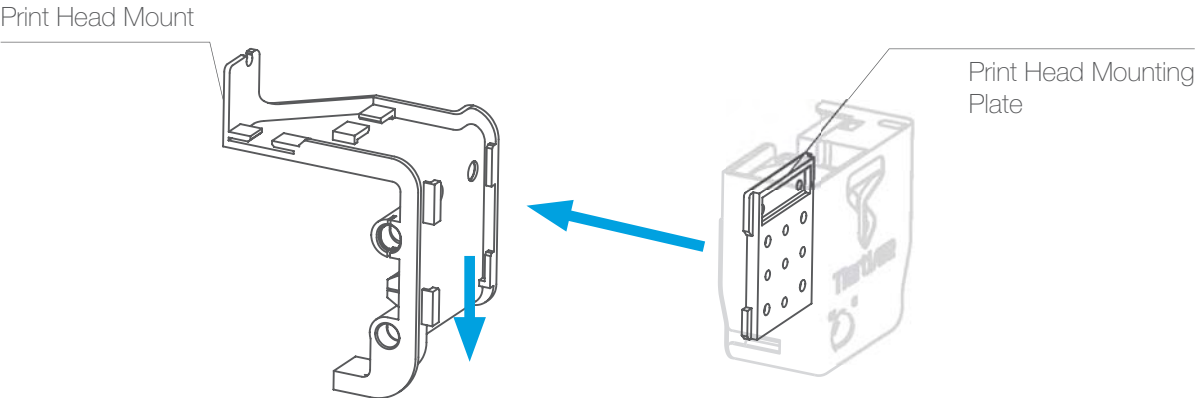
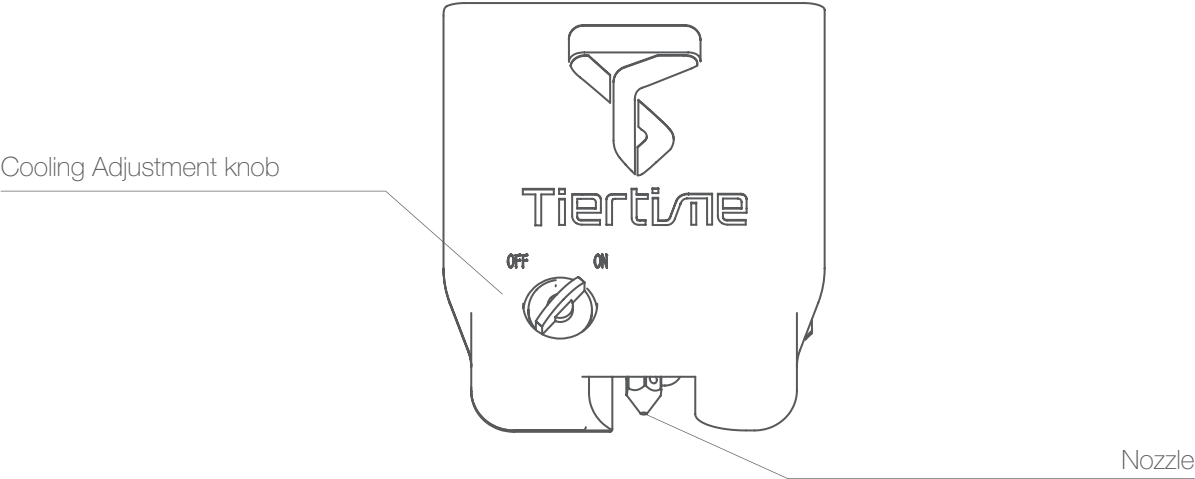


Installation of Print Board

Slide print board into the platform



Print Head Installation



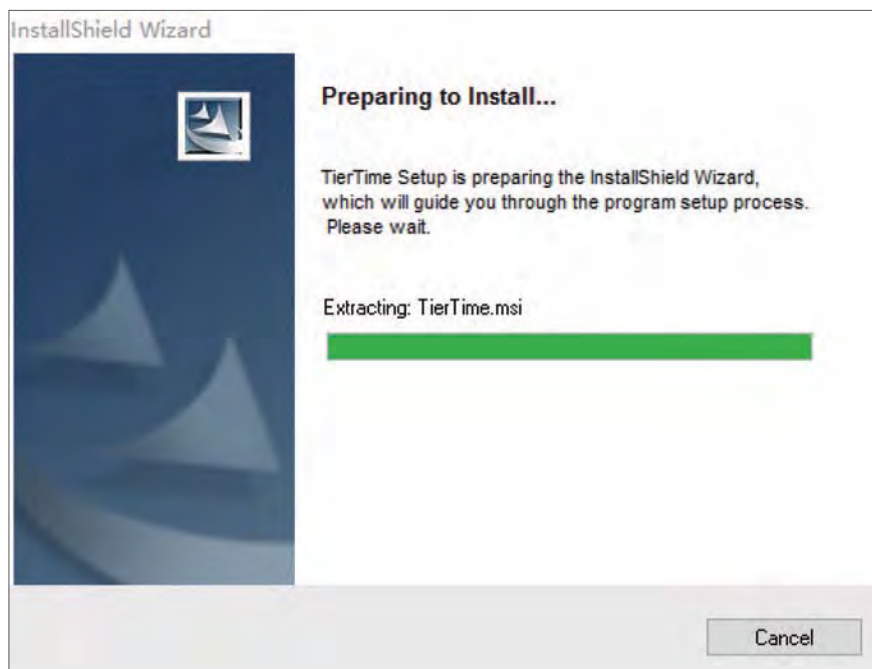
Download and Install UP Software

Two ways to obtain UP software:

1\ From the Micro SD card included in the package (using the mciroSD reader).

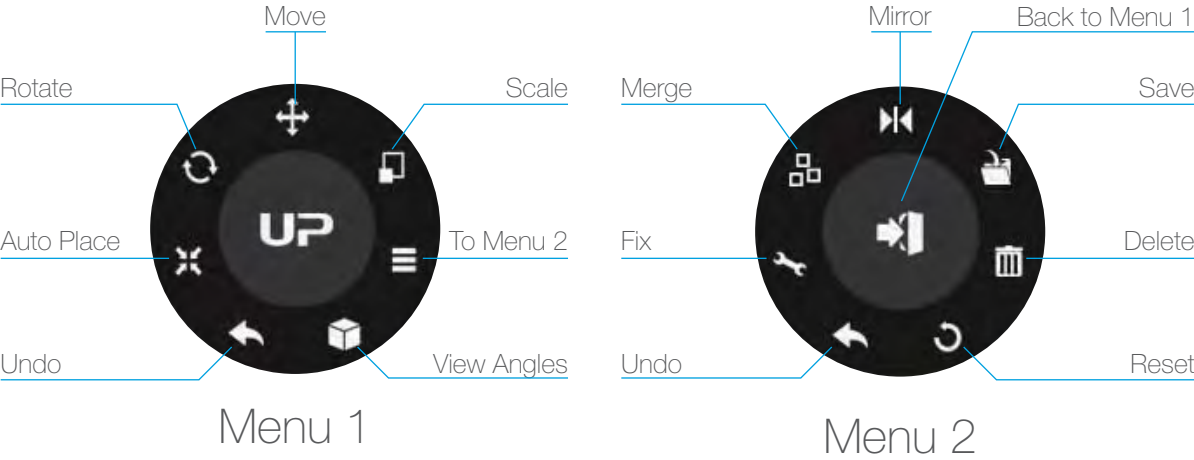
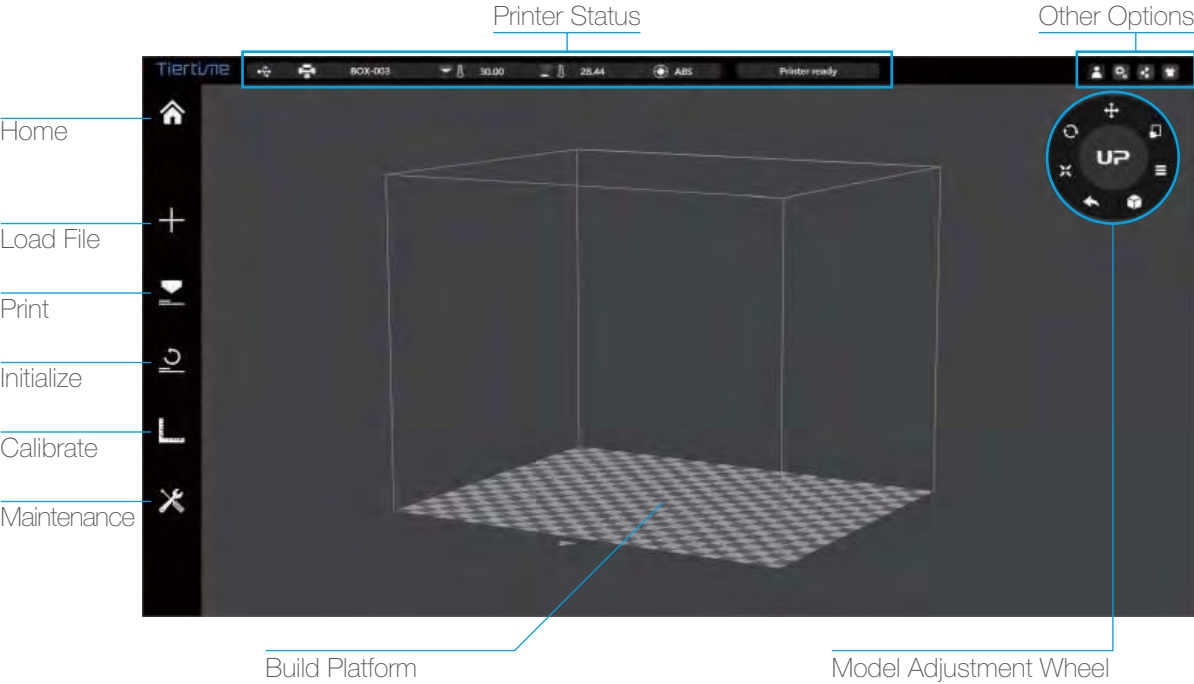
2\ Download the latest version from www.up3d.com.

Double click the installation file, following simple instructions, the installa- tion will be finished swiftly.



Software Requirements

Software Interface

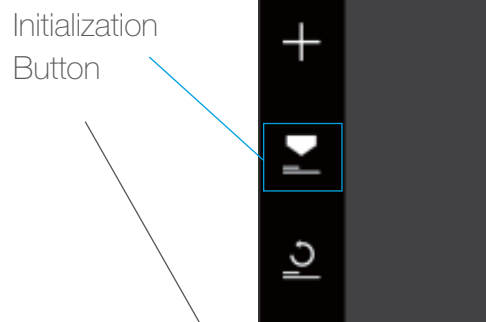
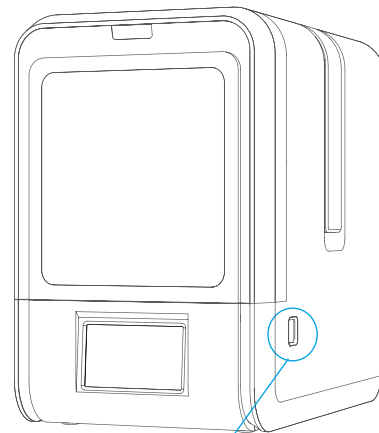


Initialization of Printer

Initialization is required for every time the machine is switched on. During initialization, the print head and print platform move slowly and hit the endstops of the XYZ axes. This is essential as the printer needs to find the endpoints of each axis. The other software options will light up and become available for use only after initialization.

There are two ways to initialize your printer:

The UP mini 2 can be initialized by clicking the "Initialize" option in the software menu (shown above). When the printer is idle, hold the initialization button on the printer. Press the initialization on touch screen.

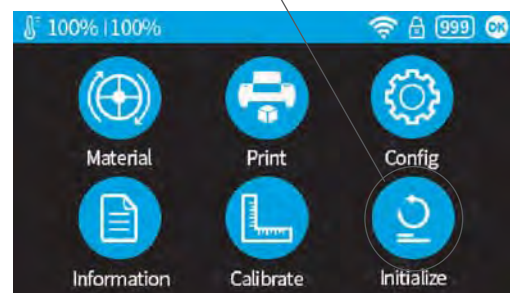


Other functions of Initialization Button:

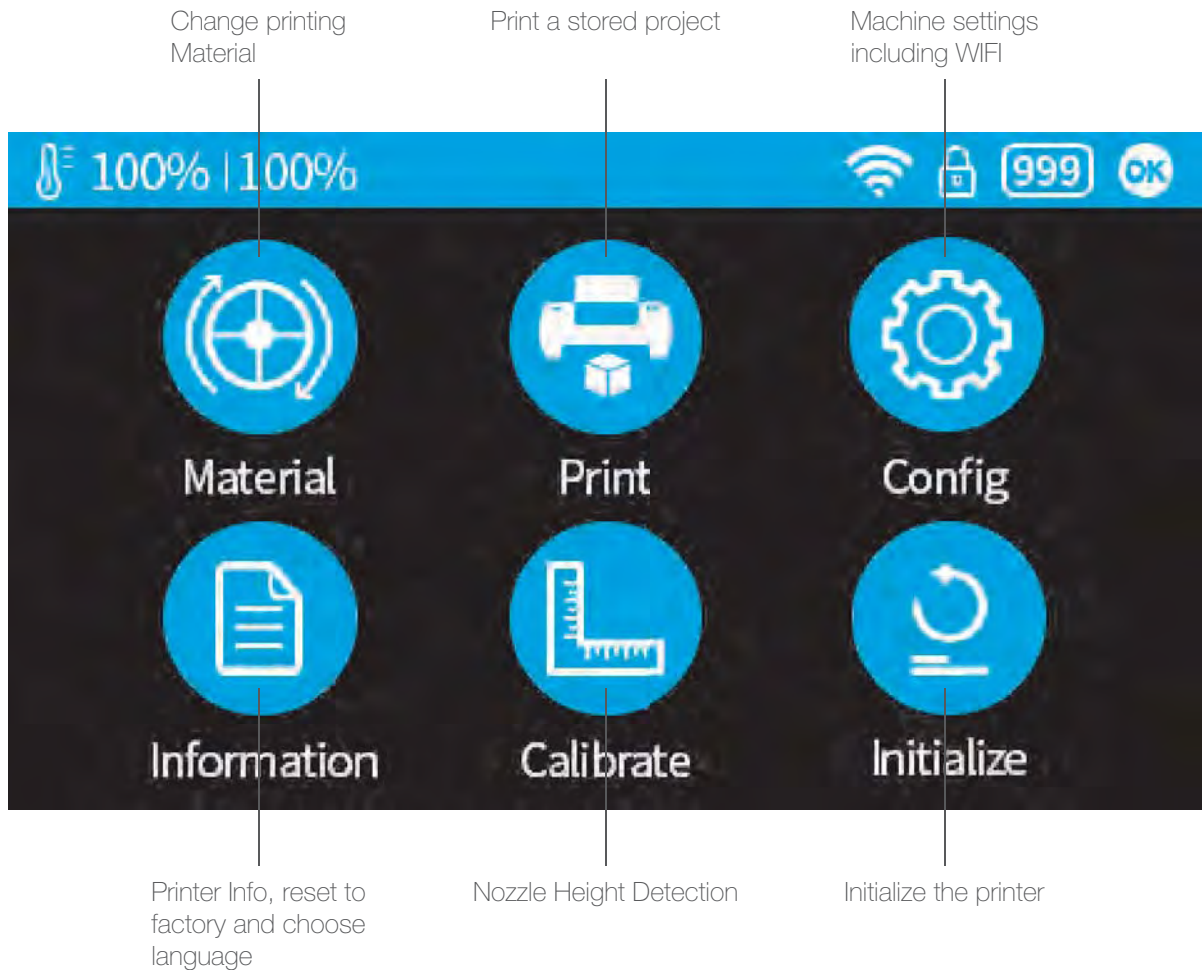
Stop the current print job: During a print, press and hold the button.

Reprint the last job: Double-click the button.

Turn on/off internal lighting: Single-click the button.



Touch Screen Control



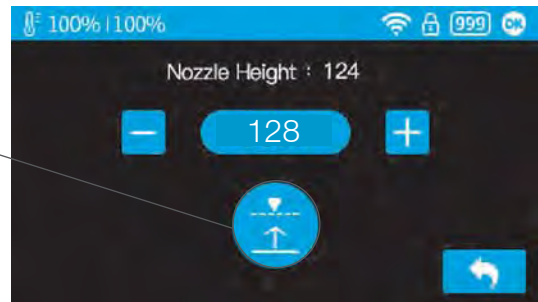
Prepare for Printing - Update Nozzle Height

The printer was calibrated before leaving the factory, but users are recommended to update the nozzle height value using the automatic nozzle height detection function through the touch screen before the first print.

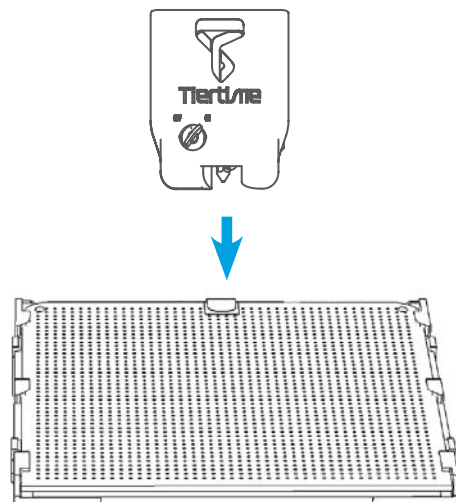
Press Calibrate button to enter nozzle height setting screen.



Press the "Nozzle Height Detection" button to start the automatic process.

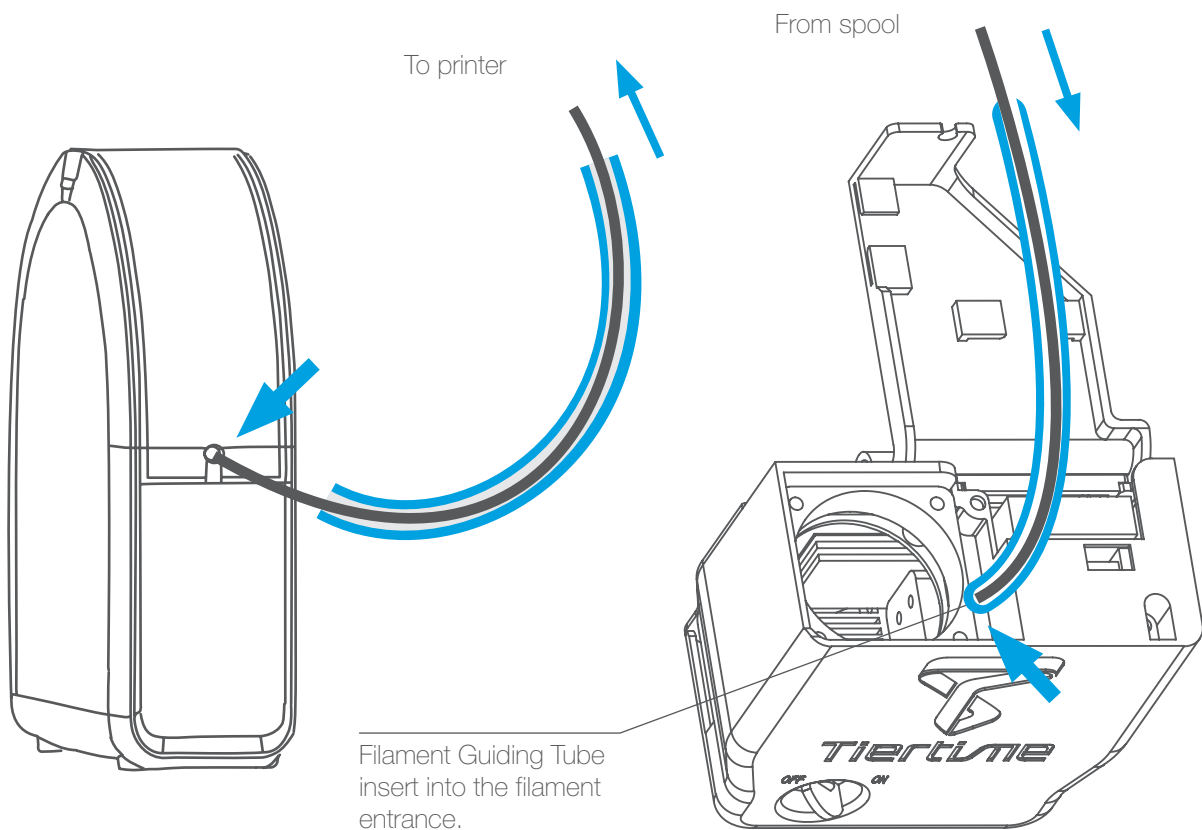
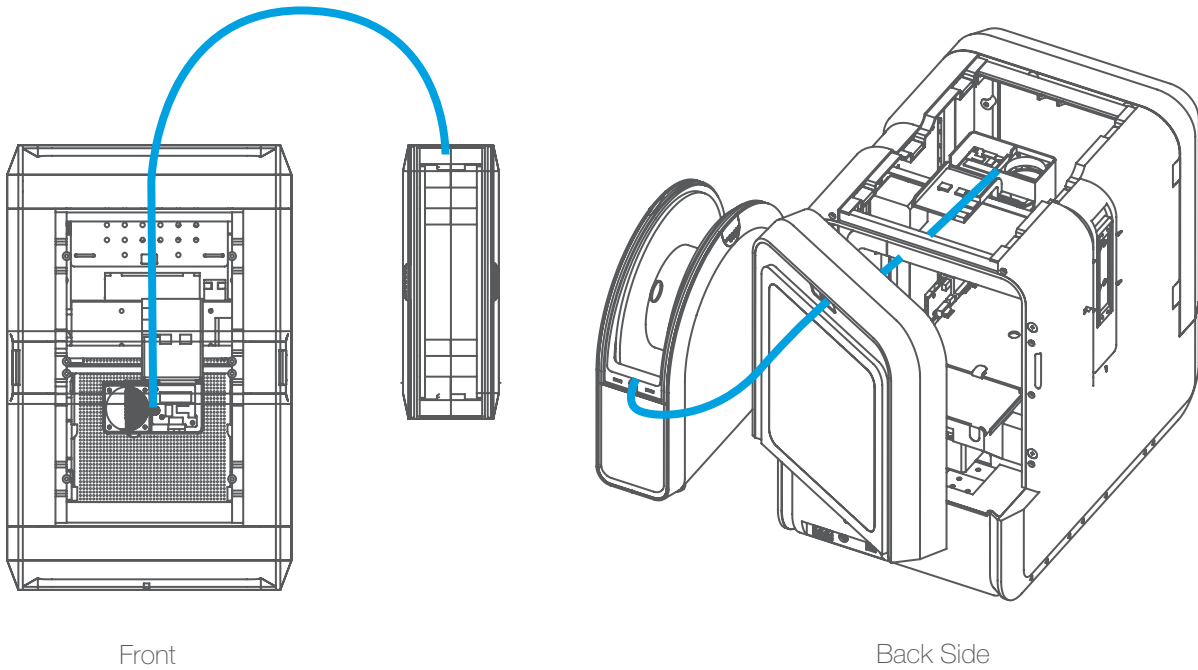


During nozzle height detection, the print head nozzle will touch the thin metal sheet on the detector to make measurement.



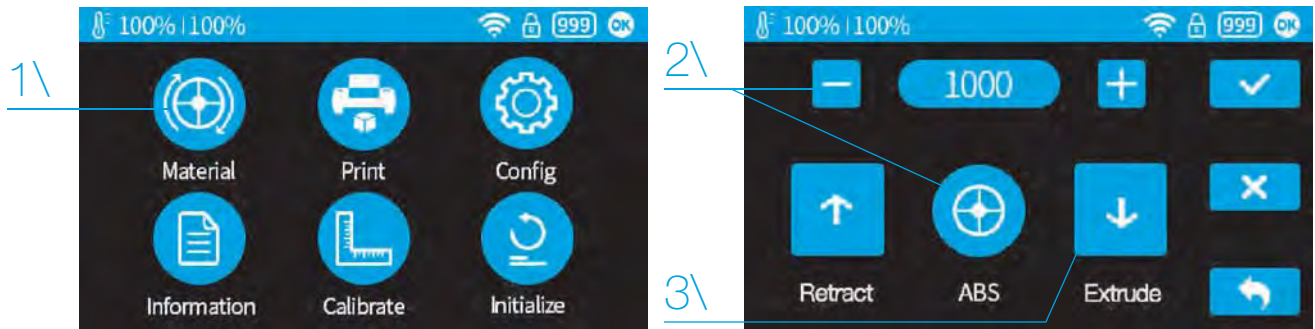
Prepare for Printing - Load Filament

install the filament and guiding tube shown in red.



Safety Precautions

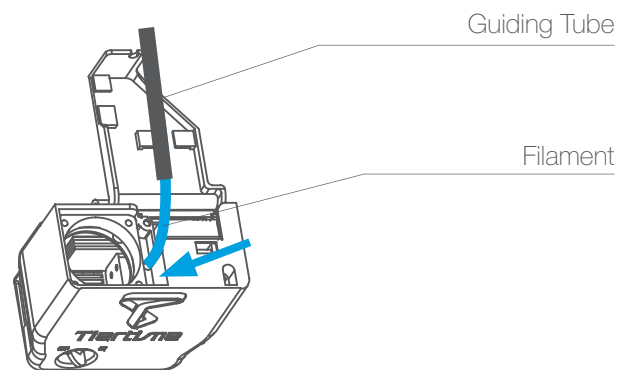
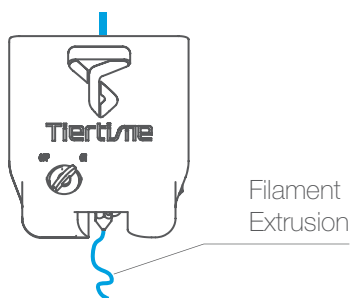
1\ Insert the filament from the spool into guiding tube, arrange the guiding tube as shown in previous page. Press the Material button on the touch screen.



2\ Choose the printing material as ABS by press the Wheel button to switch between different materials input the filament weight by using the +/- buttons.

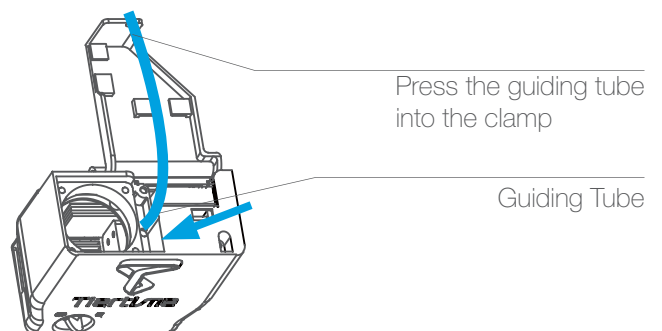
3\ Click "Extrude." The print head will start to heat up, within five minutes. Its temperature will reach 260°C, then the printer will buzz and the print head will start to extrude.

4\ Gently insert the filament into the small hole on the print head. The filament will be fed into the print head automatically when it reaches the extruder gear inside the print head.

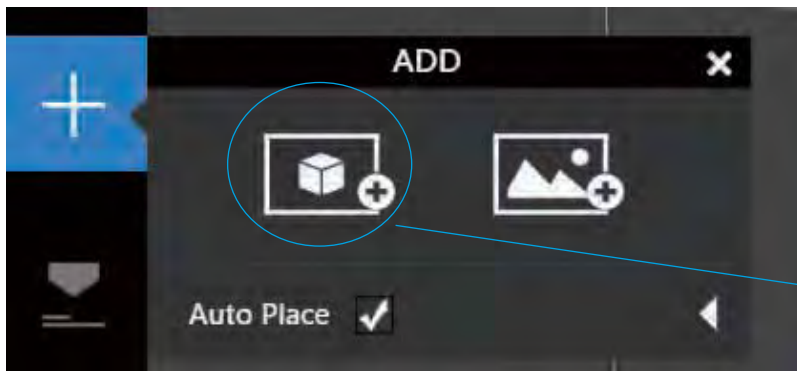


5\ Check the nozzle for plastic extrusion. If plastic is coming out from the nozzle, that means the filament is loading correctly and the printer is ready for printing. (The extrusion will stop automatically.)

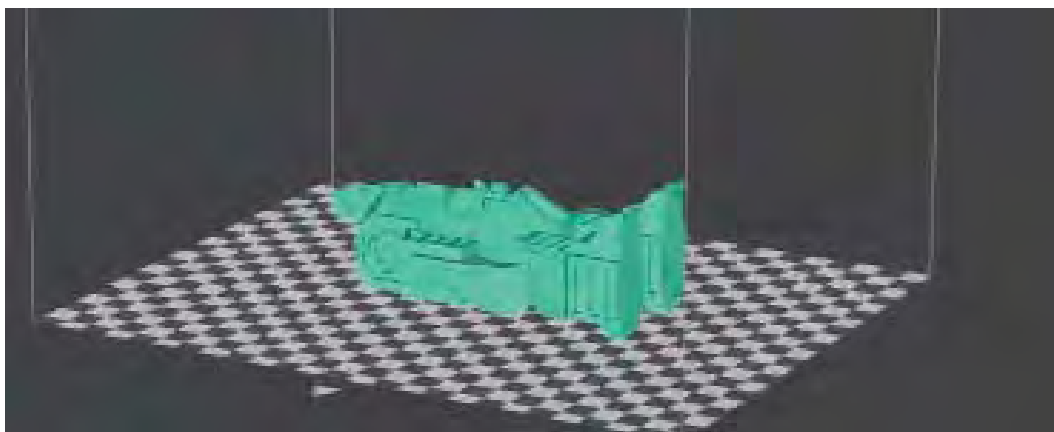
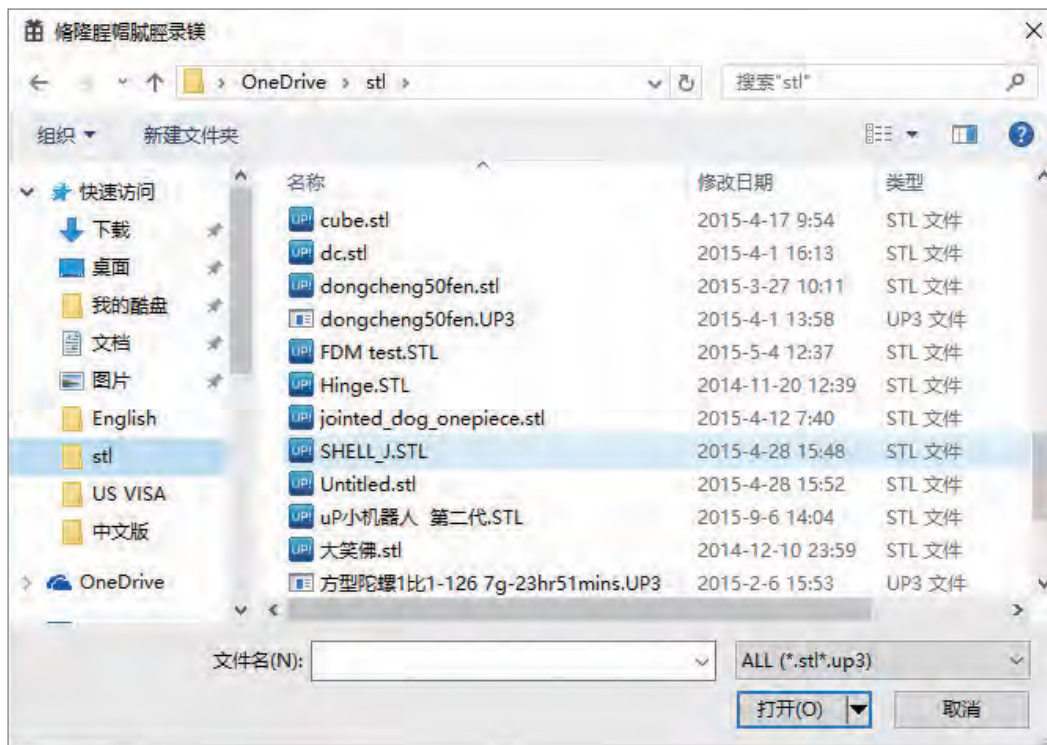
6\ Finally insert the guiding the tube in to the filament entrance and press the tube into the holding clip on the print head mount.



Loading a 3D Model

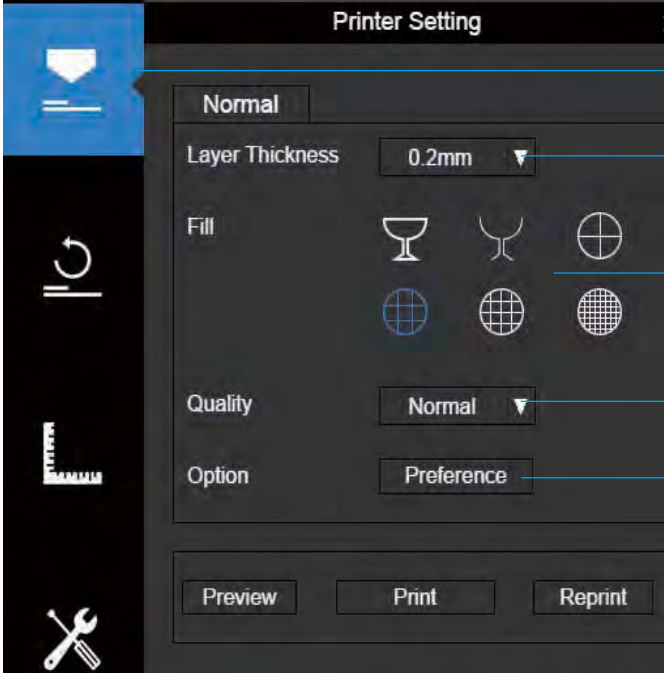


Load Model Button



Print a Model

Make sure printer is connected to computer through USB or WIFI (go to page xxx for details about WIFI setting)and loaded a model.

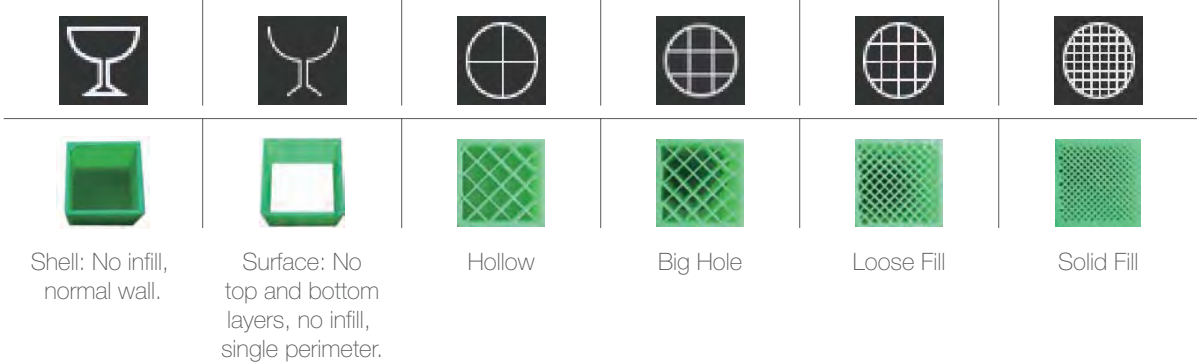














The screenshot shows the 'Printer Setting' window. On the left is a vertical toolbar with icons for home, refresh, a ruler, and a wrench. The main panel is titled 'Printer Setting' and has a 'Normal' tab selected. It contains the following settings:

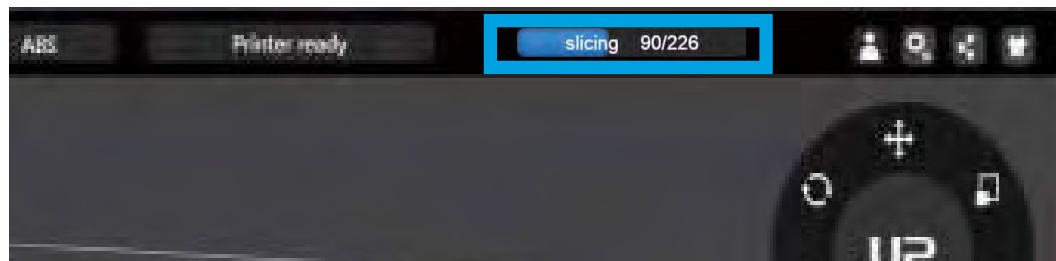
- Layer Thickness: 0.2mm (dropdown menu)
- Fill: Six icons representing different infill patterns (cup, Y-shape, circle with cross, grid, and two other grid patterns).
- Quality: Normal (dropdown menu)
- Option: Preference (dropdown menu)

At the bottom are three buttons: 'Preview', 'Print', and 'Reprint'. Callout lines point from the following text to the corresponding elements in the interface:

- Click print button to open the print interface (points to the 'Print' button)
- Set Layer Thickness (points to the '0.2mm' dropdown)
- Select Infill Type (points to the 'Fill' icons)
- Select Print Quality/Speed (points to the 'Normal' dropdown)
- Advanced Options (points to the 'Preference' dropdown)

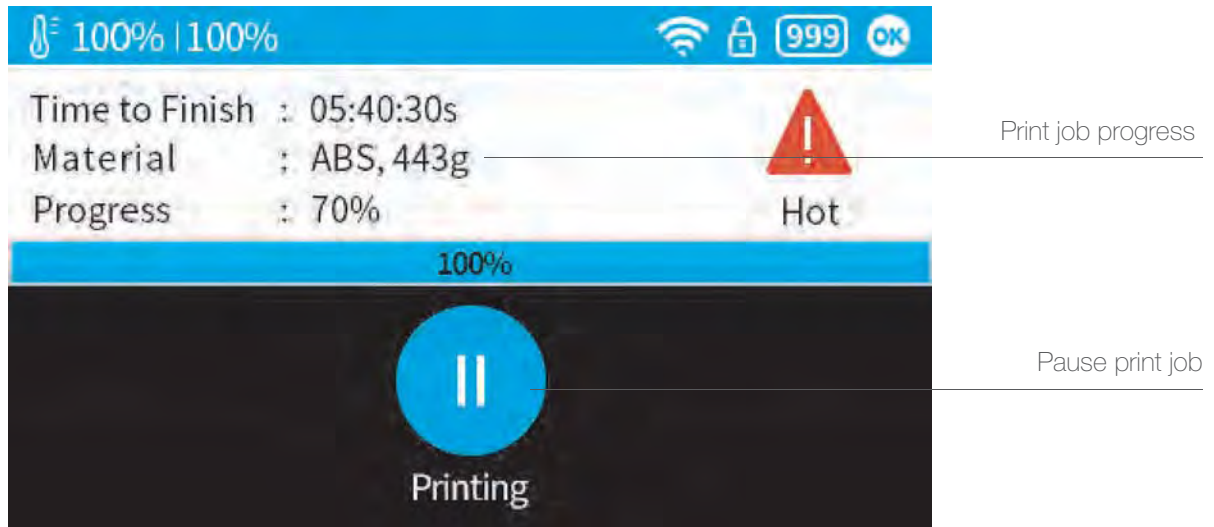


					
					
Shell: No infill, normal wall.	Surface: No top and bottom layers, no infill, single perimeter.	Hollow	Big Hole	Loose Fill	Solid Fill



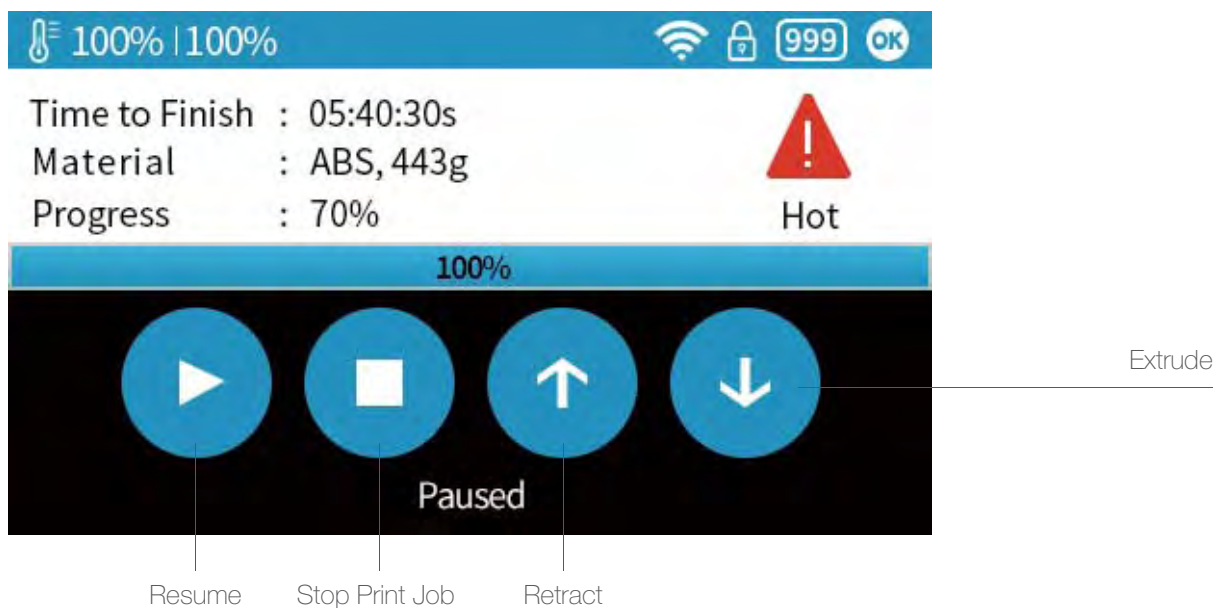
When the UP software is slicing or sending data to the printer—progress displayed on the status bar on top of the software interface —do not unplug the USB cable as this will disrupt the data transfer and result in a print failure. The USB cable can be unplugged after the data transfer is finished.

Printing Progress

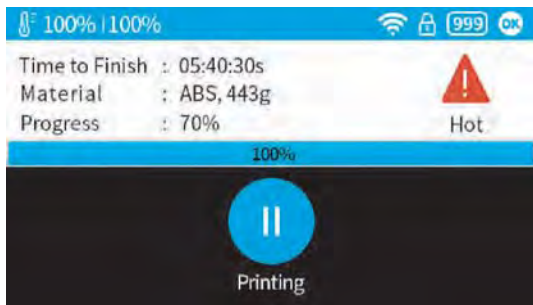


After pressing the pause button, the nozzle will be paused but temperature is maintained at printing temperature. During pausing, the following control buttons will appear to allow users to resume, stop or change filament.

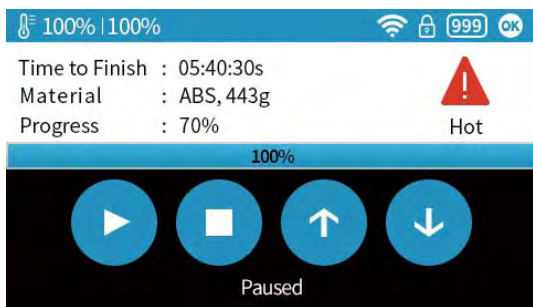
Please note the stopping is irreversible, the current print job can only be restarted from beginning.



Change Filament During Printing



1\ During printing process the “Pause” but- ton, the printing job will be paused.



2\ When print head stopped moving and platform lowered. Press the “Retract” but- ton to remove filament.



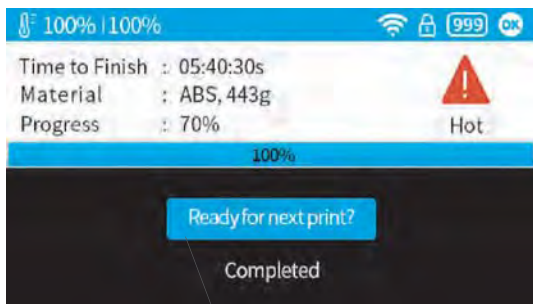
Press the “Extrude button” to load the new filament



Press the “resume” button to resume print- ing.



After filament was removed, insert new filament to the print head as described in page 16.



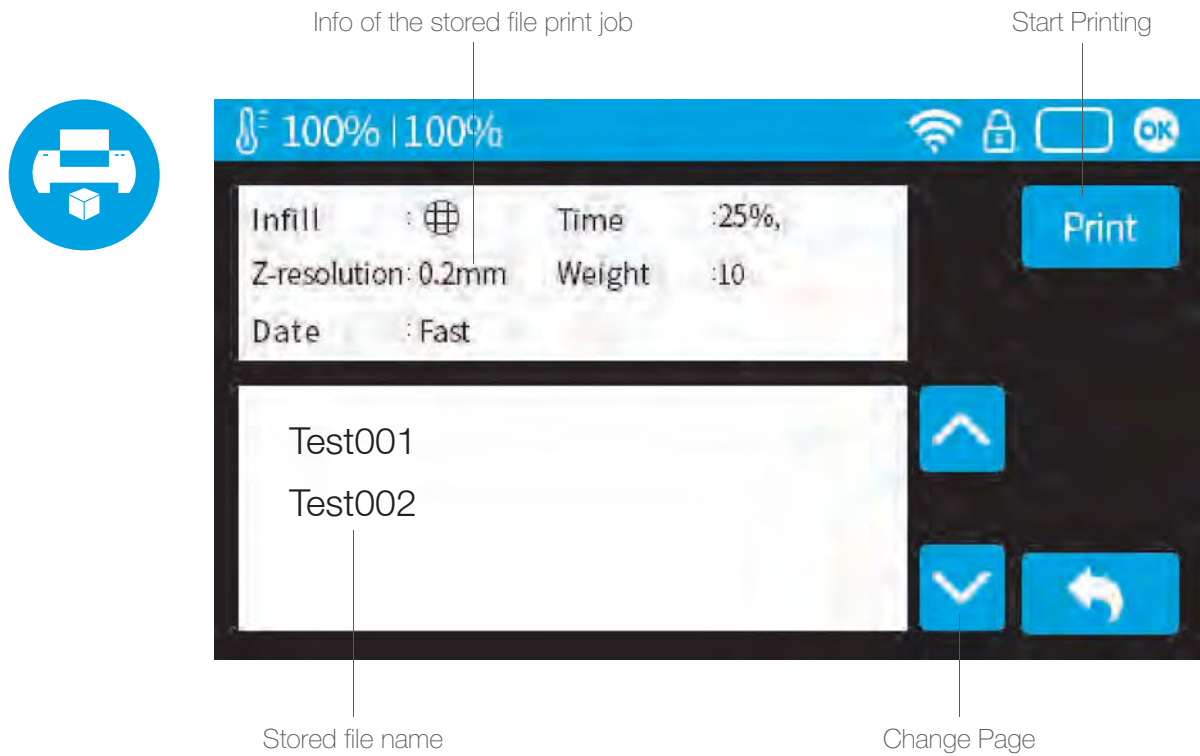
Confirmation button

Print Job Finished

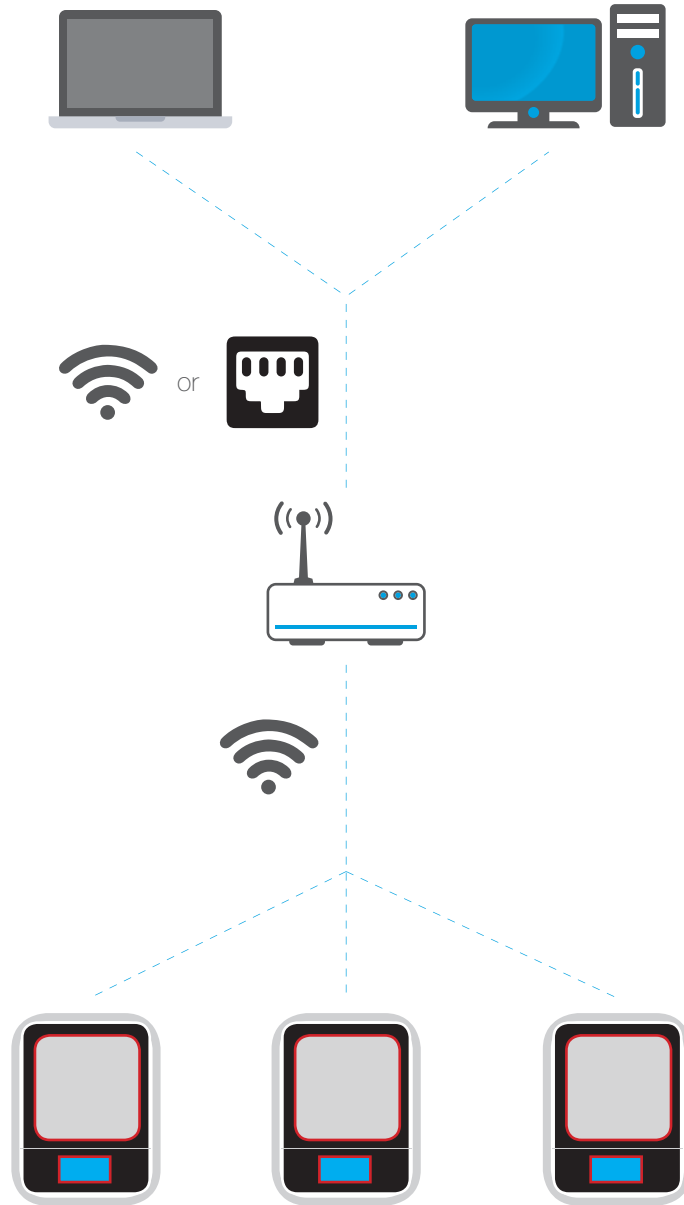
Printer ready confirmation:

After the print job was finished, the user need to press the “Ready for next print?” button to confirm the printer is ready. User should make sure the previous print job is removed from the platform before pressing the button. The printer cannot start a new print job if they did not confirm the status.

Reprint or Printing Stored Print Jobs



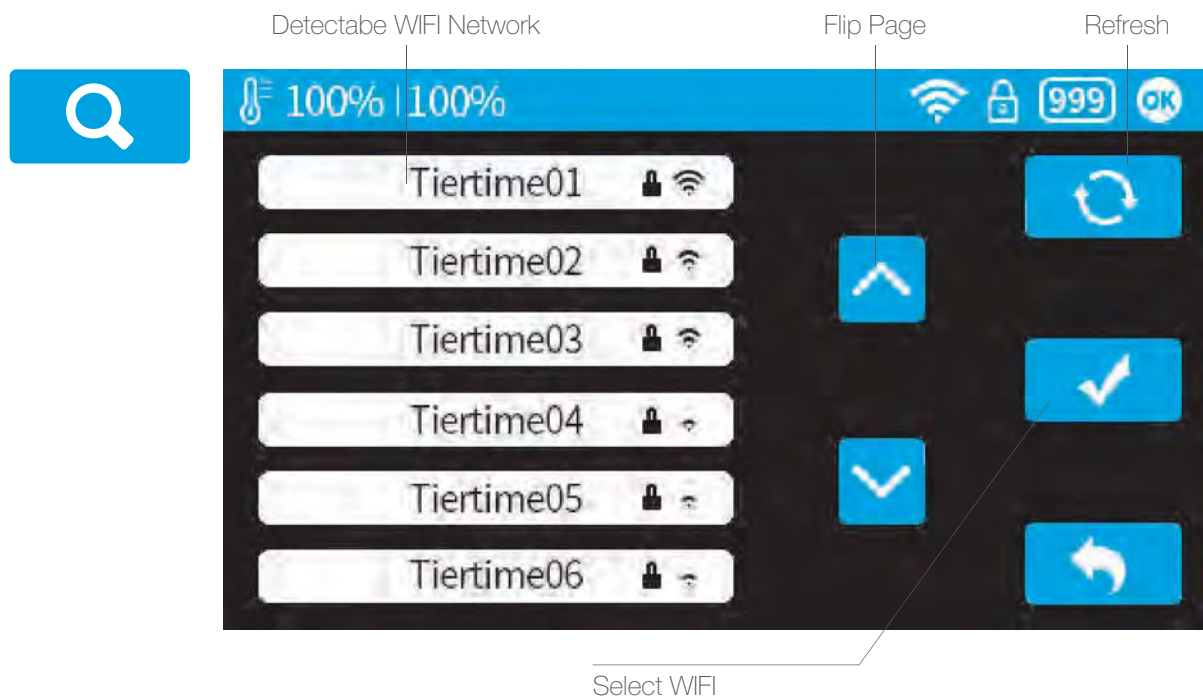
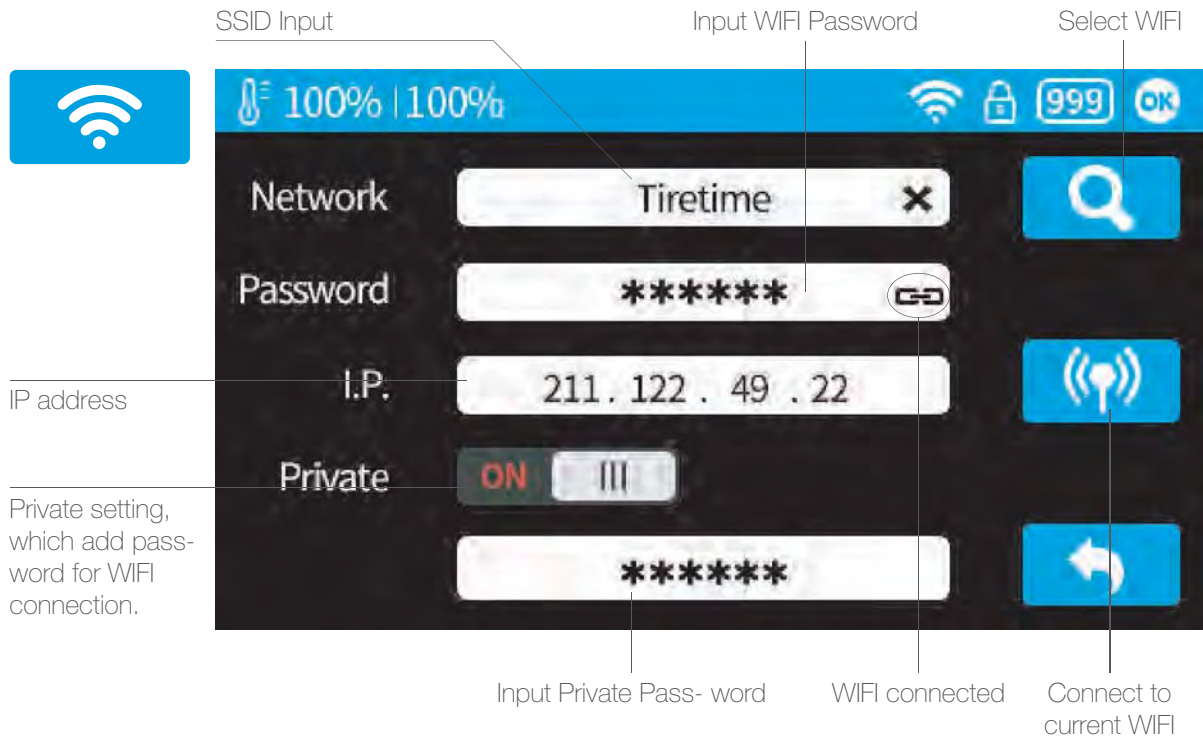
Machine Settings - WIFI Connection



Connecting to the UP mini 2 through WIFI requires a Wireless Local Area Network (WLAN). Computer and printers must connect to the same WIFI network (same SSID) before able to communicate.

In order to achieve stable WIFI connection, users are recommended to connect under a capacious WIFI environment. A crowded network or an area with a large number different networks are known to cause interruption during data transfer.

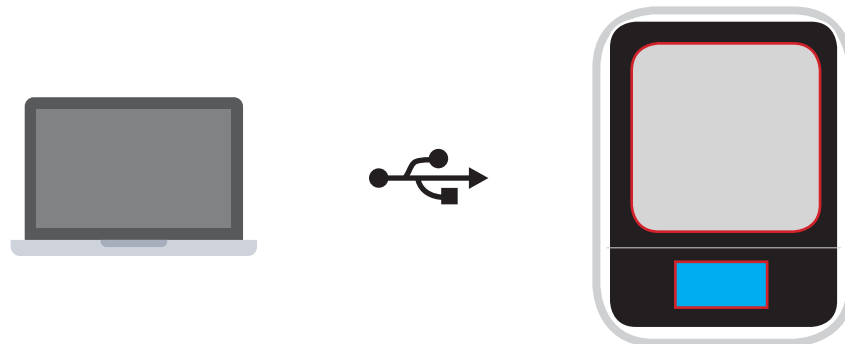
WiFi Setup through Touch Screen.



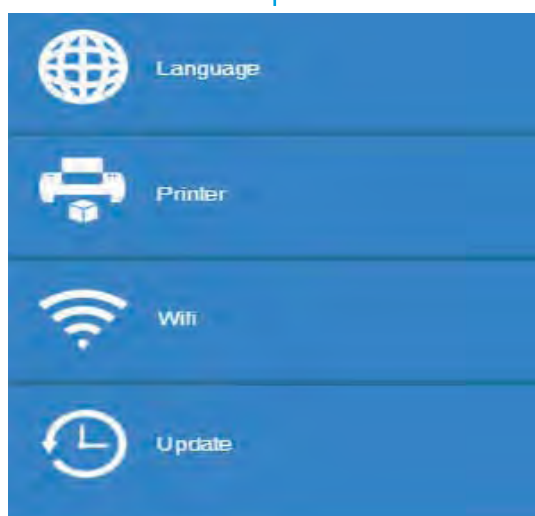
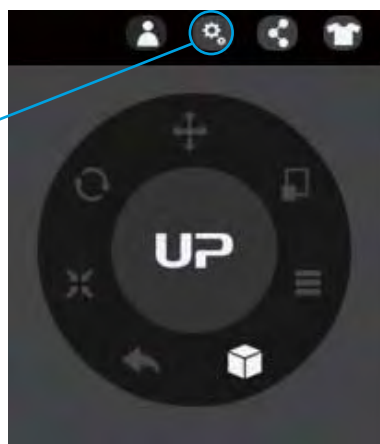
Setup Private WIFI Access



If user switch on the private function in WIFI setting, a password field will appear to allow password setup. This is password that will be required for WIFI connection to the printer to prevent unauthorized usage through WIFI. Please note this is a weak protection that anyone who can access to the printer through USB or touch screen could change the private password.



1\ Connect UP mini to computer through USB.



2\ At top right corner click the setting button and then click WIFI tab.