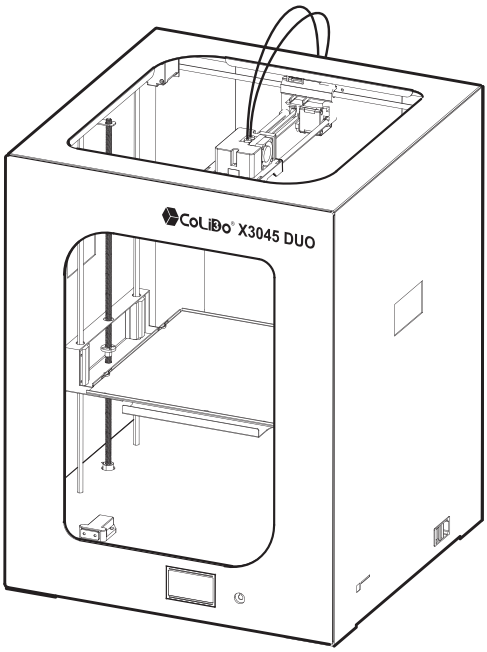
PRINT-RITE™

CoLiDo™ X3045 Duo

Industrial 3D Printer

USER MANUAL



* Carefully and thoroughly read this manual before using

View us at *www.colido.com*

V1.35

This User Manual is designed to start your journey with CoLiDo X3045 Duo 3D Printer in the right direction.

In Chapter 1~5, you can learn the basics knowledge of CoLiDo X3045 Duo 3D Printer, how to unbox safely, how to assemble correctly.
In Chapter 6~9, you can learn how to calibrate the platform, printing, maintenance and troubleshooting.

PRINT-RITE welcome you to the world of CoLiDo X3045 Duo 3D Printer.

Following this manual will help you fully understand the Printer and make amazing products.

In this manual, Safety Alert Symbol will be marked in the start of safety message. The Safety Alert Symbol means potential safety hazards which will possibly harm you or others and cause product or property loss.

Safety Alert Symbol

WARNING: HOT SURFACE, DO NOT TOUCH
CoLido 3D Printer has high temperature when working.
Make sure the CoLiDo 3D Printer cool down before touching inside.

WARNING: HAZARDOUS MOVING PARTS, KEEP FINGERS AND OTHER BODY PARTS AWAY
The moving parts of CoLiDo 3D Printer will possibly cause harm. Do not touch the CoLiDo 3D Printer inside when the printer is working.

WARNING: Make sure stand by CoLiDo 3D Printer when it working.

CAUTION: Be careful when using PRINT-RITE unapproved material, which may damage Printer and impact print quality.

CAUTION: Disconnect power plug from power socket during emergency.

CAUTION: Power socket must be located near the Printer and within reach.

CAUTION: Place CoLiDo 3D Printer in well-ventilated area as it will melt plastic and emit plastic odor when printing.

Interference of Radio and Electromagnetism

The Printer has been tested and certified to comply with the restriction of FCC Part 15, which is related to Class B digital facility.
The restriction is designed to provide reasonable protection against harmful interference in residential area when install the Printer. The Printer will generate, apply and radiate Radio Frequency Energy. If the Printer is not installed and used in accordance with the manual, it may cause harmful interference to radio communications. However, there is no warranty to the interference if the Printer is installed in a special environment. If the Printer does cause harmful interference to the receiver of radio or television, which can be determined by turning on and turning off the Printer, the user is suggested to adopt below one or more methods to eliminate the interference:

1. Change the orientation and location of the receiving antenna.
2. Increase the distance between the Printer and the receiving device.
3. Connect the Printer and the receiving device separately with two power sockets in different power supply circuit.
4. Get help from the dealer of the Printer or an experienced radio/ TV technician.

Printing

Print Technology: Fused Deposition Modeling
Construction Dimension: 300*300*450mm
Layer Resolution Setting: 0.1~0.4mm
Positional Accuracy: XY: 0.011mm
Z: 0.0025mm
Filament: PLA/ABS
Filament Diameter: 1.75mm
Nozzle Diameter: 0.4mm

Mechanical

Frame: Steel
Nozzle Qty: 1pc with 2 feeding tubes
Platform: Coated Glass
XYZ Bearing: Steel
Stepper Motors:
1.8° step angle,
1/16 micro-stepping

Electrical

Storage Temperature: 0 ºC ~ 32 ºC [32 ºF~ 90 ºF]
Operating Temperature: 15 ºC ~ 32 ºC [60 ºF~ 90 ºF]
Power: 300W
Input Voltage: 110~240V 50HZ

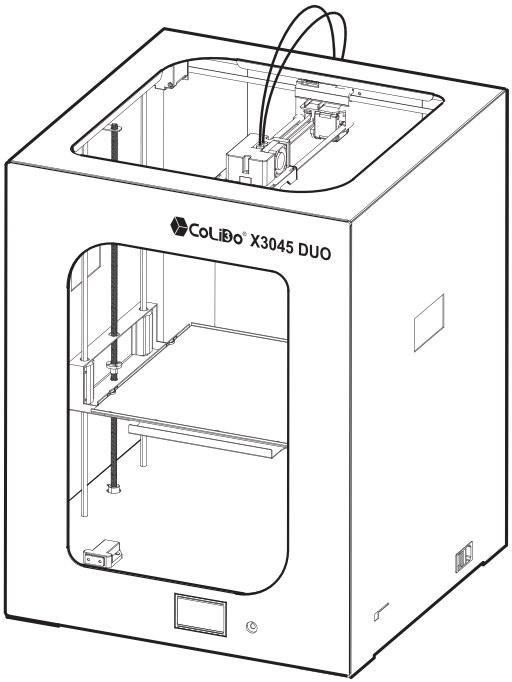
Dimension

Printer Size: 530*530*690MM
Package Size: 705*650*795MM
Net Weight: 35KG
Gross Weight: 40KG

Software

Software package: REPETIER-HOST
File Type: .STL，.GCODE
Operating System: WINDOWS 7 and above, MAC OS
Connection: USB, SD Card

CoLiDo X3045 Duo Printer makes solid, three-dimensional objects by melting PRINT-RITE PLA/ABS filament. The designed 3D files are converted into CoLiDo command and sent to the Printer via SD Card or computer software “Repetier-Host”. Then, the printer head will heat up and melt the PRINT-RITE PLA/ABS filament and push it out from the nozzle to make a solid object layer by layer. This method is called Fused Deposition Modeling or FDM.



Take more time to unpack carefully and set up by following the user manual.

5.1 Unpack CoLiDo Printer

NOTE： Please use the printer in the room with normal temperature.

1. Place printer package box on a dry and flat surface when opening.
2. Take out all accessories inside the Printer box.
   Please refer to the Accessory Checklist at next page.

   NOTE: In case there are any missing accessory, kindly email the Printer serial number, name and qty of missed accessory to 3Dsupport@utec.com.mo
3. Carefully lift up the printer when taking it out of the box. Place the Printer on flat ground and carefully remove the package foam and bag of the Printer.

NOTE: Do not pull or twist the cable at any time.

NOTE: The printer is heavy, please take out the printer carefully.

4. CoLiDo Printer is unpacked. Please keep the packageing material in good shape. It will be re-used in the future to avoid unnecessary damage during transportation.

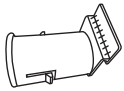
NOTE: Please keep the packaging box and packaging foam in good shape, it must be packed with original package when return the printer for maintenance or repair to avoid unnecessary damage during transportation.

5.2 Accessory Checklist

PRINT-RITE

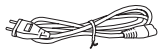
PLA Filament 2PCS

Spool Holder 2PCS



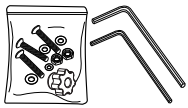
SD Card 1PC

Power Cable 1PC



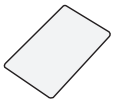
USB Cable 1PC

Tools 1 Set



SD Card Reader 1PC

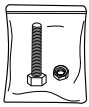
Test Sheet 1PC



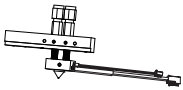
PLA Glass Platform 1PC

ABS Glass Platform 1PC

3D printed samples 1 Set

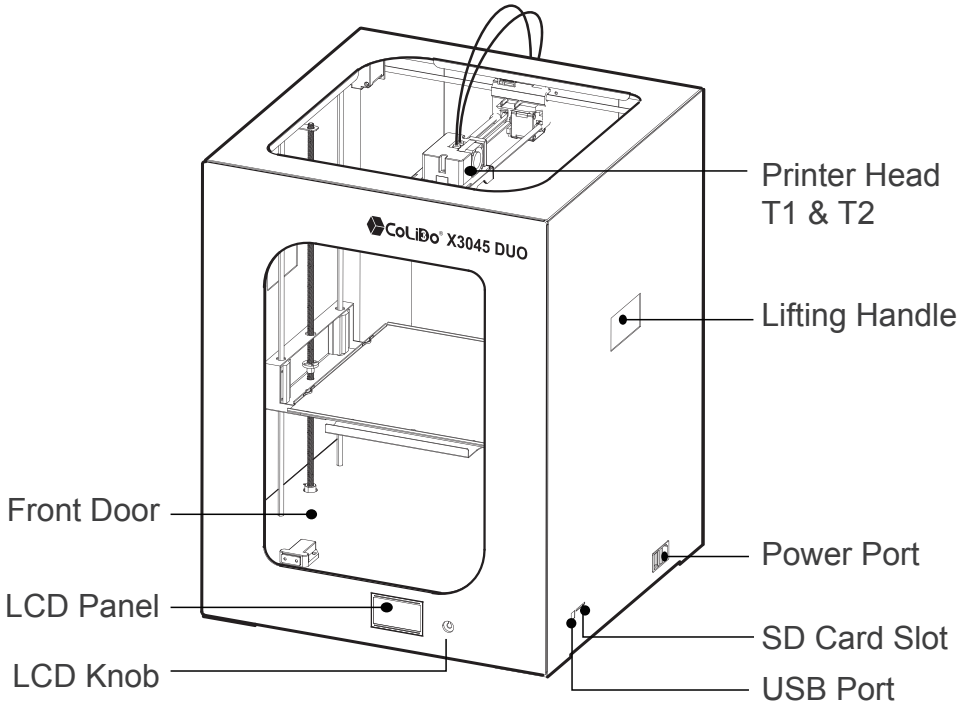


Nozzle Unit 1 Set (Spare Part)



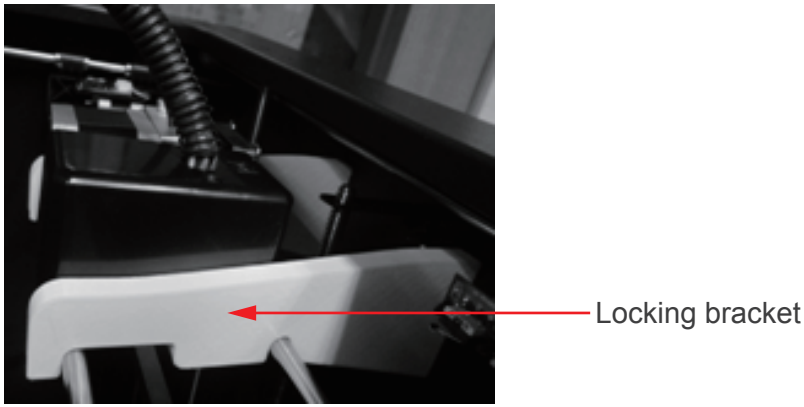
Clean nozzle tools 1 Set

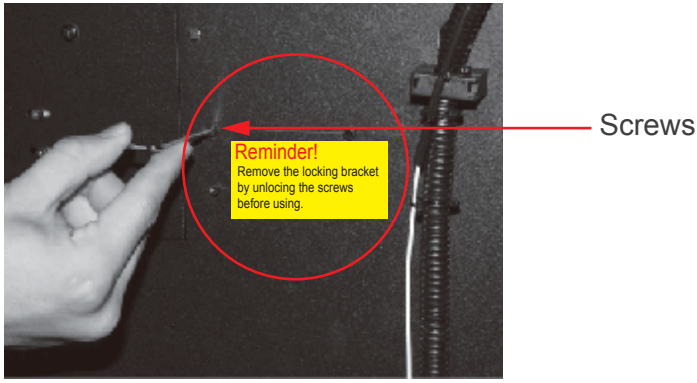
Camera 1PC


Printer Head
T1 & T2
Lifting Handle
Front Door
Power Port
LCD Panel
SD Card Slot
LCD Knob
USB Port
CoLiDo X3045 DUO

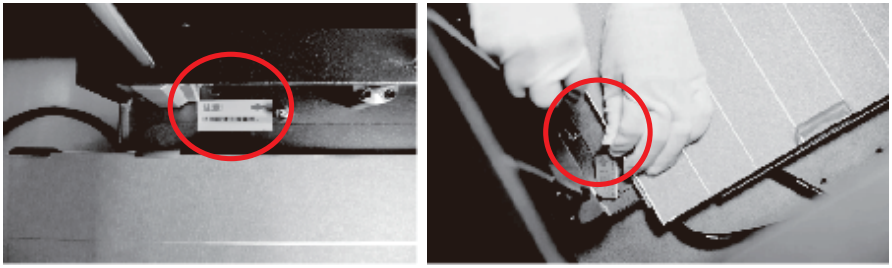
5.4 Unlock Printer Head and Heat Table

1. Remove the two locking brackets by unlocking the screws to release the printer head. (Use the Allen Key in the Accessory)





2. Remove 2pcs locking screws to release the Heat Table.



Remove the locking screw

5.5.1 Power ON the printer

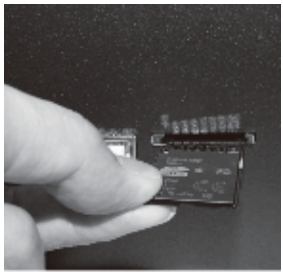
Connect the Power Cable to the Printer.

NOTE: Make sure printer switch is at "O" position.

1. Plug-in the power cable to AC power source.

NOTE: The socket-outlet should be installed near the printer and should be accessible.

2. Properly insert the SD Card in SD Card slot. (SD card stores .gco files to print directly)

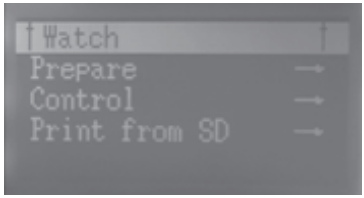


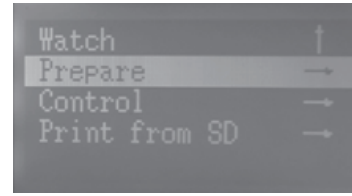
3. Power on the printer by switching to"I" position as shown.

CAUTION: Only use the Power Cable included in the package. Power Supply Socket should be near to the Printer , such the power can be disconnected easily in case of emergency.

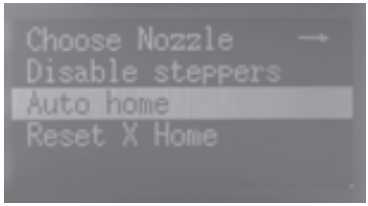
5.5.2 Unpack Glass Platform

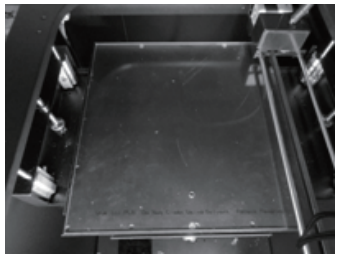
5.5.2.1 Push the knob to go to main menu, rotate the knob to select “Prepare”





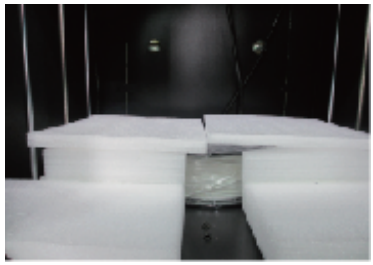
5.5.2.2 Push the knob to go to submenu, rotate the knob to select “Auto Home” and push the knob to confirm. Then, the heat table will be moved up to HOME position.





Please do not rotate the left/right Z screw rod to avoid the heat table unbalance.

5.5.2.3 Remove the foam, get the glass platform package and the filament package under the heat table.



5.5.3 Install Glass Platform

1. Get the two glass platforms from the package.
Select Glass Platform according to the selected filament material that will be used. The two platforms are coated Glass Platform which mark “PLA”or “ABS”to distinguish.

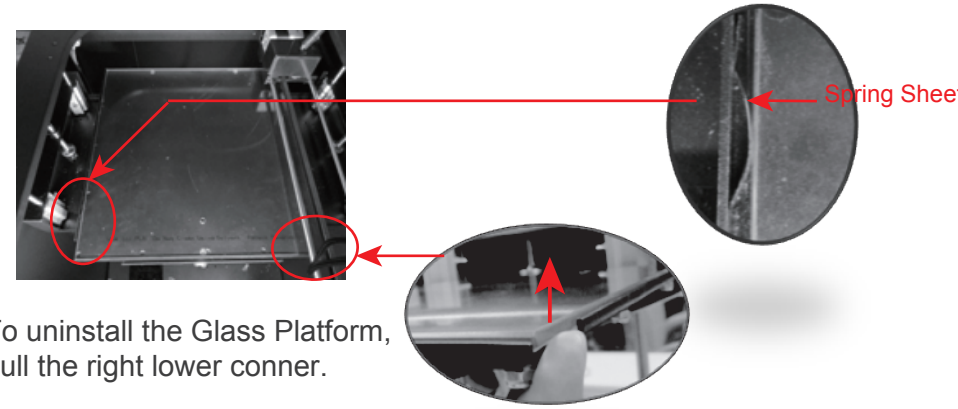
Coated Glass Platform

Glass Platform Orientation: Matted surface of Glass Platform must be on top when installing (The printed words must be facing top).

NOTE:

1. Do not change the platform heating temperature setting to avoid the printed object not sticking on the platform. (PLA platform: 65~70℃, ABS platform: 100~110℃)
2. Clean the glass platform using lint-free cloth or wet tissue. Do not use alcohol or any cleaning chemical solution in cleaning the glass platform, it will damage the glass coating.
3. Please wait for the platform temperature to cooldown (25~30℃) before removing the printed object. Quickly removing the printed object will cause damage on the printed object and/or glass coating.

2. Install the Glass Platform to the Heat Table of the Printer and locked by the spring sheets in the Heat Table.

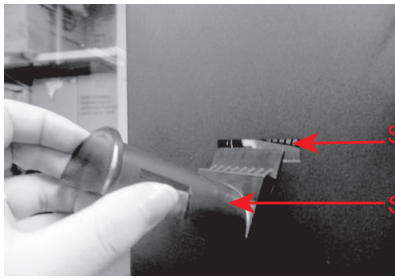


To uninstall the Glass Platform, pull the right lower conner.

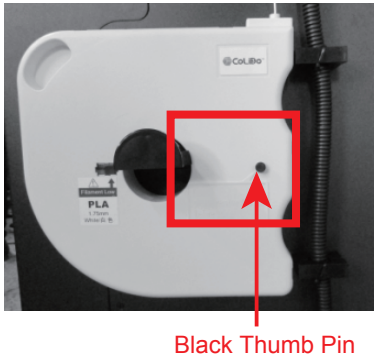
5.6 Install Filament

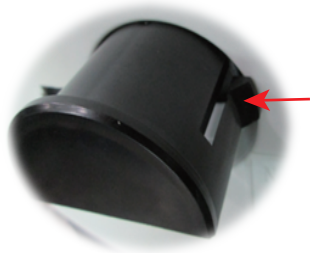
5.6.1 Take off the two filament cartridges from packaging.

5.6.2 Insert two Spool Holders into the Spool Holder Slot located at the back of the printer and push down to lock as shown below.
(Back view of the Printer)

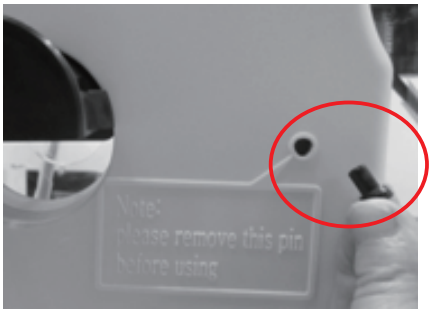


5.6.3 Mount two filament cartridges on the spool holder
NOTE: The black thumb pin and the printed“Note”must be facing front.





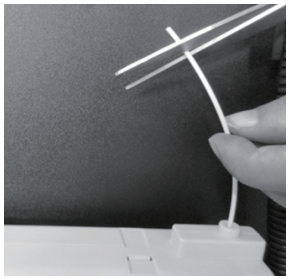
5.6.4 Remove the black thumb pin to release filaments.



NOTE: To avoid damage to the cartridge, do not pull filament until:
1. Black thumb pin is removed.
2. Cartridge is installed into the printer.

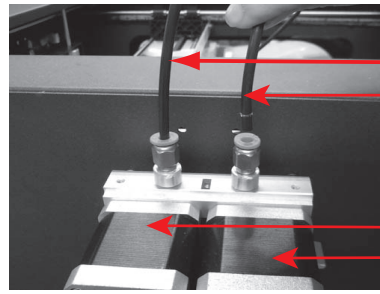
5.6 Install Filament

5.6.5 Gently pull the filament from the cartridge. Cut the filament tip flat using scissor and make it straight for easy installation.

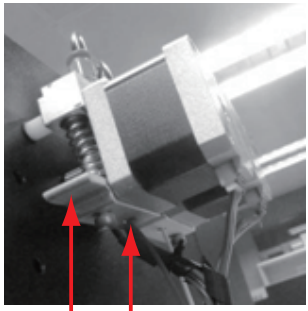


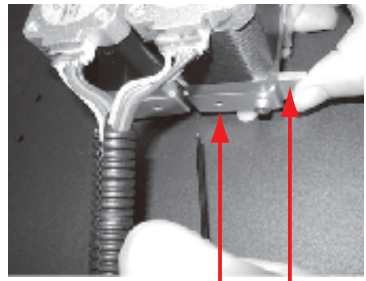
NOTE: Do not forcedly pull out the filament from the cartridge in case the filament disorder inside the cartridge.

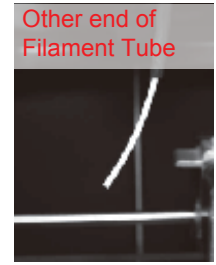
5.6.6 Insert the two filament tubes to the top connector of the extruder 1 and extruder 2 at the back of the printer to lock.



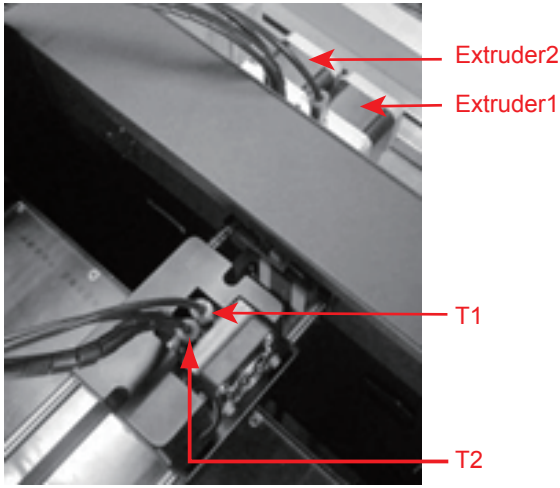
5.6.7 Push down the extruder arm 1. Insert the filament into the bottom hole of the extruder1 until it comes out from the other end of the filament tube. Then, release the extruder arm 1.
Same process to insert filament to extruder2.

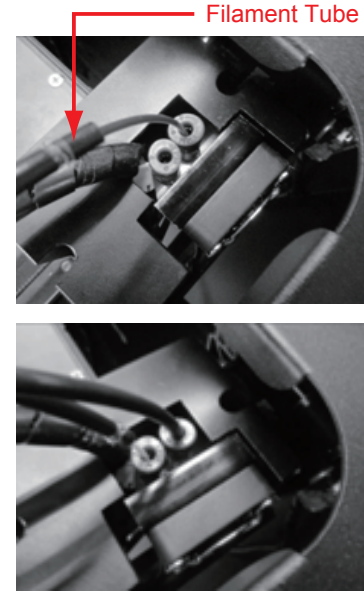






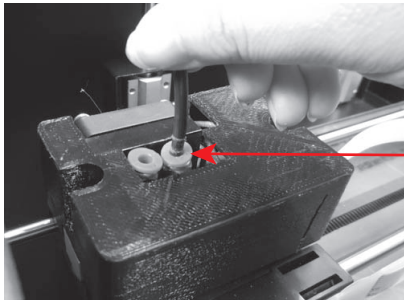
5.6.8 Insert the filament into the T1 and T2 of the printer head until it reaches the receiver port of the nozzle.
Then, insert the filament tube to the head to lock.





NOTE: The filament from Extruder1 must be inserted to T1 as Nozzle1;
The filament from Exturder2 must be inserted to T2 as Nozzle 2.

5.6.9 If want to remove the filament tube from the printer head or the extruder, push down the receiver port lock of the printer head or the exturder and pull out the filament tube.



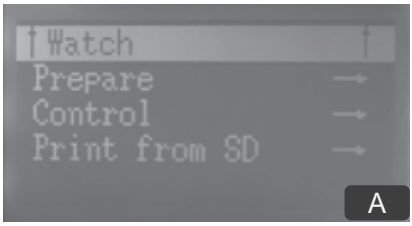
5.7 Install Camera

5.7.1 Put magnet under the camera and install camera on the corner inside the printer.

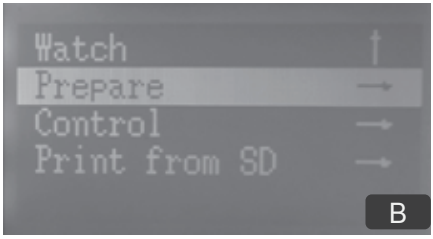
Initial display of LCD Panel

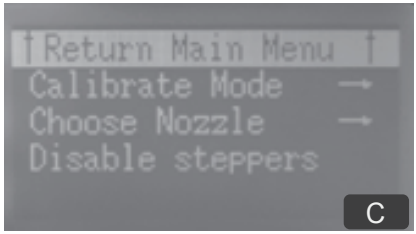
6.1 Main Menu

6.1.1 Push the knob to go to main menu and you can see three submenus (picture A).



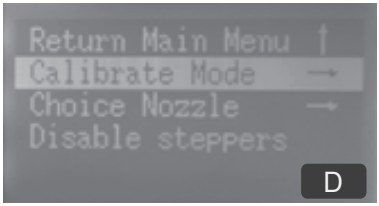
6.1.2 Rotate the knob and select“Prepare”(picture B), then push the knob to go to “Prepare”submenu. (picture C)





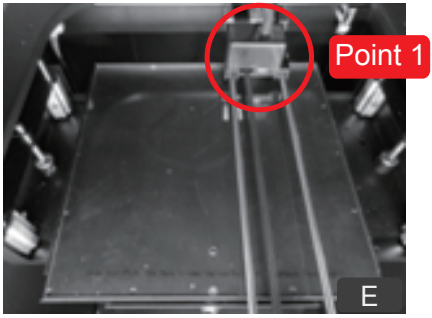
6.2 Calibrate Mode

6.2.1 Rotate the LCD knob and select“Calibrate Mode”(picture D), then push the LCD knob to start the calibration .



NOTE: “Calibrate Mode”is to guide user to operate the printer and to check if the printer is working well.

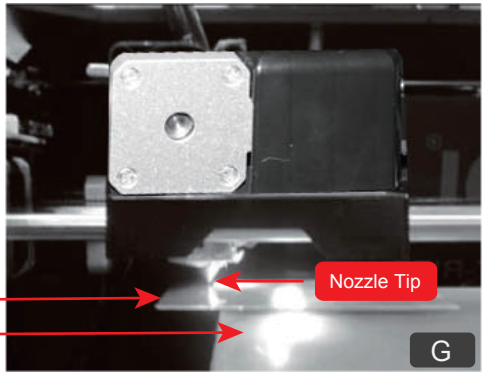
6.2.2 The platform will move up and the printer head will go to the 1st location Point 1 (picture E) and the LCD Display screen will show as picture F.



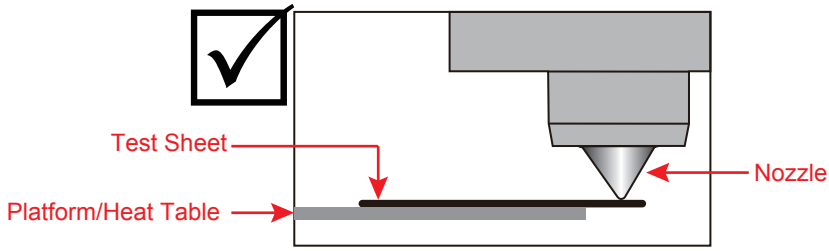
printer top view

6.2.3 Start to calibrate the table and nozzle.

6.2.3.1 Use the test sheet to check the gap between the nozzle tip and the platform. (see picture G)

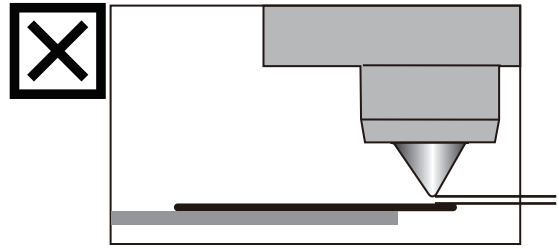


6.2.3.2 Calibration Standard Condition:
The test sheet must be lay down flat in the platform, and the test sheet must be touching the nozzle tip.

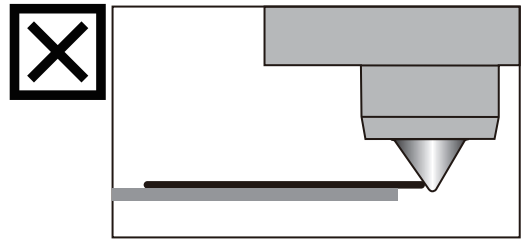


Note: If the calibration standard condition is not met, platform level must be adjusted.

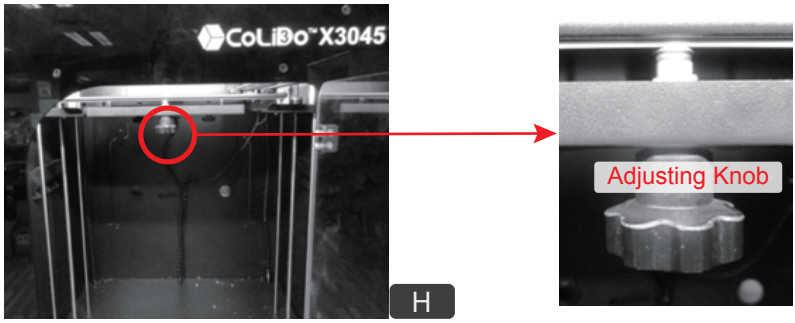
Condition 1: There is a gap between the nozzle tip and the test sheet.
Adjustment 1: Rotate the butterfly nut under the platform counterclockwise until the test sheet just touch the nozzle tip as standard condition.



Condition 2: The test sheet is over the nozzle tip.
Adjustment 2: Rotate the butterfly nut under the platform clockwise until the test sheet can just touch the nozzle tip as standard condition.

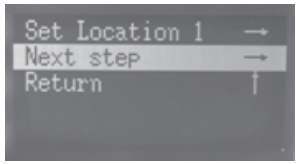


The adjusting knob location as picture H (total 3PCS).



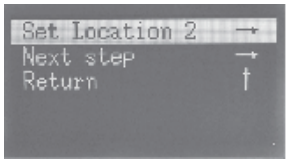
H

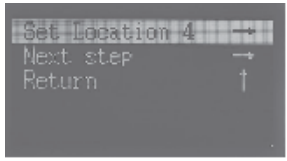
6.2.4 After rotate the adjusting knob to meet the Calibration Standard Condition, rotate the LCD knob to select “Next Step”as picture J, then press the LCD knob to next point to calibrate.

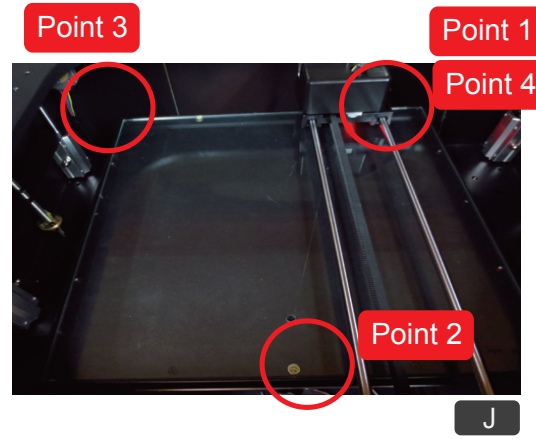


I

6.2.5. Follow 6.2.3 procedure to calibrate point 2,3 and 4 as picture J (Point1 is same to Point4).





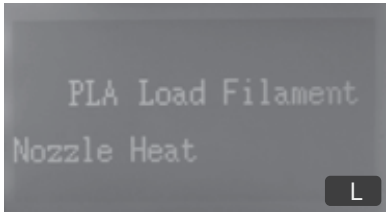


J

6.3.1 After calibration, the screen will show Picture K, push the LCD knob to select the filament you are using in extruder1.

NOTE: The original default testing filament will be from Extruder1.

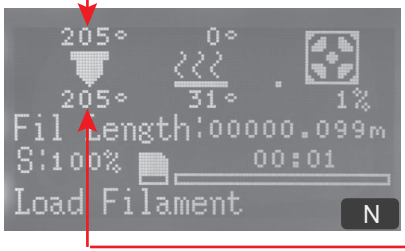
6.3.2 The screen will show Picture L, make sure the filament is inserted into the printer head correctly.



6.3.3 The nozzle will start to heat up as picture M. Once the nozzle actual temperature reach the setting temperature as picture N, the filament will auto load into the nozzle and flow out from the nozzle.

NOTE: the setting temperature for PLA and ABS is different as below. Incorrect temperature setting will result to printer damage.

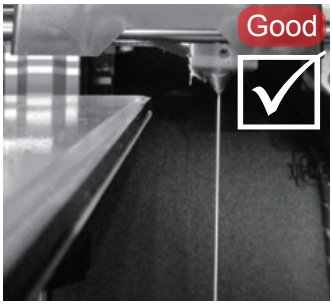
Nozzle Setting Temperature



Filament	Nozzle Setting Temperature
PLA	205℃
ABS	230℃

Nozzle Actual Temperature

Good condition:
The melted filament flow out smoothly and continuously from the nozzle.



O

No Good condition:
The melted filament do not flow out smoothly and continuously from the nozzle.

P

Note: If the filament flowing is in No Good condition, check the following.

a. Nozzle Temperature - must be the equal to the set temperature and according to the filament material melting temperature.
b. Nozzle Cleanliness - No Clogging by refer to troubleshoot clogged nozzle label on the side of the printer.
c. Filament Insertion on the receiving port correctly.
If problem still occur kindly email 3Dsupport@utec.com.mo

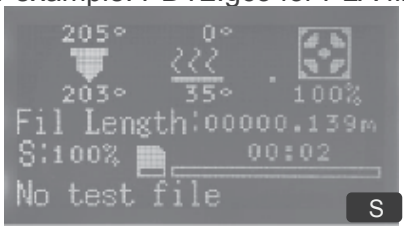
6.4 Print test with SD Card

6.4.1 After nozzle and filament inspection, the screen will show as below picture R. The printer will start to heat up the platform a few minutes.

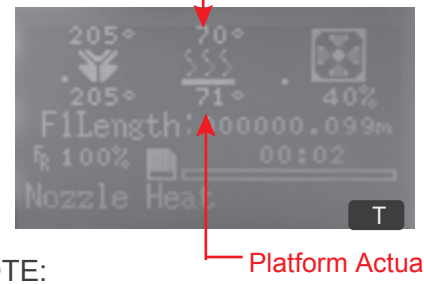
NOTE: If screen shows no test file such as picture S, means that the test file cannot be found n SD card. Check the following.

1. Check if the SD Card is inserted into the SD card slot well.
2. Check if the test file is saved in the SD Card. The test file name will be updated base on the shipped printer,

(For example: PDT2.gco for PLA filament and ADT2.gco for ABS filament)



6.4.2 Once the platform temperature reach the setting temperature, the nozzle will heat up next as picture T.

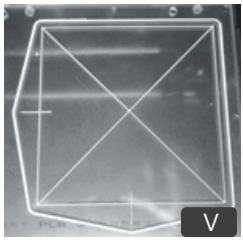


NOTE:
The platform setting temperature for PLA and ABS is different . Incorrect temperature setting will result in the object sticking on the platform.

Filament	Nozzle Setting	Platform Setting Temperature
PLA	205℃	65~70℃
ABS	230℃	100~110℃

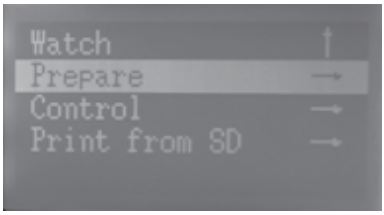
6.4.3 Once the nozzle temperature reach the setting temperature (Picture U), the heating is done and the printer start to print the test file.

6.4.4 Finish printing the test file as picture V, the LCD Display will show as picture W. The platform and the nozzle will start to cooldown.



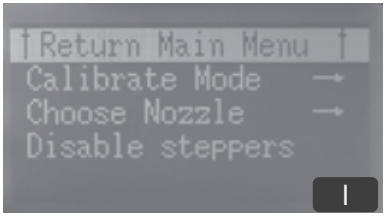
NOTE: Please wait for few minutes to cooldown the platform before removing the printed object.

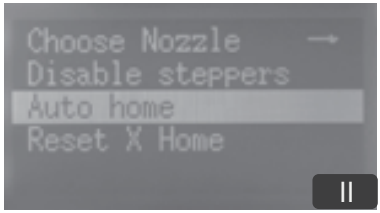
6.4.5 LCD Display Screen Definition

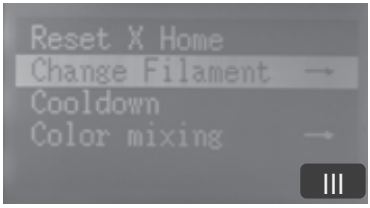


There are 8 submenus under “Prepare” as below picture I~III：

1. Calibrate Mode → Printer calibration and test (Refer to 6.1~6.4)。
2. Choose Nozzle → Select the extruder1 or extruder2 to work. (Refer to 6.6)
3. Disable Steppers→Unlock all motors, can move the position of the platform and the printer head manually.
4. Auto Home→Printer Head will go to initial position.
5. Reset X Home→Printer Head return to X initial position. Y, Z position will not change.
6. Change Filament →Load or unload filament, test filament (Refer to 6.7)
7. Cooldown→Cool down the temperature of the platform and the nozzle to normal temperature.
8. Color Mixing → Printing with proportional color, gradient color or separation color. (Refer to 6.8)





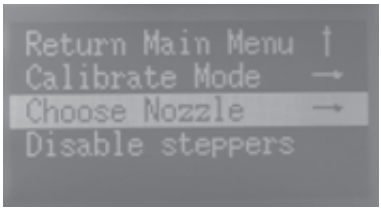


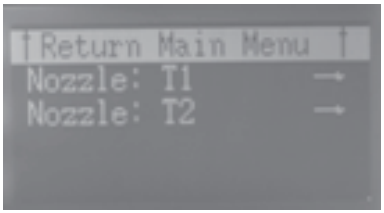
6.6 Choose Nozzle

“Prepare”-“Choose Nozzle”has 2 submenus:

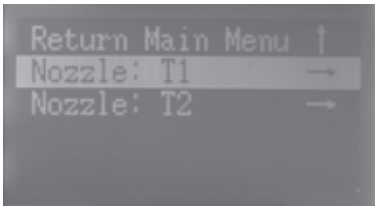
Nozzle: T1

Nozzle: T2

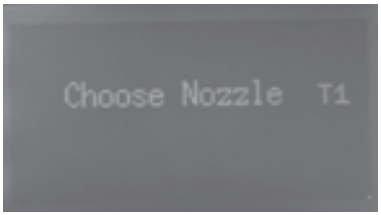




Rotate the knob to select the nozzle you want to take as default nozzle, and its corresponding extruder will be taken as default to work.



Push the knob to confirm the selection and return to initial display.



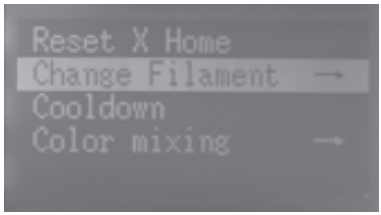
Then, the default extruder will be changed to the one you selected. (The original default is exturder1/ Nozzle1/T1).

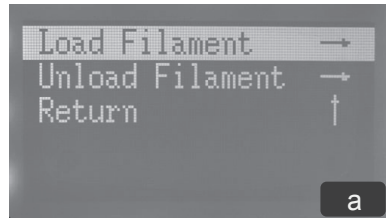
NOTE: if you want to change default extruder to work, please select the extruder first before processing.

6.7 Change Filament

“Prepare”-“Change Filament”has 2 submenus: (as picture a)

1. Load Filament - Load filament into the nozzle automatically and check the filament flowing status.
2. Unload Filament - Remove filament from the nozzle.





6.7.1 Select“Load Filament”and proceed as below picture b~e.

a. Select the filament material you are using

b. Nozzle start to heat up. Please ensure the filament is inserted to the hole of the printer head

c. Heating up nozzle temperature to the setting temperature

d. Once reach the setting temperature, The default extruder will work to load its filament into the nozzle and flow out. Check the filament flowing condition by refer to 6.3.3.

6.7.2 Select “Unload Filament” and proceed as below picture f~j.

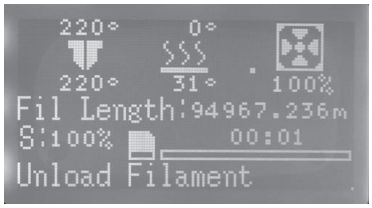
f

g

a. Heating up the nozzle temperature to the setting temperature as picture i.

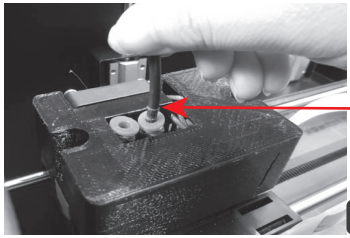
h

b. Once the temperature reach the setting temperature as below picture g, the default extruder will work to auto unload its filament from the nozzle.



i

c. When unload ok, finish the filament unloading.
Press the receiver port lock and gently pull out the filament tube and filament from the printer head.



j

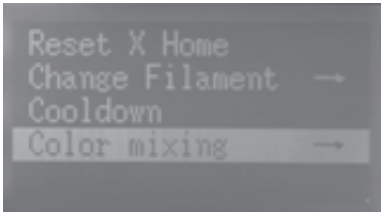
6.8 Color Mixing

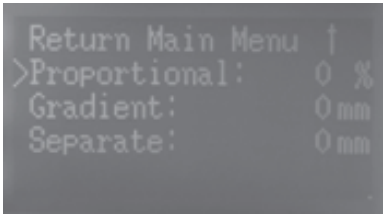
“Prepare”-“Color mixing”has 3 submenus:

Proportional:

Gradient:

Separate:

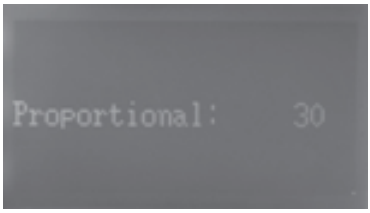


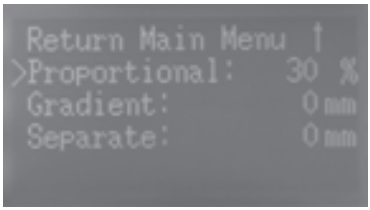


6.8.1 Proportional

6.8.1.1 Select“Proportional”, rotate the LCD knob to input the percentage number 0~100% and push the LCD knob to confirm.

The percentage % means the mixing printing percentage of the default extruder such as T1. Then, the another extruder T2 mixing printing percentage will be 100% deduct the T1 mixing printing percentage.

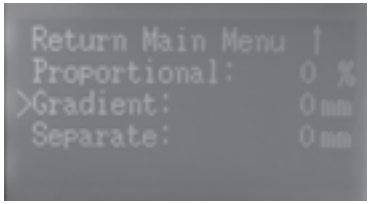


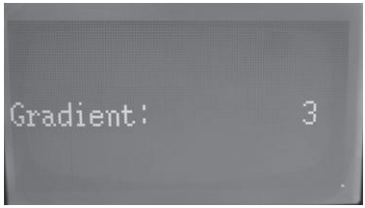


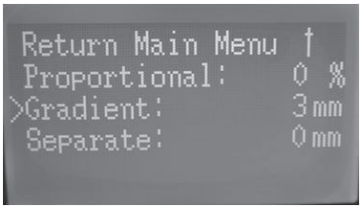
For Example, the default extruder is T1 and input the percentage is 30%, then T1 filament (Yellow PLA) will be printed 30% and T2 filament (Green PLA) will be printed 70%.

The printing effect as below picture.

6.8.2 Select “Gradient”, rotate the LCD knob to input the height 1~5(mm) of layer for color transition.
The gradient percentage of the default extruder is 0~100%, the graident percentage of the another extruder is 100~0%.







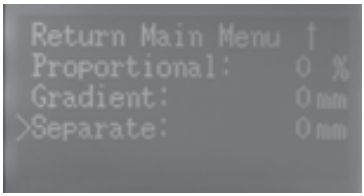
For example, the object height is 320mm and input is 3mm, the T1 is the default extruder, then:

1. The print height from 0mm to 300mm, T1 filament decrease progressively 1% color per 3mm (from 100%~0%), T2 filament will increase progressively 1% color per 3mm (from 0%~100%).

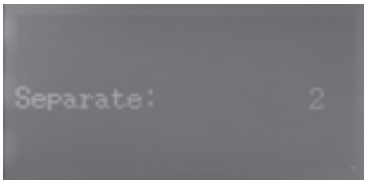
2. The print height from 300mm to 320mm, T2 filament will decrease progressively 1% color per 3mm (from 100%~finish) and T1 filament will increase progressively 1% color per 3mm (from 0%~finish) until the object finish print.

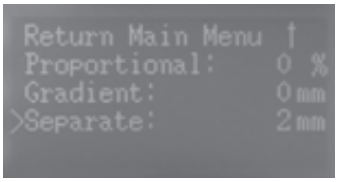
The printing effect as below picture.

6.8.3 Select“Separate”, rotate the LCD knob to input the interval (mm) of the object you want to print different color.

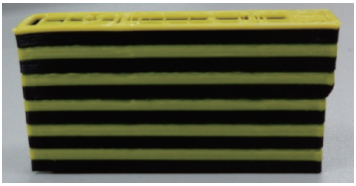


For example, input 2mm and the T1 is the default extruder, then T1 filament (Black PLA) will print 0~2mm, T2 filament (Yellow PLA) print 2~4mm, T1 filament print 4~6mm again, T2 filament print 6~8mm...until finish printing.



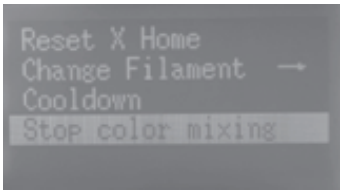


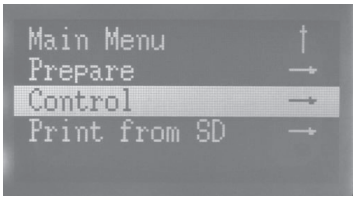
The printing effect as below picture.



NOTE: If want to print with color mixing, must firstly select the color mixing from LCD Display before printing, or the printer will print with single color as default.

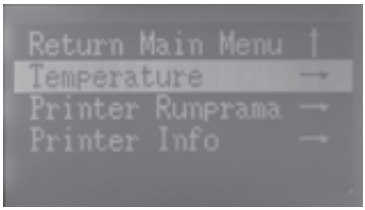
6.8.4 If want to switch or stop the color mixing when already select color mixing, need select “Prepare”- “Stop color mixing”.

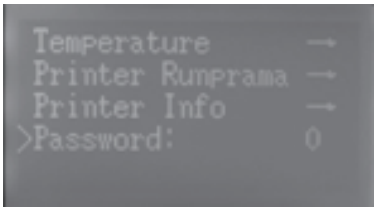




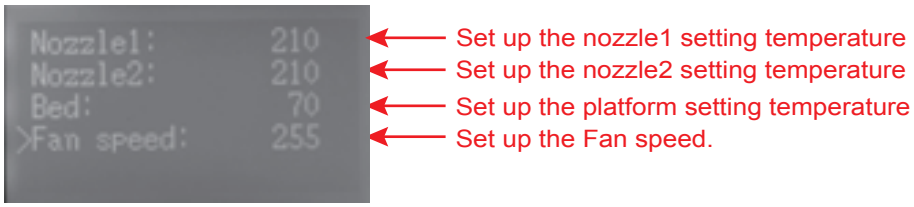
There are 4 submenus under “Control”:

1、Temperature →to adjust the setting temperature.
2、Printer Runprama →to refer to the printer running information.
3、Printer Info →to refer to printer basic information.
4、Password→Manufacturer setup. Forbit user to adjust.

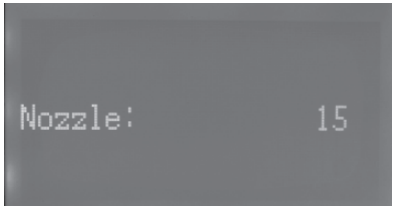




6.9.1 “Temperature” menu can set up below parameter:

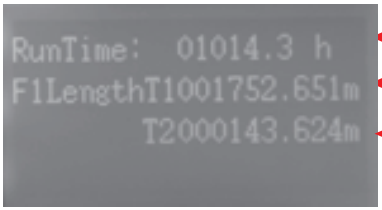


Setting method: Rotate the knob to select the parameter that you want to adjust and push the knob to confirm. Then rotate the knob to adjust the setting you want and push the knob to confirm the number. The parameter will be run to the system.



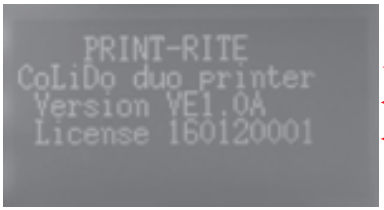
NOTE:
The Nozzle1 and the Nozzle2 must be adjusted to the same temperature at the same time, or the temperature will not be adjusted.

6.9.2 “Printer Runprama”menu as below.

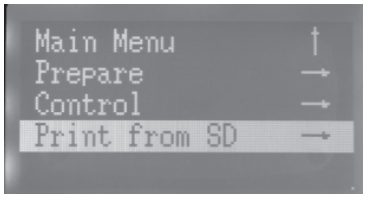


6.9.3 “Printer Info”menu as below.

It is to show the printer basic information such as Printer type, Version No and License No.

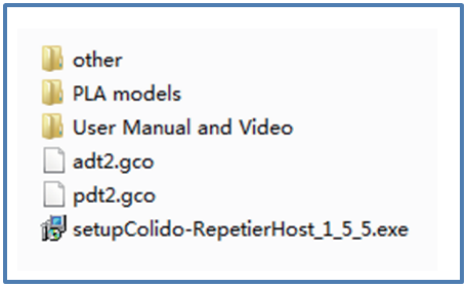


The actual Version No and License No will be depend on the shipped printer.



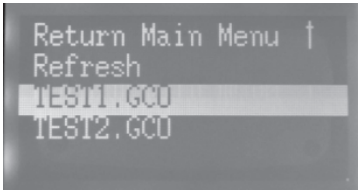
“Print from SD”is to select the print file from SD Card to print.

6.10.1 The default documents when out of factory is:
(it will be updated depend on the shipped printer)



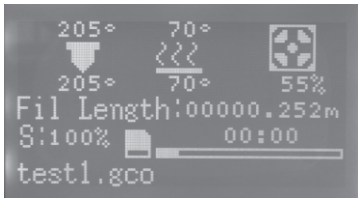
Remark:
Print the file “Z-330.gcode”from the SD card is to move down the printer table far from the nozzle tip 330mm height (Z aixs).
The file can be printed when there is not printed object on the printer table.

6.10.2 Rotate the knob to select the print file that you want to print (.GCO file) and push the knob to confirm to start to print the file.



A

Select the print file that you want to print



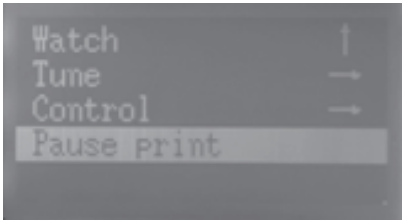
B

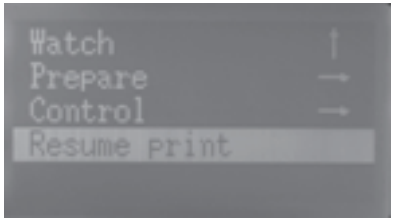
Once the platform temperature and the nozzle temperature reach the setting temperature, the printer start to print.

NOTE: The printer just can read the G-code (GCO). You can print .GCO file with SD Card directly. Otherwise, you can convert .STL file to .GCO file using software REPETIER-HOST, then save the GCO in SD card to print directly or connect REPETIER-HOST in the computer to print through USB cable .
However, Print from SD card must disconnect USB cable to computer.

6.10.3 Pause Printing Feature:

1. Push LCD knob and rotate to select “Pause print”;
2. Push LCD knob and rotate to select “Resuming print”to resume print.



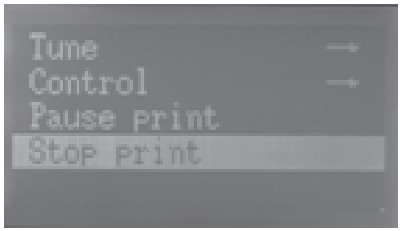


NOTE: When pause printing, the printer head will go to home position and be locked. The nozzle and the platform temperature will keep on.

a. Please clear up the remained filament outside the nozzle tip before resume printing.
b. If resume printing after pause long time, please make sure the nozzle no clogged by pressing the printer head arm and pushing the filament into the nozzle until the filament flow out smoothly.

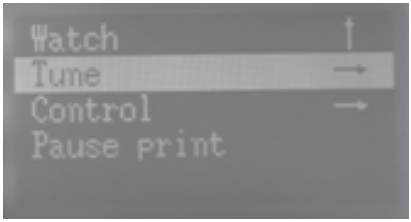
6.10.4 Stop Printing Feature:

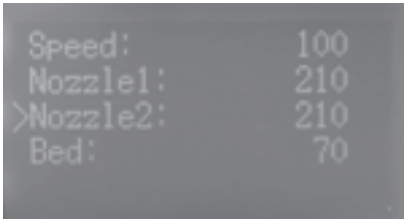
1. Push LCD knob and rotate to select “Stop Print”;
2. Once stop, the printer head will go to home postion. the nozzle and the platform temperature will cooldown. The printing cannot be resumed.



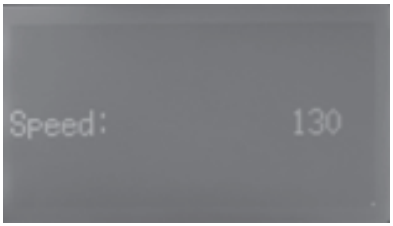
6.10.5. Adjust Printing settings Feature:

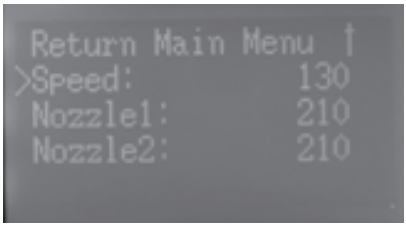
During printing, rotate the LCD knob and rotate to select “Tune”.
You can adjust the setting temperature, speed or switch the nozzle.





a. “Speed”: the default speed is 100%.
The printing speed can be adjusted base on actual condition during printing. The number increases, the printer speed also increases. the number can be set from 10% to 200%, too fast speed will impact printing effect. .

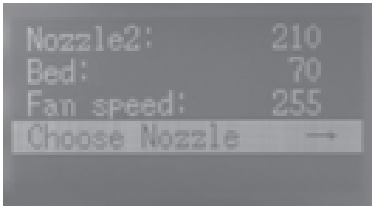




b. “Nozzle1”, “Nozzle2”,“Bed” and “Fan Speed”: refert to 6.9.1.
The nozzle and the platform temperature can be adjusted base on the filament you are using and actual condition during printing.

NOTE: The Nozzle1 and the Nozzle2 must be adjusted to the same temperature at the same time, or the temperature will not be adjusted.

c. “Choose Nozzle”: refer to 6.6.
The default nozzle can be switched during printing.



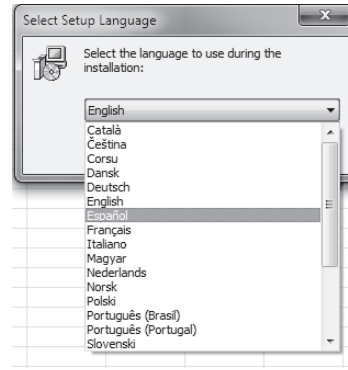
If you want to print files from computer, you need install REPETIER-HOST.
Computer Operation System：WINDOWS 7, MAC OS

REPETIER-HOST is a software which is used to slice the 3D models (.GCO or .STL) and command CoLiDo Printer to print.

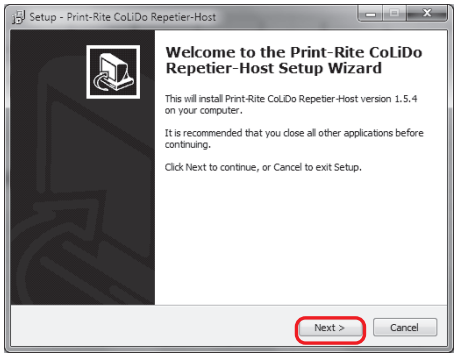
7.1 Install REPETIER-HOST (WINDOWS)

1. Find“setupColido-RepetierHost_1_5_5.exe”in SD Card (Colido RepetierHost software can be download from website Colido.com) , double click to start.

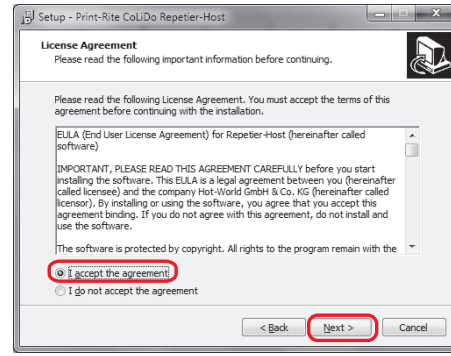
Select Setup Languange to use during the installation.



2. Start to install. (You will be asked“Do you want to allow the following program to make changes to this computer?”,please click“Yes”to continue installation.

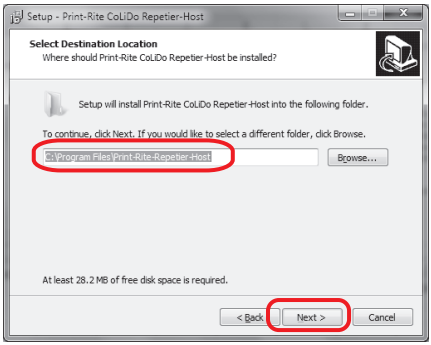


Click“Next”

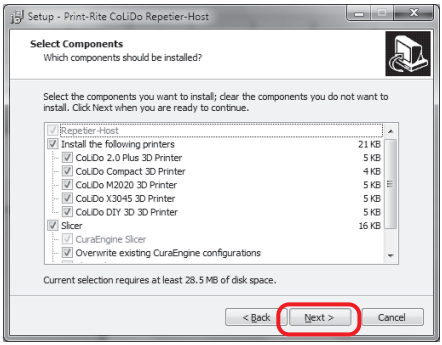


Click“I accept the agreement”，Click“Next”

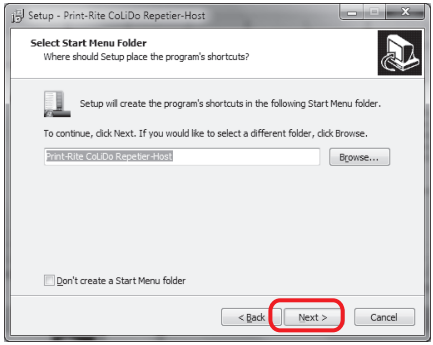
❸ Select a destination to save the software and select the components should be installed, then click “Next”and“Install”.



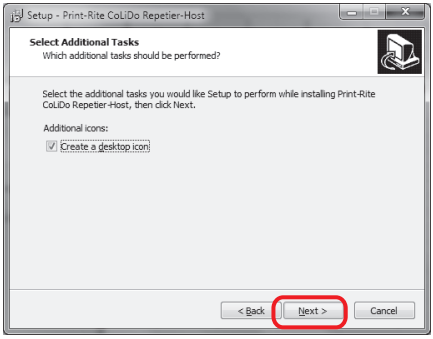
Click“Next”



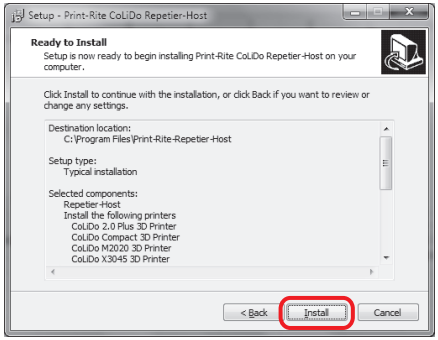
Click“Next”



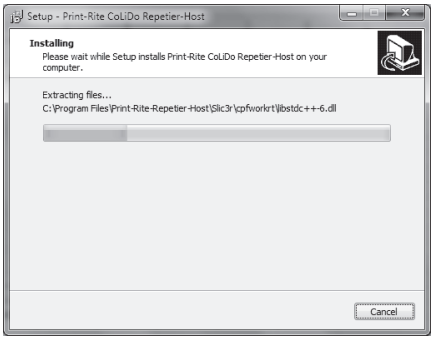
Click“Next”



Click“Create a desktop icon”
Click “Next”

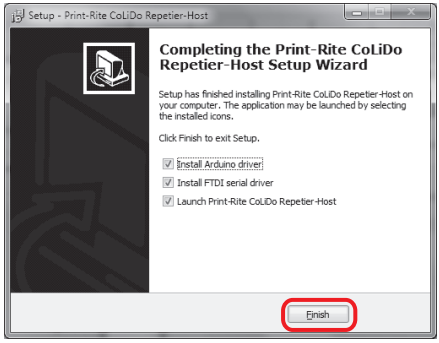


Click“Install”



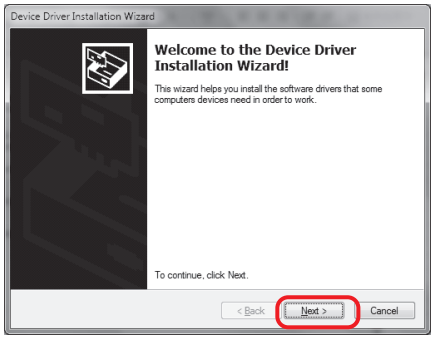
if antivirus message appear, please allow the operation timely.

4 Click “Install Arduino driver”, “Install FTDI serial driver” and “Launch Print-Rite CoLiDo Repetier-Host” and then click “Finish”.

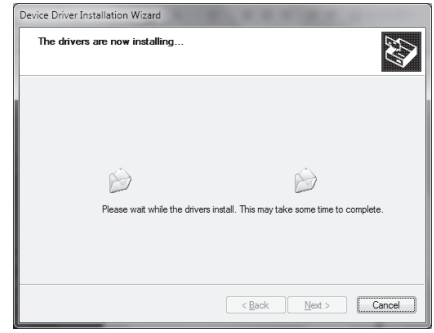


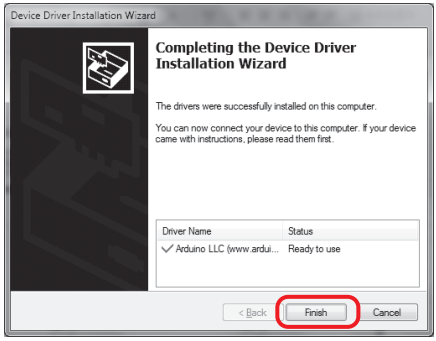
Click“Finish”

5 Install Arduino drivers.



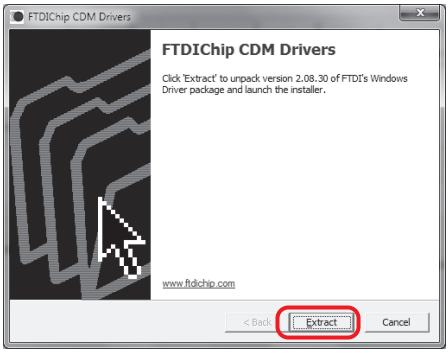
Click“Next”



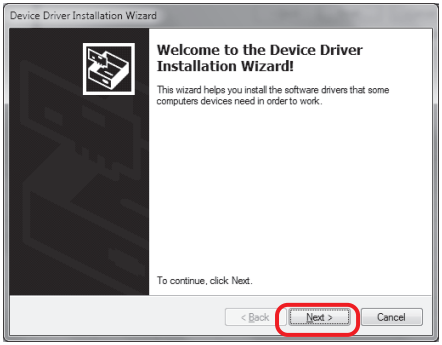


Click“Finish”

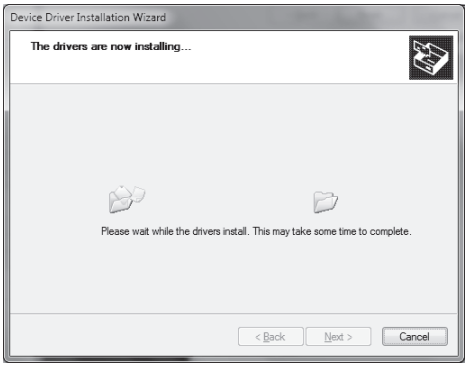
6 Install FTDI Drivers.

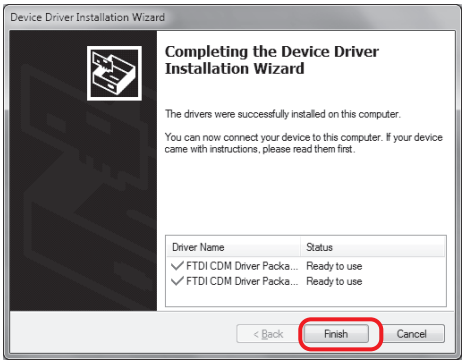


Click“Extract”



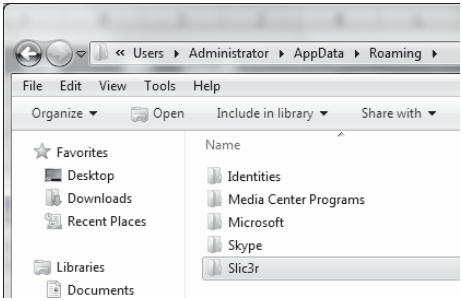
Click“Next”





Click“Finish”

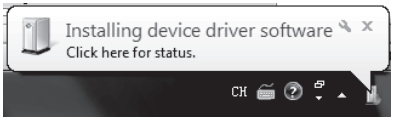
7 Find the configure folder “Slice3r”in SD Card, copy it to the computer path: “C:\Users******(User Name)\AppData\Roaming”as below.

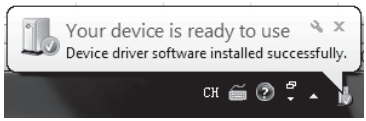


NOTE: “AppData” folder maybe will be hided in the computer. Please click “show hidden files, flolders, and drivers” in “Folder Options”.

Connect the printer to the computer using USB Cable and Turn ON the printer.

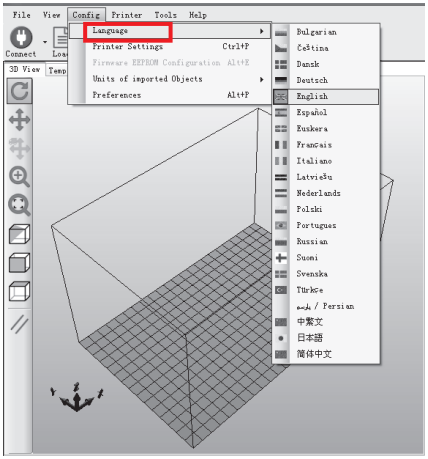
When the computer is the first time connecting the printer, there is connection reminder at the right bottom of the computer.





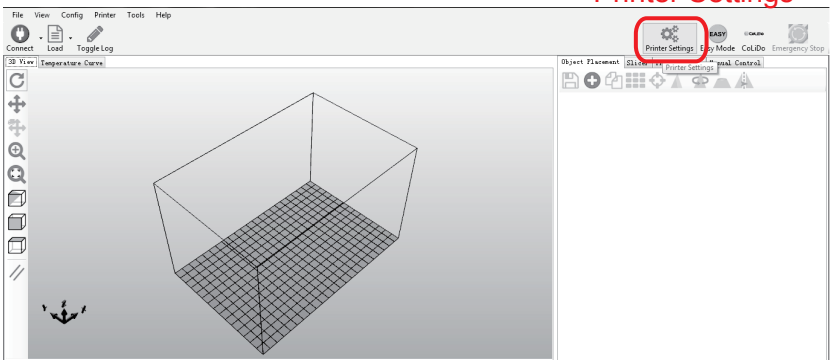
7.2.1 Double click , to go into “Repetier‐Host”software.

7.2.2 Select language you want in the software, “Config”- “Language”.



7.2.3 Click “Printer Settings”.

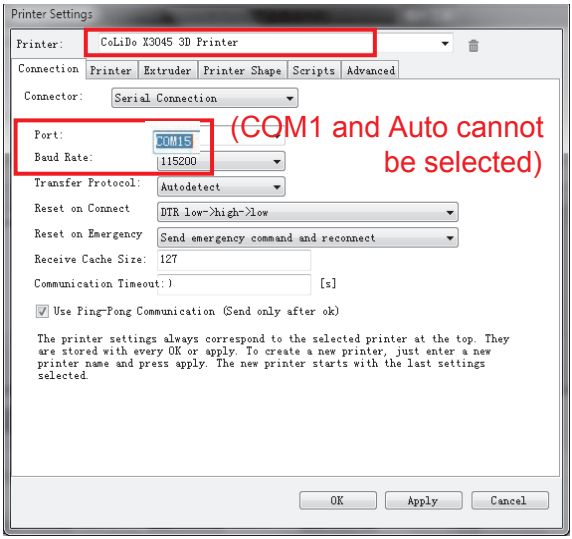
Printer Settings

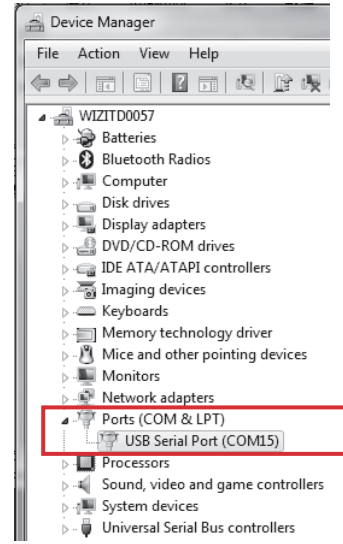


7.2.4 Printer Settings as below.

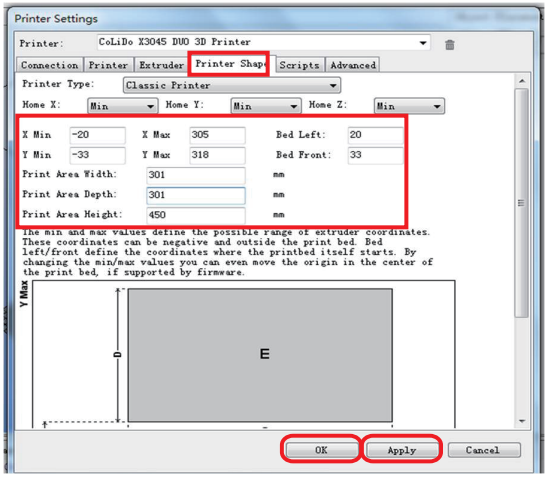
Connection: Select Printer: CoLiDo X3045 3D Printer; Baud rate: 115200.
Select the correct Port COMx such the printer can connect witht the Repetier.

NOTE: COMx dependant on different computer or 3D printer you are using.
Different 3D printer has different COMx, which can be located and matched with COMx in Device Manager as below.





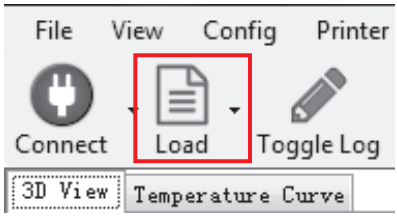
Printer Shape: as below data. After checked, click “Apply” and “OK”.

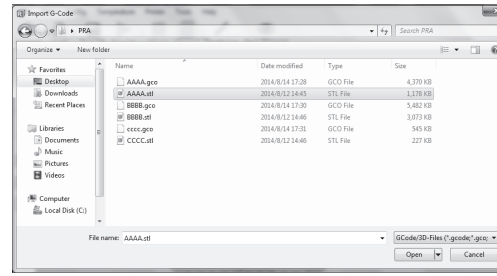


7.3 Slice_Single Color/Color Mixing

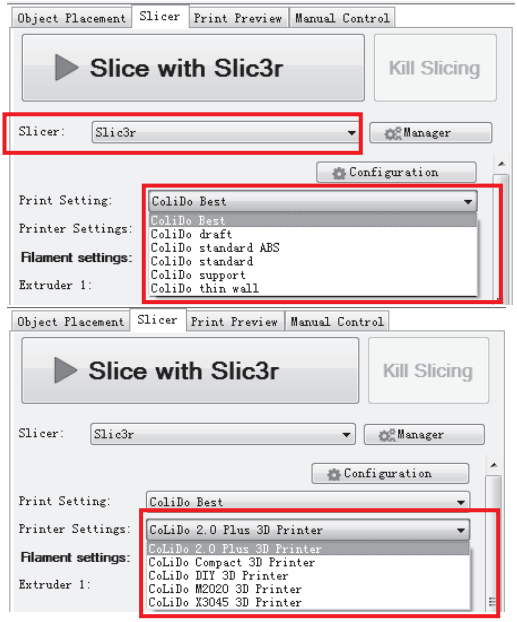
Slice is to convert .STL file to .GCO file (g-code) as the printer can only read the .GCO comand to work.

7.3.1 Click “Load”, select the print file that you want to print and click “Open”. Note: The print file should be with .STL format.





7.3.2 Select the print effect that you want to print, select PLA or ABS filament that you are using. Then click“Slice with Slic3r” to generate G-code.

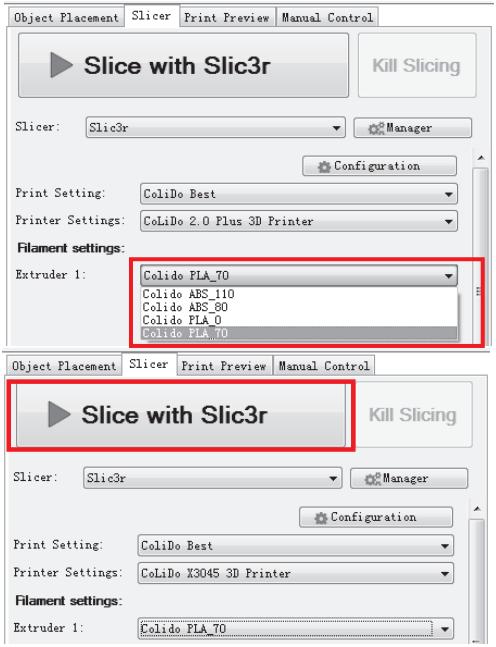


Step1: Select “Slic3r”

Step 2: Select the effect that you want to print

CoLiDo Best - For small object
CoLiDo standard - For big object
CoLiDo standard ABS - For ABS material object
CoLiDo draft - For fast printing
CoLiDo support - For the model adding support
CoLIDo thin wall - For the thickness lower 2mm thin wall object

Step 3: Select printer type “CoLiDo X3045 3D Printer”



Step 4: Select the nozzle and the platform heating temperature base on the filament you are using.

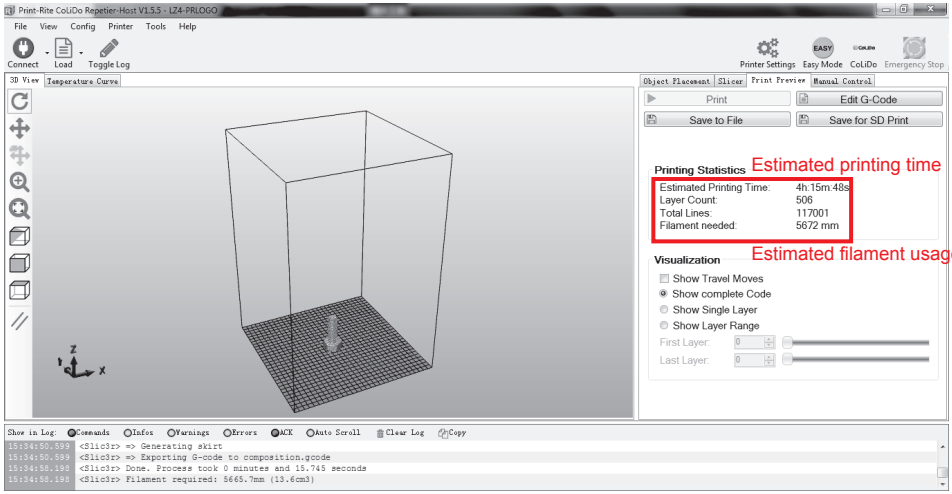
CoLiDo ABS_110
- For ABS Filament with nozzle temp 220℃ and platform temp 110℃

CoLiDo PLA_70
- For PLA Filament with nozzle temp 205℃ and platform temp 70℃

NOTE: If the two filaments loaded in the printer are different type, need select the heating temperature base on the higher required temperature.

Step 5: Click “Slice with Slic3r”to slice the file to generate g-code

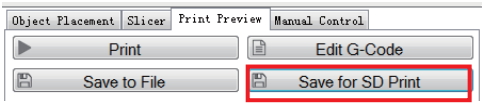
7.3.3 After slice, you can see the estimated printing time and filament usage. Also, you can see the printed shape of the object in the “3D View”.



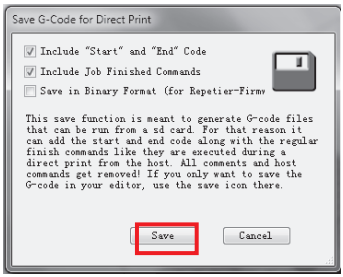
NOTE: You also can load the .GCO file which already sliced as above to review the printing object.

7.4 Printing_Single Color

7.4.1 If want to print the file using SD Card, you can click “Save for SD Print” after slice, then save the GCO file to SD Card to print. (refer to 6.10)

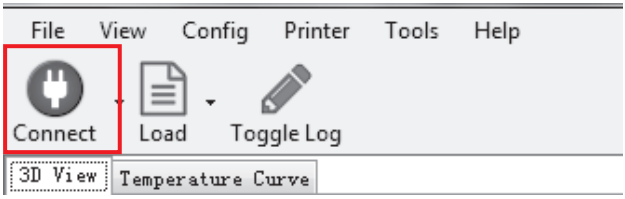


NOTE: The saved file name just can be English words, number, underline, blank space.



7.4.2 If want to print the file using Repetier-Host, need remove SD Card from the printer.

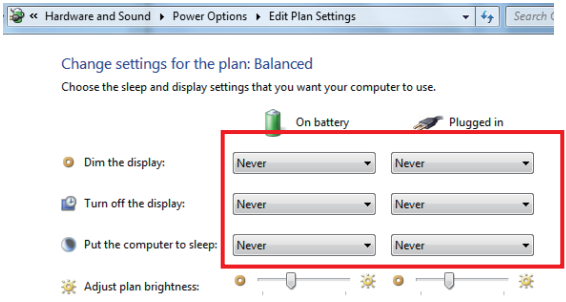
7.4.2.1 Click “Connect”.



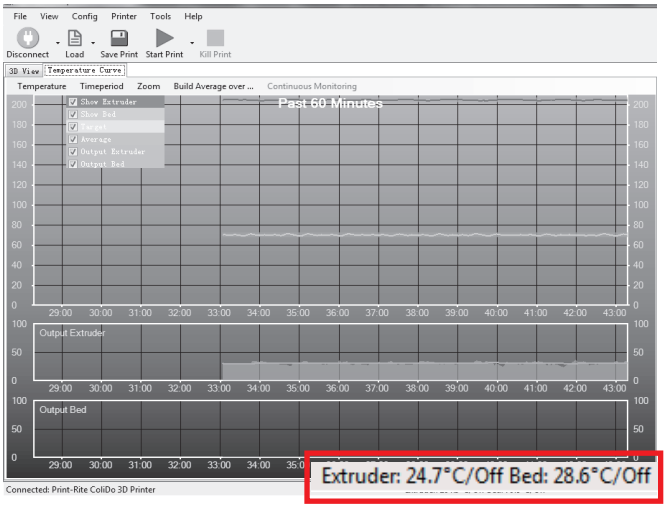
NOTE: 1. Must remove SD Card from the printer before clicking “Connect”, or the Repetier-Host will stop.
2. Once connect with the Repetier-Host, the printer will restart.
3. Must disable the screensaver when pinting using Repetier-Host, or the printing will stop once appear screensaver.

Change the sleep and display settings:

“Control Panel”- “Hardware and Sound”-”Power Options”-”Edit Plan Settings”, select all settings to “Never”, then click “Save changes”.

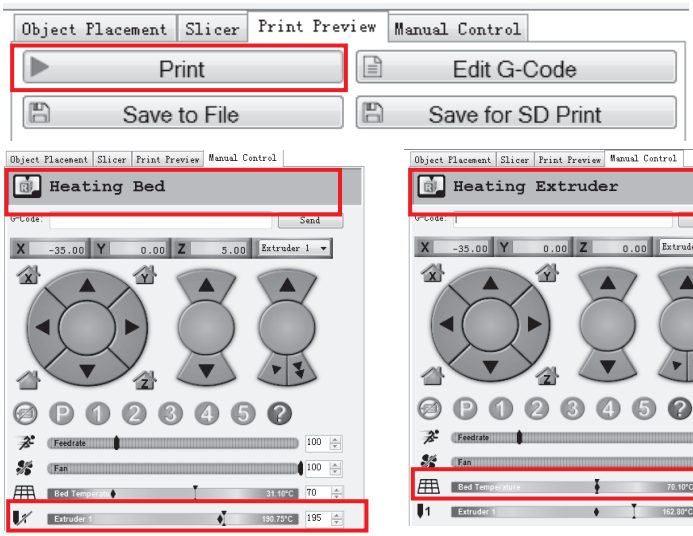


After the printer is really connected with the Repetier software, the actual extruder and bed temperature of the printer will be shown in the bottom of the Repetier software. Also, the Temperature Curve is moving.



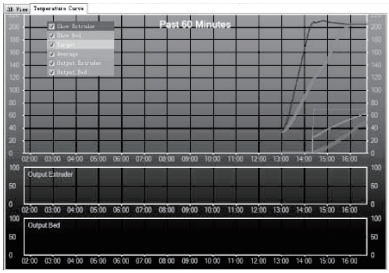
7.4.2.2 Click “Print”, start to print.

Once the platform and the nozzle actual temperature reach the setting temperature, the printer will start to print.

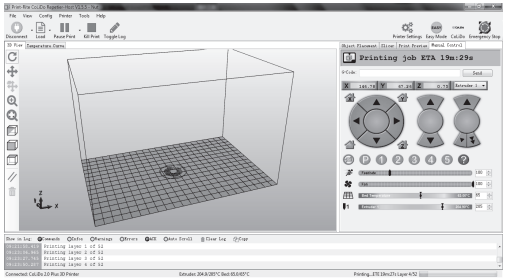


7.4.2.3 Printing.

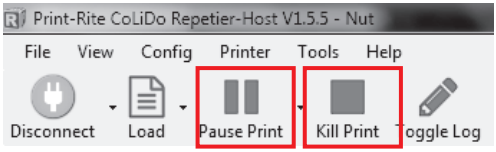
1. During printing, you can see the temperature go up/down from “Temperature Curve”.

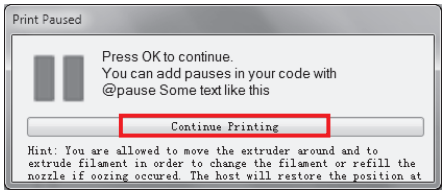


2. During printing, click “Manual Control”, you can see the printing track from “3D View”window.



3. During printing, you can click “Pause Print” and “Continue Printing” to pause/resume printing. (the printer head will pause and will not go to home position)
Also, You can click “Kill print” to stop the printing and cannot be resumed.



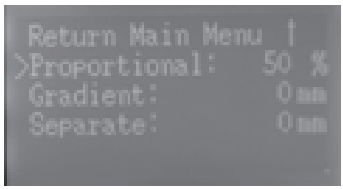


7.4.2.4 Finish Print.

Caution: Please wait for a few minutes to cooldown before remove the printed object.

7.5.1 Load two filament into the nozzle

a. Select “Prepare” - “Color mixing”- “Proportional”, input 50%.

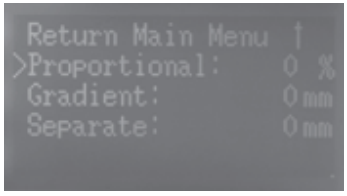


b. Select “Prepare”-”Change Filament”- “Load Filament”.
(Refer to 6..7.1) to check the mixing filament flowing.

NOTE: Suggest the two filaments for color mixing will be similar printing temperature to have good printing effect.
As only one printer head/ one nozzle, the nozzle temperature will be matched with the filament of the default extruder temperature.

7.5.2 Print the file using SD Card.

7.5.2.1 Select “Prepare”- “Color mixing”from LCD Dispaly to choose the mixing function that you want to print the object. (Refer to 6.8)

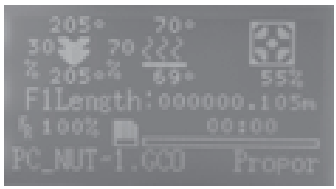


7.5.2.2 Select “Print from SD”to choose the file you want to print.
(Refer to 6.10)

Print Color Mixing through SD Card, need disconnect the USB to the computer. Also must select color mixing function from LCD Display firslty, then select the gco file from SD Card to print.

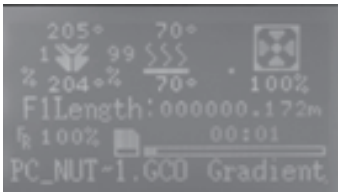
a. “Proportional”: (For example T1 30% and PLA Filamens)

The mixing percentage T1 30% and T2 70% will keep no change until finish printing.



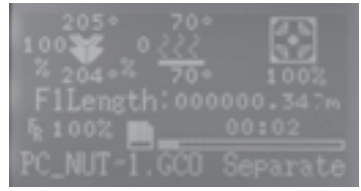
b. “Gradient”:

The mixing percentage T1 will change from 0% to 100% progressively and T2 will change from 100% to 0% decreasingly .



c. “Separate”:

The mixing percentage T1 and T2 will change between 0% and 100%.



7.5.3 Print the file using Repetier-Host.

7.5.3.1 Click “Connect” to connect the printer to the Repetier-Host. (Refer to 7.4.2.1)

NOTE: Must remove SD Card from the printer before clicking “Connect”, or the Repetier-Host will stop.

7.5.3.2 Select “Prepare”- “Color mixing”from LCD Dispaly to choose the mixing function that you want to print the object. (Refer to 6.8)

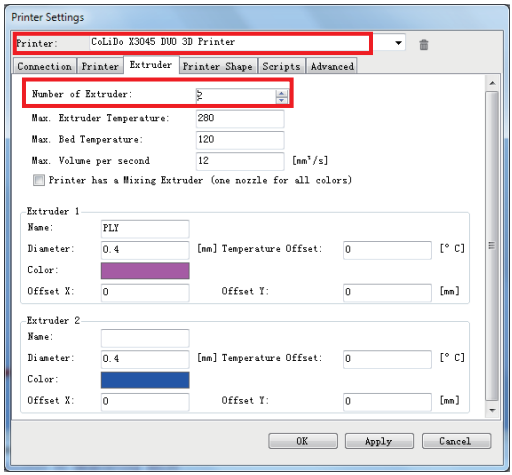
NOTE: Must connect the Repetier Host to the printer firstly, then select color mixing function from LCD Display.

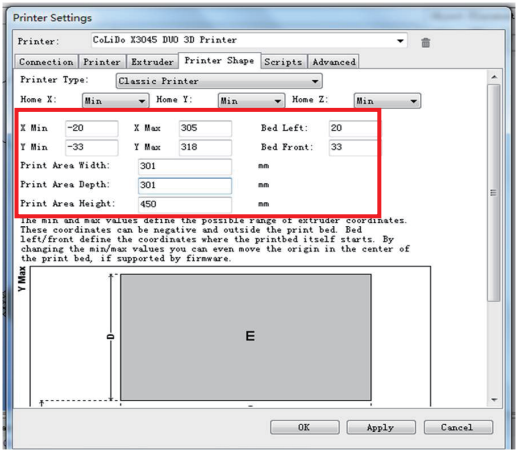
7.5.3.3 Click “Print” to start to print. (Refer to 7.4.2)

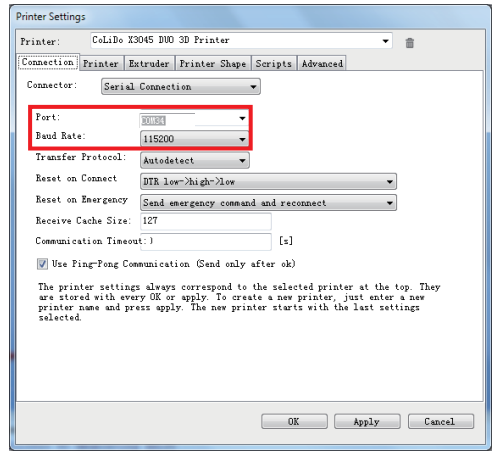
7.6.1 Double click  , to go into “Repetier‐Host”software.

7.6.2 Click “Printer Settings”.

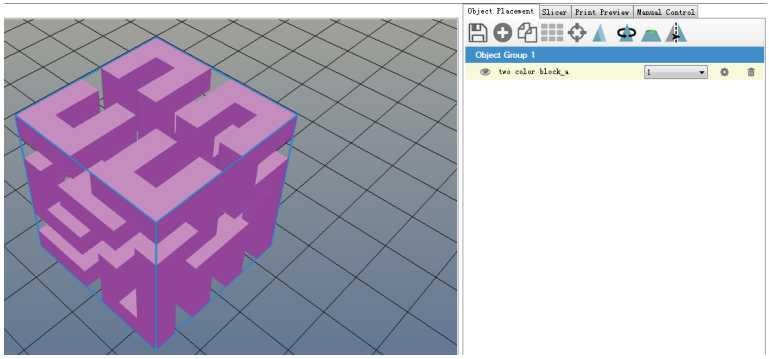
7.6.3 Printer Settings as below:
Select “CoLiDo X3045 3D Printer”, revise the name to “CoLiDo X3045 Duo 3D Printer”;
Click “Extruder”, revise “Number of Extruder:”to 2;
Check the “Printer Shape” as below and “Connection” by refer to 7.2.4;
Click “Apply” and “OK”.



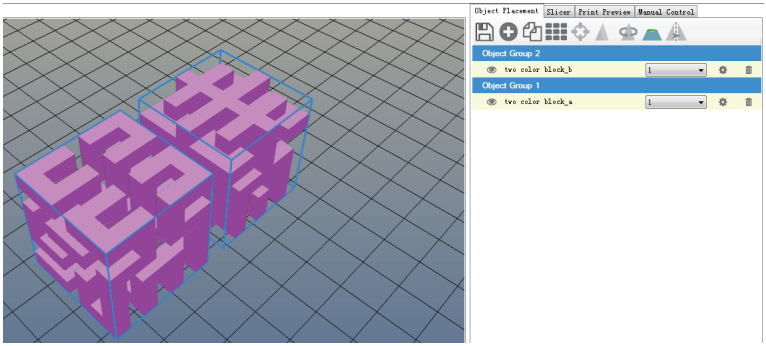




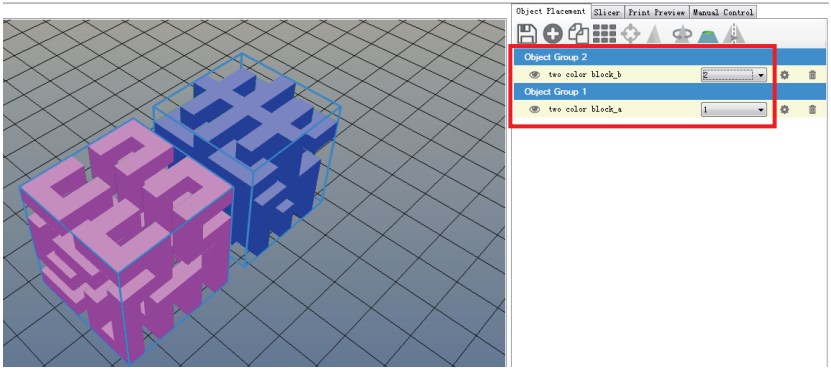
7.7.1 Click “Load”, select the first print file that you want to print and click “Open”. Note: The print file should be .STL format.



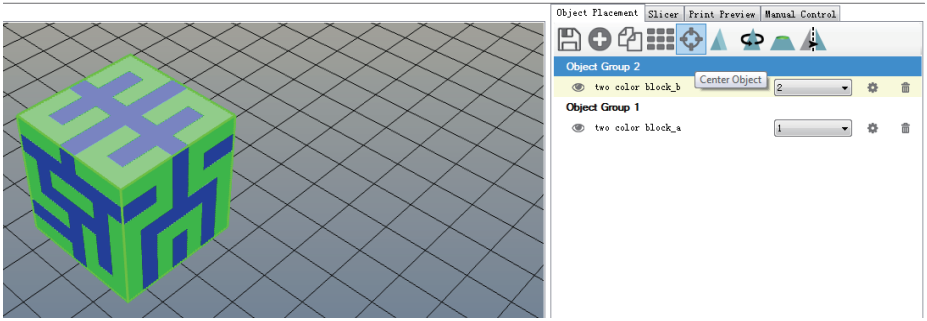
7.7.2 Click “Load”, select the second print file that you want to print and click “Open”. Note: The print file should be .STL format.



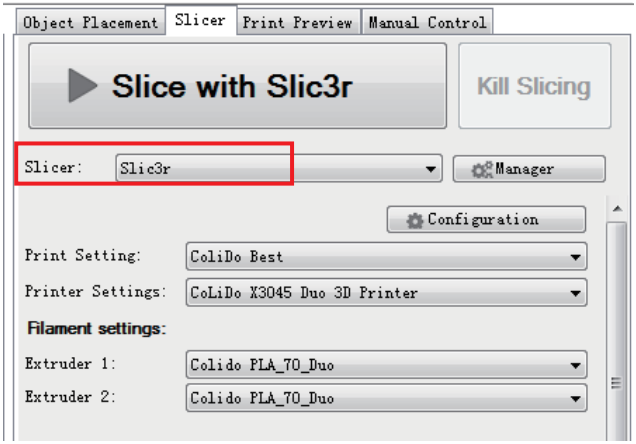
7.7.3 Select file to print use T1 and T2, such as “block_a”to use exturder T1 and “block_b” to use extruder T2.



7.7.4 Select the file and click “Center Object” to center the two objects.



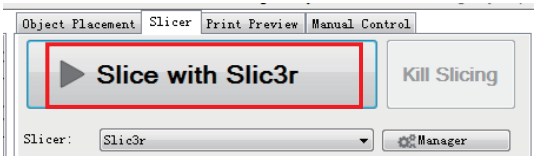
7.7.5 Select “Slic3r” and select the settings as below:

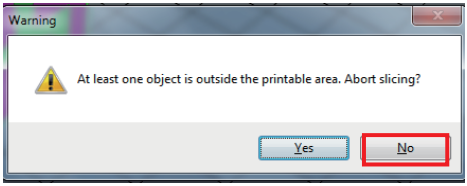


Printer Setting:
Select the effect that you want to print
Printer Settings:
CoLiDo X3045 Duo 3D Printer
Extruder 1:
Extruder 2:
Select the nozzle and the platform heating temperature base on the filament you are using.

NOTE: The Extruder 1 and Extruder2 settings must be same. If the two filaments loaded in the printer are different type, need select the higher required temperature to the two Extruders.

7.7.6 Click “Slice with Slic3r”and the “Warning” windown will come out. Click “No”, then the slice will start.



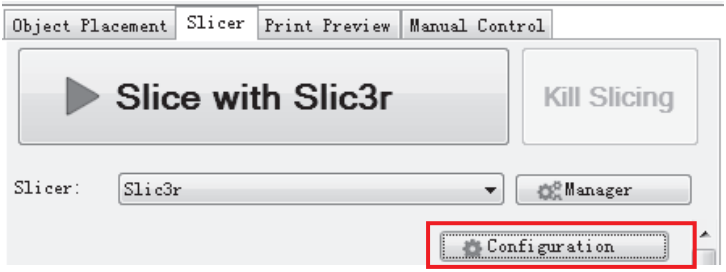


7.7.7 After slice to gco file, you can see the estimated printing time, filament usage and the printed shape of the object in the “3D View”.

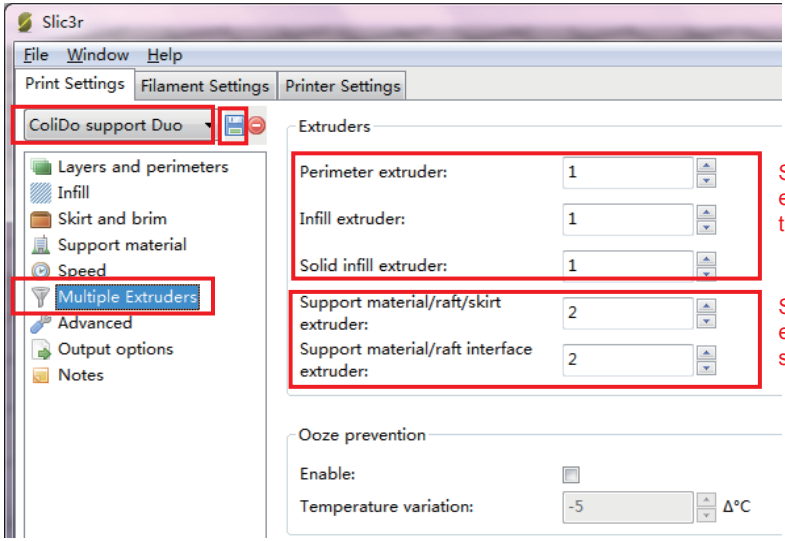
Two material can be two different filament material, such as:
Two material1: One material is product and another one is support material;
Two material2: One material is product and another one is infill material.

7.8.1 Refert o 7.7.1~7.7.4, load the print files that you want to print using two different material. Note: The print files should be .STL format.

7.8.2 Click “Configuration”to revise the printer setting.



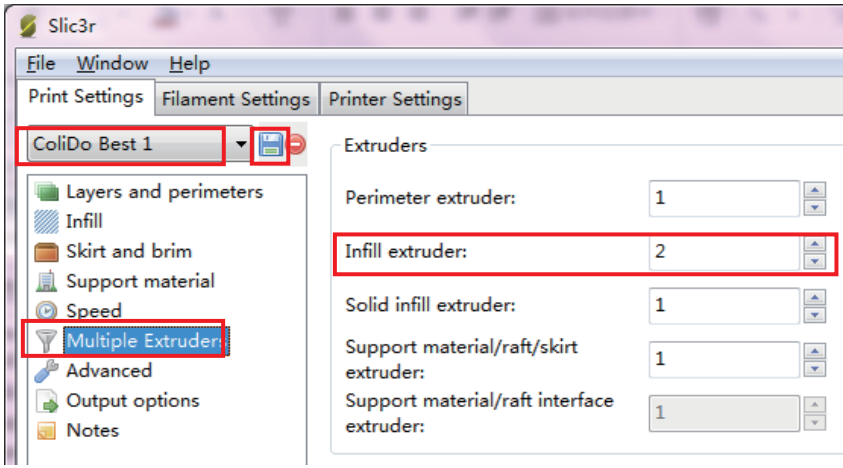
7.8.3 Click “Print Settings”to revise the settings.
7.8.3.1 Setting for Two material1:
Select “CoLiDo support Duo”, “Multiple Extruder”. Set one material is to print production such as T1, one material is to print support material such as T2 as below picture. Then click “save” to save the revising.



Set the filament of extruder1 to print the product

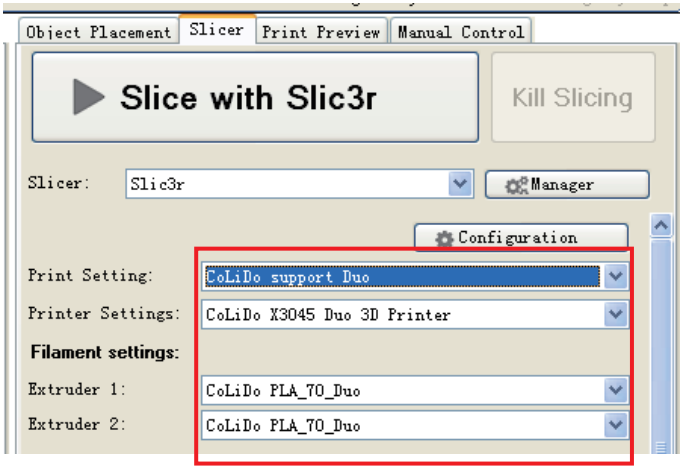
Set the filament of extruder2 to print the support material

7.8.3.2 Setting for Two material2:
Select “CoLiDo Best”, “Multiple Extruder”, set one material is to print product such as T1, another material is to print infill such as T2. Then click “Save”to save the revsing to other name such as“CoLiDo Best 1”as below picture.



Set the filament of extruder2 to print the infill.

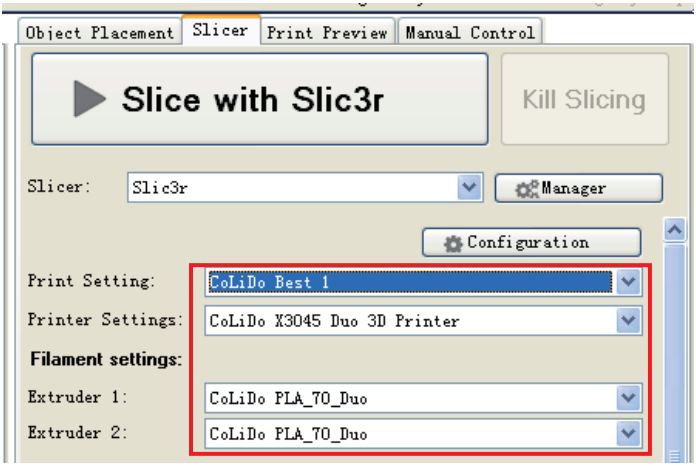
7.8.4 Select the slice settings to slice.
7.8.4.1 Sllcie Two material 1:



Printer Setting:
CoLiDo support Duo
Printer Settings:
CoLiDo X3045 Duo 3D Printer
Extruder 1:
Extruder 2:
Select the nozzle and the platform heating temperature base on the filament you are using.

NOTE: The Extruder 1 and Extruder2 settings must be same.
Need select the higher required temperature to the two Extruders.

7.8.4.2 Slice Two Material 2:



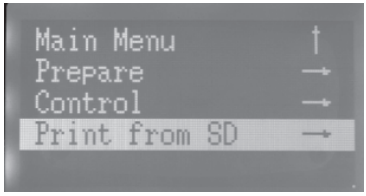
Printer Setting:
The saved settings such as "CoLiDo Best 1"
Printer Settings:
CoLiDo X3045 Duo 3D Printer
Extruder 1:
Extruder 2:
Select the nozzle and the platform heating temperature base on the filament you are using.

NOTE: The Extruder 1 and Extruder2 settings must be same.
Need select the higher required temperature to the two Extruders.

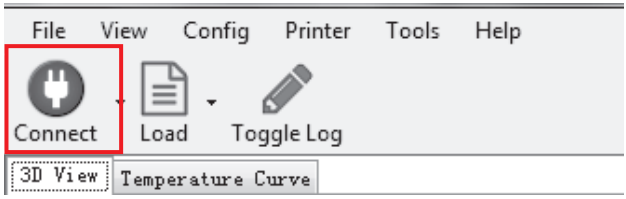
7.8.5 Click "Slice with Slic3r"by refer to 7.7.6.

7.8.6 Start to print.

You can save the gco file to SD Card to print directly by refer to 7.4.1;



You can connect the Repetier-Host to the printer to print by refer to 7.4.2.



7.9 Printing using WIFI communication

7.9 There are two methods of WIFI communication:

A. WIFI communication: Control printer using local area network (No need internet cable, use printer WIFI hot spot to communicate with printer);

B. Remote control: Control printer using internet (No need internet cable, use wireless relay to connect with print).

7.9.1 WiFi function cannot use if the printer connect with PC using USB cable.

When printer under the WIFI mode, can operate printer through the web. Reboost printer after disconnect printer with PC, before connect WIFI function.

NOTE: Google Brower only.

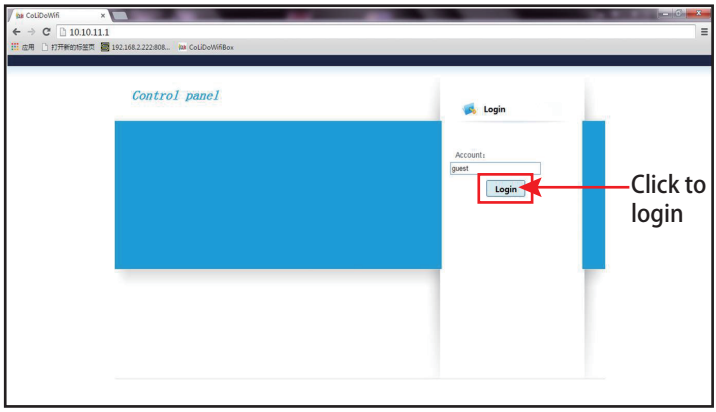
7.9.1.1 Connect and login use PC.

a. As picture shown below, under the WIFI connection to connect "ColidoWifi_XXXX"and default password is 12345678.

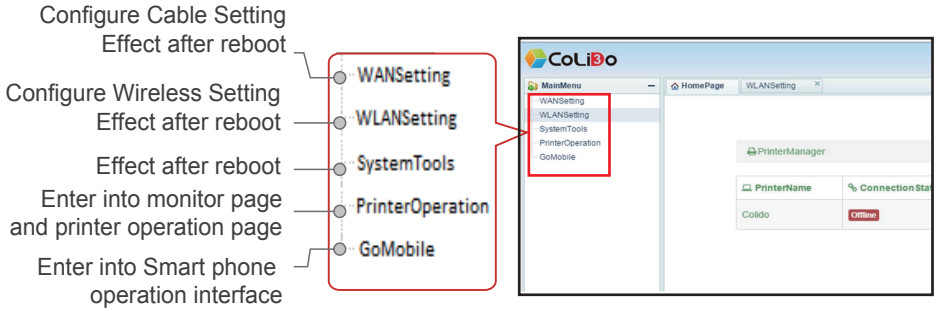
NOTE: Make sure the Wifi USB receiver plug in the printer and the printer is turn on.

Select "ColidoWifi_xxxx" to connect

b. Open Google Browser, input “10.10.11.1” in the address bar, then you can view CoLiDo 3D printer Control system in webpage.



If login with mobile, please select “To PC” to setup relay mode.

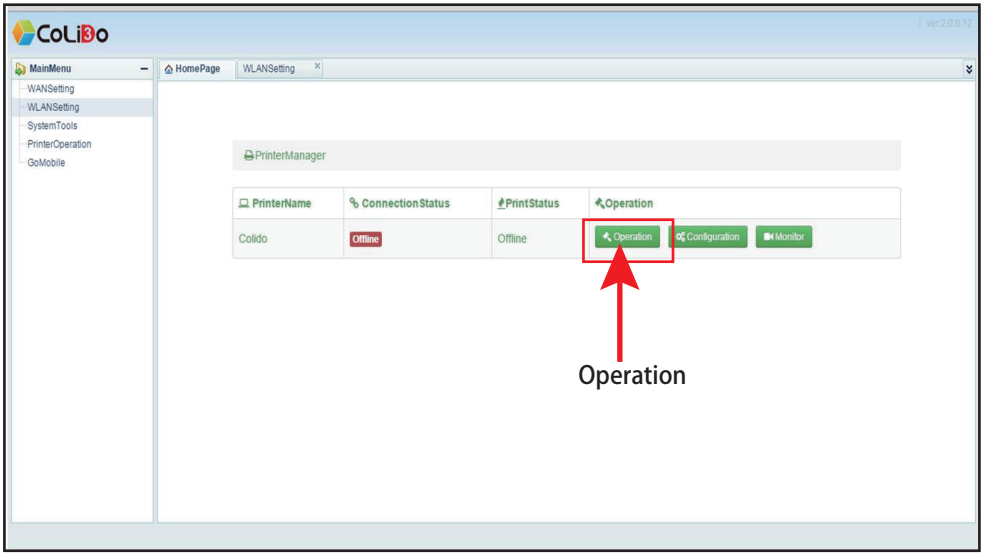


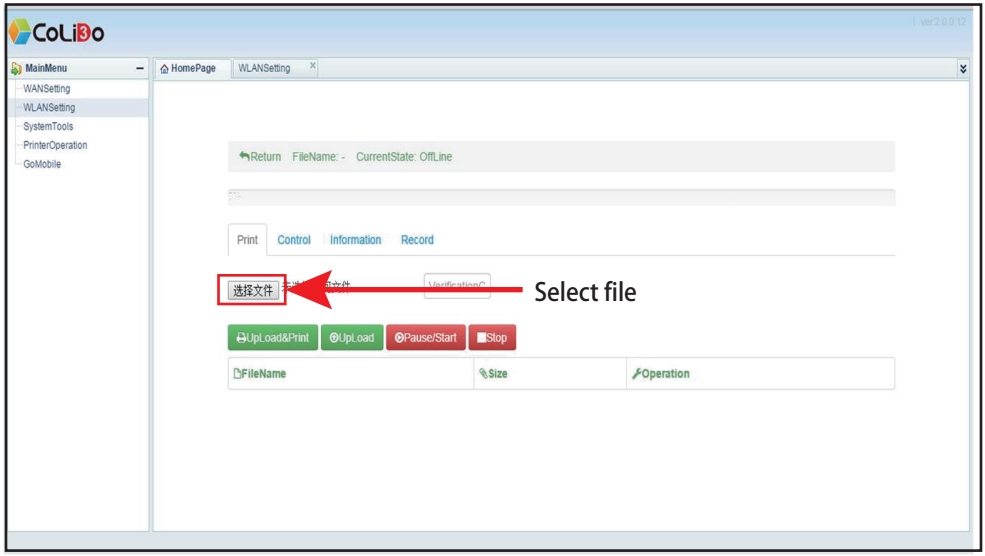
NOTE: When powering off the printer, login to control panel page, under the “System Tools”, click on “ Power off” then switch off the printer.

7.9.1.2 Printer operation

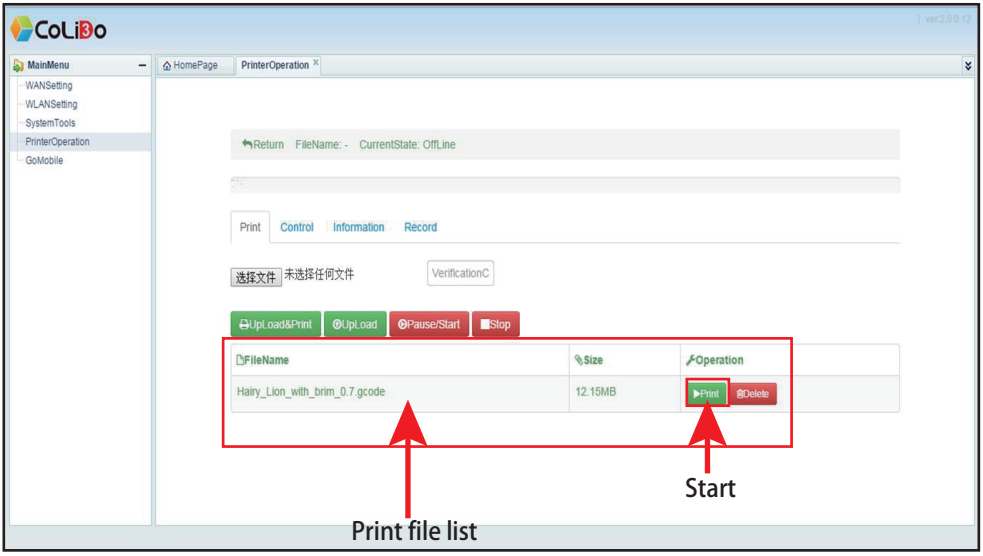
Under the “Printer Operation” select “Operation” will go to printer operation page. Click on “Select file” to print the .GCO file.

7.9 Printing using WIFI communication





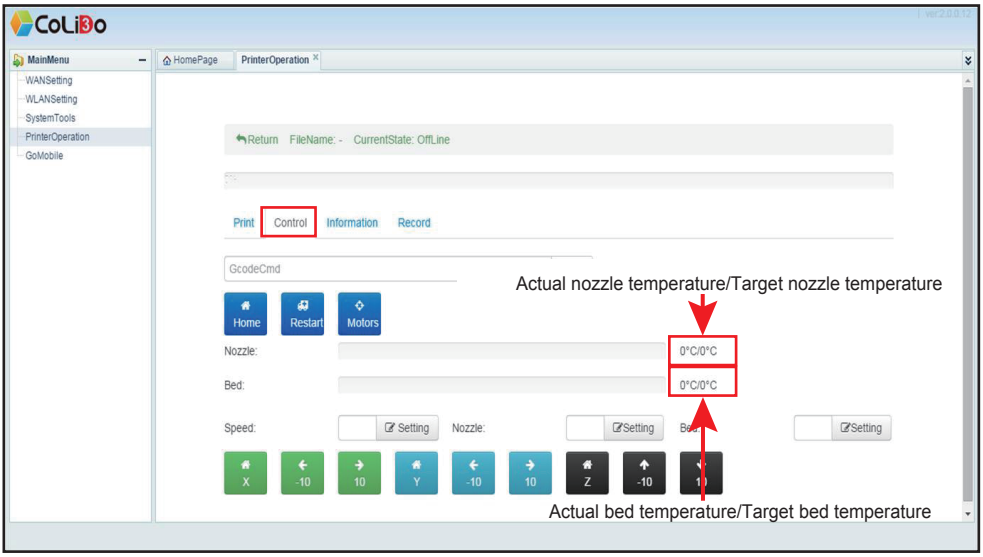
During the print, can use “Pause/Start” and “Stop” button to control.
Select "Upload & Print" the model .GCO will show on the list and start print automaticlly； Select "Upload" the model .Gco will show on the list only. Click "Print" printer will start print the selected .GCO.



7.9.1.3 Other functions

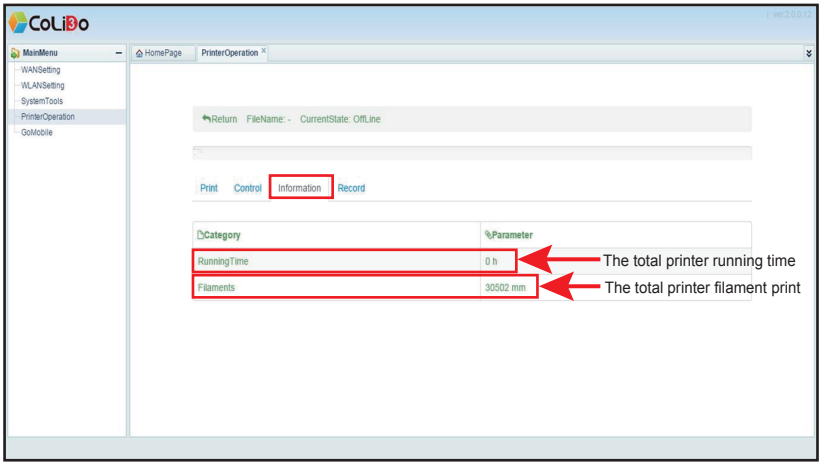
Can adjust and check the print settings and file print information.

Control menu:

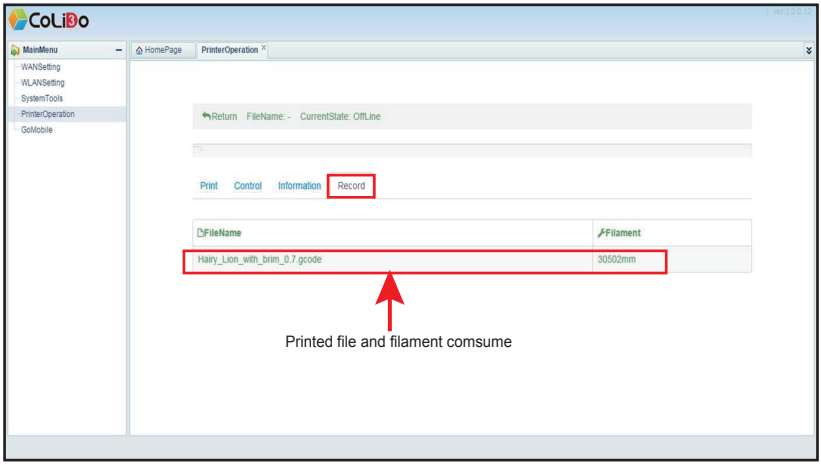


7.9 Printing using WIFI communication

Information menu:

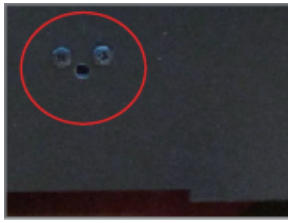


Print Record:



Reset function

Reset button is inside the small hole located at the left side of the printer.



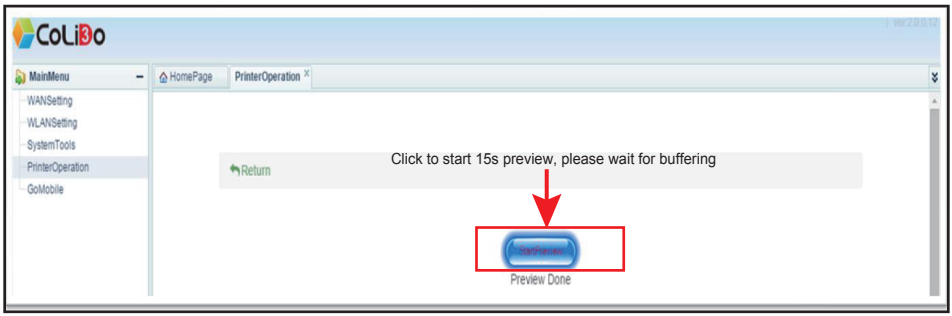
Press the reset button 1 second, Wifi will reboot;
Press the reset button 10 seconds, Wifi will restore to the factory settings.

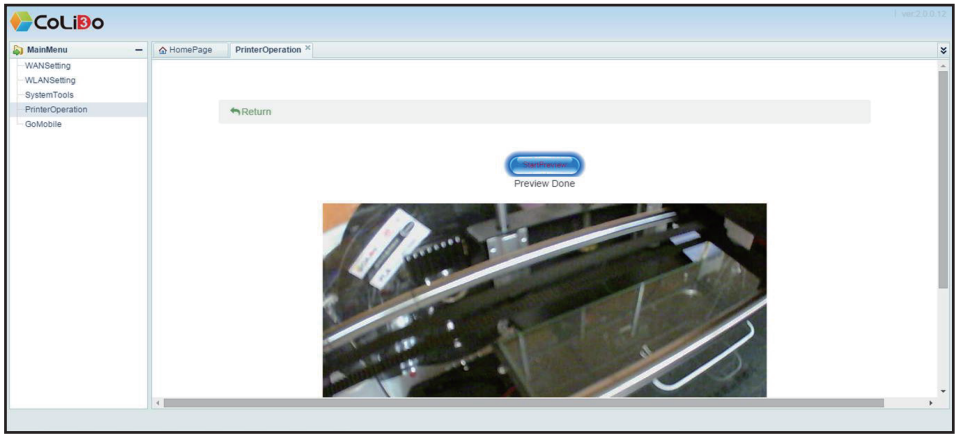
7.9 Printing using WIFI communication

Monitor function

Under the WLAN Settings, select “Monitor” the click on “Start Preview” to start the monintoring the printer printing state.

NOTE: Every time click on “Start Preview” only have 15 seconds for the preview. Click again to refreash the page and start again.



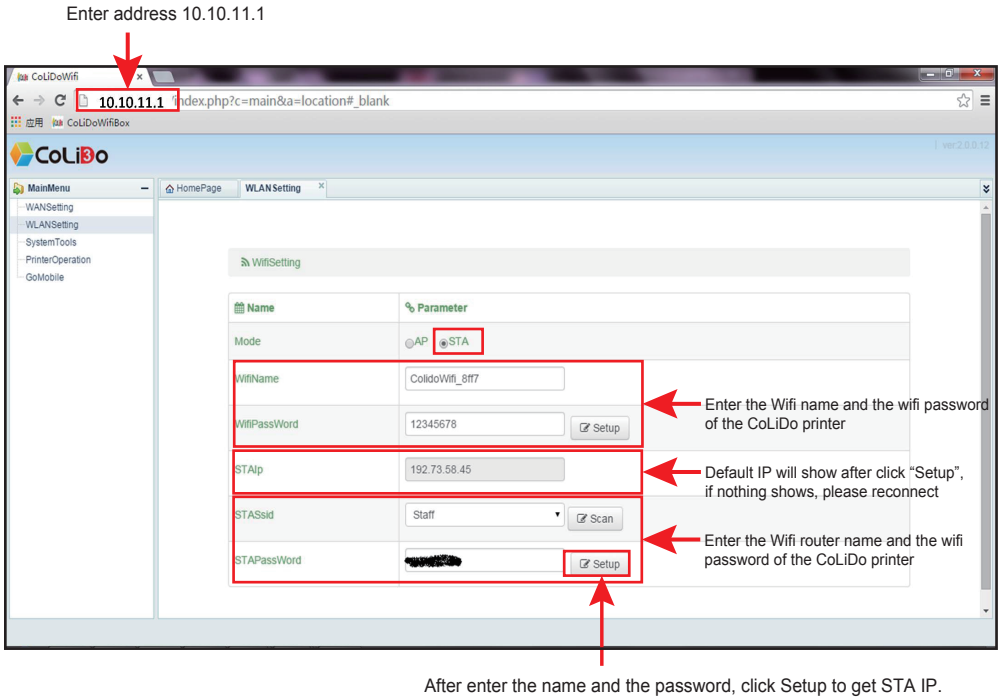


7.9 Printing using WIFI communication

7.9.2 Remote control

Step 1. Printer wireless relay setup

Refer 7.9.1.1 to connect printer with wifi, then open Google browser enter 10.10.11.1 to enter the CoLiDo 3D printer control web page. Under the "WLAN Settings" select "STA" then enter the router user name and password, click "Setup" to get STA IP as Fig. shown below.



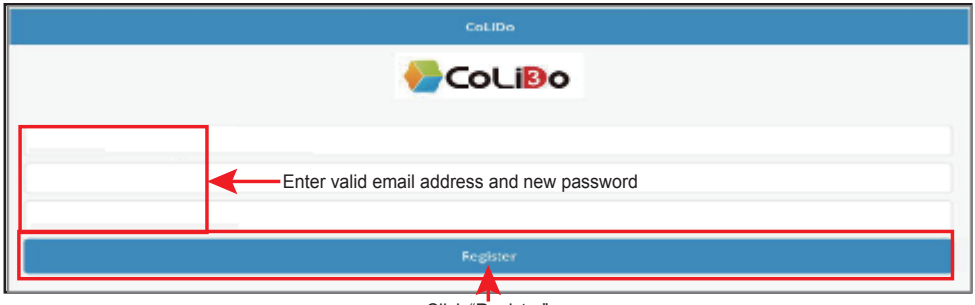
If login with mobile, please select "To PC" to setup relay mode.

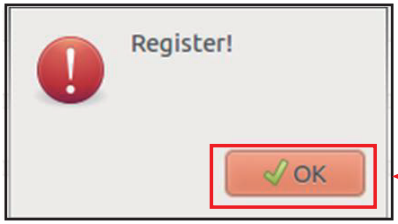
Step 2. Register with email

Connect with internet from router, enter “www.colido-server.com” in Google browser go to page as Fig. shown below.

Click “Register”.

Enter the valid email address and new password. The success message will be shown after click “Register”, and then click “OK”.

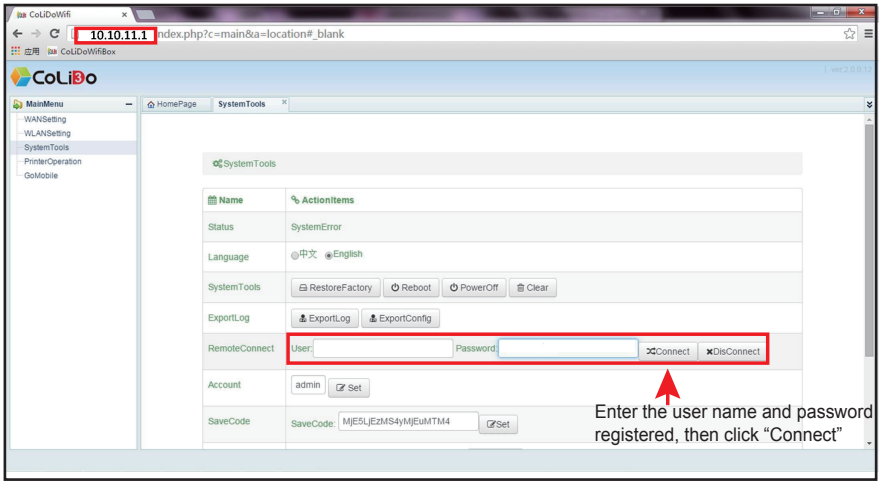




Step 3. Bind email

Connect with printer wifi, enter “10.10.11.0” in Google browser then select “RemoteConnect” under the “System Tools” menu.

Enter the registered email address and password, press”Connect” will pop-up the bind succeed message.



Step 4. Remotely control printer

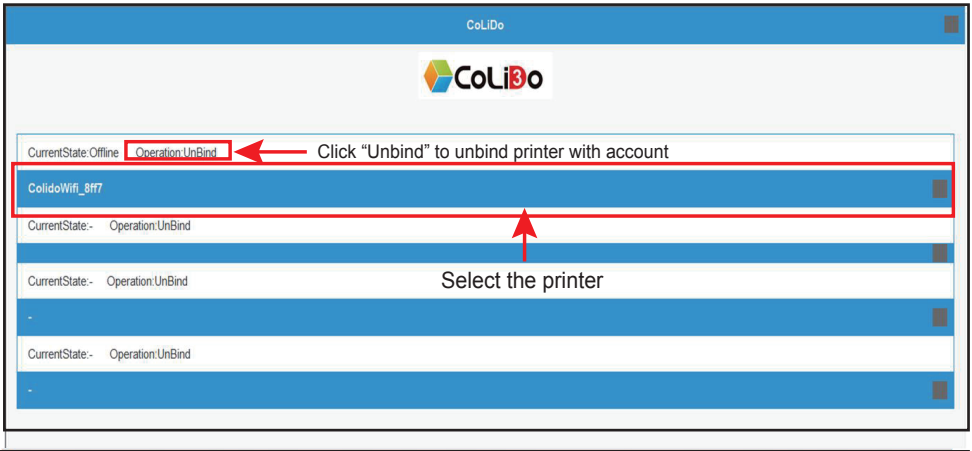
Connect with WAN internet, enter “www.colido-server.com” in Google browser.

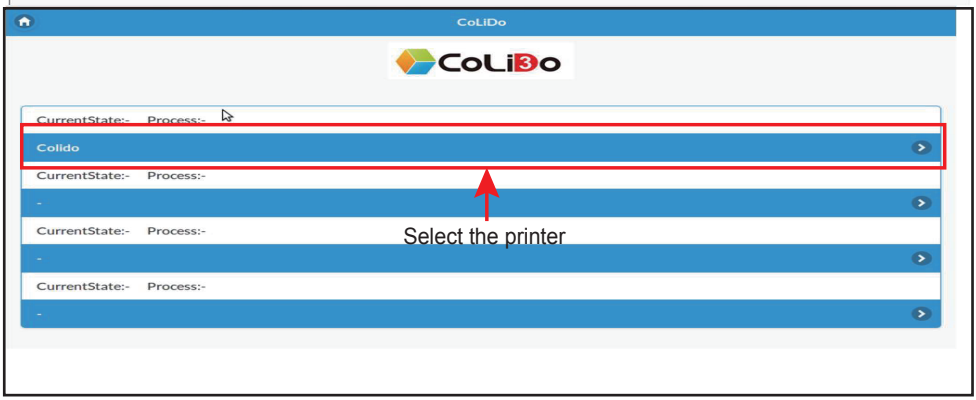
Enter the bind email address and password, click “Login”. Click printer wifi enter into printer operation page.

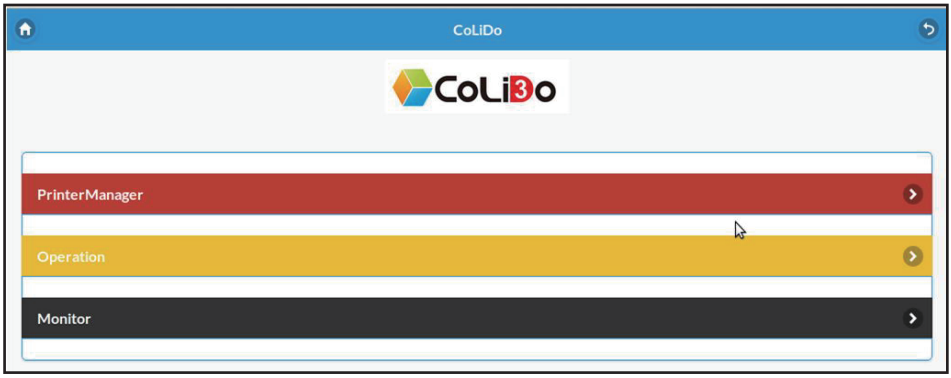
NOTE: Click “Unbind” can remove the binding. One account can bind maximum 4 printers.

7.9 Printing using WIFI communication

Enter the user name and password connected with print wifi then click “Login”







A

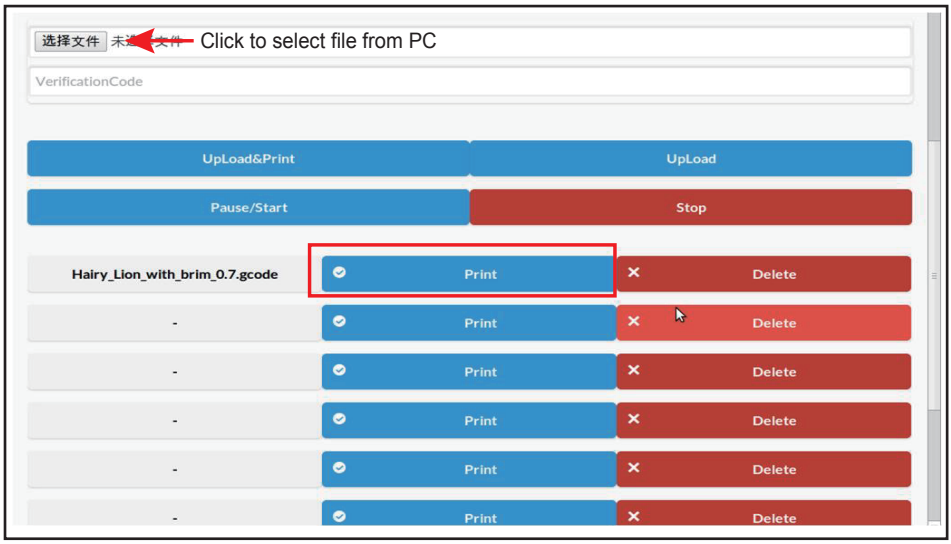
a. “Print manage” page

Click “Select file” to select the .Gco model want to print.

Select "Upload & Print" the model .GCO will show on the list and start print automaticlly; Select "Upload" the model .Gco will show on the list only.

Click "Print" printer will start print the selected .GCO.

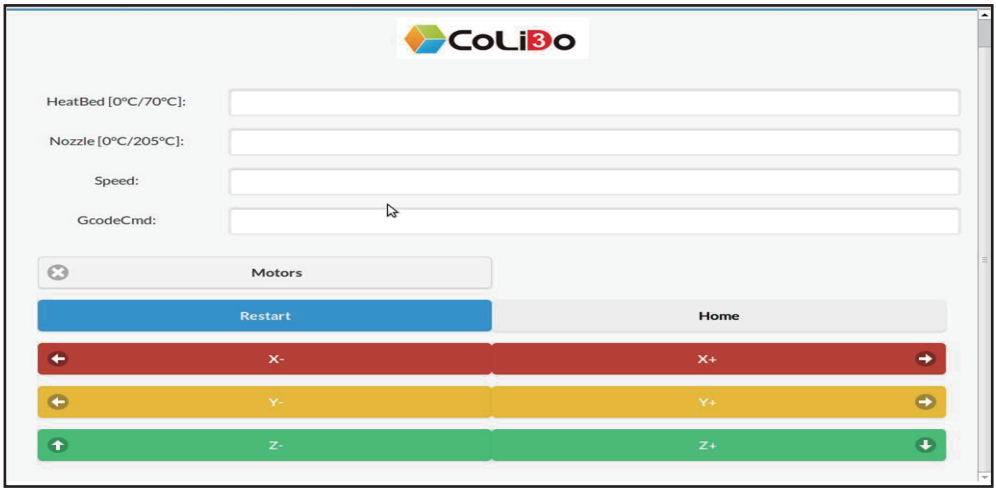
NOTE: The list can only show 10 recently uploaded files, if want other models, delete the file in the list then upload.



NOTE: The “Pause” and “Stop” function can be use during the printing. During the printer operation might have delay, please wait after click until the page refresh automatically.

2. “Operation” page

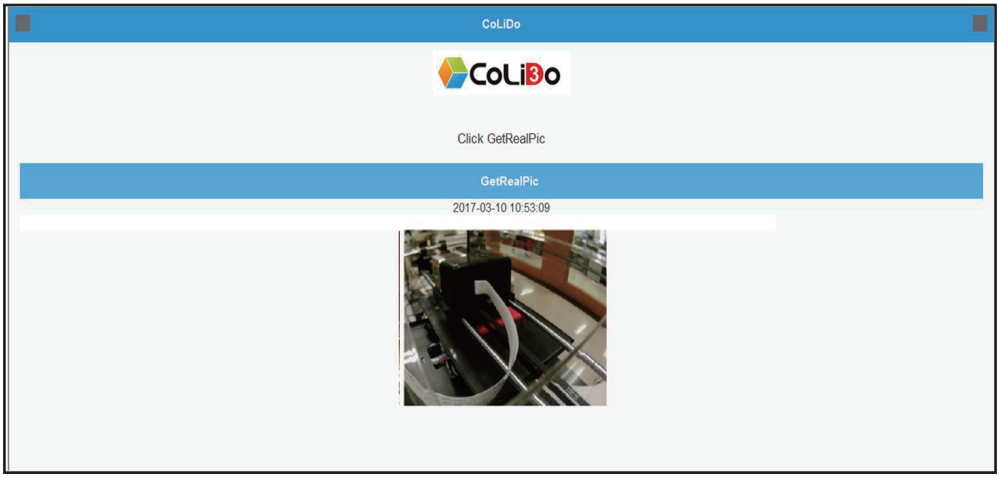
As Fig. A shown, click “Operation”. The operation page can setup the heated bed temperature, nozzle temperature, print speed, Gcode and so on.



3. “Monitoring” page

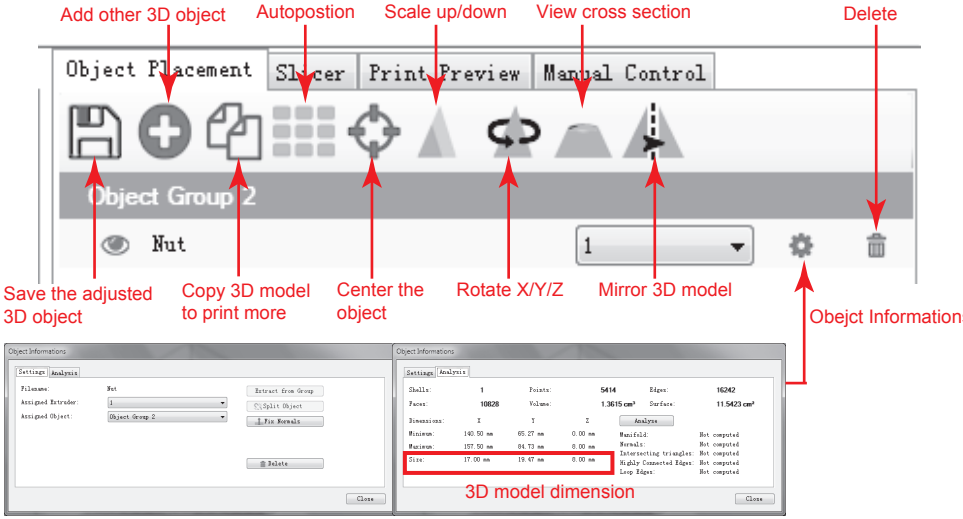
As Fig. A shown , click “Monitoring” to check the current print state.

NOTE: Every click can only have one current preview snap shot.

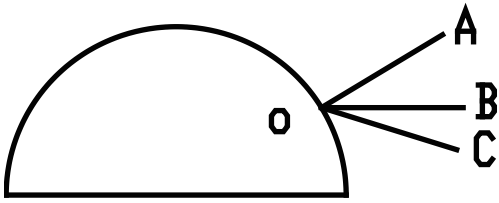


7.10 Repetier-Host Basic 3D Printing

1. 3D object can be adjusted such as scale down/up X/Y/Z, rotate X/Y/Z, copy, mirror, autoposition and split before slice. After adjusting the object, It is better to click “Center Object”.



2. For 3D printing layer by layer base on FDM process, we suggest printing the model with OA structure. If printing the model with OB or OC structure (Call Overhang Printing), the parallel or downward layer will fall down on the model or on the platform due to no supporter to the layer. So, you need add supporter for overhang object.



Remark:

OA – the structure is upward to stretch

OB – the structure is parallel to stretch

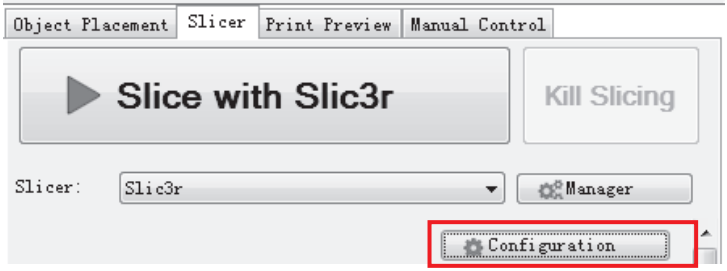
OC – the structure is downward to stretch

3. The 3D model must be closed surface or line to print base on FDM process. If below message appeares, it is better to repair the object before printing. Recommend repaire website: https://netfabb.azurewebsites.net.

```
The object is not manifold. This essentially means, that it is not
watertight. This normally causes problems during slicing, resulting
in unwanted results. We strongly advice to repair the file. One free
repair service is: https://netfabb.azurewebsites.net
```

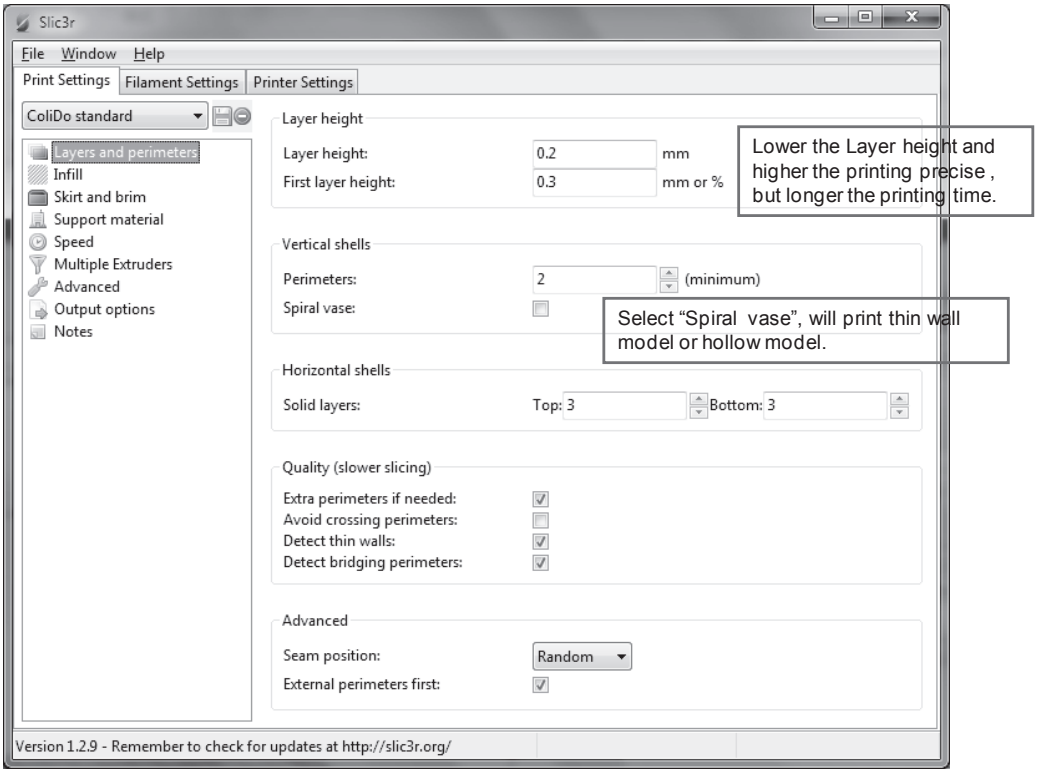
7.11.1 Slic3r settings

For printing setting, you can click “Configuration” to review or have your customized “Print/Filament/Printer Settings”in Slic3r for advanced user.

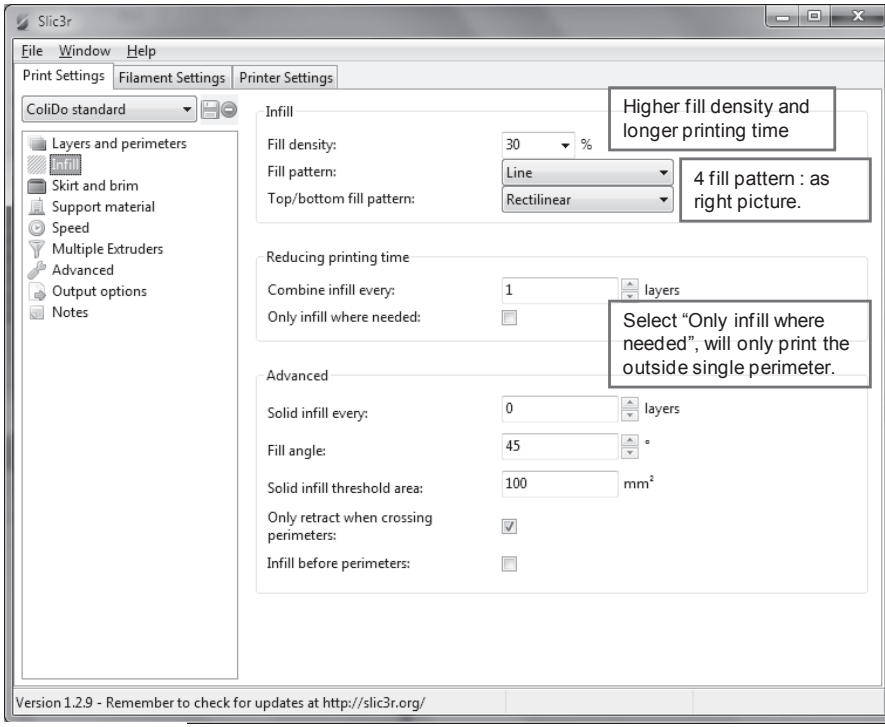


7.11.1.1 Print Settings (For example “CoLiDo standard”)

a. Layers and perimeters

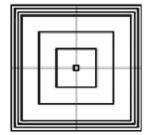


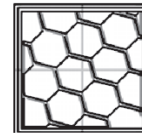
b. Infill



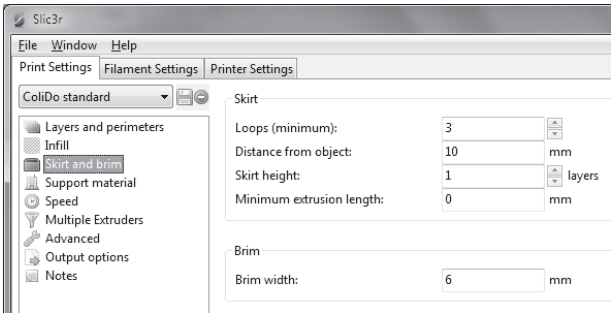

Line

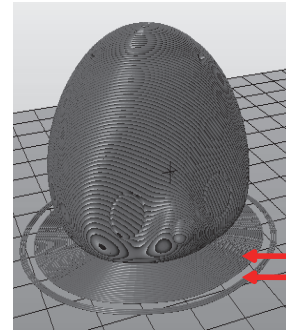

Rectilinear


Concentric

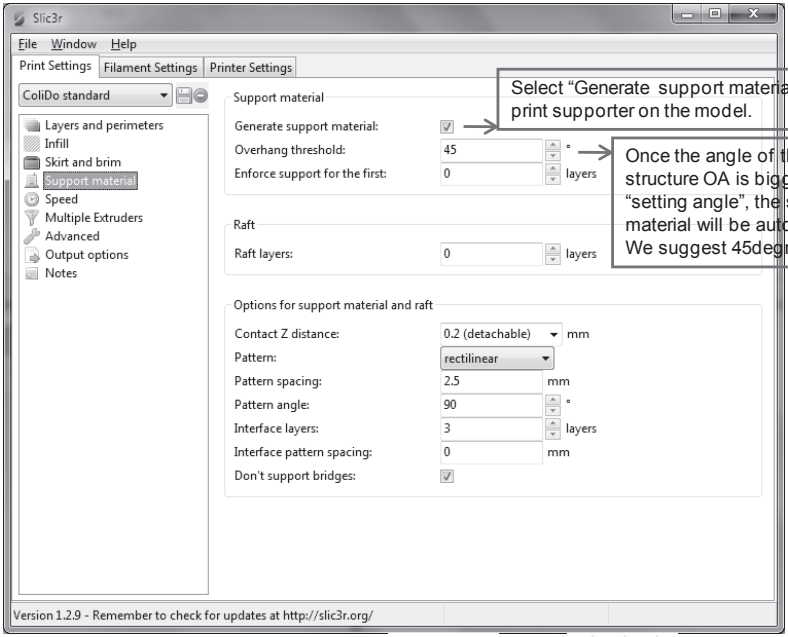

Honeycomb

c. Skirt and brim





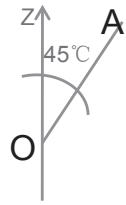
d. Support Material



Select “Generate support material”, will auto print supporter on the model.

Once the angle of the overhang structure OA is bigger than the “setting angle”, the support material will be auto generated. We suggest 45degree

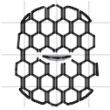
Overhang threshold:



Support Material Pattern:

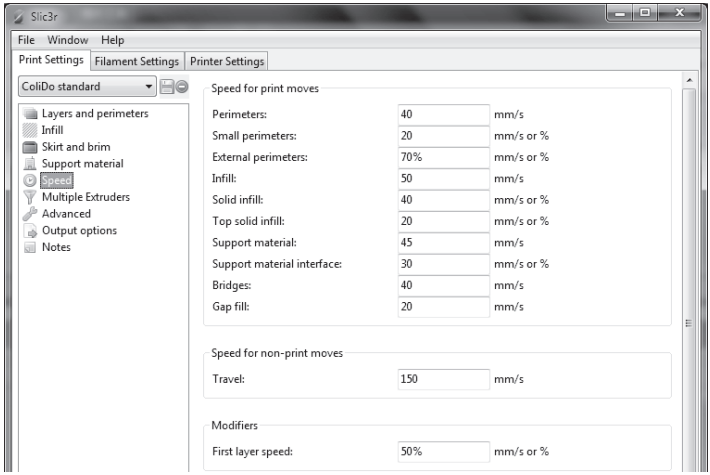
Rectilinear

Rectilinear Grid



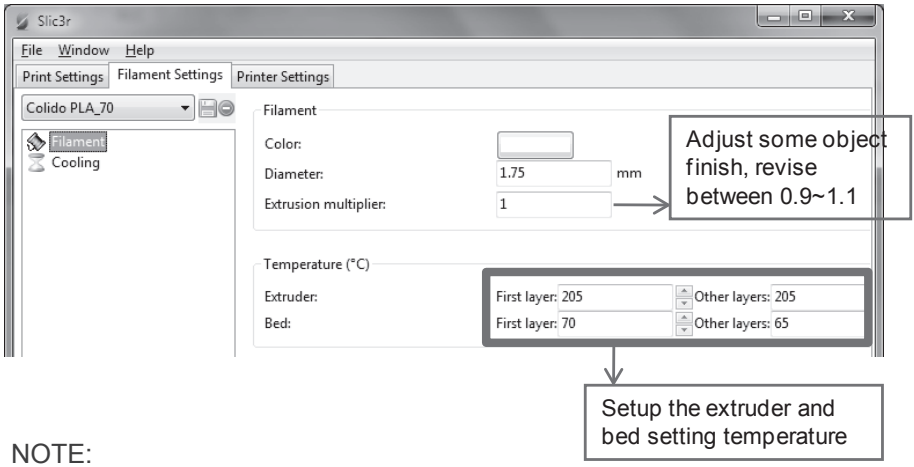
Honeycomb

e. Speed



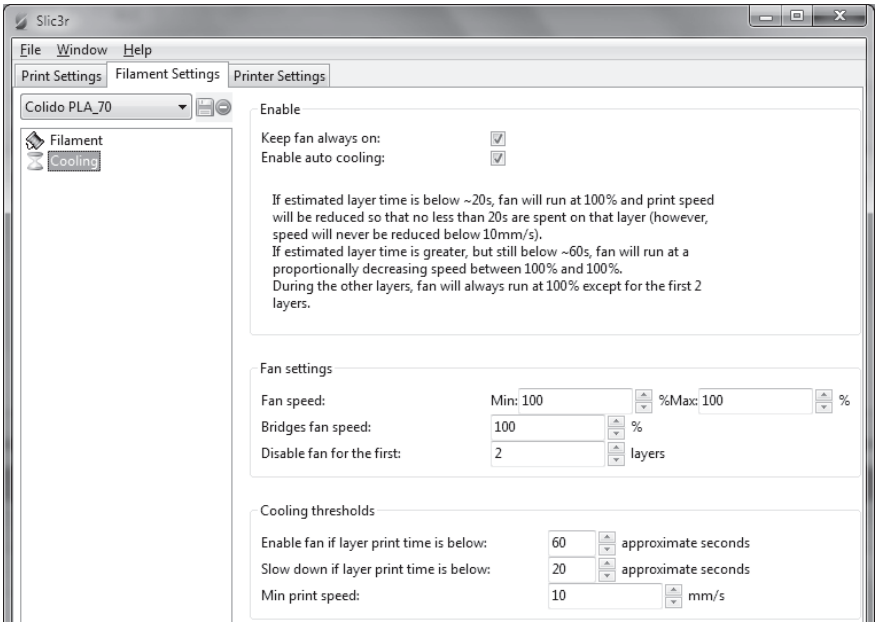
7.11.1.2 Filament Settings (For example “CoLiDo PLA_70”)

a. Filament



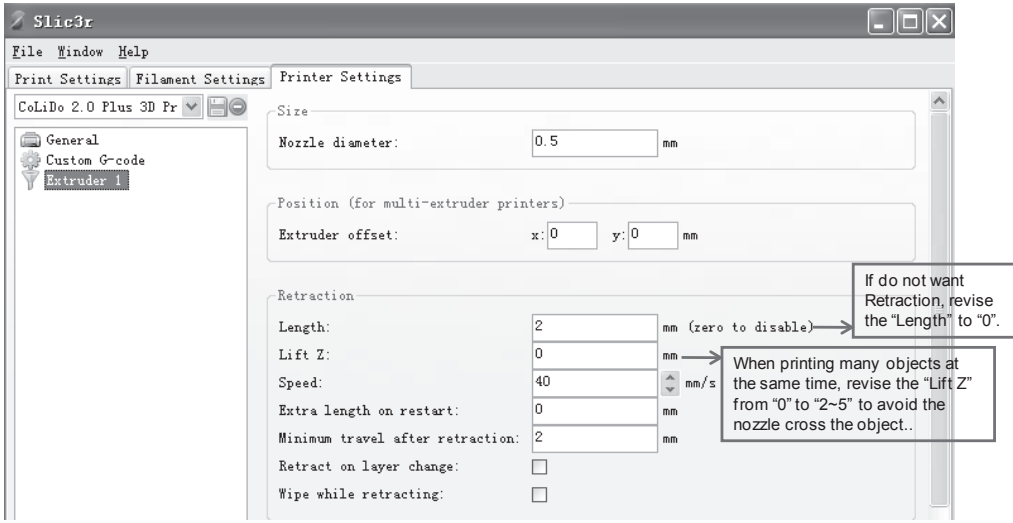
NOTE:
To revise the temperature, need click the up/donw narrow instead of revise the number directly.

b. Cooling

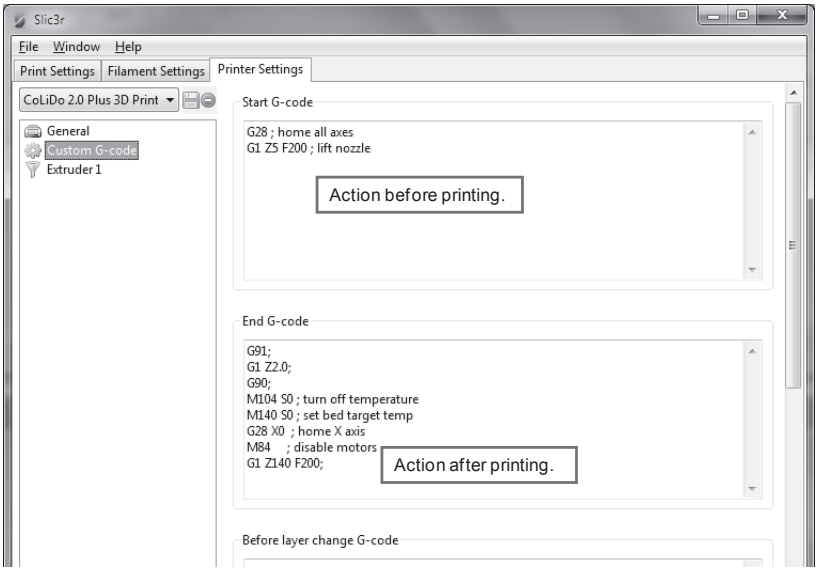


7.11.1.3 Printer Settings

a. Extruder 1

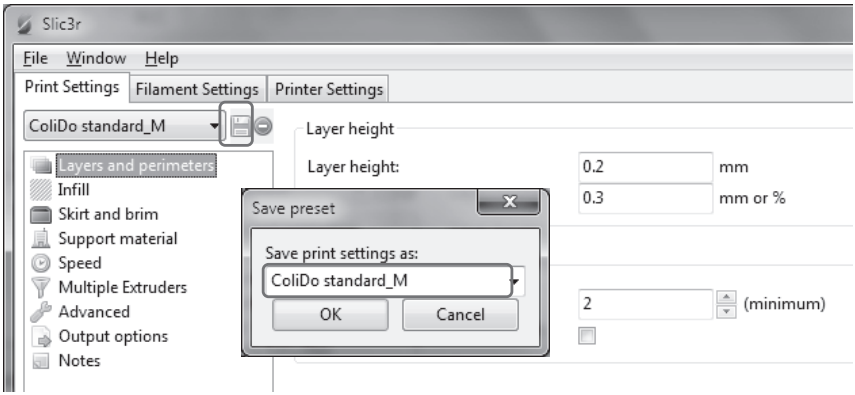


b. Custom G-code



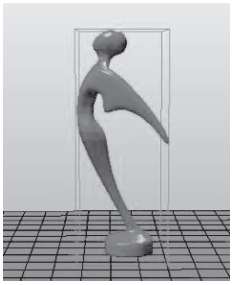
7.11.1.4 Save the settings

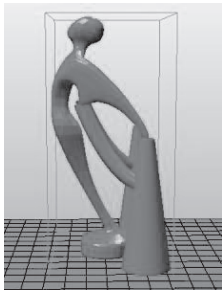
If you want to save the revised settings , click “Save” and have customized name. Then you can select customized name/settings when you slice.



7.11.2 Other Skills

a. Design supporter on the 3D model to aviod overhang structure (the supporter can be easily removed.)





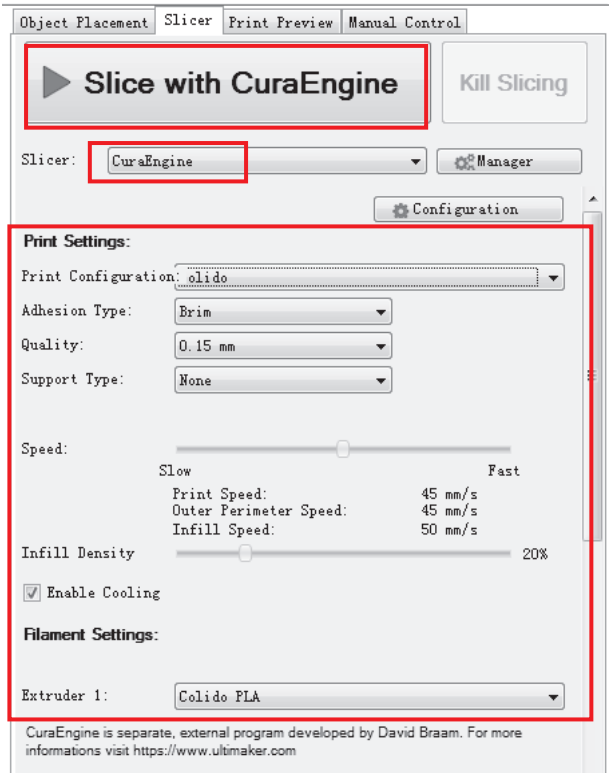
b. When printing the hollowed-out object, it is better to lower the nozzle temperature by 5~10 degrees to avoid silky threads.

c. If the object is bigger than the printer printing area, it is better to divide the object in several parts to print, then assemble together.
If the object is smaller, it will easy moving on the platform and offset, it is better to copy printing several objects at one time.

d. The printing environment has minor impact on the filament sticking condition. If cold printing environment, it is better to increase the nozzle and platform temperature 5~10℃ and vice versa.

7.11.3 CuraEngine

It is another slicer software to convert 3D model to g-code.

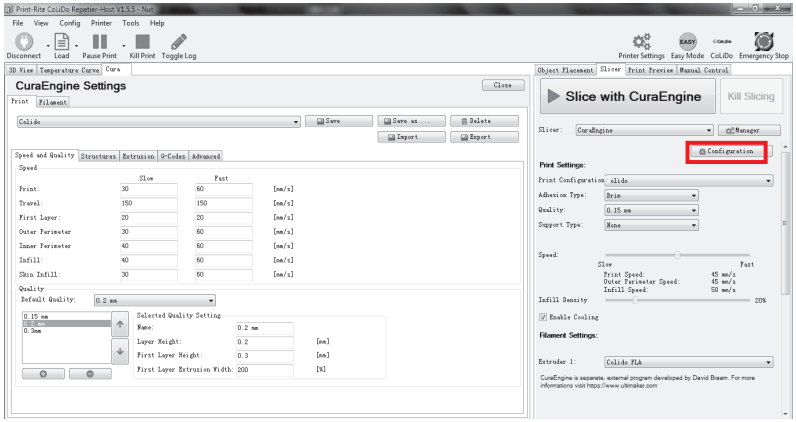


Step1: Select “CuraEngine”;

Step2: Select “Print Settings”and “Filament Settings”;

Step3: Click “Slice with CuraEngine”.

If you want to view or customize CuraEngine settings, cilck “Configuration”.

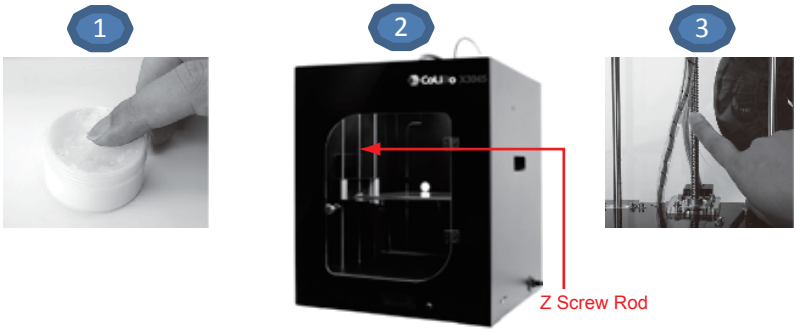


Lubricate the Z-axis Screw Rod and the X,Y Rods

After printing around 50 hours, you should lubricate the Z-axis screw rod and the X,Y Rods.

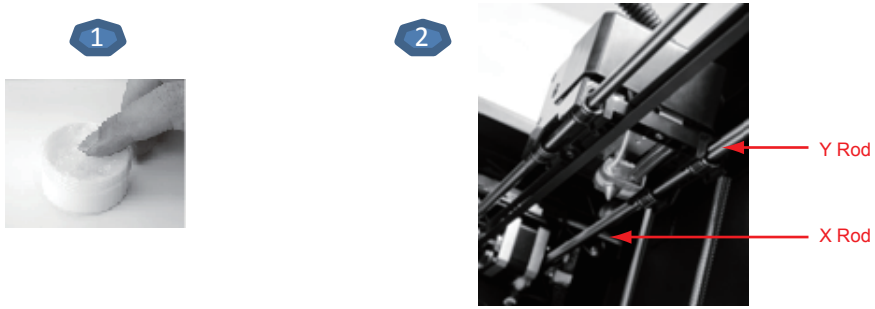
To lubricate Z-axis screw rod, please follow up below process:

1. Prepare the lubricate (own by customer) such as SKF Bearing Grease .
2. Slowly rotate the two Z screw rods (Left and Right) to move up/down the platform of the 3D Printer.
3. Use a clean, lint-free cloth to spread the grease onto the top/bottom of the Z-axis screw rod.
4. Make sure the grease cover the inside of the Z-axis screw rod.



To lubricate X, Y Rods, please follow up below process:

1. There are 2pcs X Rods and 4pcs Y Rods on the printer as below picture.
2. Apply small amount of the grease directly onto the exposed area of the Rods and manually move the printer head forward/backward and left/right to spread the grease. Too much lubricate will cause the printer head moving blocked.



Consumable (Filament)	
? Question	Solution
What is the PLA/ABS default setting temperature?	1. PLA: Nozzle temperature is 205℃， Platform temperature is 65~70℃; 2. ABS: Nozzle temperature is 220℃， Platform temperature is 100~110℃.
How to store the filament when the printer will is out of use for a long period of time?	If you do not use the the filament for a long time, keep your filament spool or cartridge in a closed plastic bag to avoid the filament absorbing the moisture. Also, ensure insert the filament tip into the small hole of the spool to avoid filament entangle when use next time.
How about the length of 1000g and 500g PLA/ABS filament?	1. 1000g: PLA around 320~330m， ABS around 390~400m; 2. 500g: PLA around 160~165m， ABS around 195~200m.
Can Printrite filament compatible with other 3D printer?	Yes, Printrite filament can compatible with other FDM 3D printer, such as Makerbot, Afinia, Reprap, UP!, etc. The filament diameter should be 1.75mm.
3D Printer	
? Question	Solution
Does the printer support offline printing?	Support offline printing by using SD card.
How long will it take to print an object?	The required time depends on the object size and resolution level. The higher the resolution level, the slower printing speed. The printer is configured with different print setting option: Best, Standard, draft. After you select the printing setting to slice, the repetier software will show the needed time .
How to fix the clogged nozzle?	1. Refer to chapter 6.7, once the nozzle reached the setting temperature, please press the printer head arm and at the same time pull on the filament to extract it from the nozzle. 2. Refer to the label on the printer, clean the nozzle using clean nozzle tool in the accessory. 3. Disassemble the printer head by unlocking the screws on the Fan, clean the blocked filament inside the nozzle.
Can I adjust the parameter during printing?	For new user, we do not suggest adjusting the parameter during printing. For advanced user, you can push the knob to select “Control” to adjust Nozzle or Bed temperature and printing speed during printing.
How can I know if the printer is properly working **?**	Refer to chapter 6.2~6.4 in user manual, print one of the test file in SD Card supplied with printer. (For example: PDT2.gco for PLA filament, ADT2.gco for ABS filament)
The filament cannot come out from the nozzle during printing?	1. The platform maybe too close to the nozzle tip, which will prevent the filament extruding from the nozzle. Please select "Prepare"-"Calibrate Mode" of LCD screen to re-calibrate the platform. (refer to chapter 6.2 in user manual) 2. Remove the filament from the printer head (refer to chapter 6.7 in user manual), cut the filament tip flat, make a length of filament straight and re-load it into the printer head. Make sure that the filament is properly inserted into the nozzle receiving port. 3. Disassemble the printer head, check the gear which is pulling the filament into the nozzle. If there are presence of filament powder residue is filled in, clean the gear using the brush. Check also if the gear tooth is damaged. If yes, replace the gear with a new one.
The printer makes a clicking noise when printing?	1. The filament is not properly inserted into the nozzle . Please unload the filament, cut the end of the filament flat and re-load into the printer head. (refer to chapter 5.6) 2. It maybe a short length of the filament blocked in the nozzle from the last time it printed. Refer to chapter 6.7 in user manual, heat the nozzle and push the blocked filament into the nozzle tip by loading new filament, the blocked filament will be melted out.
The filament cannot be removed from the printer head?	1. Check if the nozzle actual temperature reachs the setting temperature; 2. Refer to chapter 6.7 in user manual, when the nozzle actual temperature reach the setting temperature, press the printer head arm and push a bit filament into the nozzle until the filament come out from the nozzle, then pull the filament out quickly.
The printed sample stick to the platform too tight and cannot be removed?	1. Please wait a few minutes for the platform and the printed samples cooldown, then remove the printed sample. 2. If the printed samples still stick to the platform tightly, please carefully remove it using a scalpel.

3D Printer	
? Question	Solution
The printed object cannot stick to the platform?	1. Make the temperature setting correct. PLA, nozzle temperature is 205℃, platform temperature is 70℃; ABS: nozzle temperature is 220℃, platform temperature is 110C. Make sure the selected setting is matched with the material you are using. 2. Re-calibrate the platform to meet "calibration standard condition" (The test sheet must be lay down flat in the platform and the test sheet must be touching the nozzle tip). 3.Make sure that the glass platform you are using is correct base on the filament material. No dust, oil or damage coating on the glass platform. If yes, please clean up using lint-free cloth or replace the platform.
The printer cannot read the files on SD card and cannot start to print with SD Card?	1. Turn off the printer and turn on again the printer. 2. If the printer still cannot read the file, please check if the files saved in SD card in .GCO format and correct file name (Engilsh word, number, underline, blank space). If the file is not .GCO format, please convert it to .GCO format through Repetier-Host software. (refer to chapter 7 in user manual). 3. Please double check if the SD card insert into the SD card slot well. If not, please re-insert.
How to clean the excess filament around the nozzle?	Preheat up the nozzle to 220℃ by rotate LCD knob to select“Control”-”Temperature”-”Nozzle”. Once the nozzle actual temperature reachs the setting temperature 220℃, clean the nozzle using the lint-free cloth or tissue.
Need pause/resume during printing?	1. During printing with SD Card, push the LCD knob and rotate it to select "Pause print"; Then push LCD knob and rotate it to select “Resuming print”. NOTE: Please be more patient after selecting "Pause print", the printer need ~30s to buffer. 2. During printing with Repetier control, click “Pause Job” and then click “Continue Printing”.
Need stop during printing?	1. During printing with SD Card, push the LCD knob and rotate it to select "Stop print". Once stop, the printing cannot be resumed. The printer head will go to home position and the nozzle & bed temperature will cooldown. NOTE: Please be more patience after selecting "Stop print", the printer need ~30s to buffer. 2. During printing with Repetier control, click “Kill Job”. The printer head will stop moving and the nozzle & bed temperature will cooldown. 3. If the printing still not stop after above, please turn off the printer, wait ~10s and turn it back on. Then push the LCD knob and select "Prepare"-"Auto Home" so the printer head go to home position.
Download files from 3D model website cannot be printed well?	1. Refer to chapter 7 in user manual, re-setup Repetier-Host and select correct filament material to print. 2. The printed object will have different printing effect with different filament material. For example, if the object cannot be printed well with ABS filament, you can test to print with PLA filament. 3. Check if the object shape is closed drawing, if it need scale up/down, rotating, adding supporter, etc to meet FDM process by refer to 7.8. If Repetier-Host shows warning message when load the object, it is better to repair the object through the website: https://netfabb.azurewebsites.net
The STL file cannot be sliced to gco file in Repeiter software?	When load STL file to Repetier software, the object will show all dark blue color in the 3D view window, it means that the file can be sliced. 1. If the object show some red and some green, it mean the object has unclosed line or surface and cannot be sliced. Also, Repetier-Host will show warning message to suggest repairing the object. 2. If the object is not touch with he printing area or exceed the printing area, please click “ place in the middle, or click “ scale down and then place in center.
How to set parameters for the 3D printer to insert them in Repetier/Slic3r software?	1. The Repetier-Host software of the printer has standard settings for selecting to use directly. 2. For the advanced user, click “Configuration” to revise the parameters. Refer to 7.9 in user manual for detail.

3D Printer	
? Question	Solution
How to do if the LCD Disply show “Err: MINTEMP”?	CoLiDo printer operation temperature is 15℃~32℃, please place the printer under the right room temperature such the printer can have good printing. Once change the printer to place in the right room temperaure, need turn off and turn on back to refresh the printer.
How much the printing speed?	The printer printing speed is 20~120mm/s.
Repetier-Host software cannot connect to 3D printer though the software installed correctly?	1. Ensure the printer connect to computer with USB cable and turn on; 2. Refer to chapter 7.2 , make sure that the selection of COM port in printer setting is right. The port should be the last one when turn on the printer and matched with COM port in Device Manager. Once connected, the Temperature Curve will be moving. NOTE: “COM1” cannot be used.
The printed object easy to warp when printing?	1. Adjust the adjusting knob to have the nozzle tip more close to the platform. 2. The contact area of the object to the platform is too small, use Repetier software to add brim before slicing: Click“Configure”- “Brim”, add the Brim width with “8~10mm”. 3. Add the nozzle and platform temperature higher 5~10℃. 4. Maybe have a cover to cover the top of the printer when printing ABS to avoid the heat dissipation too fast.
How to evaluate if the filament enough or not to print the object?	After convert STL file to GCO file in Repetier-Host software, customer can see the needed filament usage (Length) of printing the object . Customer can evaluate the actual filament length is enough to meet the needed filament length.
How to clean the coating glass platform if the remain filament stick on it?	1. Clean the glass platform using lint-free cloth or wet tissue. Do not use alcohol or any cleaning chemical solution in cleaning the glass platform, it will damage the glass coating. 2. If still cannot clean the remain filament on the glass platform, please replace a new one.
How to download Repetier for Mac OS or Linux?	Go to website Repetier.com to free download the Repetier software for opertion system Mac OS or Linux.
How to get free 3D modeling software?	Website to download free 3D modeling software: http://www.hongkiat.com/blog/25-free-3d-modelling-applications-you-should-not-miss/
How to get free 3D model to print?	1. Use 3D modelling software such as UG, 3DMAX and above free software to design your 3D model file and save as STL format. 2. Use scanner to scan 3D model . We recommend scanner “Structure Sensor”which need work with APPLE IPAD. 3. Download 3D model from Website: http://www.thingiverse.com http://www.hongkiat.com/blog/download-free-stl-3d-models/ http://www.hongkiat.com/blog/60-excellent-free-3d-model-websites/
CoLido Printer parts life time ?	Nozzle : 1500hours PLA and ABS Glass Platform : 300 times use in same location Motor : 3000 hours End Stop (Limit Switch) : 10000 times Belt : 2000hours Linear bearing : 3000hours Fan : 20000h Display panel : 20000h Rotary knob : 100000 times

If you need more assistance, kindly please contact with us:

Email: 3Dsupport@utec.com.mo