

Wiiboox

3D PrinterService
Manual

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1. Matters needing attention

1.1 About the instruction manual

This manual contains 3D printer installation, use, maintenance, common problems and other important information. Please read this manual carefully before use the 3D printer. For violating the security matters given in this instruction manual and the operation process. The damage of 3D printer and other losses will be undertaken by the user

1.2 Safety matters

- 1) Please use this product at room temperature environment. The nozzle temperature as high as 200 °C during the 3D printer is printing or end of the printed. During this period banned directly touch the nozzle, In order to avoid been burn. Children need to be used under the parents' care.
- 2) The temperature of print platform as high as 100 °C after 3D printer print ABS material during printing or end of the printed. During this period banned directly touch the print platform.
- 3) The highest working temperature of the 3D printer nozzle is 230 °C. Our company will not be warranty if the machine is damaged caused by working over temperature.
- 4) 3D printer is equipped with active air filtration system. It can handle the most irritating gases after print silk materials by heating them. But if you need long time print, please place the printer in a well-ventilated environment.
- 5) 3D printers have complicated structure. Please refer to the troubleshooting of this instruction manual if the fault happened. Please connect our after-sales if still cannot solve the fault. Our company will not be warranty if the users without authorization maintain the printer.
- 6) 3d printer with high voltage, non-professional is banned remove printers

without authorization. For in violation of any consequences caused by this matter will be undertaken by the user

7) Please use the power cable and the USB data cable provided by the company . If failure of printers and other consequences by using a third-party power cables or USB data cable will be undertaken by the user.

8) Please insert the power cord in accordance with international three holes in the flat receptacle if you connected to electric power supply for the 3D printer. Not to plug the power cord to the two holes in the socket. Power outlet in the ground must be good grounding, shall not be suspended. Our company will not be warranty if the failure or other accident caused by not good grounding in the 3 d printer machine.

9) 3D printer default input voltage of 220 v. For outside mainland China to use the 3D printer, please connect our company's after-sales. The company's technical staff will provide you with solutions

10) If your region often occur accident, please prepare power supply for 3D printer.

1.3 Printing consumables

While using this printer, please use the printing consumables we provided. The printing consumables have different specifications and quality are sold in the retail market. Easy to plug the printer nozzle, and damage to the nozzle and the motor. Our company will not be warranty if printer malfunction caused by using third-party materials.

1.4 Environmental requirements

This 3D printer adopts the totally closed structure. It have strong adaptability to the environment temperature. It can work in the degree between 5 °C and 40 °C. If the temperature is not among this range, printing product quality will be declined.

Printing consumables once opened, please seal save if it is not going to be used in a short time. Especially PLA materials, it will affect the printing quality if it is been exposed to the air for a long time can absorb moisture.

2. The printer profile

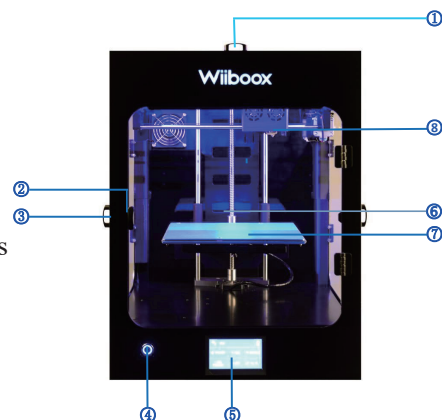
This printer adopts the principle of FDM (hot melt solidification molding in). Convert and slice STL three-dimensional model. Then print out the physical products one by one. This printer has a series of innovative design, such as a metal frame, fully closed structure, removable printing platform, active air filtration system and so on. It can print fast, high quality of products, easy to use, simple maintenance and support high strength wire to print.

2.1 Appearance introduction

The front view of the printer

- ① The cover of the door
- ② The front door
- ③ The left side door
- ④ The switch of power
- ⑤ Touch screen
- ⑥ Camera
- ⑦ The print platform
- ⑧ Print nozzle

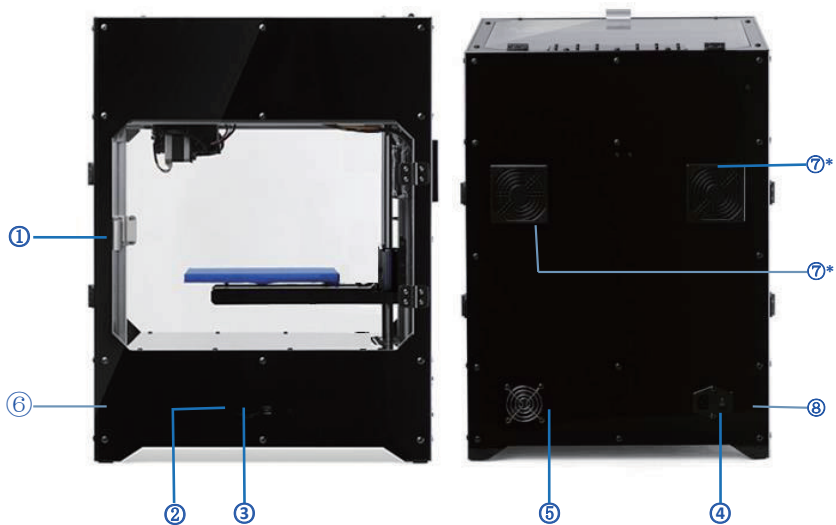
* Wiiboox Company Models
equipped with double nozzle



Printer's right view and back view

- ① The right side door
- ② The socket
- ③ The USB cable socket
- ④ A power socket
- ⑤ The main engine fan
- ⑥ Surveillance camera socket
- ⑦ Air filter fan
- ⑧ The switch of power

* Only Wiiboox Company equipped with double air filter fan



2.2 Technical parameters

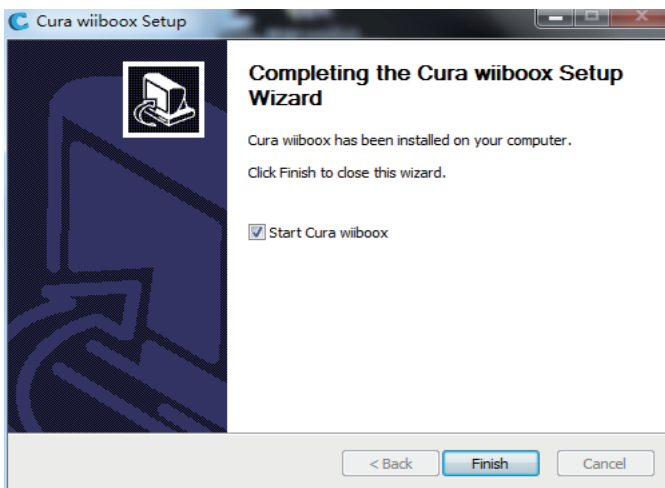
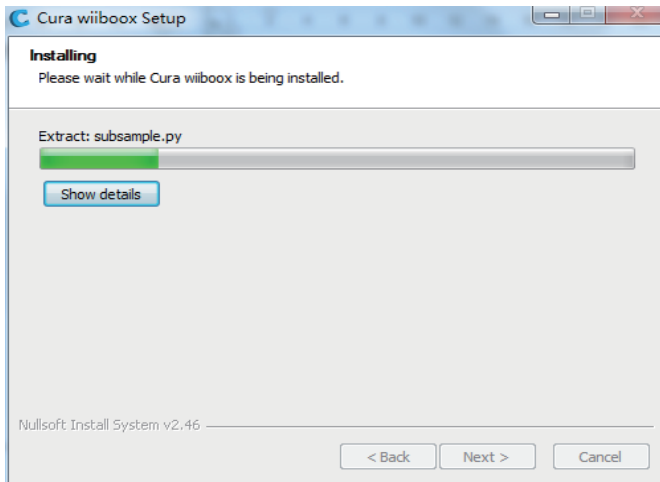
Printing parameters		The machine parameters	
The print size	260*260*300mm*① 270*280*300mm	The display	4.3 -inch color touch screen*② 5 -inch color touch screen
The layer thickness	0.1~0.5mm	The machine size	458*494*630mm
The nozzle diameter	0.4mm	The machine weight	21kg
The print accuracy	0.08mm*③ 0.05mm	The machine color	Black
The printing speed	20~150mm/s	The input voltage	220V
The positioning accuracy	Z shaft 0.0025mm	The highest power	350W
	XY shaft 0.011mm	The filtration system	Three layers of mesh filter
The print platform	Removable heat discharge aluminum plate	Platform automatic calibration	Support
Save after resuming	Support	Feeding wire alarm	Support
The consumable parameters		The software parameters	
The consumable type	ABS/PLA/PLA Pro	Printing software	The Chinese version of Cura
The consumable diameter	1.75mm	The file format	STL/GCODE
The consumable color	Multicolor optional	The operating system	Windows/Linux/MacOSX
		The way of print	SD card

※ **Note** : *①、*②、*③ are the models of Wiiboox Two.

3. Install the software

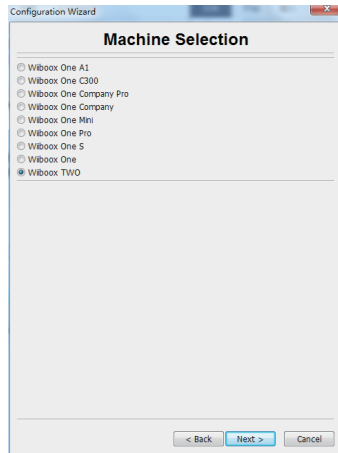
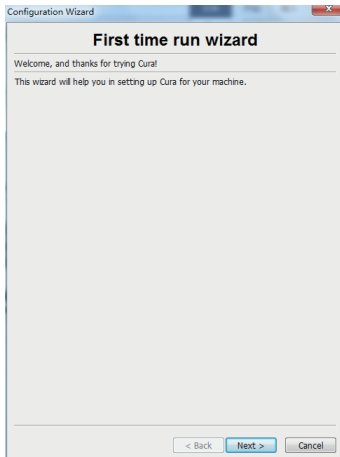
3.1. Install the special edition of Cura Wiiibox

Run the installation package of the software. Cura - 14.07 - Wiiibox, Click the installation wizard window "install" to "next" to "done". Please use the default path program when choosing the installation path window,



※ **Notice: The Cura installation path is packing list C**

The first time use Cura software, have to enter the wizard interface. Click the "Next" to get into the model selection interface. Then select Wiiboox One Mini, and click "Next". After that ready to enter interface, click "Finish". At last complete the installation.



4. Print the first model

4.1. Connect the power supply

Take out the power line from the accessories box. The male head inserted into the power socket and female head inserted into the back of the power input socket of the printer.



Press the switch on the power input socket, make sure that the vertical bar end down, as shown in the picture below.

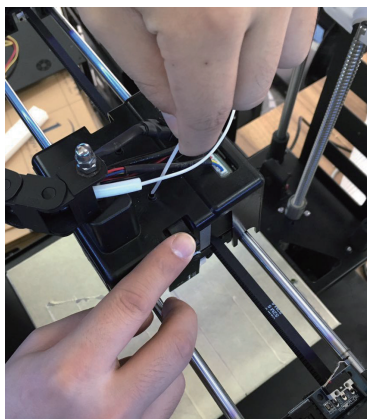


4.2. Equipment materials of silk

Take out the tray and rack. Put the rack shaft into after-hours. Then put them into the material plane. Put into the feeding tube on the back of the printer from one side of the silk materials on the tray until the material pull out through the feeding tube.



Open the cover of printer plate. Pull out the silk materials from a feeding tube for around 20 cm. Make the ends of silk materials straight. Use the right hand press the extrusion of the handle, and use the left hand to put the silk material insert into the feed port, the depth around 5 cm.



Put the rest silk materials back to the feeding tube. Then put the feeding tube in the entrance.



4.3. Print ready

Take out the SD memory card, insert the card slot.

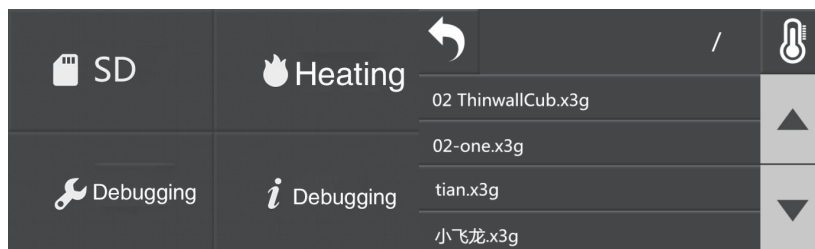


Press the power button on the back panel, switch on the printer.



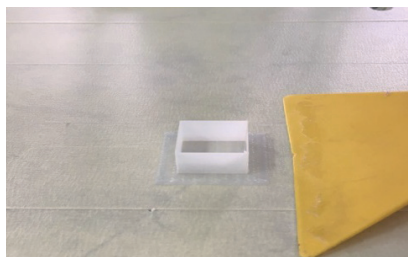
4.4. Print the model

On the touch screen panel select "SD card" to "02_ThinwallCub. X3g", click on the file to print directly.



4.5. Remove the model

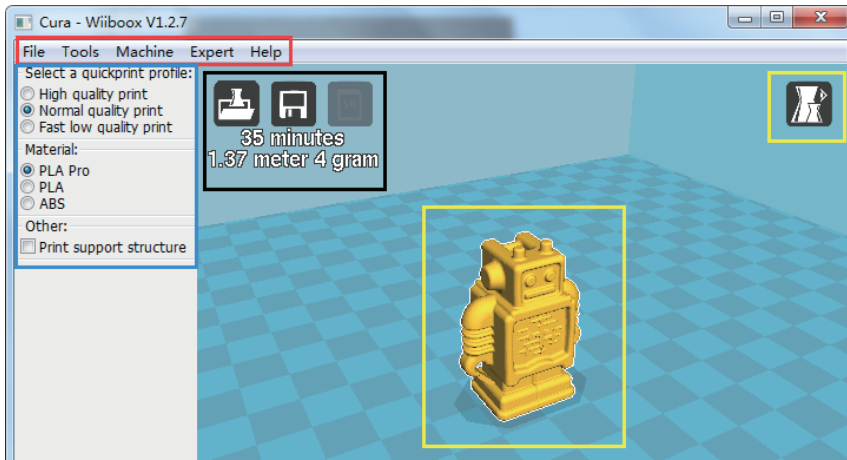
Finished the model print, use the plastic scraper, remove the model up along one edge.



5. The described in details of the Cura software

5.1. Basic interface

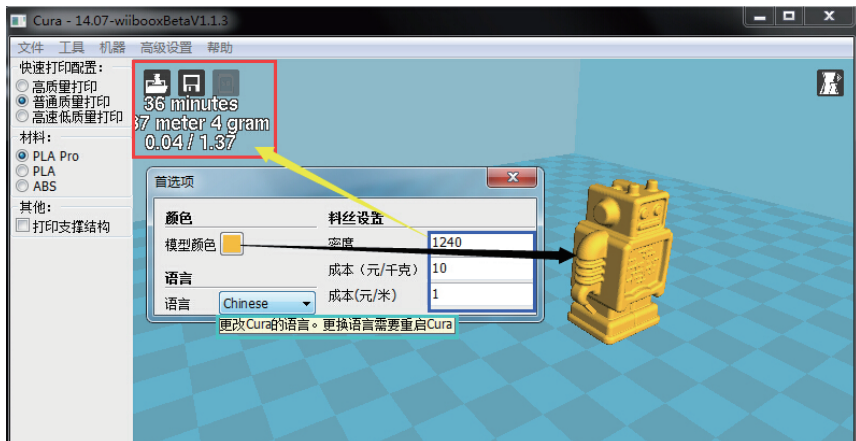
The picture below shows a typical interface of the Cura.



- ▲ Red box for the menu bar
- ▲ Blue box for the printing parameters set column
- ▲ Yellow box is used to adjust the model and check the model
- ▲ Black box is related to the print operation, the grey button shows cannot use the current condition.
- ▲ The green box for the model preview

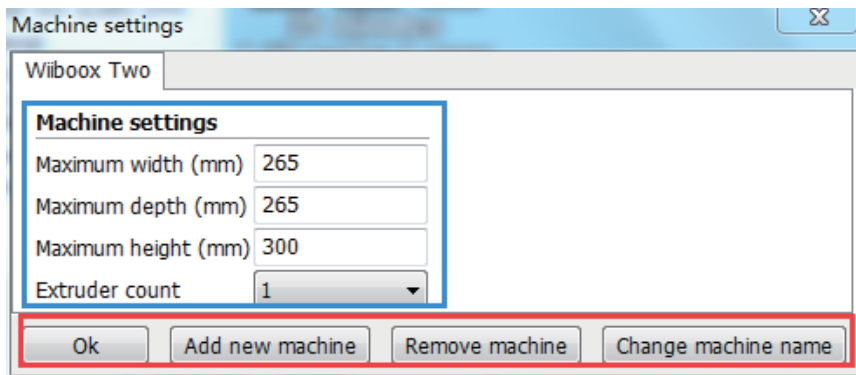
5.1.1. The preference Menu

Click on the menu "file"→ "preferences". Then enter the preferences menu, as shown in the picture below. It can make the following Settings.



5.1.2. Machine set up

Click on the menu "machine" → "machine Settings". Then enter the machine Settings interface, as shown in the picture below.

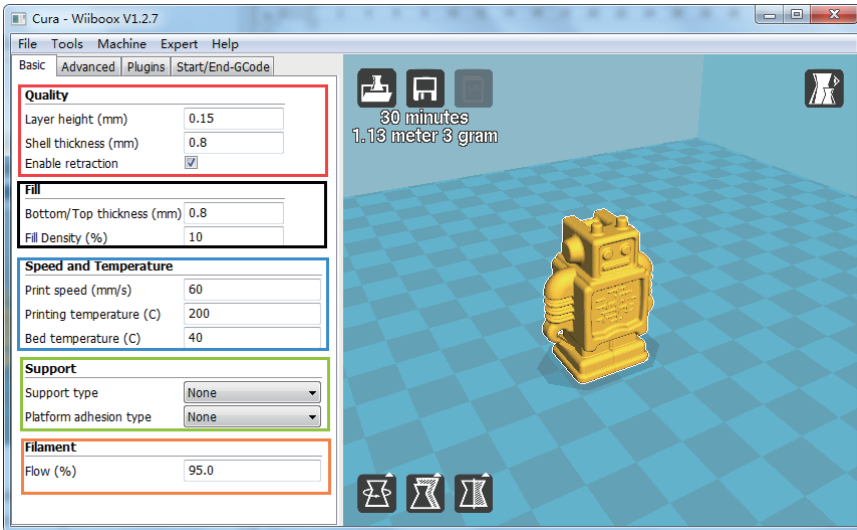


▲ Blue box means the size of the print machine platform. We have preset according to your choice of models. Please do not change the data

▲ Red box means the associated Settings of the machine. Including adding new models you need, delete the model you needn't. It also can modify the name of the model, but will not change any parameters.

5.1.3. The printer parameter Settings

Click on the menu "advanced Settings" → "switch to completely setup mode". Then enter completely mode Settings interface. As shown in the picture below.



▲ Red box is the print quality parameters.

Height: It's the print precision between 0.1 and 0.25 that we often say. Smaller the data, higher model precision.

The shell thickness: The thickness of the outermost surface can improve the surface quality. The general size for the nozzle always multiples (It's a multiple of 0.4)

▲ Black box is filling parameters.

Bottom and top thickness: The thickness of the model bottom and top, it is recommended to use of the same parameters as the shell.

Pack density: The fill rate of the model. The interior of the model is not fully padding, and it does not affect the surface quality. But just affect the strength.

※ Notice: The Cura will work after restart the language switch.

▲ Blue box is the parameters for speed and temperature.

Print speed: If the print objects are small, please use the low speed.

Print temperature: It's the temperature of print nozzle. The temperature is 195-195 degrees if print the PLA/PLA material. The temperature is 230 degrees if print ABS material.

▲ green box is the support parameters.

Support type: As shown in the picture below. "None" is for not use support. "Touching buildplate" is for external support. "Everywhere" is for the full support. Select the support type according to the situation of model dangling.

Support	
Support type	None ▼
Platform adhesion type	None Touching buildplate Everywhere
Filament	

Type of support structure build.
"Touching buildplate" is the most commonly used support setting.

None does not do any support.
Touching buildplate only creates support where the support structure will touch the build platform.
Everywhere creates support even on top of parts of the model.

The print platform pedestal formation type: As shown in the picture below. "None" is for not use the pad. "Brim" is the liner for edge. "Raft" is for the bottom grid liner.

Support

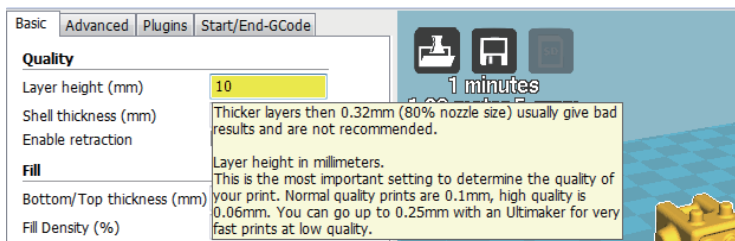
Support type	None ▼
Platform adhesion type	None ▼
Filament	None
	Brim
Flow (%)	Raft

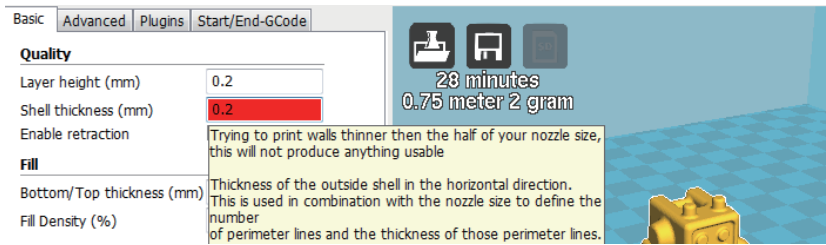
Different options that help in preventing corners from lifting due to warping.
 Brim adds a single layer thick flat area around your object which is easy to cut off afterwards, and it is the recommended option.
 Raft adds a thick raster below the object and a thin interface between this and your object.
 (Note that enabling the brim or raft disables the skirt)

▲ Orange box is the silk material parameters.

Silk material is commonly 95% turnover parameters.

※ **Notice:** The software will use the yellow and red color to prompt when the parameters filled is wrong or invalid. Yellow means warning. Red means error. You can see the prompt when the mouse hovering. As shown in the picture below

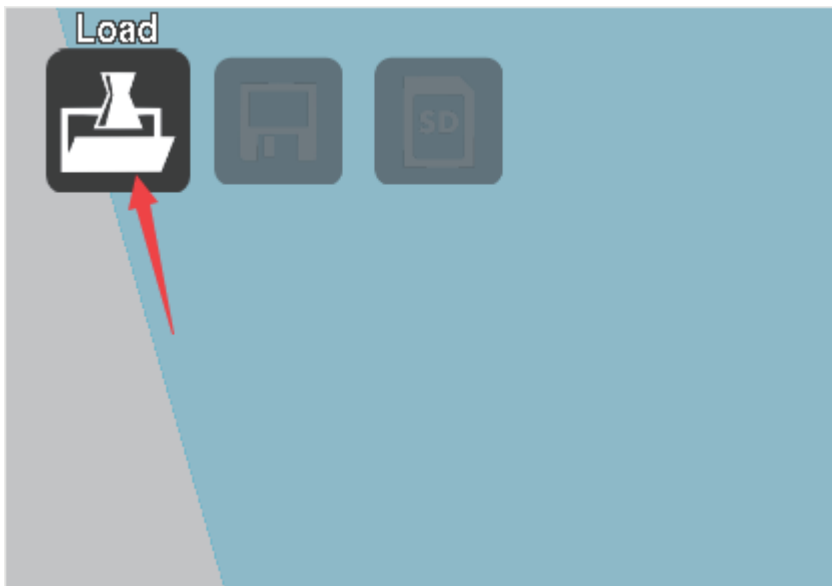


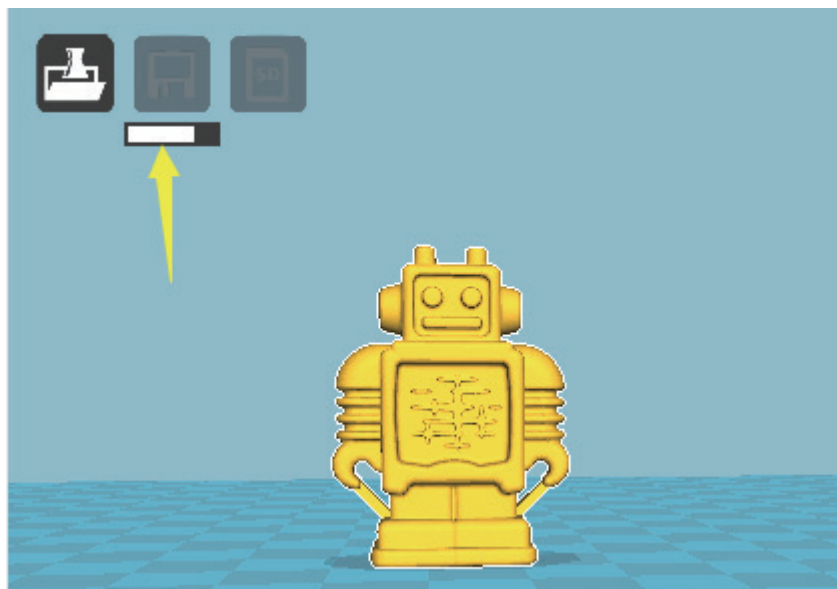


5.2. Model Transformation

5.2.1. Model Load

Open the Cura software, as shown in the picture below. Click on the screen, the red arrow pointing to "Load" is to load. Select the model need to print in the pop-up window. Notice: the yellow arrow pointing to is the progress. The Cura section of the engine is automatically open all the time. The engine will start slicing when the model or parameter changes. It may cause block during engine starting if the computer configuration is low, and frequent change parameters and change model. So the operation speed cannot be too fast.

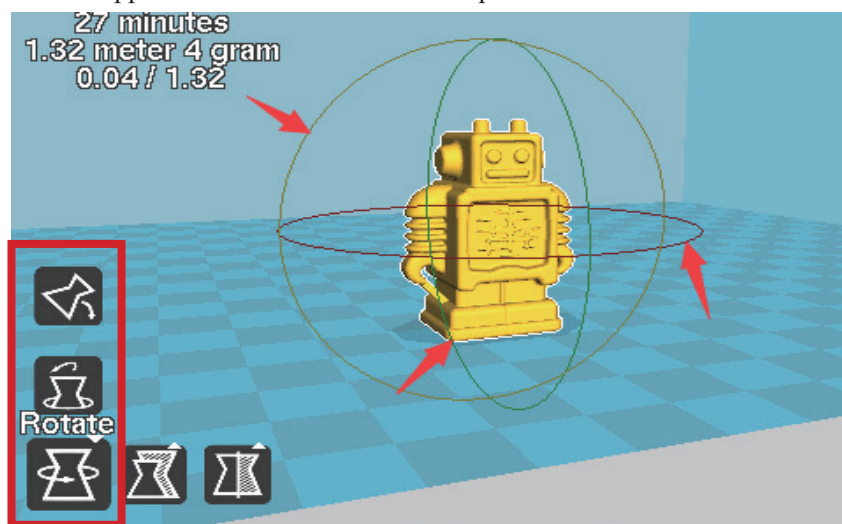




5.2.2. Model Adjust

Click the  button, five mode buttons will popup, respectively:

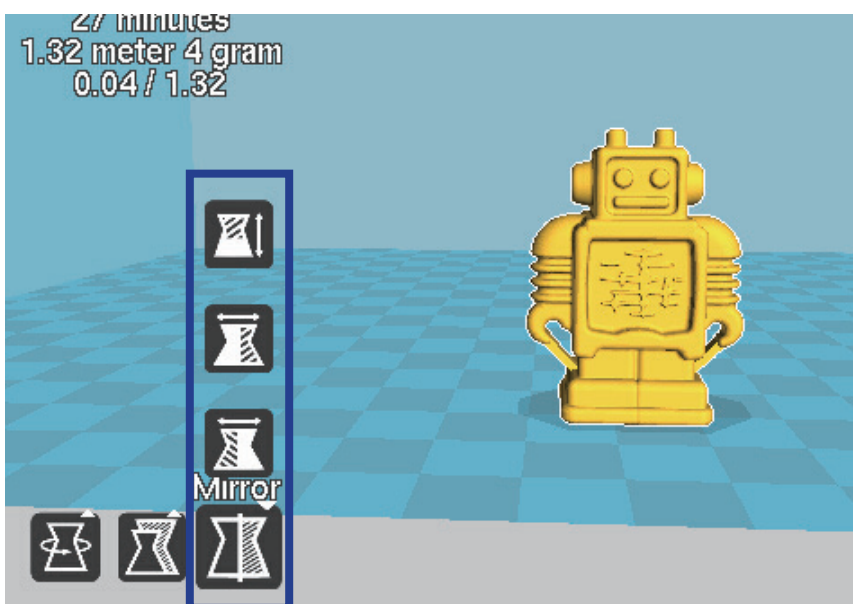
"The Layers" is layered model, you can see the movement path of the nozzle and the support structure. As shown in the picture below




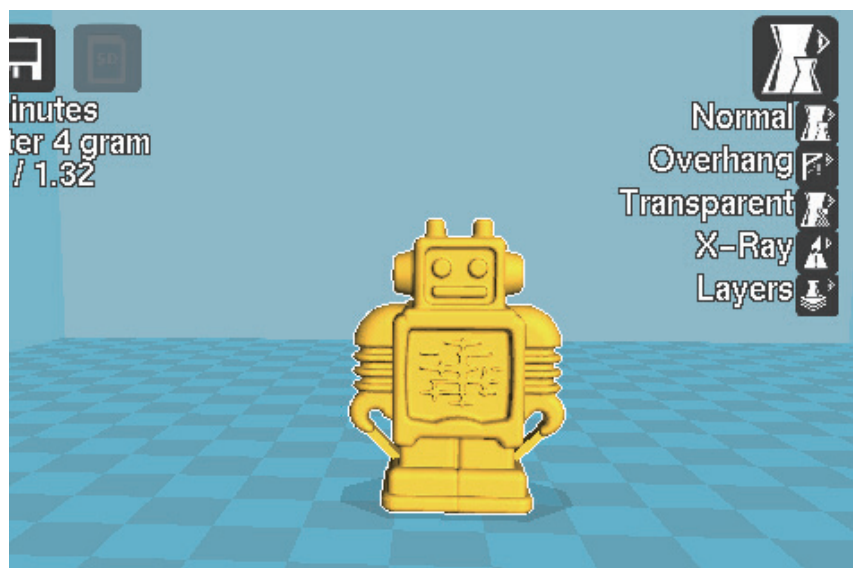
Red box is the model rotation settings. Click rotate button, and then press and hold the left mouse button, drag the ring frame around the model to adjust the model. You can adjust the model from the X, Y, Z three directions rotate.



Yellow box is the model scale settings. If click the zoom button, it will pop up the model scale rate and size of the dialog box. Put the scaling model to adjust the scale factor of the size you need in the "Scale". The "red arrow" to "🔒" icon is locked, as a direction of zooming are overall zoom on the model. When the "🔓" icon is open, the model can be scaling of one direction.

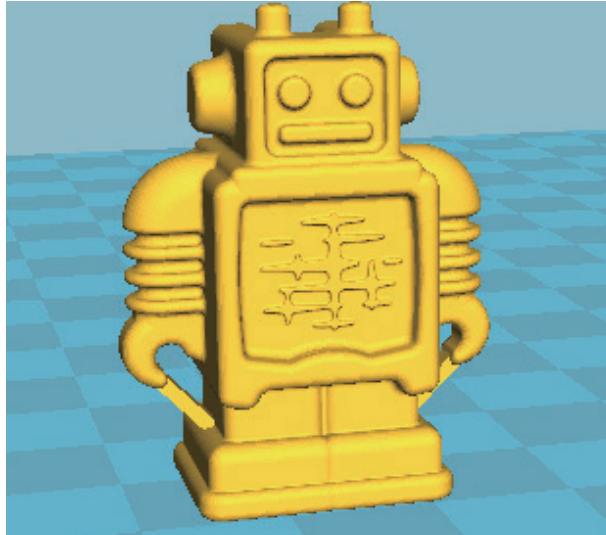


Blue box is the model image. Click on the image button, it will popup three buttons. They are Y, Z, X three directions image. Click the  button, five mode buttons will popup, respectively:

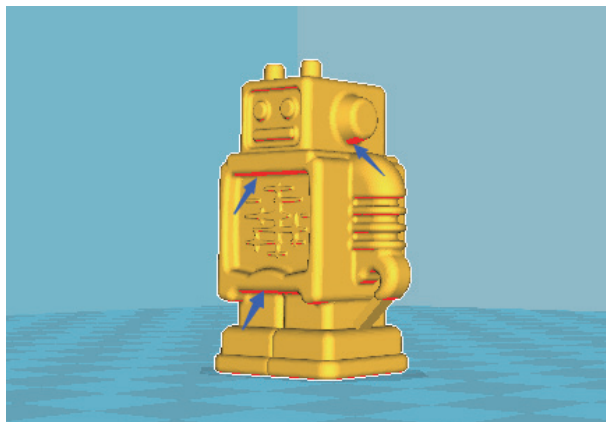


The green box is the options to check the model.

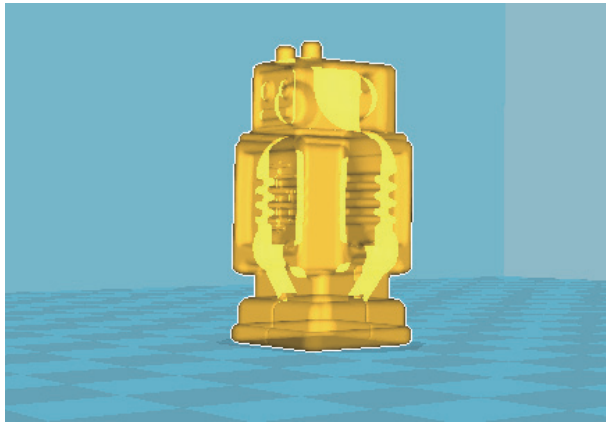
“Normal” is Normal model, only display the appearance of the model, the default is this model.



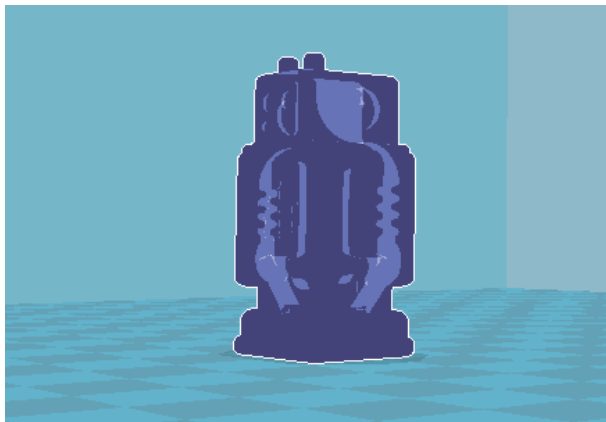
“Overhang” is Overhang model, it will indicate the overhang parts of the model. These parts may prolapse if no supports. As shown in the picture below, the blue arrow which pointing to the red area.5.2.3. Generate the Gcode code and X3G file



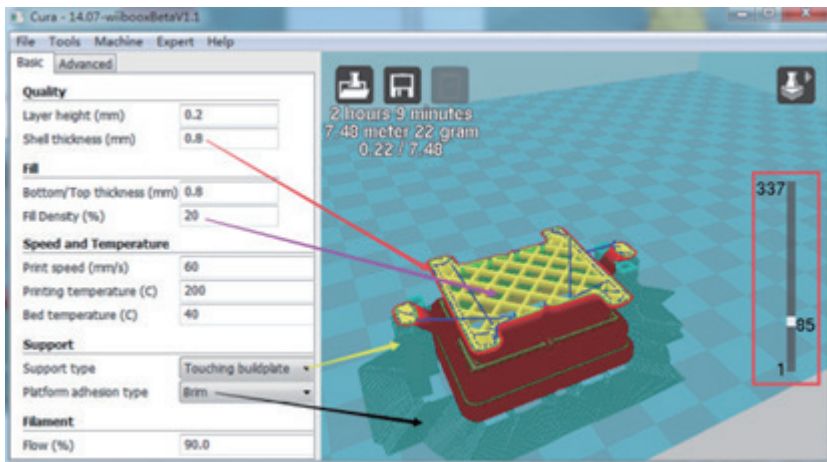
“Transparent” is transparent model, it can see the pattern of internal structure.



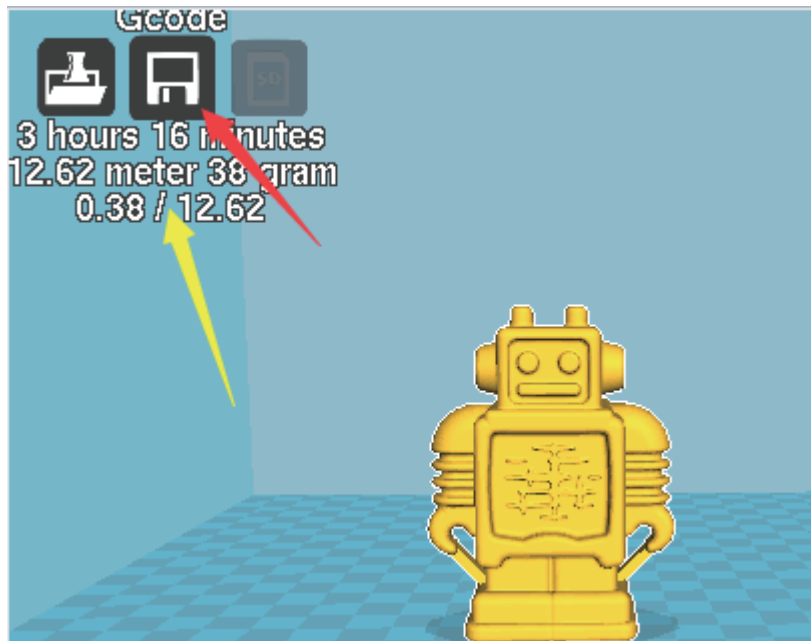
“X-Ray” is X-ray model, similar to the transparent model, but ignores the surface




“The Layers” is layered model, you can see the movement path of the nozzle and the support structure. As shown in the picture below:

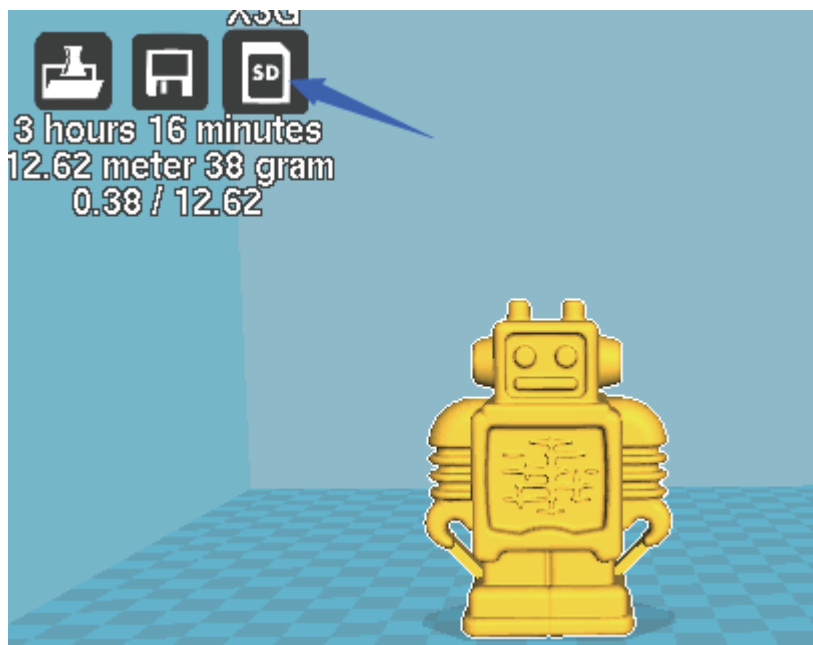


5.2.3. Generate the Gcode code and X3G file

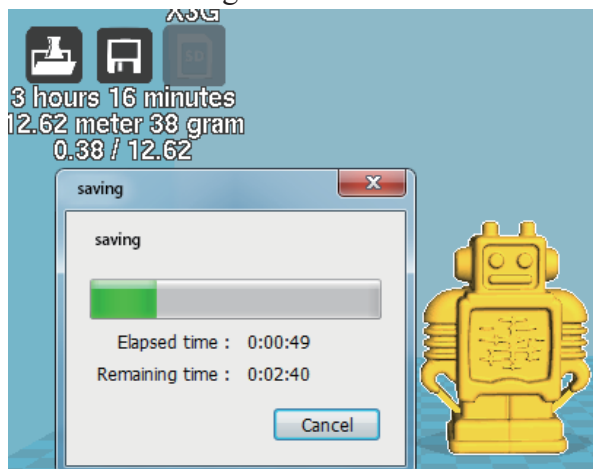


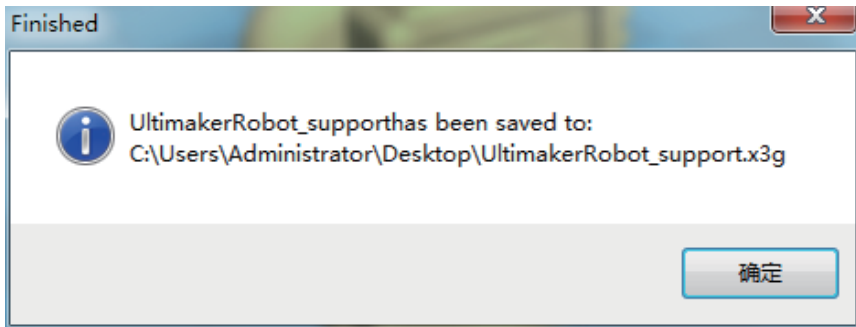
The data that the yellow arrow point to is the result of model transformations, including print time-consuming and silk material usage. The cost for model is displayed if set silk material cost. At this time, the save button“”can be

used. Click the red arrow buttons will generate Gcode code.



The model generates Gcode code. It indicated that the button can be used when the blue arrow point to the "SD" icon is from gray to white. Click this button to generate X3G files.



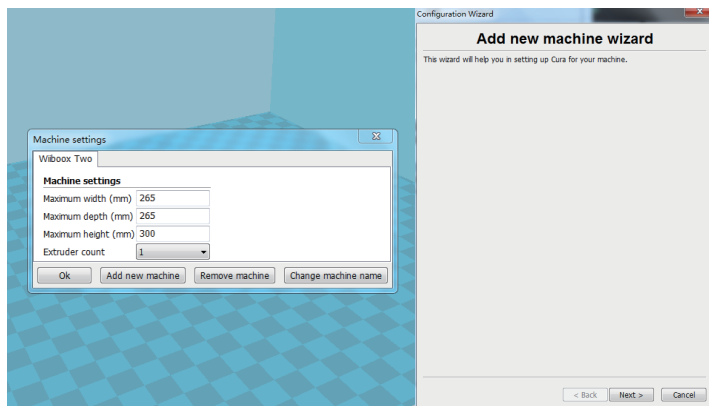


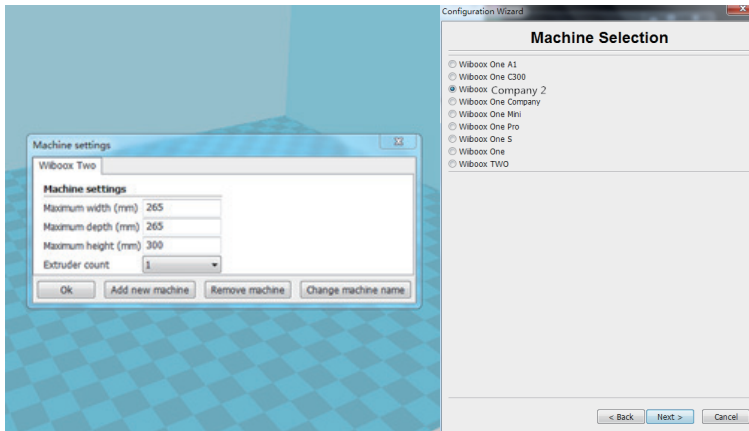
It will pop up the hint as shown in the picture above after x3g file is completed. Means the store path of the x3g file.

6、Double nozzle print Settings of Wiiboox Company 2

Relative to the single nozzle Wiiboox machine two, the print setup of double nozzle machine Wiiboox New Company has increased to set parameters of the second print nozzle.

6.1 Machine set up



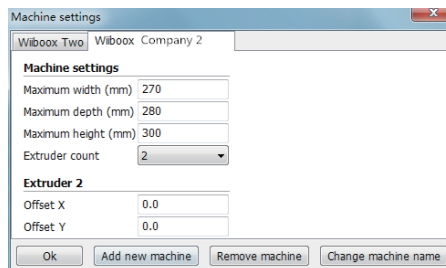


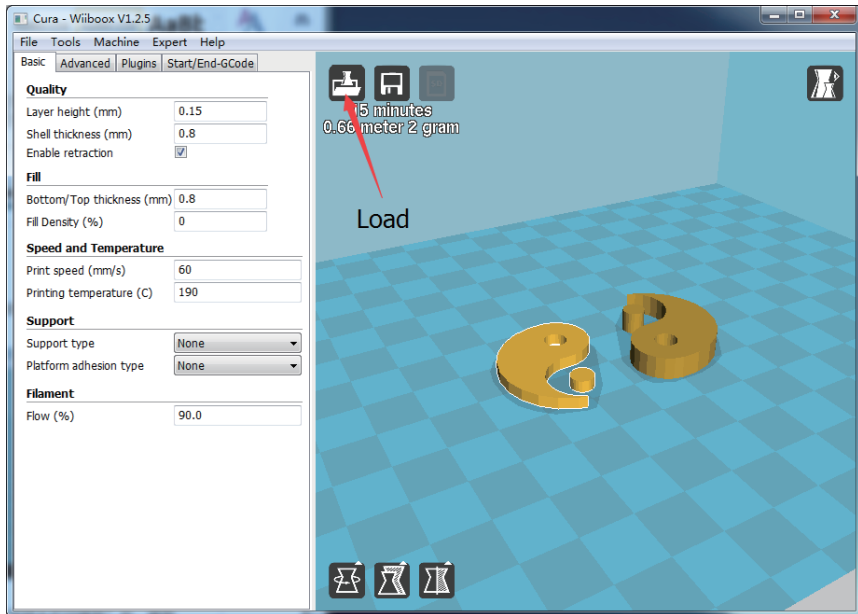
Open the cura Software, click the menu "machine" - "The machine setting". As shown in the picture below it will enter the machine setting interface. Click "Add a new printer" into the wizard interface, then click "next" to enter the selection interface of the machine. As shown in the picture below, choose the models match your machine. Click "next", the setup interface will pop-up. Click the "ok" will finish adding.

6.2. Dual color print setup

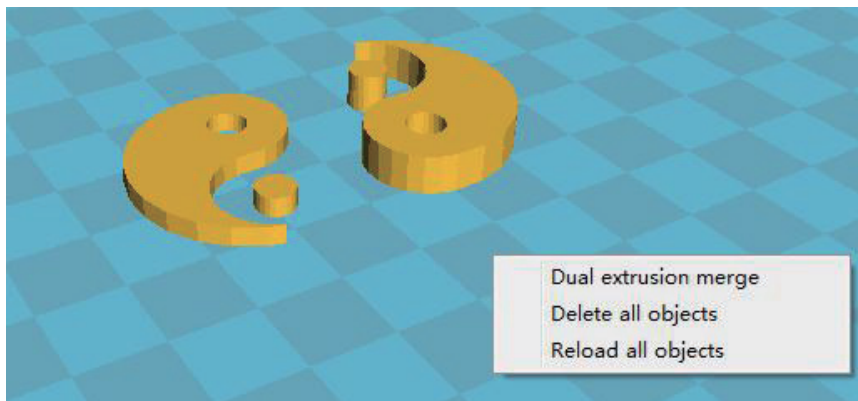
6.2.1 Load model

Standard two-color print model, loading model. Can drag the model directly into the Cura software (or use the Load button to load)





Right click the print platform, in the pop-up window select "merge double nozzle print model", the model merge complete.



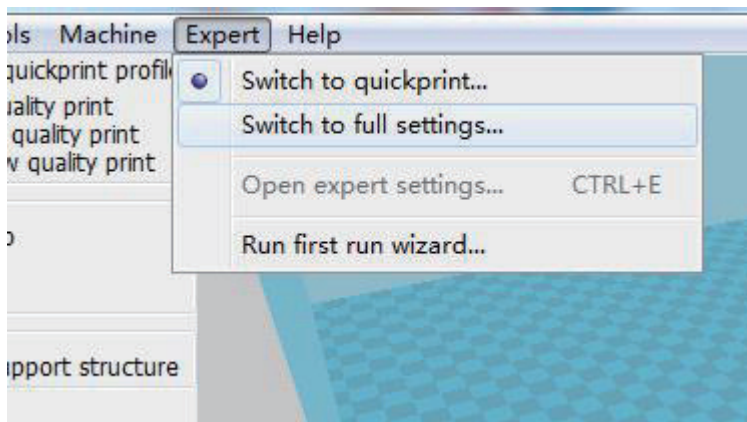


6.2.2. Two color printing parameter setting

On the menu bar click Advanced settings, in the pop-up dialog box select switch to fully set mode..."

The matters needing attention is only using a nozzle of Wiiboox New Company to print the model.

In the fully set mode interface, you need to pay attention to a few parameters:



Speed and Temperature

Print speed (mm/s)	60
Printing temperature (C)	190
2nd nozzle temperature (C)	190
Bed temperature (C)	40

Support

Support type	None ▼
Platform adhesion type	None ▼
Support dual extrusion	Both ▼

Dual extrusion

Wipe&prime tower	<input checked="" type="checkbox"/>
Ooze shield	<input checked="" type="checkbox"/>

Filament

Flow (%)	90.0
----------	------

▲ The second nozzle temperature (Celsius)

For two-color printing, you can set the value directly according to the print temperature.



▲ The choice of print head support

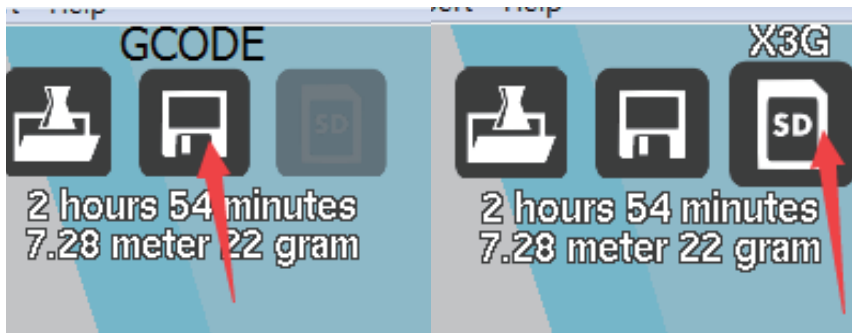
Select "both"

▲ I wipe out and prepare the tower and a drain wire protective layer. Please tick in box

▲ The feeding wire flow rate

Flow rate is generally set to 90%

After setting the parameters, the Cura engine slices the model and generates the Gcode code. click“”Button to save the Gcode code, and then click“”Button to generate x3g files, and then copy the x3g file to SD card, and use the dual nozzle machine printing.

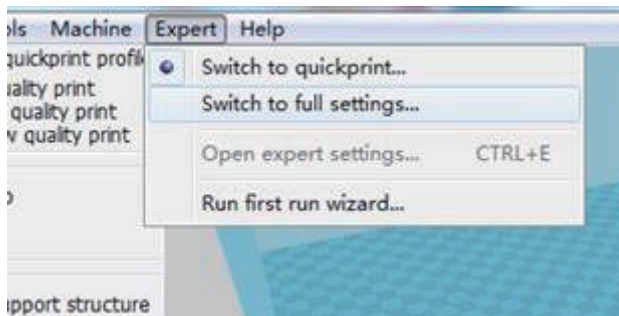


6.2.3. A nozzle print support a sprinkler print model

If you need a nozzle print support (you can use water-soluble silk), a nozzle print model, follow these steps:

The loading model

Drag the model into the Cura software (or load it with the Load button)



We set the print model and supporting parameters

Speed and Temperature

Print speed (mm/s)	60
Printing temperature (C)	190
2nd nozzle temperature (C)	180
Bed temperature (C)	40

Support

Support type	Touching buildplate ▼
Platform adhesion type	Brim ▼
Support dual extrusion	Second extruder ▼

Dual extrusion

Wipe&prime tower	<input checked="" type="checkbox"/>
Ooze shield	<input checked="" type="checkbox"/>

Filament

Flow (%)	90.0
----------	------

On the menu bar click Advanced settings, in the pop-up dialog select switch to fully set mode..."

In the fully set mode interface, you need to pay attention to the following parameters:

▲ Temperature

Print temperature (Celsius): the temperature of the nozzle used to print the model.

Nozzle temperature (second degrees Celsius): a model of a print head nozzle print support, second print head for support, the nozzle temperature depends on the material wire, if the set temperature is 180 PVA or less. What is the minimum value?

▲ Brace

Support type: generally "Touching buildplate" or "Everywhere" fully supported.

Print platform adhesion base type: general choice "Brim". Select Print support nozzle: select "Second extruder" second nozzle.

▲ Erase and prepare tower and drain protection layer

Select tick

▲ Flow rate

Flow rate is generally set to 90%.

After setting the parameters, click "Save" button to save the Gcode code, and then click on the "Generate" button to generate the x3g file, and then copy the x3g file to the SD card, and use double nozzle printing machine.

6.2.4 only use Wiiboox Company 2 in a sprinkler print model notes.

If you only using one nozzle of Wiiboox New Company to print the single color model. Please set the heat temperature to 40 °C of the other free nozzle in Cura. Or the temperature of the working nozzle will be too high.

Speed and Temperature

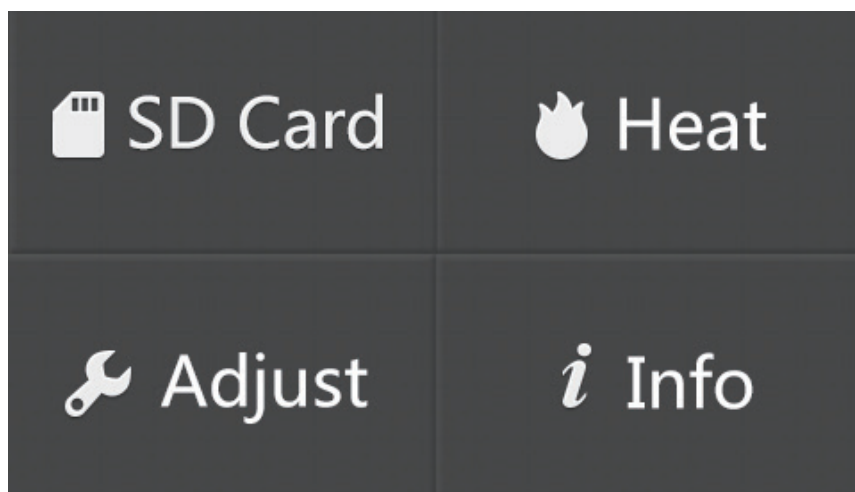
Print speed (mm/s)	80
Printing temperature (C)	200
2nd nozzle temperature (C)	40
Bed temperature (C)	40

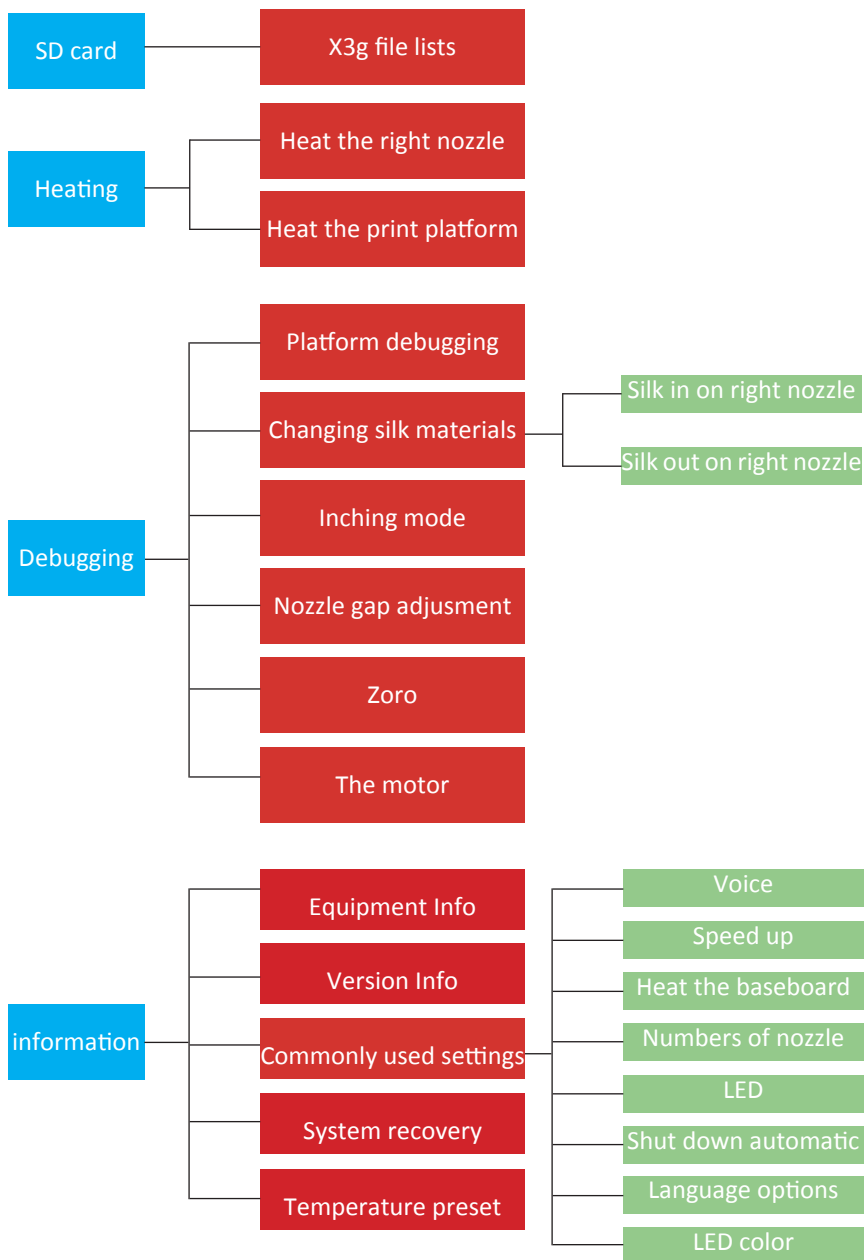
7. Operation panel Settings

There is a SD card slot on the right side of the 3D printer . You can directly print the model files in the SD card. You can control the printer on the touch screen display panel for changing the silk materials, debugging and so on.

7.1. Operation panel Introductions

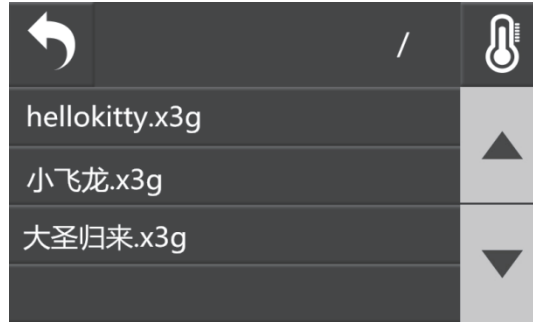
The touch screen panel menu tree as shown in the picture below, the menu is divided into three layers. The menu structure may be adjusted for firmware upgrades. The left-most is the start menu and on the right side is the submenu. Click on the submenu can enter a menu item. Click the return key on the top left corner can return to a layer on the menu.





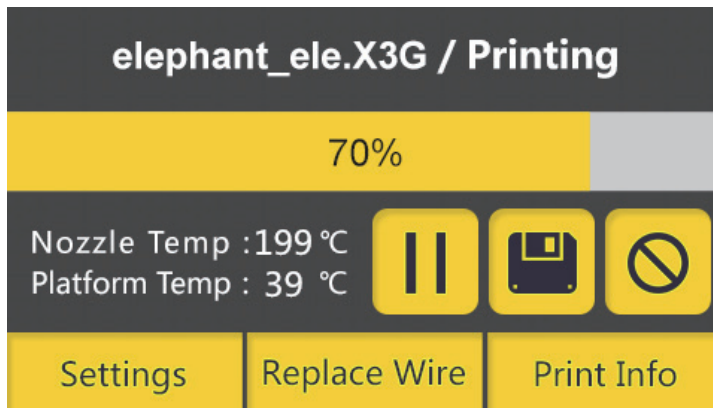
7.2 Touch screen panel common operations

7.2.1 Print SD documents



Select "SD card" will enter the SD file list. This machine supports the models with Chinese name. The list shows the x3g format file in Kagan directory according to the reverse chronological order way. Use arrows on the right screen to turn pages. And the button on the top left corner is return.

Select print file and enter model print interface



For start / pause buttons, pause printing during model printing;



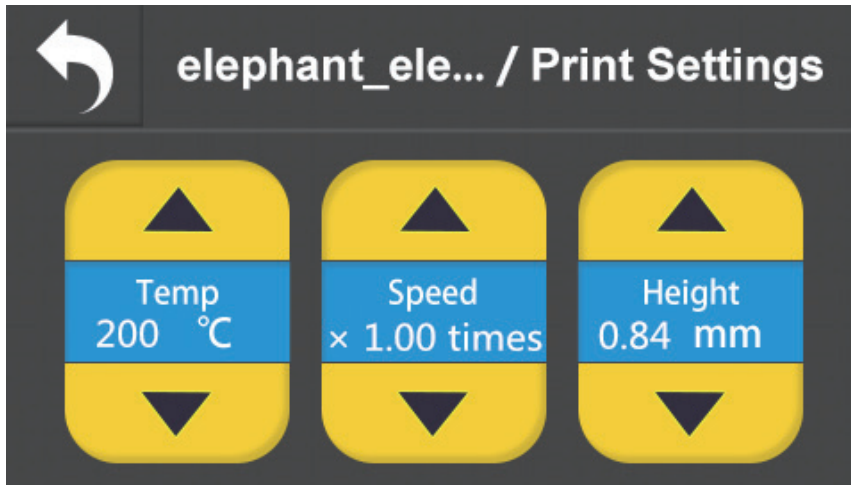
Save the print schedule and automatic shutdown, when switched on again, the screen to jump directly to the printing interface model, press

start pause button machine from the last checkpoint to print (Note: save the print schedule after the machine SD can not be removed, otherwise the print progress data loss).



Cancel print job.

Select settings"




Enter the set interface, can print in the process of temperature, speed and height settings. Height defaults to the height of the model being printed. When setting a height value, the print model stops printing when it reaches this height.

Select "change wire"

Need to be suspended before the silk operation

Select "print information"

 Print Information	
File Name	elephant
Print Time	0 M 0 H
Height	0.84 MM
Material	1244.52 MM





Print information displays "file name", "print time", "model height", "material length".

Print finish.

7.2.2 Heat

"Heat" option is to enter the printer preheating interface.

The interface has the right nozzle heating and platform heating. Click select heating directly, then the printers start heating.

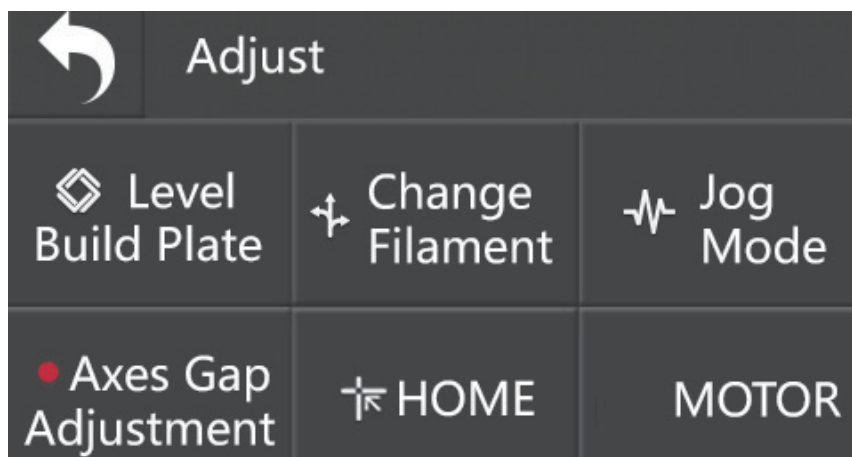
 Manual Heat	
	Heat
	Right Nozzle Heat
	Platform Heat

※ **Notice:**

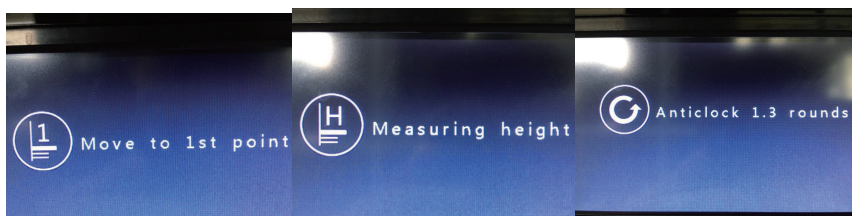
The single nozzle of Wiiboox Two shows the right nozzle heating only. The double nozzle of Wiiboox New Company shows the right and left nozzle heating.

7.2.3 Debug

Platform leveling

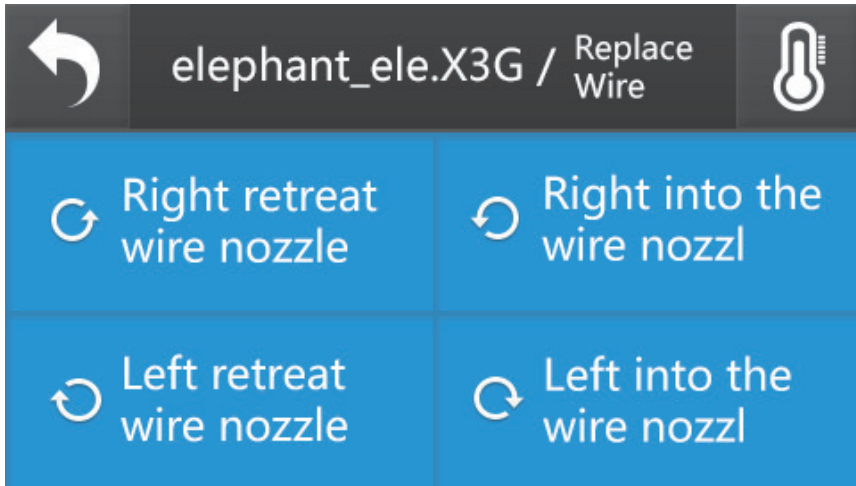


Select "Platform leveling" in "Debugging" menu, then the printer will into the automatic leveling. Level the detection switch nozzle around the nozzle to measure the three test points on the platform in turn. According to the screen prompt counterclockwise twist the disc nut on the platform below around the measurement point. Make the platform in a rising state until there is music. Level the detection switch should continue to measure height at the next test point. Click the return key to return to the higher level menu after the



automatic leveling complete.

Change the silk material.

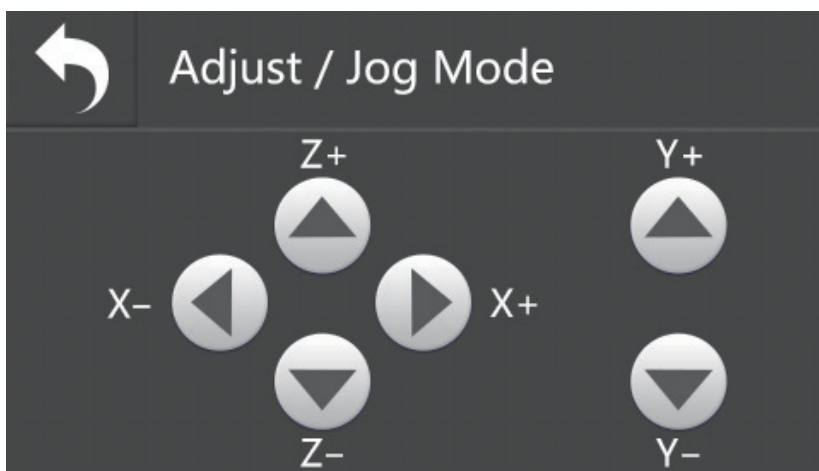


Choose "change" to enter the 2nd level menu. Enter the interface to manually change.

Choose silk out on the right nozzle to enter the wire out. Heat the nozzle to a predetermined temperature and then start the nozzle motor wire backward.

Choose silk in on the right nozzle to enter the wire in. Heat the nozzle to a predetermined temperature and then start the nozzle motor wire forward.

※ **Notice: Double nozzle machine of Wiiboox New Company has the same operation about silk in and out on the left nozzle**



Inching mode

Select "point model" to enter the 2nd level menu. Then it will enter the printer debug interface.

Touch screen display X, Y, Z axes three direction key. Click on each key can control the printer axis motor respectively according to the shown in direction.

Nozzle gap adjustment

New printer has adjusted nozzle gap. No need to adjust the nozzle gap again. After replace the nozzle, you need to adjust the nozzle gap again. You can see "daily maintenance and maintenance" and "Nozzle height calibration" to replace the nozzle.

Zero

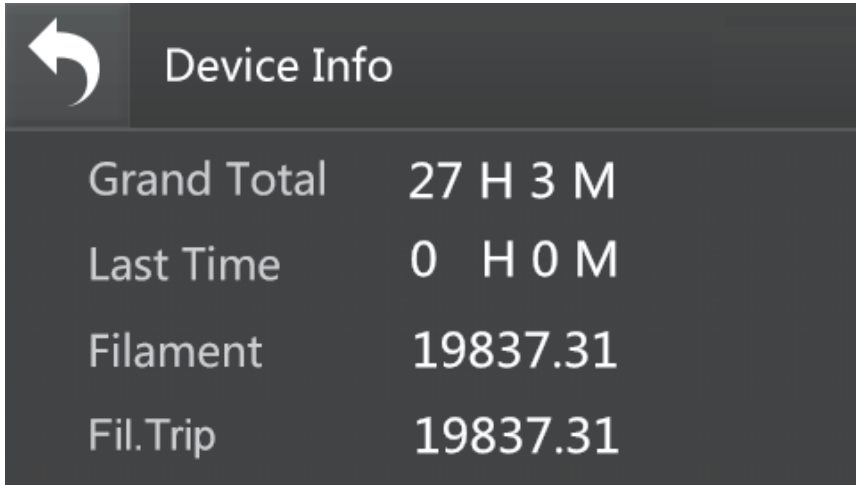
Select the "zero", the print platform and nozzle will return to the initial position.

The motor

Lock the shaft of the motor. And will not be able to manually move the motor after lock it.

7.2.4 Information

Equipment information



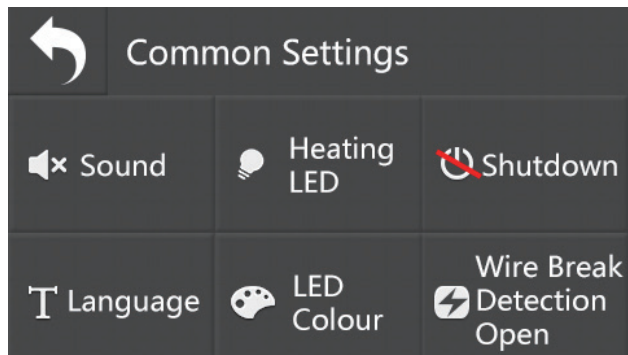
Device Info	
Grand Total	27 H 3 M
Last Time	0 H 0 M
Filament	19837.31
Fil.Trip	19837.31







Select “Equipment information” to enter the printer runtime statistics interface. Here shows the cumulative print time, last print time-consuming and wire length, etc.

Version information

It displays the version of the machine and factory information.

Commonly used Settings



Common Settings		
 Sound	 Heating LED	 Shutdown
 Language	 LED Colour	 Wire Break Detection Open

▲ Voice:

Open and close the printer to open, shutdown and equality music platform.

▲ Heat LED:

Open and close the printer in the heating process weather open color lights.

▲ Open and close automatically:

The automatic shutdown function of the printer after the task been finished.

▲ Language options:

English and Chinese.

▲ LED color:

Replace the color of the printer color lamp.

▲ Broken wire detection open:

Open and close the detection function of broken wire. We add the broken wire detection function for Wiiibox TWO/Company. As shown in the picture below, install the broken wire detection at the feeding mouth. Wiiibox will automatically save the printing progress if the accident broken wire is happened to run out or broke. And also will stop the machine to prevent damage of the machine idle. Printer can complete print the model out after you change the silk material.



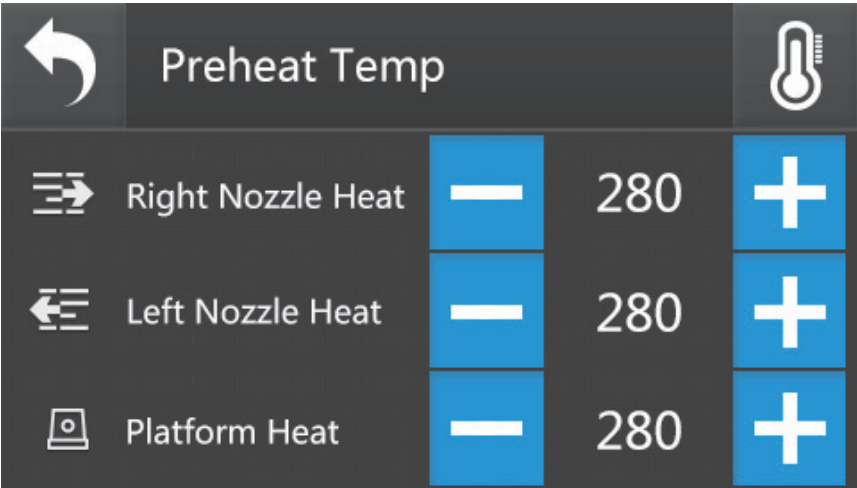
System restore



It can choose whether to reply to factory Settings in the options.

Preset temperature

The preset temperature interface can set the preheating temperature of nozzle/ platform. Press "+" "-" buttons to set the preheating temperature.



8. Daily Maintenance

3D printer need regular maintenance and some daily maintenance to ensure that the printer keep high performance and stable operation.

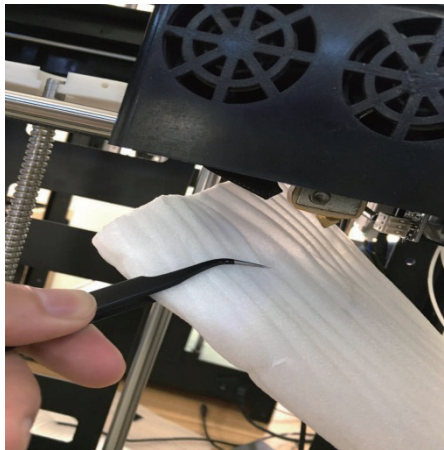
8.1. Printer daily maintenance guide

Daily maintenance mainly include: Clean print nozzle, replace the print platform sticker tape, regular check the printing platform leveling, replace the air filter chip, the maintenance for optical axis and screw and etc.

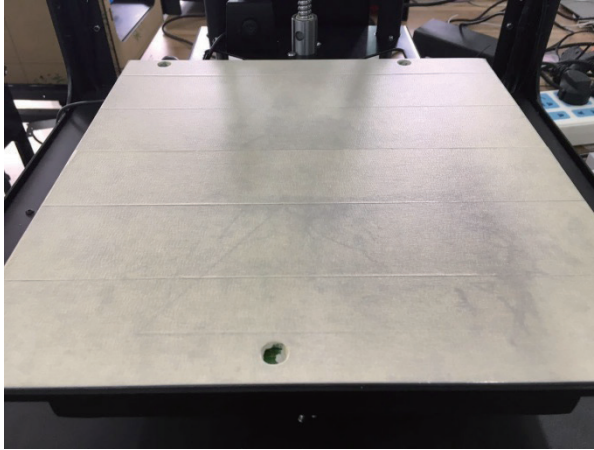
8.1.1. Clean print nozzle

In the process of 3D printing, consumable parts of the debris, dust particles can accumulate around the print nozzle. As the time goes on, the accumulation of material will make the prints in bad accuracy or nozzle blockage. So check the print nozzle weather clogging before print every time. And clean it.

Maintenance methods: Clean print nozzle generally by using the tweezers, wipes to clean around the nozzle.



8.1.2. Replace the 3M sticker for the printer



Check the print platform whether the surface of yellow sticker wear and tear or uneven. It must be replaced if the stickers are wear and tear to ensure that the model can firmly stick on print platform.

Maintenance methods: First find out a roll of tape sticker attached from random accessories box.

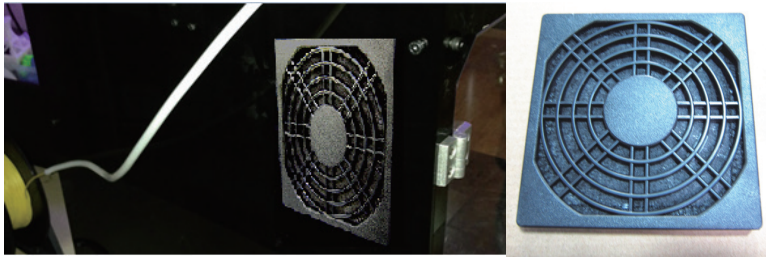
※ **Notice: Don't leave gaps between stickers. Tear off the tape from the left bottom of the platform. Stripped slowly and don't have a residual. Stick the new sticker. Don't leave a gap between the stickers.**

8.1.3. Replace the air filter chip components

It is recommended to replace after 500 hours used of the air filter chip components. Otherwise it will lead to dust filtering effect greatly reduced.

Maintenance methods:

Firstly take off the fan cover on the back of the printer strength directly. Then find out the filter chip components from the attached random list box. and installed directly.



8.1.4. Regular inspection of the print platform leveling

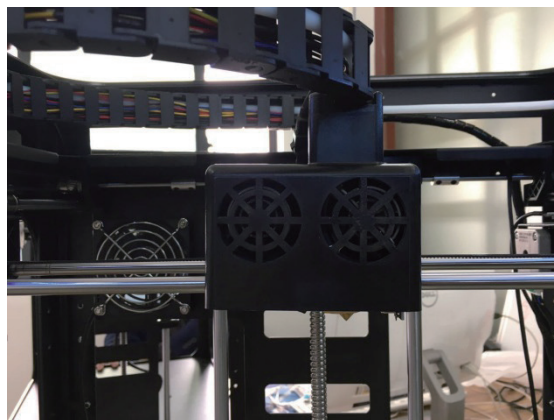
The print platform regular leveling

Regularly check the leveling platform for the printer is very important. Whether the print platform level will seriously affects the forming of the model.

With reference to the "Debug" and "Level platform".

8.1.5. Maintain the Optical axis and Screw

During use the printer, X, Y, two directions are depending on the precise guide rail and the Z axis screw to ensure smooth and precise linear motion. It can reduce friction and the wear of mechanical moving parts after adding silicon grease lubrication. So it must be regular maintenance. It is recommended to maintain one time in a 1000 hour.



Maintenance methods: Take out silicon grease lubrication from random parts box. Evenly coated on the screw or optical axis, then start the equipment. Make each shaft full trip around several times to make the silicon grease lubrication is evenly distributed on the surface of the axis.

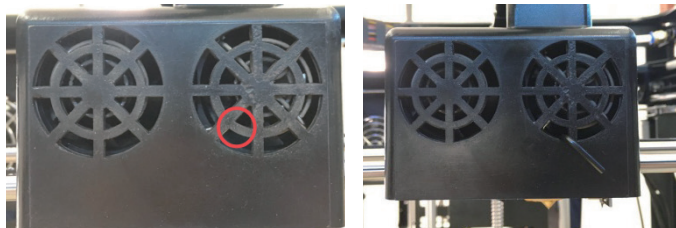
8.2 Maintain and Replace the print nozzle

After a long time use of the printer, the wire feeding gear continuously transfer and friction materials. The gear will stick the silk powder, and lead to the gear holding power be weaken. It will influence the transmission effect. Remove and clean nozzle regularly can maintain machine smooth operation. A thorough cleaning nozzle component is been advice after print 500 hours.

8.2.1. Replace the print nozzle

Improper operation or silk material selection is not good can lead to the nozzle blockage. Replace the need for nozzle if necessary.

Remove process:



Use 2 mm Allen wrench, unscrew the screw which fixed nozzle throat.

Take of the integral parts from the bottom of the nozzle, and unplug the cable plug nozzle

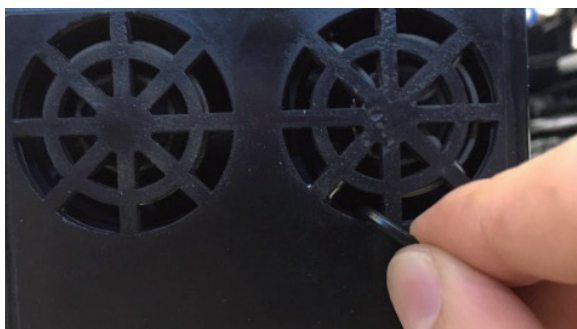
The disassembly process of the nozzle of is over.



8.2.2 Install the new spray process:

Put the new nozzle's throat part inserted into the aluminum block on the bottom. The top of the throat contact with the bottom of the motor gear, then tighten screw the fixed throat. Finally put nozzle cable plug.

Need to level the print platform and calibration nozzle to print model after replace the print nozzle.



Leveling the print platform

With reference to "debug" "automatic leveling" will complete automatic leveling the platform.

Nozzle height calibration

Please place a piece of white A4 paper to print on the platform after leveling the platform. Then select the "debug" "platform gap adjustment" to move to

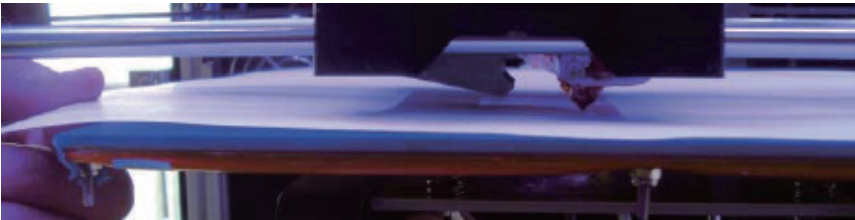
a fixed point print for print nozzle. Then switch the A4 paper.

With 2 mm Allen wrench to unscrew the nozzle screw to adjust the height of



nozzle until A4 paper can just sliding between the nozzle and the platform. Tighten the nozzle screw after adjustment.

After a long time use of the printer, the wire feeding gear continuously



transfer and friction materials. The gear will stick the silk powder, and lead to the gear holding power be weakened. It will influence the transmission effect. Remove and clean nozzle regularly can maintain machine smooth operation. A thorough cleaning nozzle component is been advice after print 500 hours.

9、Announcements for replace print nozzle of double nozzle machine

The double nozzle machine of Wiiibox Company, need the calibration for nozzle height and the gap between the print platform and nozzle after changed the print heads. Then adjust the nozzle around X/Y offset value. Finally start printing.

9.1 Platform Calibration

As an example to replace the nozzle, take off the old nozzle and put on a new nozzle. At the same time, as shown in the picture below that the left nozzle is slightly higher than the right one about leveling height. Then place the motor gear components to the normal position. Put on the fan and the heat sink (Don't tighten the fan screw in order to remove in the future).

Select "debugging" "leveling platform" to carries on the platform of the automatic leveling.

9.2 Around the nozzle level calibration

9.2.1 Only replace one nozzle calibration

Place the randomly given nozzle calibration module on the print platform after calibrated the print platform.

Use "debugging "move mode" to remove the print platform under the nozzle. Make module between the nozzle and platform to resist module with no replace nozzle. Calibration another height of nozzle, adjust the height of nozzle by unscrewing the screw. Make the two nozzles at the same level.

9.2.2 The calibration for replacing two nozzles

Undertake the height calibration for one nozzle after calibration the print platform. Please place a piece of white A4 paper to print on the platform.

Then select the "debug" "platform gap adjustment" to move to the fixed point for print nozzle. Twitch A4 paper.

Unscrew the nozzle screw with 2 mm Allen wrench to adjust the height of nozzle until A4 paper can just slide between the nozzle and the platform. Tighten the sprinkler nozzle screw after adjustment.

The calibration reference for another nozzle is "The height calibration for only replacing one nozzle".

Common problems and the troubleshooting(FAQ)

1. Will it run a wire operation for one time if switch on the printer?

To run wire operation is not been operated in every boot. Only used when replace the silk material.

2. Can we take down the model immediately with the hand after the model print?

Please don't take down the model with the hand immediately. Let it cooling for a moment, please. Then use the spatula take down the model gently; Don't broke the stickers on the platform.

3. How to deal with problem that the power indicator light is not on?

Please check the power switch on the back side and face side. The power cord on the back side is connected or not. If it is built-in power supply models, please check the back power supply. Is the fuse in good condition or not? The power seat has a spare fuse.

4. How to deal with the situation that at the bottom of the model that print out is being stick weak or at movement?

Please check the set temperature of the print platform. The print platform has reached the set temperature or not.

If the temperature of the print platform is correct. Please check the print platform. Whether level off, and adjust the printing platform.

5. How to deal with the problem that the print nozzle clogging or no silk out?

Please check the silk material on the feeding supplies has been used up or not.

Maybe the silk material left in the print nozzle if the silk materials have been run out. Please take down the print nozzle after take down the fan at the top. Then pull out the silk material with pliers when heated the print nozzle to 230 °C. Switch off the printer. Reinstall it after cooling the print nozzle.

It means the print nozzle clogging if still have the silk material on the feeding supplies. Please remove the fan at the top of the print nozzle. And check the feed gear has wind silk material or not. If there is winding silk material, cut the silk material on the aluminum material. Remove the print nozzle, and then pull out the silk material with pliers when heated the print nozzle to 230 °C. Remove the extruder at the same time. Clean the silk and detritus in the feeding gear. Switch off the printer. Put on the extruder and print nozzle. If no silk material winding, please press the handle of the extruder when heated the print nozzle to 230 °C. Manual put into silk materials and push them down harder. It will push out the silk materials which left in the print nozzle. Then manually pull them out. Manual put into silk materials again. Repeat the actions for several times until the print nozzle completely clean.

Please be careful to dredge the print nozzle to avoid burns.

Please contact us to change the print nozzle if cannot be dredges,. The print platform have to be leveling again after changing the print nozzle. Then it can print.

6. Material is running out, but the model needs to print does not finish. What kind of operating can continue printing?

You can change the silk material directly on the printer. First click PAUSE after press the left arrow key on the control panel, then press the down arrow key to select CHANGE FILMENT. Click Ok. Then choose UNLOAD. Drop out the silk material from the feed port and then put the new silk material into the feed port. Click LOAD. Then return to the menu. Click UNPAUSE can continue to print. In the process of a silk material changing, unable to move the position of the nozzle or printing won't be able to proceed normally.

7. Print model is not the molding. The silk it spit out like noodles?

This situation shows that the space between the print nozzle and the bottom of the print platform is too big. Please realign the platform.

8. The customer just received the machine and print 20 mm test piece. But the silk never out from the nozzle. Will the silk out when hands down?

Check the silk material completely into the feed port or not. It should be extruder motor gear is loose if still can't solve. Just need tighten motor feed gear screw is ok.

9. Will it make some strange sounds with the nozzle moving left or right, even can't move when the printers are printing?

This is probably the X or Y axis motor line contact undesirable. First shut down the printer and move the nozzle to the middle of the machine. Then switch on the printer. It will enter the printer inching mode. Control X+,X-, Y+,Y-, and check the nozzle moving around normal or not. If it is abnormal, please take down the X or Y axis motor line interface. And then put them back again to see if it is normal or not. Please contact us if the problem still cannot be solved.

10. Why do the display garbled words, broken screen or no content during printing?

Please don't do anything if the model you print didn't have any problems. Just

let the printer continue printing.

Finish the print first. It will return to normal after shut down and switch on the printer. This may be connected to the printer indoor power line without ground wire (with ground connected). You can think about moving the machine to a normal room that the ground wire been connected. Or maybe the weather is dry, caused by the electrostatic. This is no effect on the machine itself. Shutdown the printer directly and restart the machine again if the model is been print by broken screen has errors.

11. Why don't work when click the machine's operation panel button after switch on the printer? Like a failure?

Restart the printer (Unplug the power cord and plug in again, then turned on the printer)., You will hear the bell for 5-6 seconds after a few seconds you turn on the printer., It means the machine can normal boot if you hear the bell. Then try the operation buttons. It means the machine can't normal boot if you couldn't hear the bell. Then you can try to click the small black circular RESET button on the right side of the printer. Reset the system. Please contact us for replacing new mainboard if not normal start. We will provide details of the replacement of tutorial.

12. Are there two rows of bar code displayed on the screen if the printer cannot be started?

Restart the printer (Unplug the power cord and plug in again, then turn it on) to see if returned to normal or not.

If not you can click the small black circular RESET button on the right side of the printer. Reset the system.

13. Is the printer stop working during printing the model file?(Suddenly screen prompt heating failure # 3! my extruders are losing temperature. Check my connections | heating failure # 1! Software temp limit reached. Please shutdown or restart.)

This should be a sprinkler lines caused by poor contact. Please take off the nozzle hotline socket connection and pull it back again. Check the hotline at the nozzle has been tie in place. Please contact our service if the problem still cannot be solved.

14. It shows NA on the display of Extruder during printing. What is the reason that appears red alarm about the machine LED lights?

This should be caused by poor contact about the temperature measurement line. Take off the hotline pin line of the nozzle and pull it back again. Take off the motherboard temperature measuring wire connector and pull it back again. Please contact us if the problem still cannot be solved.

15. What is the reason that the print machine automatic shutdown suddenly during printing?

May be the machine internal relay module fails. Please contact our customer service to make specific diagnosis.

16. How to solve this problem that the machine continue to silk during the printer don't print when print 95% - 97%?

Firstly try to print 50mm test piece. Uninstall and reshipment the computer software first if the same problems happened during printing. Then try it again. Format the SD card if still working. Cancel the quick format column when formatting.

17. How to deal with the problem that the gap between nozzle and platform when too high or too low?

Clockwise the butterfly nut under the platform if it is too high. Counter-clockwise the butterfly nut if it is too low.

18. What kind of circumstance that the machine been used suddenly show the words jump or heating failure?

This kind of circumstance is commonly appears on the problems of nozzle,

hotline of the nozzle and platform. Firstly check the line whether loose or not. Try to put back the interface line if it is not loose. Please contact our customer service if it is need to replace parts.

19. Does the print abnormal motor jitter or stop running during printing?

Generally problem is not plugged well. Loose or cable faults in the machine lead to abnormal jitter or stop. Don't be yank hard when disassembling motor. Plug well and please contact our customer service if the cable faults.

20. What is the reason that the platform down to the bottom without stopping, and send out the voice of kaka?

It means that the firmware parameters of machine errors. Please contact our customer service to brush into the firmware.

21. What is the reason that the platform is not heated or display but shows 255 °C ?

Please check the heat platform whether the wiring interface plug firm or not. Please contact our customer service if there is any breakage or poor contact. Warranty period will be free replacement.

22. What to do if the physical printing is not match the model?

This is usually caused by model flawed. Please use the netfabb software to convert printed again after repair. Please contact our customer service if you still can't solve the problem. And we provide technical support for you.

23. What is the reason that the print model appears wrong layer?

Please judge the wrong layer is the X direction or Y direction. Or so is for the X direction, before and after is for the Y direction. Change the X switching line and line of the motor in the random accessories if the wrong layer is in the X direction. Please contact our customer service if the wrong layer is in the Y direction. Warranty period will be free replacement.

24. What wrong with the machine stop in a half way during the software

converting the model or saving?

Firstly please try to shut down the operating system of the third party security software, such as 360. Then restart to convert the model. Please try to uninstall and reinstall the software if still failed. Please notice that the software should be installed in the default directory.

25. Why the computer can't connect printer?

Please try to rearrange random supporting software and the printer driver. Please contact our customer service if you still can't solve the problem. We will provide technical support for you.

26. What wrong with the printer that machine appears pause on online printing, and on the print model has a lot of small tumors?

The computer software needs real-time transmission of large amounts of data to the printer during on online printing. It can cause communication interrupt between the computer and printer if the computer speed is slow, or has software interferes on the background to data sending. And trigger a printer pauses. Also will appear the trace of small tumors at nozzle remain position. Suggest you to save the SD card after converting data into x3g files. Using the offline print mode to ensure the print will not interrupt.

27. What to do if it becomes warped edge easy during printing with use ABS material?

When printing with ABS material, and its shrinkage rate is high. So it is easy to become warped edge or cracking at the bottom. The solution is to choose ABS (ReplicatorG) in printing plans. And set the temperature 230 °C for nozzle. Then set the temperature 100 °C for the platform. Close the nozzle cooling fan to minimize the content of filler and wall thickness. Suggest not use ABS to print the model that the length is more than 10 cm.

28. What is the reason that leakage of wire or wire drawing problem during printing?

Leakage wire or wire drawing is mainly appeared on the PLA material. The PLA's liquidity is bigger than ABS material. The PLA will melt into liquid drop from the nozzle when the nozzle temperature is high, even in the nozzle is not out of phase, it will appears leakage wire or wire drawing. The solution is to reduce the appropriate temperature range for the nozzle. The single nozzle type is 200 °C, and the double nozzle type is 190 °C. Colored silk material due to the formula issue, the melting point and white silk material will have a deviation of 5 to 10 °C. Please according to the actual situation of print accordingly.

29. What to do if printing big model occur warped edge and scrap the platforms in the middle because of the print platform around the middle high low?

The print platform may due to deformation after the long heating. Please contact our customer service. Warranty period will be free replacement.