

3DTALK Fab460 Plus 3D Printer Instruction



Content

1、 Product Overview.....	4
1.1 Product Introduction.....	4
1.2 Warning.....	4
2、 Product Data	5
2.1 Product Appearance.....	5
2.2 Product Specification	12
2.2.1 Physical specification.....	12
2.3Environment request	13
3、 Operating Instructions	13
3.1 Installing Filament	13
3.1.1 Feeding Filament.....	14
3.2Electromagnetic locking of printing room.....	16
3.3Plate adjusting /Automatic leveling.....	17
3.3.1 Initializing adjusting.....	17
3.3.2 Plate adjusting.....	19
3.3.3 Automatic leveling.....	21
3.4 Feeding water into water pump.....	22
3.5 Software Instruction	23
3.5.1 Installing slicing software.....	23
3.5.2 Overview of 3D TALK slicing software	23
3.5.3 STL digital slicing Introduction.....	30
3.5.4 Introduction of uploading slicing data.....	31
3.6 3DTALK APP Intelligent printing.....	36

3.7 Notice for specific printing material.....39

3.8Removing model40

4、 Maintenance41

5、 Upgrade.....42

5.1 Software uploading.....42

5.2 Firmware uploading.....42

6、 **Warranty Instruction**.....43

1. Product Overview

1.1 Product Intro

This instruction is the guide leader of 3DTALK Fab460 Plus 3D printers for the users.Please read it carefully before installing and using.

1.2 Warning(Please read the following items carefully)



Warning:About Power.Please use our incidental power cord.The power supply have to be protected by ground electrode,and be sorted correctly.



Warning:Advising wearing the safety goggles when removing models in case of chippings going to eyes.



Warning:Advising using printers in ventilative environment as there will be a light smell when printing because of filament’s high temperature although this smell will not make users feel uncomfortable..



Warning:The printer is only be allowed to be fixed by authorized technician.The powder should be off before any unit replacement.



Warning:Removable parts are dangerous,so that please keep your fingers and body far away from them.



Warning of hot surface: The extruder,heating room and printing plate is in the very high temperature when printing.Touching them is forbidden when printing.

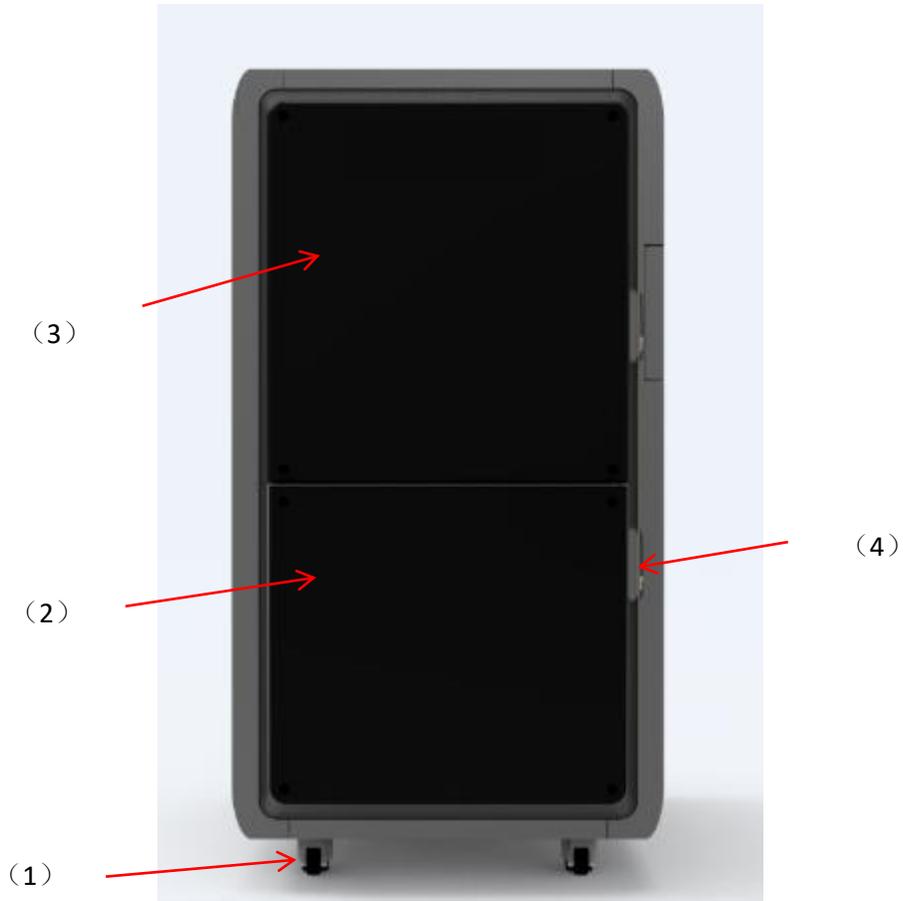


Warning of electric shock:Please do not touch any of the inner electronic part of the printer in case of electronic part.

2、 Product Data

2.1 Product Appearance

Frontage



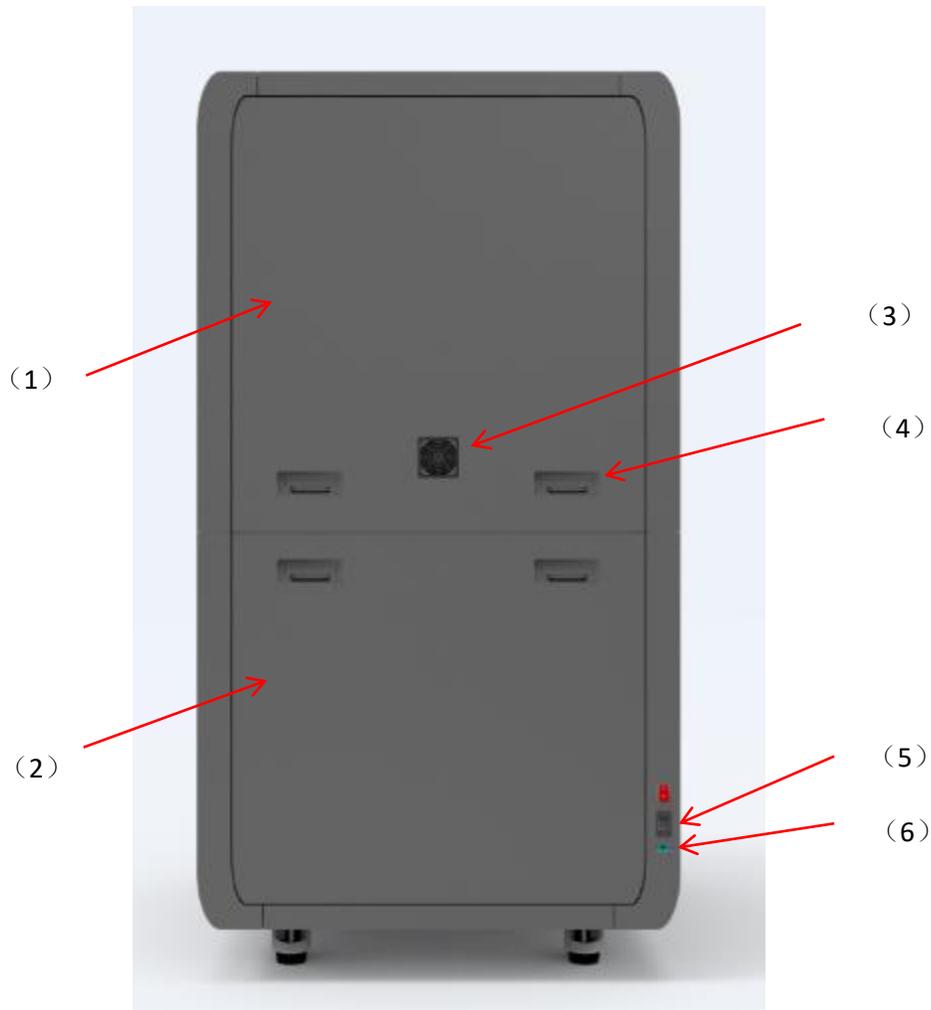
(1) Universal wheel	(2) Front door on 1 st floor	(3) front door on 2 nd floor	(4) locking
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Flank



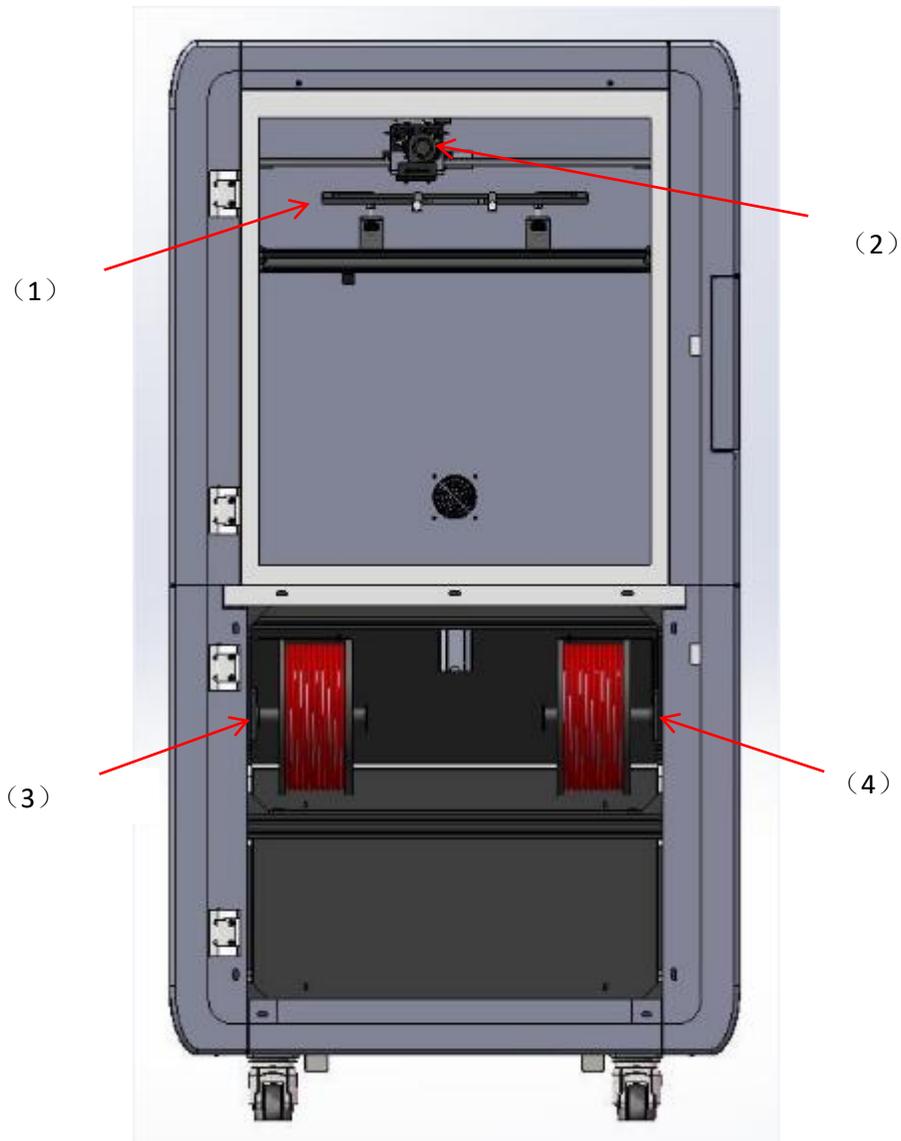
(1) roof cover	(2) screen	(3) USB connector
(4) switch button	(5) lateral cover on 2 nd floor	(6) lateral cover on 1 st floor

Back



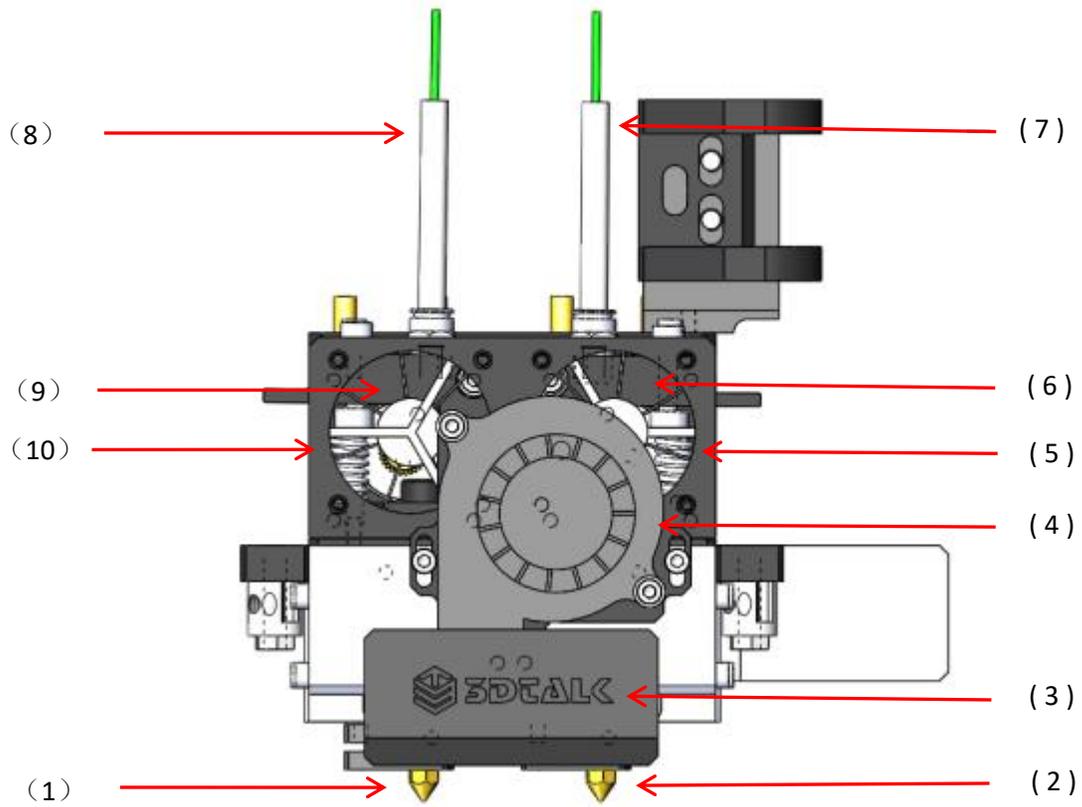
(1) Back board on 2 nd floor	(2) Back board on 1 st floor	(3) filter fan
plane locking	(5) power port	(6) Internet port

Interior structure :



(1)	(2)	(3)	(4)
Printing plate	Extruder	Left filament shelf	Right filament shelf

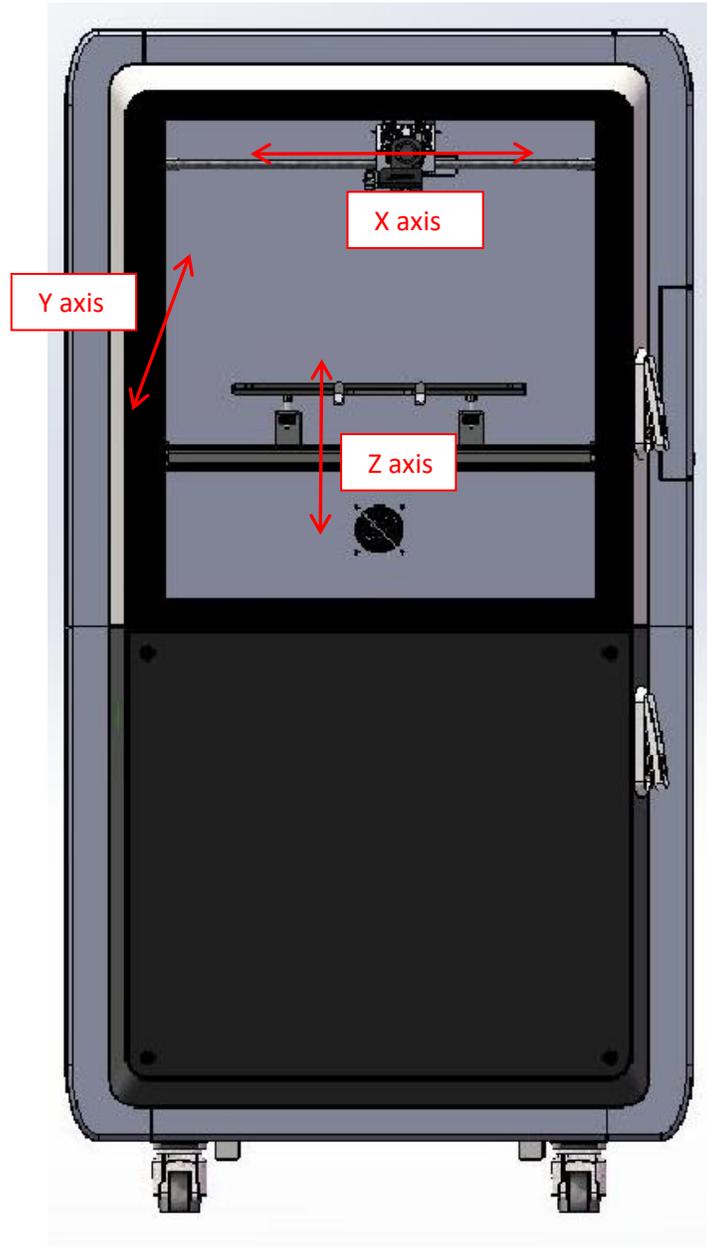
Extruder Diagram



(1) left extruder	(2) right extruder	(3) Cooling air flue	(5) cooling fan
(6) Right fan	(6) right feeder	(7) right feeding tube	(8) left feeding tube
(9) left feeder	(10) left fan		

coordinate Diagram

Moving



Accessories included



Attention: The screws in the accessories list are stand-by screws.They can be replaced according to situation; The real image of the accessories should be referred to the real one.

2.2 Product Specification

2.2.1 Physical specification

3DTALK Fab460 Plus 3D printer ----physical data			
Modelling Tech		FDM (Fused Deposition Modeling)	
Data			
Building Volume	420 * 420 * 460mm	Layer Thickness	0.075mm~0.3mm
Diameter of Nozzle	0.2mm-0.4mm	Quantity of Nozzle	2
Extruder Temp	≤245℃ (up to materials)	Inner Temp	Be up to 80℃
Aluminium Plate Temp	Be up to 60℃	Cooling system	Fan cooling +water cooling
Software			
Machine size	1025*990*1930mm	Machine weight	N.W 400kg
Printing plate	Removable aluminum alloy	LCD	7 inches touching full color screen
Connecting	USB /Wifi remote controlling/Ethernet		
Power			
File format	*.stl / *.obj/* .3 DT/* .ply/ *.3MF/* .gcode	Operating system	Windows/mac
AC input	220V/50Hz	Power supply	3500W
Connecting	16A High power plug		
Printing material			
Available printing material	PLA、ABS、PLA+、COMBO		

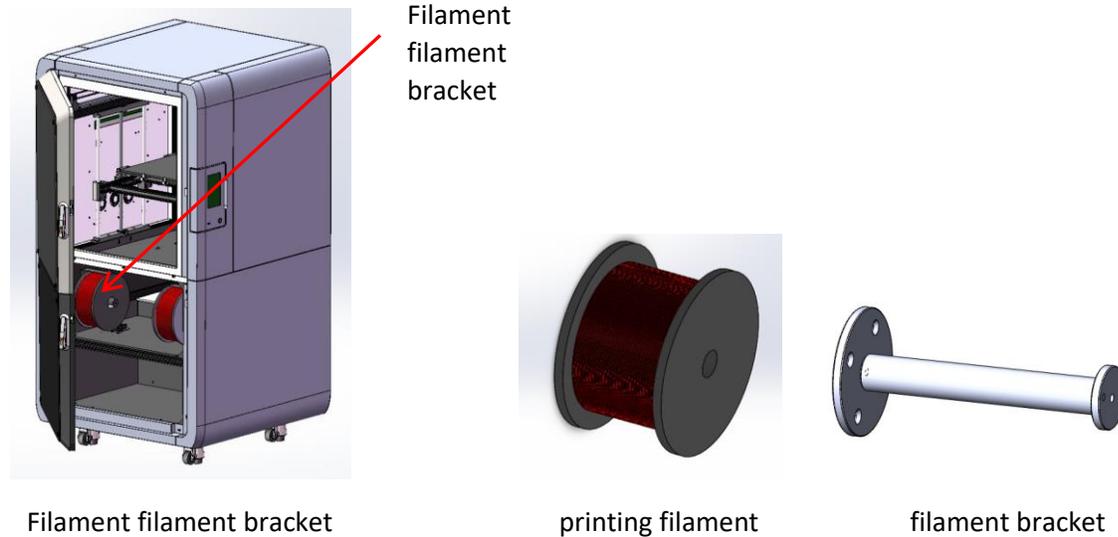
2.3 Environment Request

- ☞ environment temperature 15° C~30° C ;
- ☞ Relative humidity 20%~50%;
- ☞ The printer had better not to be move when printing in case of shock ;
- ☞ Stable voltage,correct connecting of Zero line and FireWire,ground wire.and correct ranking 。

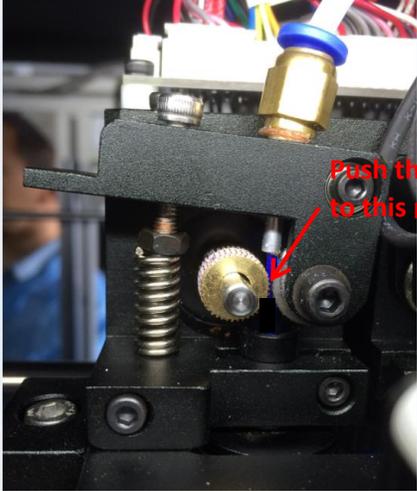
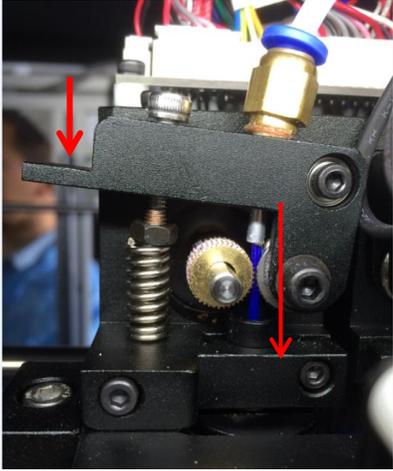
3.Operation Instructions

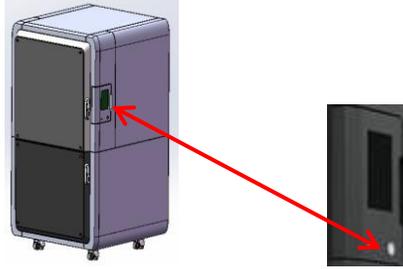
3.1 Installing filament

Open the downside door ,unlift the blade of the filament shelf,and hang the filament onto the bracket s well.Then put down the blade.The 2 filament brackets are separated into the two sides.Users install the filament according to their need.

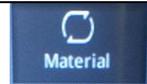


3.1.1 feeding filament

<p>1</p>	<p>Feeding filament into the extruder;</p> <p>Feed one side of the filament into the feed inlet(Picture 1),and keep pushing it into the printer's feeding part(picture 2)</p> <p>(Filament is pushed into the left extruder from the left inlet;Filament is pushed into the right extruder from the right inlet)</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>(Picture 1)</p> </div> <div style="text-align: center;">  <p>(Picture 2)</p> </div> </div>
<p>2</p>	<p>Push the filament across the feeding tube</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>1.press the black handle and make the feeding gear open</p> </div> <div style="width: 10%; text-align: center;">  </div> <div style="width: 45%;"> <p>2.when pressing the black handle,keep feeding and make the filament get across the gear.At the same time,loosen the handle to clamp the filament tightly</p> </div> </div>
<p>3</p>	<p>Plug in the power,turn on the switch in the top of the power ,and press the switch on the front board</p>



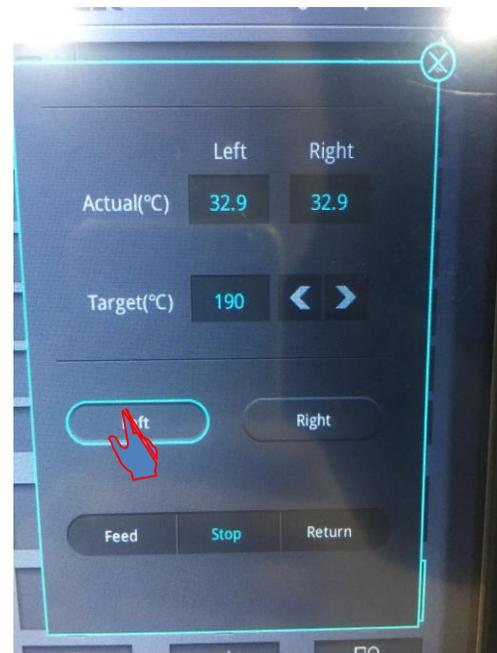
After boot Screen displaying normally, please press material “button on the interface (picture 1 below)

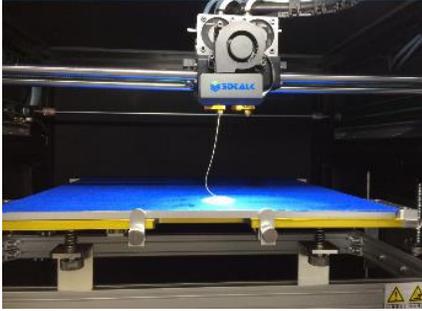


As showing on picture 2 below, by touching “Left” “two buttons, we can choose corresponding feeding extruder. By Pressing “two buttons in “ [Target (°C)]”, we can set the target temperature for the feeding extruder (we advise PLA: 200°C; ABS: 230°C); Press “Feed” button (when the temperature go up to the target temperature, the material will be extruded); When the filament is extruded from the nozzle smoothly, the feeding is successful. (Picture 3). Press “Stop”, feeding is completed. If we want to turn back the filament, set the correct data, press the “return” button, the feeder will turn back the filament to the top of the feeder. Then we can extract the material.



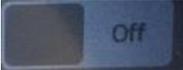
4

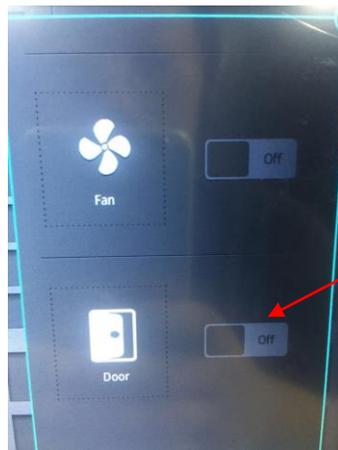


	<p>(Picture 1)</p>  <p>(picture 3)</p> <p>(Picture 2)</p> <p>Warning:If you want to print ABS as your printing materials,please set the [target (°C)] (picture 2) on the interface into “230° ” when changing the filaments</p> <p>PS:About the “feed/return” in the other extruder,please select the corresponding extruder and feeding inlet,and repeat from step 1 and step4.</p>
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3.2 Electromagnetic locking of printing room

With intelligent electronic locking,when printing,we can press “”to close the door which means the printing door is locked automatically.If we want to open the door,please press

the  button to open the door.



Door Switch

3.3 Printing plate adjusting/automatic adjusting

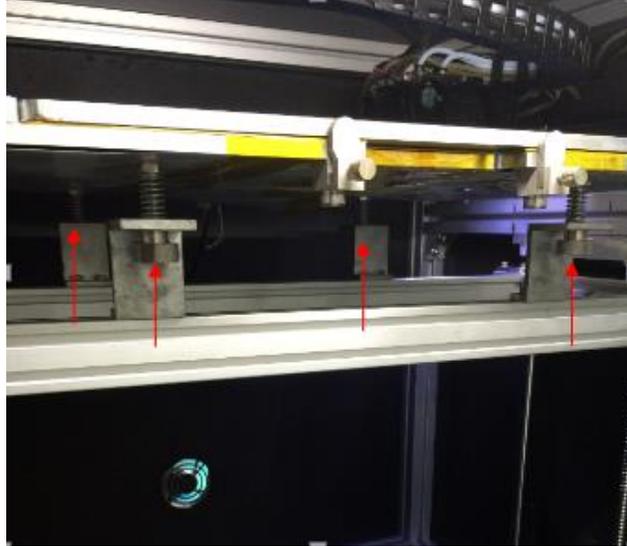
With the automatic plate adjusting, convenient extruder adjusting and plate interval adjusting, 3DTALK Fab460 Plus can realize the controlling of the plate, extruder and plate interval adjusting just by several steps.

Warning before adjusting

- Please make sure the black PC frosted paper or textured tap has been stuck well on the printing plate before adjusting
- Make sure the printing plate and extruder is clean
- The spring button on the bottom of the printing plate: spin the spring clockwise, the corresponding plate is declining;

3.3.1 Initializing plate adjusting

1	<p>Press the [control]  Control button, and press the [Reset] button to make the plate move to the zero point. By pressing the up down button in the Z axis, we can make the plate move up to the point closed to the nozzle (picture 1).</p>  <p style="text-align: center;">(picture 1)</p>
2	<p>Press (Picture 1) the arrows button in turn to make the extruders move to the plate above the 4 spring buttons. Spinning the spring button, then the vertical distance from the 4 plates to extruders will almost be the same.</p>



(picture 2)

Attention: Adjusting can be operated again if there are the following situations:

1.

The whole plate is obviously slant with visual inspection by taking the extruder as the reference substance

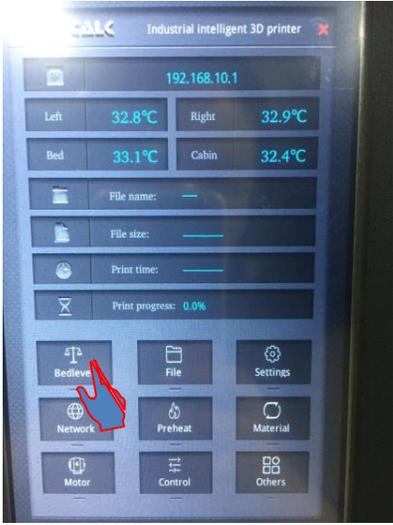
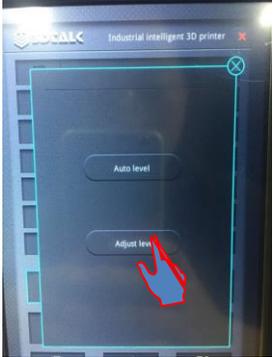
2. It have to be adjust again if the printer is moved another place

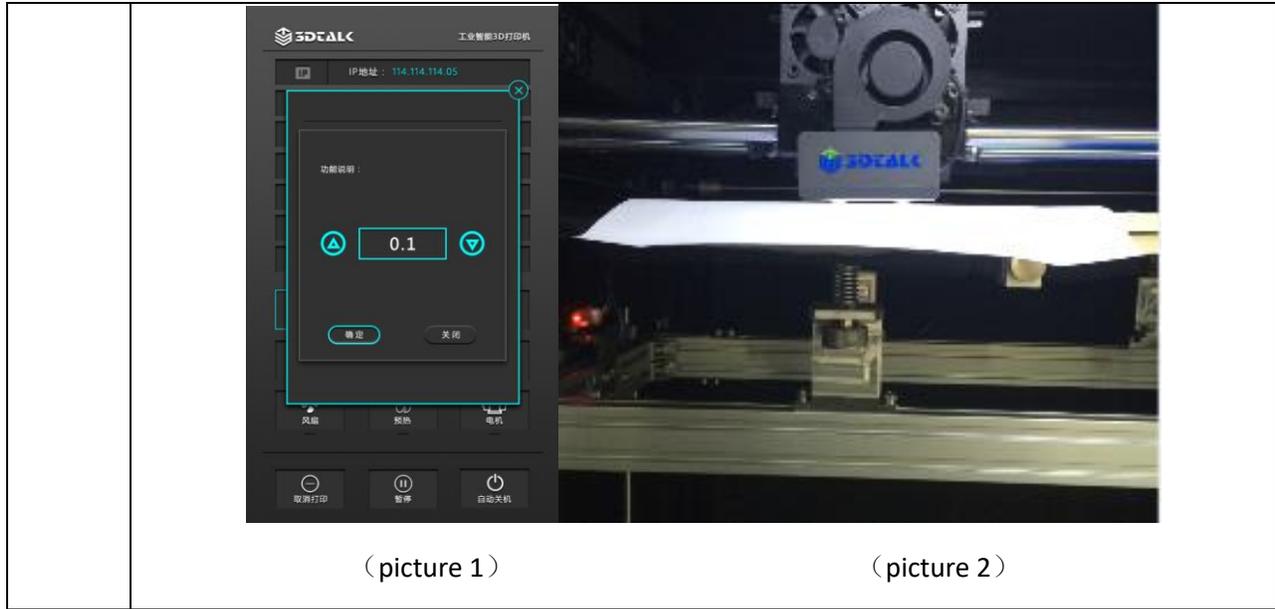
3. If it is the first time to use after leaving factory

Except the 3 situations,there is not need to adjust again.

3.3.2 Plate Adjusting

Note: In normal printing, there is no need to set again after setting successfully

<p>1</p>	<p>Select " Bedlevel " on the interface</p> 
<p>2</p>	<p>Select "Adjust Level " on the screen</p> 
<p>3</p>	<p>When the extruder stops working,press the “” “” to adjust the distance between extruder and the plate. (picture 1) (click the value to choose the every moving distance).</p> <p>(Attention:The best distance between extruders and the plate: Put a piece of A4 paper between the plate and the extruder.By pressing the “ up ””down ”button,we can keep the light friction between the paper and the plate as the extruder.(picture 2)</p>

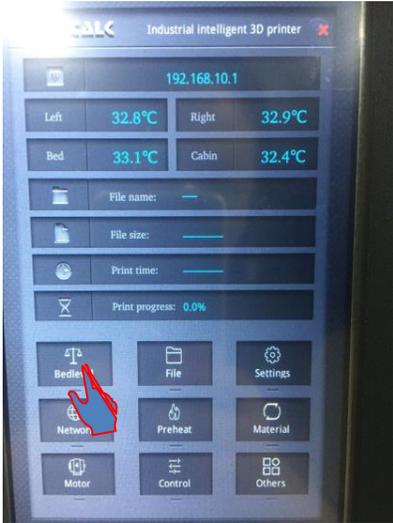
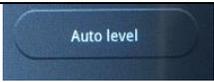
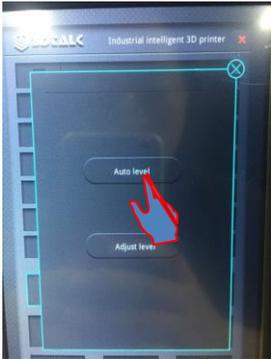


(picture 1)

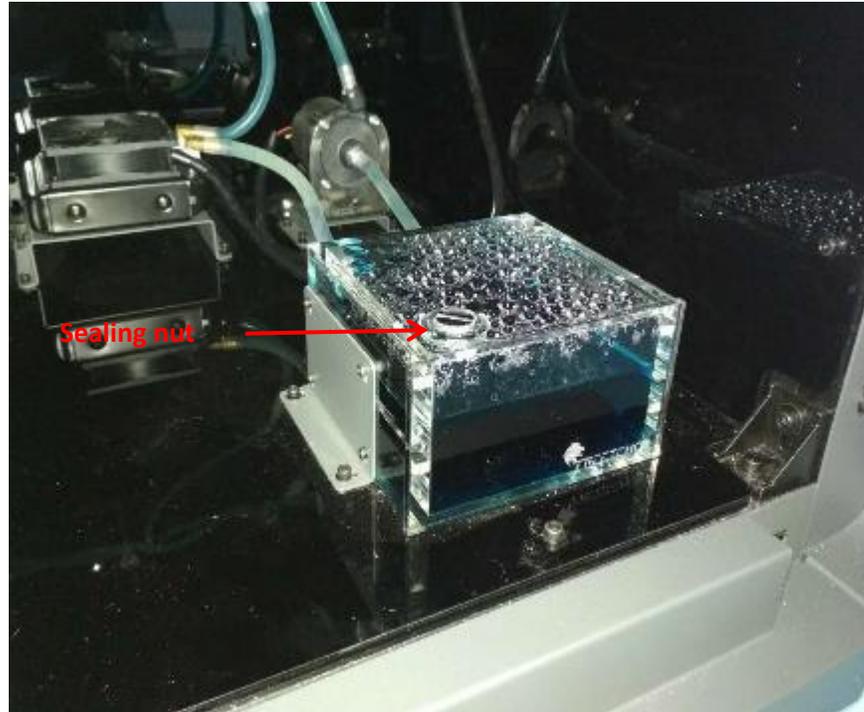
(picture 2)

3.3.3 Automatic Leveling

After adjusting, we will start to level the plate

<p>1</p>	<p>Select “  ” button on the interface</p> 
<p>2</p>	<p>Select “  ”</p> 
<p>3</p>	<p>After extruder working is finished, leveling is completed</p>

3.4 Feeding water into water pump



- Steps of adding water
1. Open the water storage ,close the nut
 2. Adding water up to 2/3 position,and then open the pump
 3. Keep adding cool water or cooling liquid until 3/4 position as the storage showing
 4. After finishing adding water,tightening the nut,closed the storage



Warning

Please be careful in case the cooling liquid will overflow or spill when adding cooling liquid

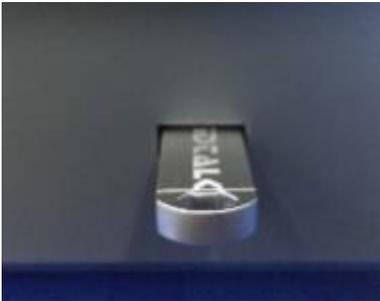
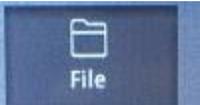
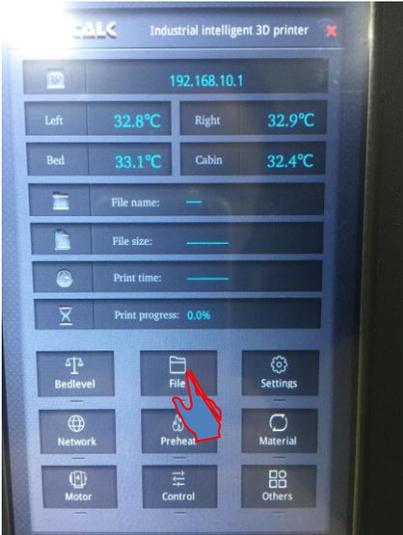
- In the recirculating condition,3/4 position of the water storage is enough
- Please cut off the power if there is the liquid leakage,and then deal with it
- If you need to heat the printing room,please make sure there is enough cooling liquid in the water storage
- Please make sure the nut is tightened well before moving the printer in case of the liquid spilling

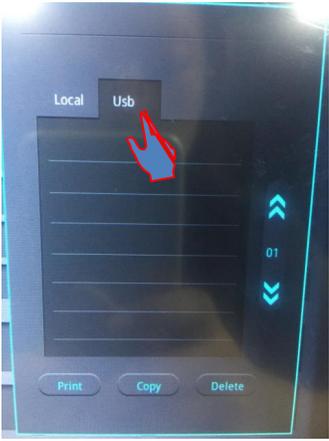
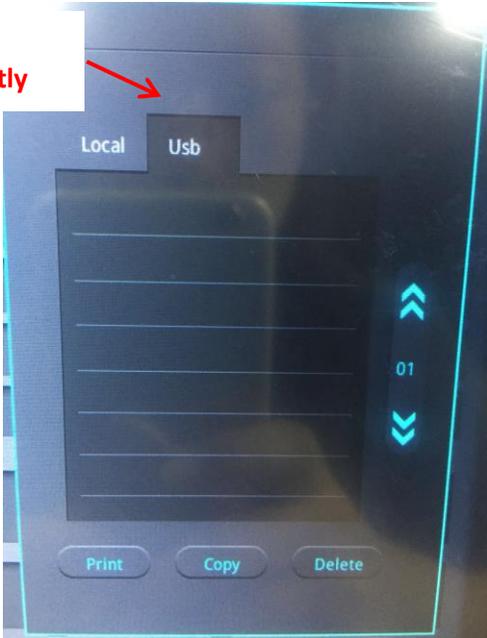
- Please put the printer in the temperature above 0°C .When the temperature is 0°C below,please drain the cooling liquid in the water storage totally in case that the printer will be frozen.

3.5.4 Uploading the slicing data Introduction

After slicing,uploading the slicing document as the following options:

Option 1: USD printing

<p>1</p>	<p>After slicing,click  ,save the G-code document into the USD catalogue(We recommend this option for big document)</p> 
<p>2</p>	<p>Select  to print</p> 

3	<p>Select USB document</p> 
4	<p>Select the correct printing document to print directly or copy it and save it into local document to print</p> 

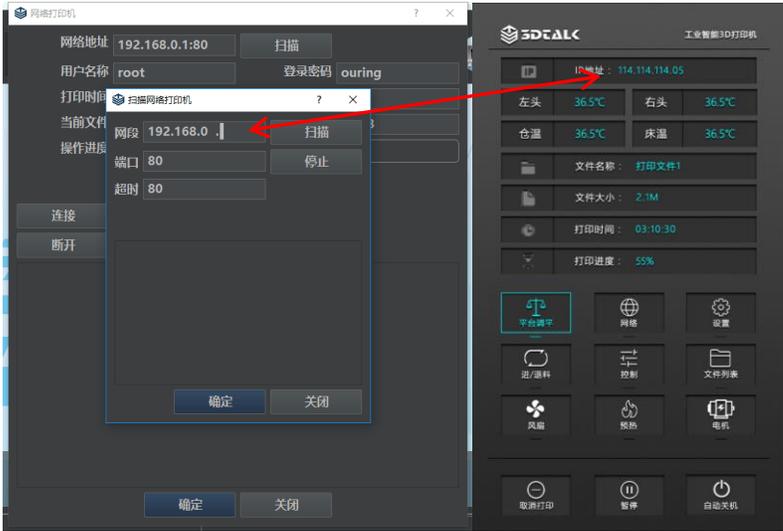
5	<p>printing model</p>  <p>the information of printing</p>
6	<p>Complete printing</p> 

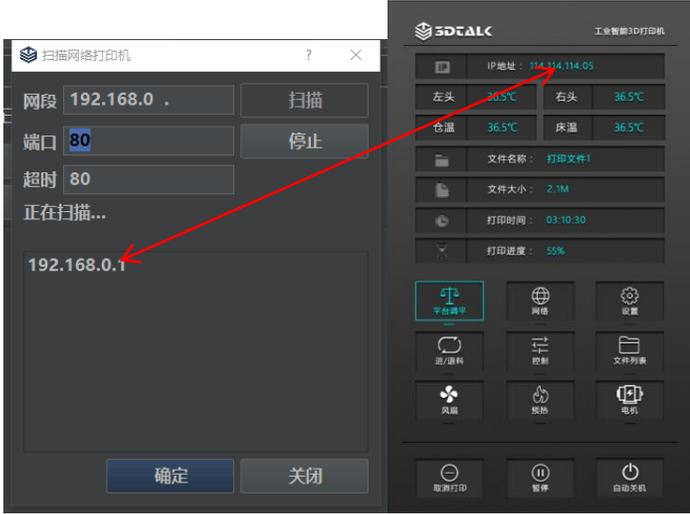
Option 2: hot point printing

Turn on the computer,connect the internet,search the hot point which is named as the printer's code(it is listed on the back label of the printer).Connect the hot point(passport is 12345678).After connecting successfully,click the  in the software.

The followings are the detailed steps

<p>1</p>	<p>Transfer the printer's condition from " " to " "</p> <p>如果当前状态为“联网模式”请切换成“热点模式”；</p> <p>If the condition is " ",please transfer it to " "</p> <div style="display: flex; align-items: center; justify-content: center;">    </div>
<p>2</p>	<p>Turn on the computer,connect the internet,search the hot point which is named as the printer's code and connect it.</p> <p>After connecting successfully,click the  in the software</p> <p>(Users can see the printer code in the factory settings .The passport of the hot point is 12345678)</p>
<p>3</p>	<p>Ensure internet address is the same with the printer's IP address.If not,please modify it manual;type the login name,login passport,and click the scan.</p> <p>(Note:If the login name ,and passport are blank,we can type as the followings;</p>

	<p>Login name: root</p> <p>Login passport: ouring</p> <p>Type them manually)</p>  <p>a: root</p> <p>b: ouring</p>
4	<p>The first 3 parts of the masks should be the same with the masks on the printer's IP address which is showed on the interface(as the following picture)</p> <p>(Attention:If they are not the same,users can modify it in the software.After they are the same,we can get into the next step.)</p> 
5	<p>Click scan to scan the hot point.</p>

	
<p>6</p>	<p>Confirm the IP scanned by the software is the same IP showed on the printer, and then select the IP in the software, and click “ ”</p> 
<p>7</p>	<p>Click connect ,if it is connected successfully, OK will be showed on the interface</p>
<p>8</p>	<p>Click uploading and confirm ,when the progress bar goes up to 100%,it means the model has uploaded successfully.</p>
<p>9</p>	<p>Click start button to control the printer and start to print.Users can click to stop the printer to cancel the printing.</p>



3.6 3DTALK APP Intelligent printing

Firstly connect the printer with Wifi, then connect the cellphone APP with the printer. After they are connected successfully, the model can be uploaded and printed by cellphone App.

<p>Step 1</p>	<p>Click  on the printer's interface, and then transfer to , click  to transfer the condition to , click  to choose a wifi which can be connected with internet, and please keep the printer online as well.</p>
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Step 2

Search for “3DTALK”APP in your app store,download the app,register and login.Click the “+” on the top right corner to add the printer function: Type the printer’s code. Select the model you need in the model storage ,and click start printing button,then we can realize the App controlling.When printing,users can control the printer to cancel or pause the printing by APP.

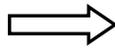
- (1) After downloading the APP,click the icon on the desktop



- (2) Go into the APP login interface,register and login the APP according to the hint.

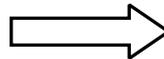


(3) Add 3D printer in APP. Click “+” on the interface by “scanning code” or “serial number adding”



(scanning code) (serial number adding)

(4) Select the model you need in the “ ”, and then print it



Introductions of the functions in the APP



User and the company's information	(2) The button of starting printing	(3) Select the printer
(4) unlock the printer	(5) connect the printer	(6) Support the video surveillance(it is only available for printers which have the cameras)
(7) Setting data	(8) 3D model digital storage	

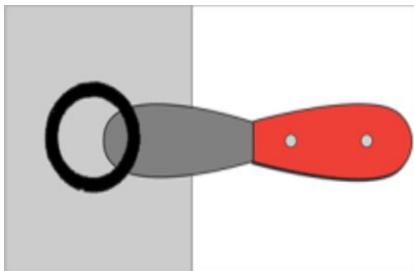
3.7 Notice for printing special materials

ABS	<ol style="list-style-type: none"> 1. Spread glue or glue stick on the printing area in case of edge wrapping 2. Users must set the room temperature in the software(make sure there are enough cooling liquid in the water storage before printing) 3. Users must set the plate temperature in the software
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	4. Please close the printer' s door when printing
COMBO	1. Spread glue or glue stick on the printing area in case of edge wrapping 2. print with the setting extruder' s temperature 3. The model with support had better not be printed with combo 4. Keep low printing speed

3.8 Remove the model

After completing printing,X and Y axis move to the zero,and the Z axis will move to the position which is set by the software.The model printing working is finished.At last,remove the model from the plate with the spatula.



Attention

- Make sure the printing has finished before you trying to take off the model from the plate.
- Please move the spatula far way from your body.The misusing of the spatula will hurt human body.
- Be careful when taking off the model with the tool in case of scratch of the printing plate
- Clean up the extruder and the printing plate after taking off the model

4.Maintain

①

Please put the printer in the dry and ventilated environment.If users do not print for a long time,please take back the filament from the extruder,and seal the filament with packing film in case of being affected with damp.

② Clean the attached material on the nozzle at times

③

The warranty period of the printer is 1 year.We will provide the after service if there is any non human damages in the warranty period.

④ If there is any quality problem within 7 days,we will accept changing or refunding.After 7 days,refunding is not acceptable.

⑤

Disassembling is forbidden without the factory's engineer's permission,otherwise we will not provide the warranty service.

⑥ All of the warranty policies agree with our factory.

⑦ The guide need to be added the rustproof oil if the guide is not used for a long time.

⑧ The remaining PLA in the tube had better be turned back totally if users want to print ABS in case the high temperature when printing ABS will make the PLA denature.

⑨

If the printer will be put into the temperature $\leq 0^{\circ}\text{C}$, please make sure the cooling liquid be discharged totally in case of the damage to the printer.

6. Warranty Instructions

Customers can have our warranty service from the day that purchasing our company's 3d printers. In order to get our warranty service well, please make sure the following conditions. If your conditions do not meet the following items or your printer has beyond of the warranty time, you will not longer get the warranty service from us.

➤ Warranty principle:

1、

As long as you purchase our 3DTALK Fab460 plus printer in the regular place, you will get the changing or refunding service with the following conditions: normal using (no human damage), no human dismantling, the assembles and packages are all well, our engineers provide and confirm that the problem is caused by the normal using.

2、

Customers who purchasing our 3DTALK Fab460 Plus printers by the regular way will get the free repairing and lifetime maintenance.

The following conditions will make you lose the warranty service.

①。 Human Damage, including wrong working environment, wrong operation which is not the same with the product operation instructions.

②

Users personally dismantle, repair refitted, or repaired by the man who is not our company.

③ Be damaged by force majeure (such as fire, flood, earthquake, lightning stroke and so on).

④ Lacking of purchasing proof or the customer's purchasing information

⑤ Lacking of purchasing date

➤ Applying warranty service

1、 Please refer the purchasing proof (such as the receipt) when you are applying the warranty service

- 2、 Please call our customer service:400-071-8228.Your calling will be transferred to our engineer
- 3、 If your purchasing proof is correct,our engineer will help you solve your printer's problems remotely.
- 4、

If the remote guiding is not working,you can send your printer to our factory.Our engineer will repair it for you.

Customer service: 400-071-8228

Attention:The warranty service is not including the transport cost and home service cost.