



# **CTC DIY PRINTER INSTALLATION AND OPERATION INSTRUCTION**

**Thank you for buying and using DIY 3D printer produced by  
CTC**

**Please read the installation and operation instruction carefully  
before use**

**Company Website: [www.ctcprinter.com](http://www.ctcprinter.com)**

## CATALOGUE

<b>CHAPTER 1 PREFACE</b> -----	<b>03</b>
THE SAFETY WARNING AND ATTENTIONS-----	03
<b>CHAPTER 2 MAIN MODULE ASSEMBLING STEPS</b> -----	<b>04</b>
1. MAIN MODULES-----	04
2. MAIN WOODEN SUPPORT MODULES ASSEMBLY-----	05
3. A1 MODULE-----	07
4. A2 MODULE-----	08
5. A3 MODULE-----	09
6. GENERAL ASSEMBLY & INTERFACES CONNECTION-----	10
7. DEBUGGING & NOTES-----	18
8. FINISHED PRODUCT DISPLAY-----	22
<b>CHAPTER 3 OPERATION</b> -----	<b>24</b>
1. SUGGESTED OPERATING & STORAGE ENVIRONMENT--	24
2. TECHNICAL PARAMETERS-----	24
3. OPERATION & APPLICATION SOFTWARE-----	25
4. INSTALL SERIAL PORT DRIVERS-----	32
5. ON-LINE PRINTING-----	34
<b>CHAPTER 4 MAINTENANCE &amp; TROUBLE SHOOTING</b> -----	<b>37</b>
1. CLEAN THE FEEDING DEVICE OF PRINTER HEAD-----	37

2. ADJUST THE STEPPER MOTOR BELT SYNCHRONOUS TRANSMISSION-----	37
3. MAINTENANCE THE Z-AXIS' FIXED AXIS & DRIVING SCREW-----	37
4. COMMON FAULT & ELIMINATING METHODS-----	37
<b>CHAPTER 5 WARRANTY-----</b>	<b>40</b>
1. QUALITY ASSURANCE-----	40
2. AFTER-SALES SERVICE ASSURANCE-----	40
3. RETURN POLICY-----	40
<b>CHAPTER 6 PACKING LIST (APPENDIX)-----</b>	<b>42</b>

## Chapter 1    PREFACE

When you receive CTC printer, please check whether the package is in good condition, and read the product specification carefully after open the package, moreover, read and follow the paragraph with  LOGO strictly. Please check whether the parts are in good condition and complete according to the packing list, then, following the installation steps to assembly and testing the printer until a quality product has been printed. After using period of time, there is a customer period maintenance needed, furthermore, properly maintenance can extend the life of the printer by several years.

### **The safety warning and attentions**

To acquire an optimal 3D model, please use the appropriate material of CTC. The warranty coverage would not be included if the printer needs a maintenance and troubleshooting which caused by using the others' print material, not CTC's.

 Please be sure the supply voltage is 110V or 220V in your area before power connection, since users in different places use different supply voltage. You must adjust the input voltage to match the voltage in your area, or the warranty coverage would not be included if there is a fault caused by a wrong input voltage.

 It is forbidden to touch the model, extruder, printing platform and the high temperature parts inside of a printer when the printer is working or has just finished work!

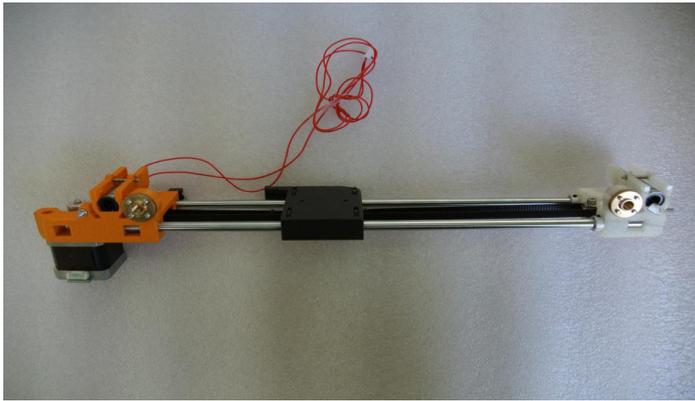
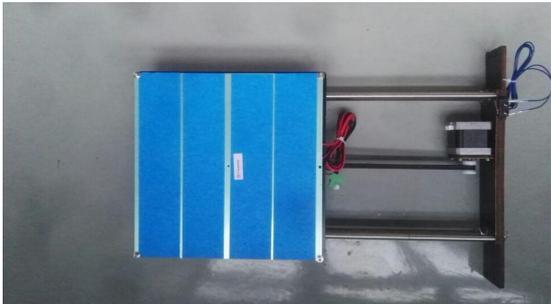
 It is forbidden to touch the power, power interface, wires of the mainboard and rotating fan when the printer is energized. Moreover, it is forbidden to print the model on the heat board directly, and a glass board with masking tape is must.

If you have any problem, please contact the customer services of CTC 3D printer, or participate in the QQ group of CTC which is 102304634 to get an online technical support.

## Chapter 2 MAIN MODULE ASSEMBLING STEPS

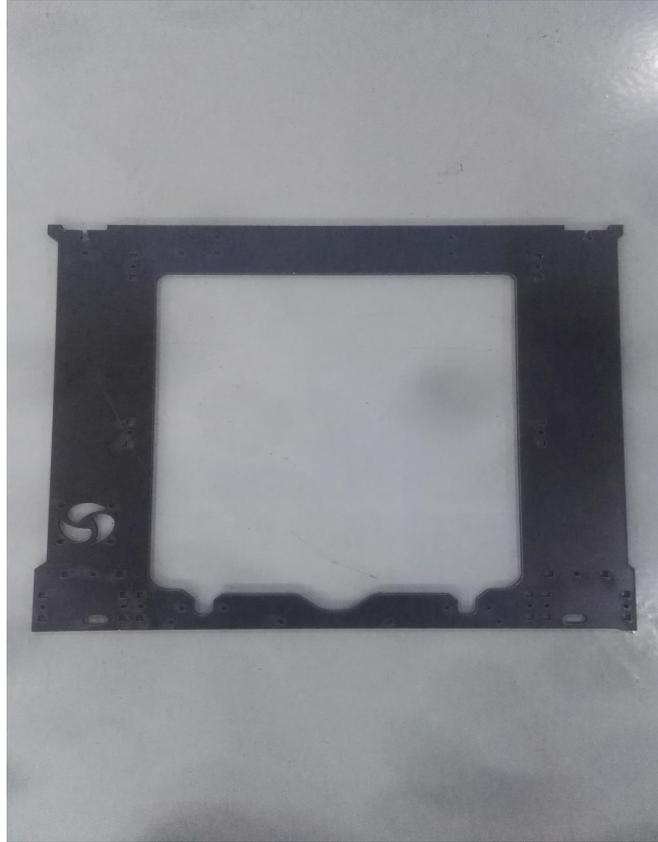
**1. Main modules (The list from A1 to A3 are large wood make parts, others parts name are collected in the DIY material list )**

NO.	NAME	QTY	PHYSICAL PHOTO
1	A4 Module (located at left of Z-axis)	1	 <p style="text-align: center;">Picture 01</p>
2	A5 Module (located at right of Z-axis)	1	 <p style="text-align: center;">Picture 02</p>
3	LED screen Module	1	 <p style="text-align: center;">Picture 03</p>

4	Q Module	1	 <p style="text-align: center;">Picture 04</p>
5	P Module	1	 <p style="text-align: center;">Picture 05</p>

## 2. Main wooden support modules assembly

Please find out the wooden supports marked with A1, A2 and A3 separately when you open the product box. Assembly the printer main support by using ③,④,⑥, the things to note here are the hole location of each board should be aligned and the assembly direction should be considered. The screw connection in picture 01,02,03,04 and 05 could use picture 06 as a reference.



Picture 01 (The front view of A1 wooden support)



Picture 02 (The front view of main support after assembled)



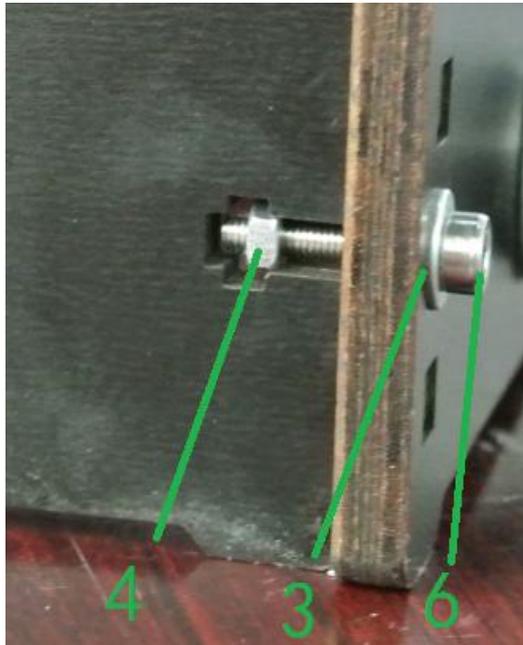
Picture 03 ( Back view )



Picture 04 ( Right view )



Picture 05 (Left view)



Picture 06 (Method of screw connection)

## 2.A2 Module

Parts: ⑩ Fan ×1, ⑦ M3\*30mm screw ×4, ⑧ plastic sleeve ×4 · ③ cushion ring ×4,  
④ nut ×4;

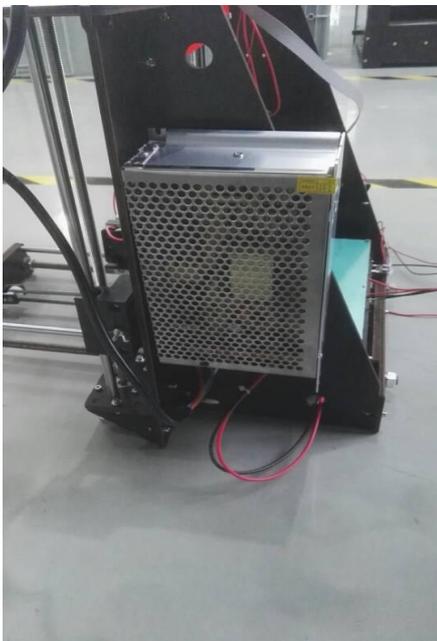
Please assemble the fan located at the back of air outlet which is located at the left side of A1 module by using ⑦, ③, ④. The label of the fan should towards the back of

A1 module, and 4 plastic sleeves ⑧ are needed. The assembly direction is shown as picture 05.

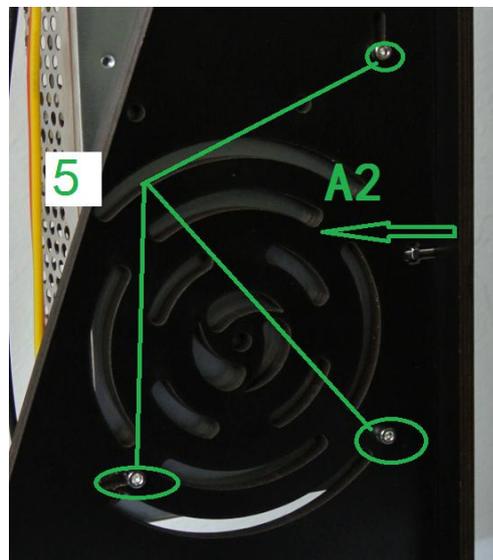
### 3. A3 Module

Parts: ② power ×1, ⑤ M3\*8mm screw ×3, ⑬ 3D power cable ×1, ⑥ M3\*16mm screw ×2, ③ M3 washers ×4, ④ nut ×4.

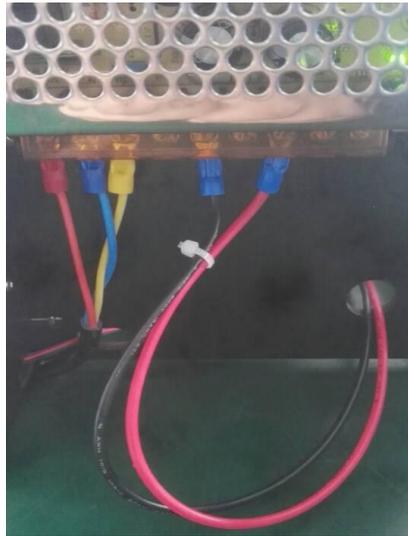
A2 module is shown as picture 08-01, fix the power ② on the right side of A2 module by using 3 screws ⑤, as picture 08-02 shown; fix 3D power cable on A2 module with ⑥ screw, ④ nut, and ③ washers, as picture 08-04 shown; connect the power cable and the wire of mainboard as same as picture08-03.



Picture 08-01 ( A2 Module)



Picture 08-02 ( back of the board, fixed screw)



Picture 08-03 (connection with power cable and mainboard) Picture 08-04 ( power cable & screw)

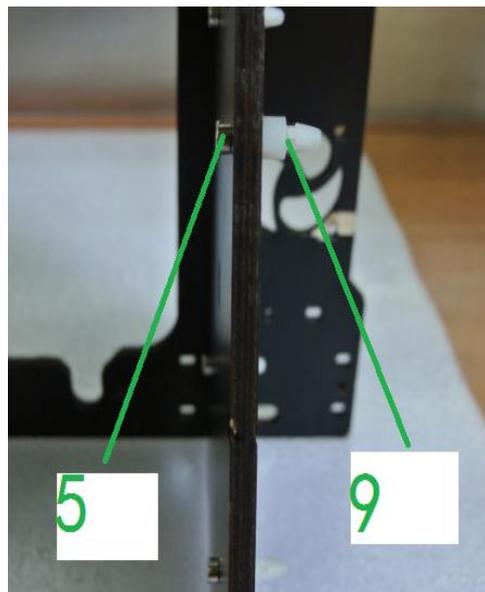
## 5. A3 Module

Parts: ⑬ Control board, ⑤ M3\*8mm screw ×4, ⑨ supporting ×4;

Insert 4 supporting ⑨ into the left side of A3 module with 4 screws ⑤, as picture 09-01, and 09-02 shown. Press the 4 supporting into the mainboard ⑬ holes, additionally, the direction of the supporting are shown as picture 09-03.



Picture 09-01 (side view)



Picture 09-02 (A3 module)

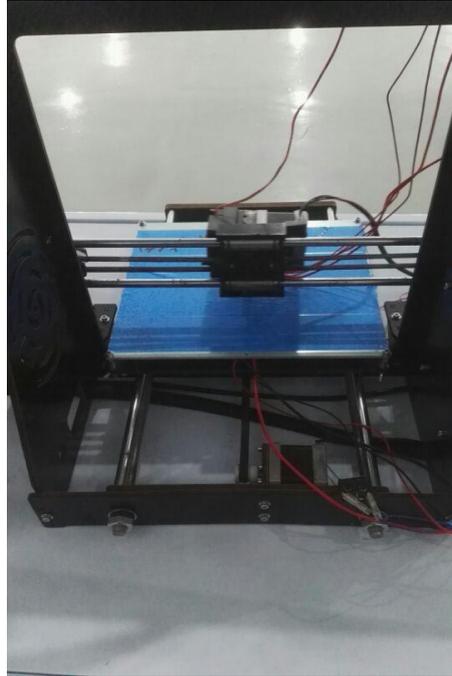


Picture 09-03 (Assembly method of mainboard)

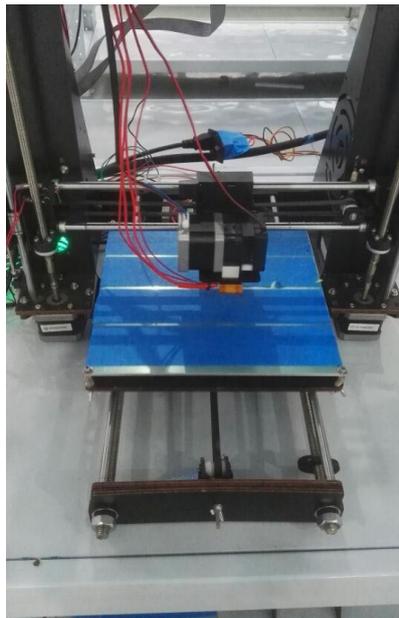
#### **4. General assembly and interfaces connection**

Please install the main modules first, then, install others parts to acquire a better assembly sequence.

Picture 09 and 10 indicate the general physical module after finished assembly. The connection sequence and function of mainboard interfaces are shown in picture 11 (Y-axis is the front and back direction, X-axis is the left and right direction, Z-axis is the up and down direction). To acquire a better assembly module, please take a reference with the pictures below, and familiar with the direction of the assembly module.

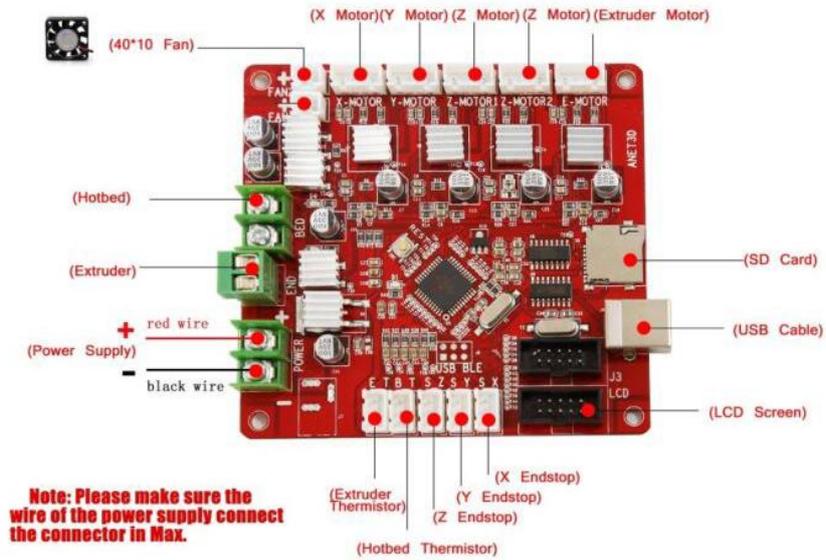


Picture 10 (Back view)



Picture 11 (Front view)

**Attention: Please connect the electronics wire to each components correspondingly.**



Picture 12 the interfaces of mainboard (1-25)

## 6-1 The connection steps of mainboard ports

Please refer to the picture.

## 6-2 Assembly of modules

1. Please collect each of the modules including A4 module, A5 module, LED screen module, P module, Q module (Parts of the structure may have a different color).

Those modules are shown as below.



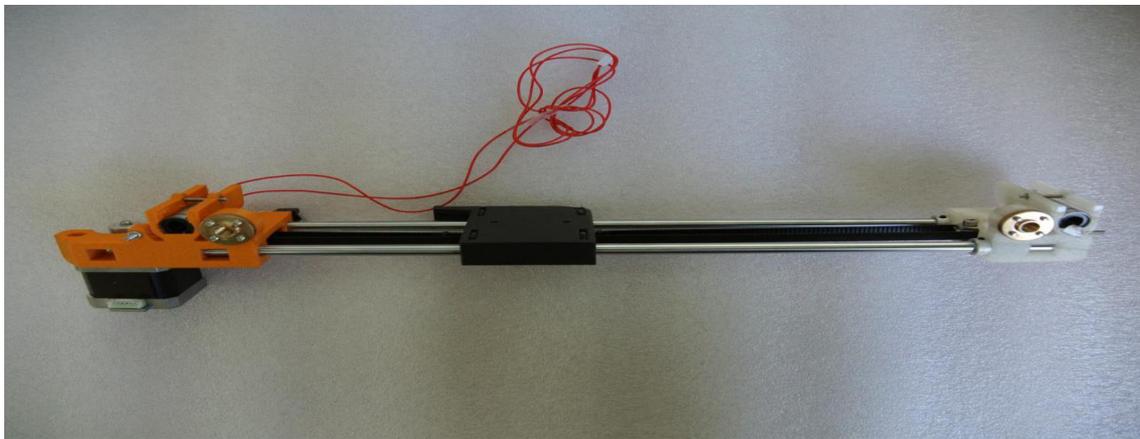
Picture 12 (A4 module)



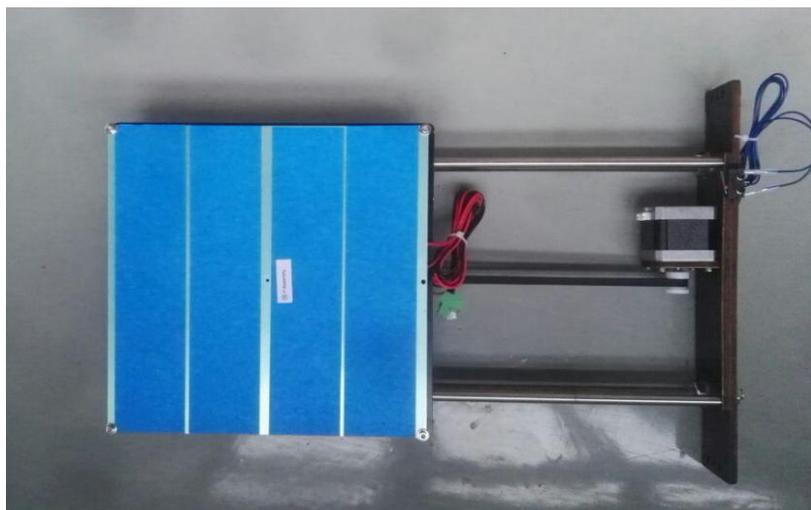
Picture 13(A5 module)



Picture 14 (front view and back view of LED screen, independently)

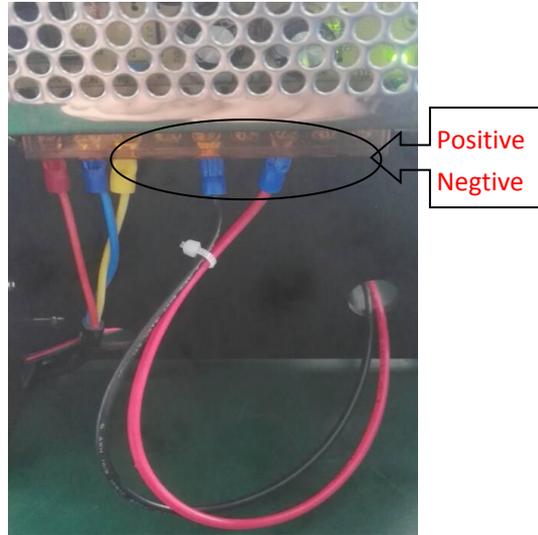


Picture 15 Q module (X-axis moving component)



Picture 16 P module (heat platform & Y-axis moving component)

2. Connect the mainboard of A3 module and the mainboard of A2 module by cable ⑱ . One side of the cable is described as picture 17 above and other side connects the port of mainboard ① .

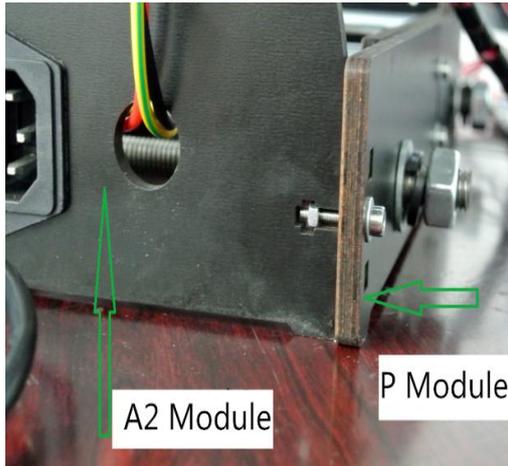


Picture 17 (cable terminals of the power)

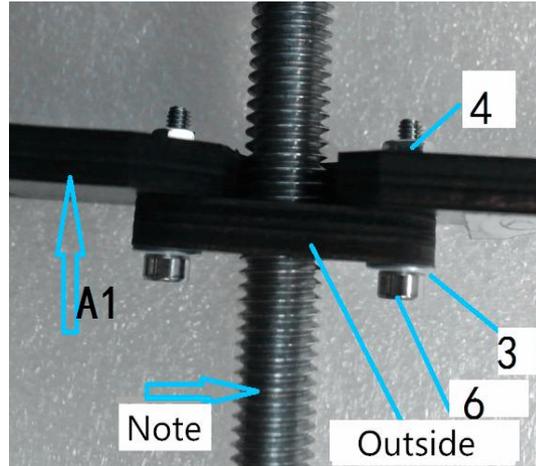
### 6-3 Assembly of P module

Parts: ⑥ M3\*16mm screw ×6, ④ nut ×6, ③ washer ×6, ① motor's cable (2 long & 3 short) ×5;

As shown in picture 18, please install and fix P module with the main module which has been installed before, and install the bottom of P module with A1 module. Blue cable is a limit cable of y axis which connects the port of the mainboard. The heat cable of hotbed connects with the number 2 port of the mainboard. The temperature sensor of head hotbed connects with the number 24 port of the mainboard.



Picture 18



Picture 19

### 6-4 Assembly of A4 module

Parts: ⑥ M3\*16mm screw ×3, ④ nut ×3, ③ washer ×3;

Align the holes both A4 module and A1 module (A1 module locates at the front of main wooden structure) and install A4 module at the lower left of A1 module. Connect motor with the number 12 port of mainboard by short cable harness 19 and connect the cable (the black one) of the limiter with the number 17 port of mainboard.

### 6-5 Assembly of A5 module

Parts: ⑥ M3\*16mm screw ×3, ④ nut ×3, ③ washer ×3;

Align the holes both A4 module and A1 module (A1 module locates at the front of main wooden structure) and install A4 module at the lower right of A1 module. Connect the motor with number 16 port of mainboard.

### 6-6 LED display assembly method

Parts: ⑥ M3\*16mm screw ×2, ④ nut ×2, ③ washer ×2, ⑬ LED cable;

Align the holes on LED display A18 with the holes at the top of A1 module of mainboard, and fix them. The screen of LED display is faced outside as picture 20 shows. Connect the LED display with mainboard by using the cable. The port

number 20 of mainboard is connected with EXP1 port of LED display's mainboard, and the port number 20 of mainboard is connected with EXP2 port of LED display's mainboard.

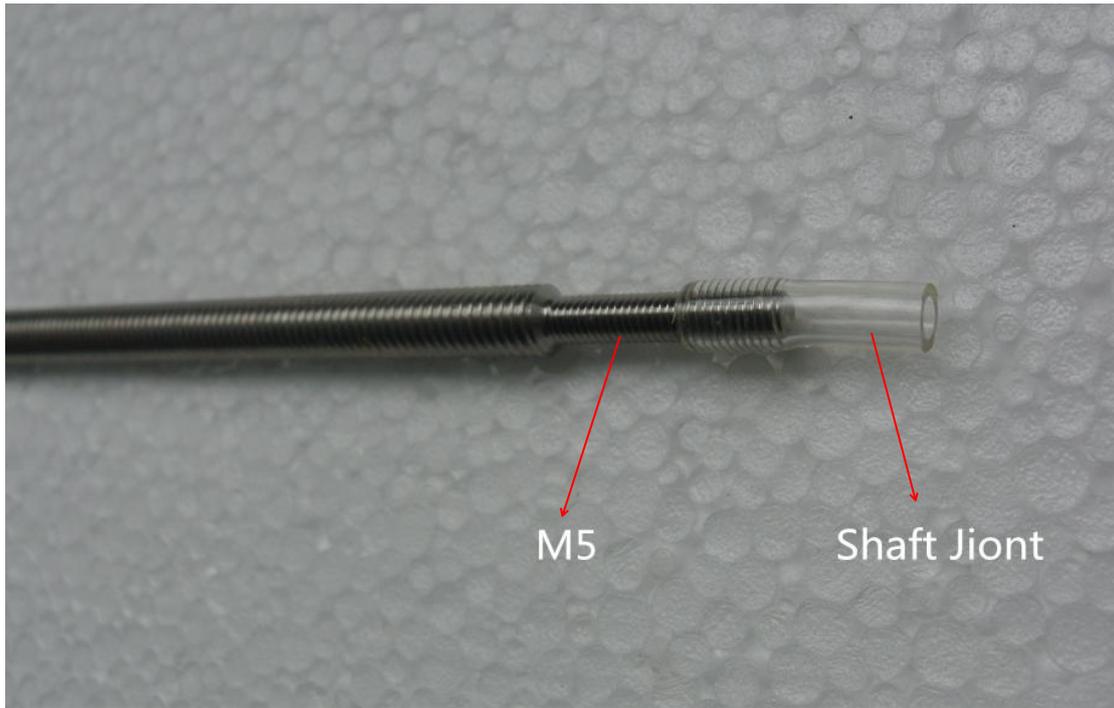


Picture 20    LED display

#### 6-7 Q module assembly method

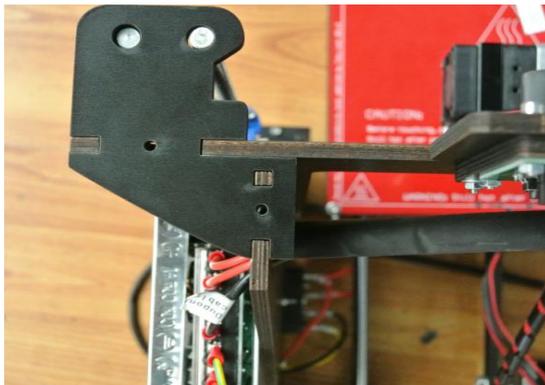
Due to there are different size errors occurred when the parts have been produced, please assembly Q module carefully to achieve a better assembly and function. If necessary, please adjust the right side of Q module moving to left or right to get a normal function. The length of belt can be adjusted according to the reality gap.

Before installation, please connect the lead screw M5 of Z-axis with flexible coupling 30, do not heat the flexible coupling before it has been connected with M5, the depth of flexible coupling inside M5 is nearly 10 mm as shown in picture 22.

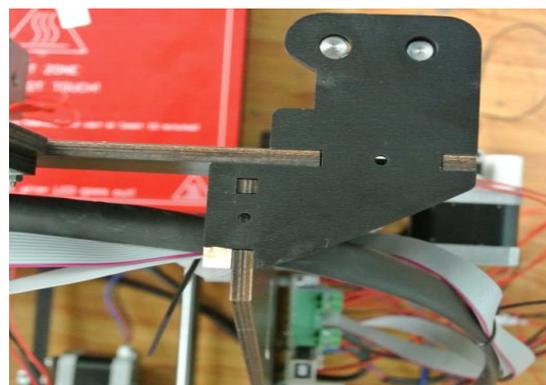


Picture 22 (adjustable flexible coupling)

Parts: A4 (left and right top plate) ×2, ⑥M3\*16mm screw ×4, ④nut ×4, ③washer ×4;  
Align A4 right plate with the A1 module and A2 module which are located at the right side of the mainboard, and fix them by screw. Align A4 left plate with the A1 module and A2 module which are located at the left side of the mainboard, and fix them by screw. The assembly picture is shown as picture 23 and picture 24.



Picture 23 (Top view)



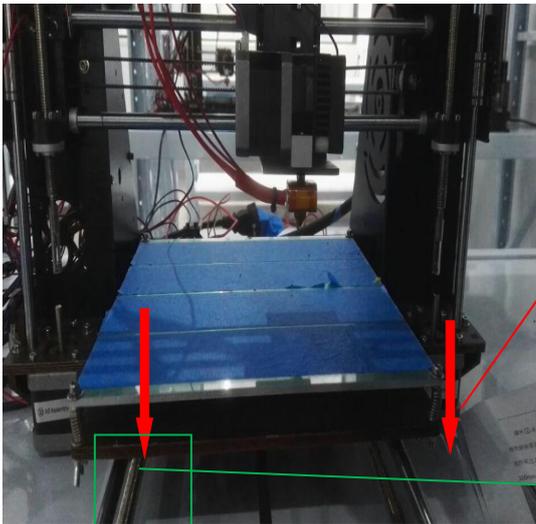
Picture 24 (Top view)

Parts: ①Smooth rod ×2, ②screw locking ring ×2;  
Smooth rod ① through outside holes of A4 plate (left and right) from up to down independently, and through the outside bearing of P module ②, the outside holes of A4 and A5. Adjust the distance between the left and right of P module, and move the

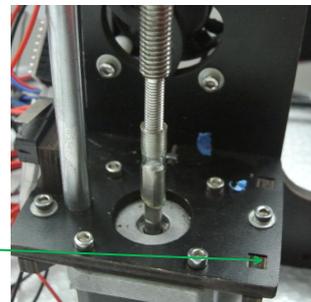
screw locking ring ⑦ to the connected area of screw rod ⑥ and A4 plate, and fix the screw locking ring.

Parts: ② screw rod ×2;

Screw rod ② through inside holes of A4 plate (left and right) from up to down independently, screw the screw rod in the inside hole of P module. Align and insert the flexible coupling M5 and A4 module with the extrude side of the motor on A5 module. As shown in picture 25, adjust the distance between left and right side of P module, to prepare for the next correct assembled. Adjust outer fringe's horizon distance of both screw rod ② at nearly 320mm, which is described as picture 27. The fastening screws of the coupling of the fixed motor above are shown as picture 26.

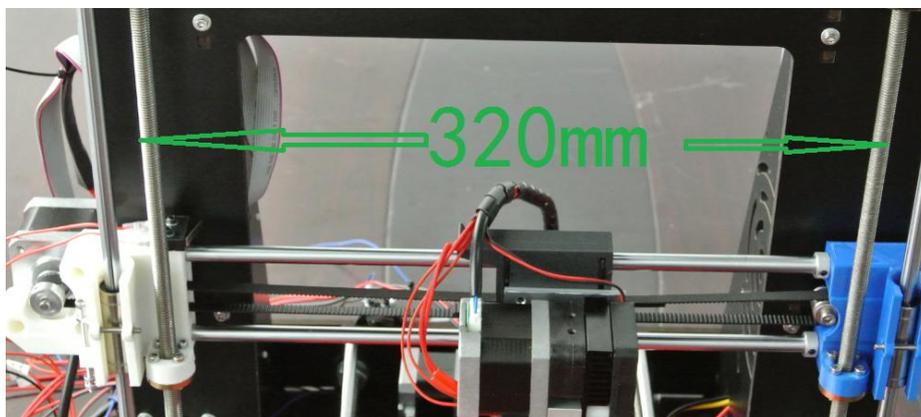


Picture 25



Picture 26

Press the screw rod and insert the flexible coupling into the extrude side of the motor of Z-axis.



Picture 27

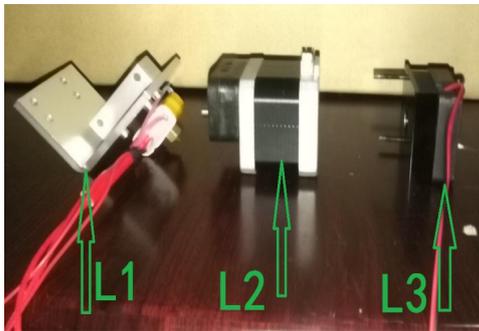
The cable of the limit cable of Q module (red color) is connected with the x axis

motor port.

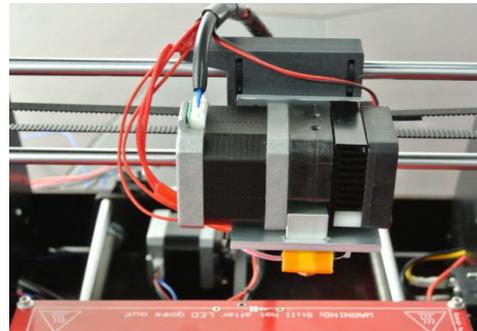
## 6-8 The print head assembly method

Parts: ⑥M3\*16 screw ×2, ③washer ×2, ④nut ×2;

Firstly, screw off the screws with the cooling fan of the print head, separate the print head into parts L1, L2, L3, as shown in picture 28. Install part L1 into the middle moving parts of P module by ⑥, ④, ③. Screw ⑥ through part L1 and the middle moving part of P module, then, install print head in the sequence which is the reverse sequence of separate the print head. The power cable ⑨ connect the motor of print head and the port number 11 of mainboard, the cable of cooling fan connect to the random port of mainboard, the cable which supplies power to print head connect the port number 4 of mainboard, the temperature sensor of print head is connected with the port number 22 of mainboard.



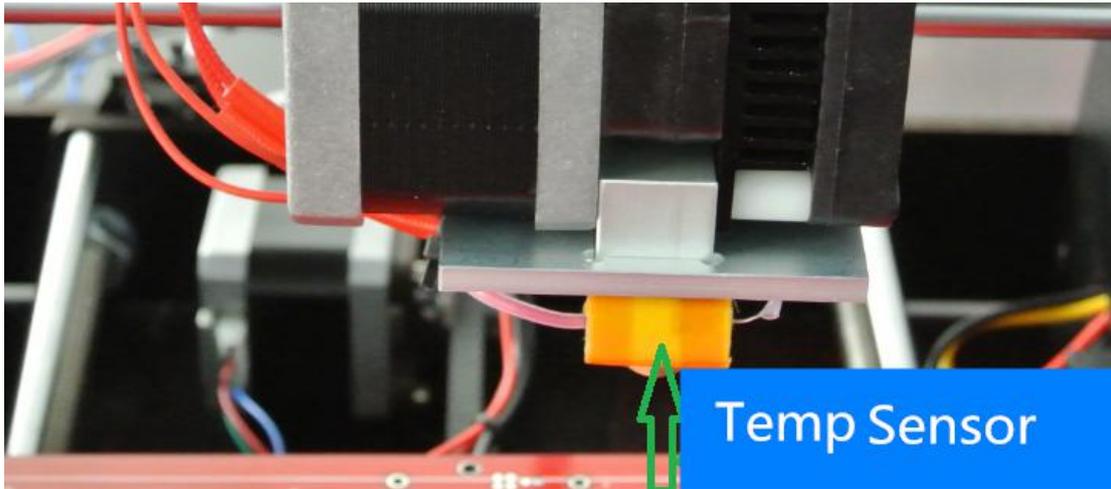
Picture 28 (separate the print head)



Picture 29 print head

## 5. Debugging and notes

7-1 Check and confirm the temperature sensor and inductive resistance located at the accurate position (the middle of heating aluminum block), as is shown in picture 30.



Picture 30 (measured temperature of electrical heating print head)

7-2 Check and confirm the cable of temperature sensor are welded firmly, and insulation layer of appearance is completely. Turn on the power, check the limiter function if is normal, especially the debugged of Z-axis' limiter. Select the function button and choose 'Prepare', then, choose 'Auto home' to check the function of each limiter. Adjust the nut matched with the long screw on the left side of Q module, and adjust the lowest position of Z-axis' downward, moreover, make sure there is an approximate gap between the print head with the print platform.

7-3 Under the situation of interruption of power supply, locate the square glass on right above the heating plate painted with red color. Furthermore, use 4 binders to fixed the square glass, adjusting the position of each binder which does not disturb the moving of print head. Move the print head from left to right manually, check whether there is a gap between the print head and the print platform, and adjust the print platform above and below with a gap. When the printer in the energized state, check the initial position of the print head and the gap between the print head and print platform to confirm the correct gap and position.

7-4 Check whether there is a deformation on screw rod of Z-axis. Adjust the gap between the motor coupling of A4 module and the plate below, and the gap between the motor coupling of A5 module and the plate below nearly 3mm, independently. As far as possible to keep the screw rod of Z-axis and the output axis of motor on a line. Additionally, keep the horizon distance of the screw rods of Z-axis equally from up to

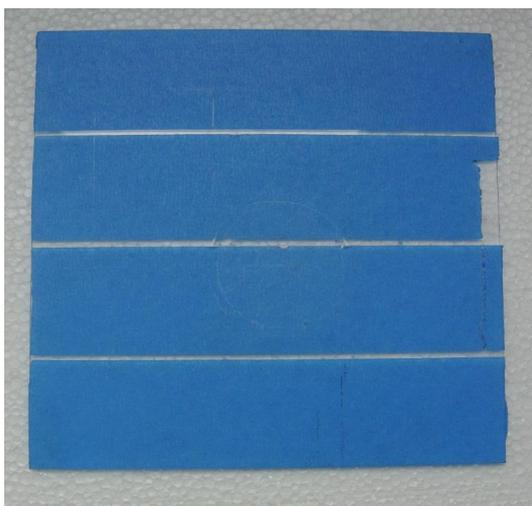
down. Please adjust the Z-axis until there is no noise with the rods when each motor is working.

7-5 The bundles of wires should not effect on each moving spaces and functions of moving parts. Adjust the heat temperature according to the using environment.

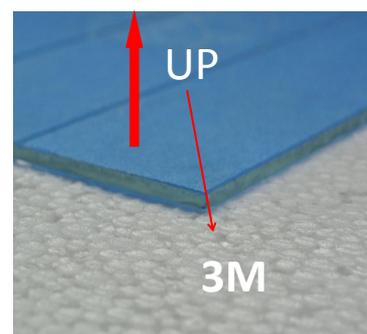
7-6 When cleaning the printer head, please fixed the square aluminum block by using a wrench, then, screw off the printer head. Furthermore, please avoid the tremble of the square aluminum block which would cause the heating pipe and temperature sensor broken when screw off the print head.

7-7 To enhance the adhesive forces between the printing model and the printing platform, the glass already be stuck with masking tape before the printer leaves the factory, consequently, please do not move the masking tape.

7-8 Please do not press the glass heavily which is located on the print platform, and loose the finished printing model by a knife when printing finished. It is easy to cause the glass broken if finished printing model moved by a heavily force directly. If customer does not move finished printing model out of the print platform in time when printing finished, the temperature of the printing platform will decrease into normal, therefore, it is hard to move the model out of the print platform. The solution is heating the print platform that increase the temperature of the platform into 100 centigrade, then, the model is easy to be moved.



Picture 31 (glass be stuck with masking tape)



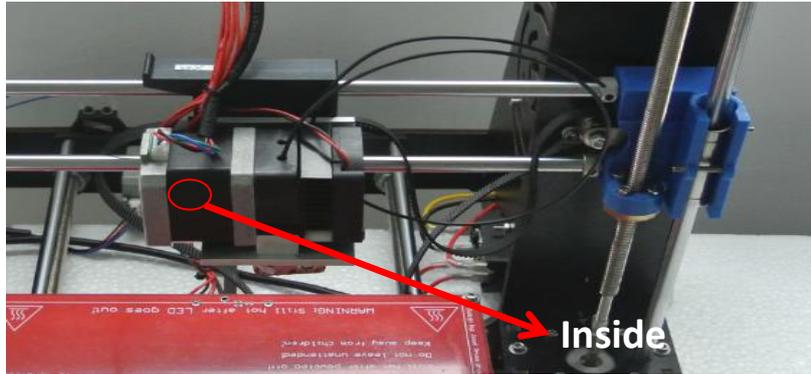
Picture 32

As picture 32 shows above, please locate the face of the glass with masking tape towards up.

7-9 Transmission belt adjustment: cut down the black ribbon on the belt, re-adjust the

length of the belt, then, fix and pack the belt by using black ribbon.

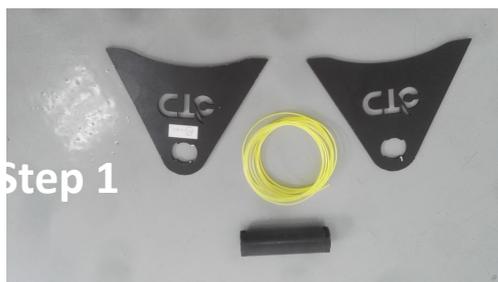
7-10 Loading port is the outside port which is above the print head. When printer starts to work (after re-loading), there is a need to insert the print material into the external port which is above the print head, (please do not insert the material into the inside port) as is shown in picture 33.



Picture 33

7-11 If the LED screen doesn't work, please check the connection between the LED display and the mainboard to see whether the connection is wrong. Then, check whether there is a loosen of the white rotating button which is located at the middle of the blue adjustable potentiometer at the upper left of the back of the LED display, if there is a loosen, please use a cross screwdriver clockwise rotate the screw lightly, and to see if the LED screen works or not.

7-12 Material reel assembly method and operation, as shown in picture 34-36.



Picture 34 (Material reel separated)



Picture 35 (Material reel assembly)

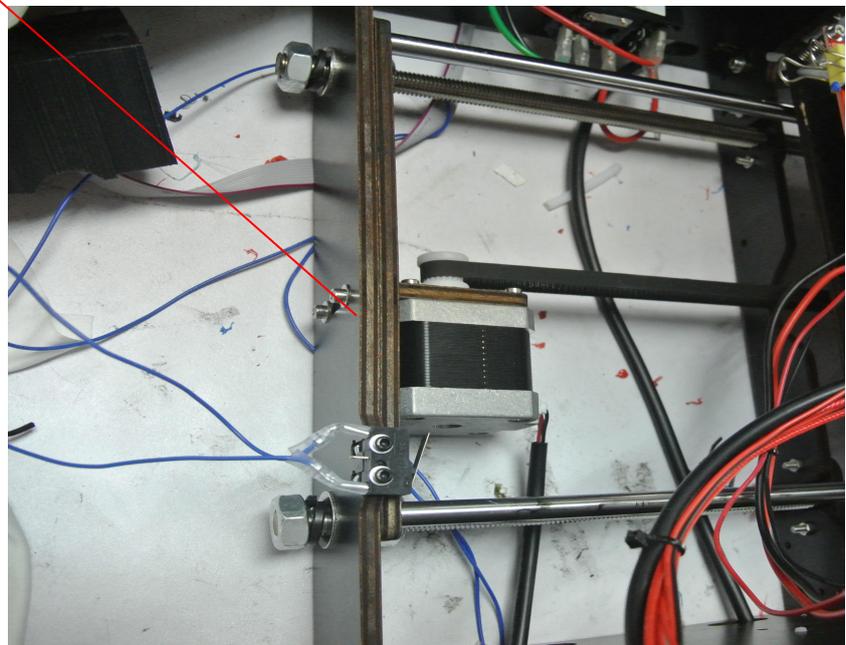


### 13、 Y axis motor board (A6)

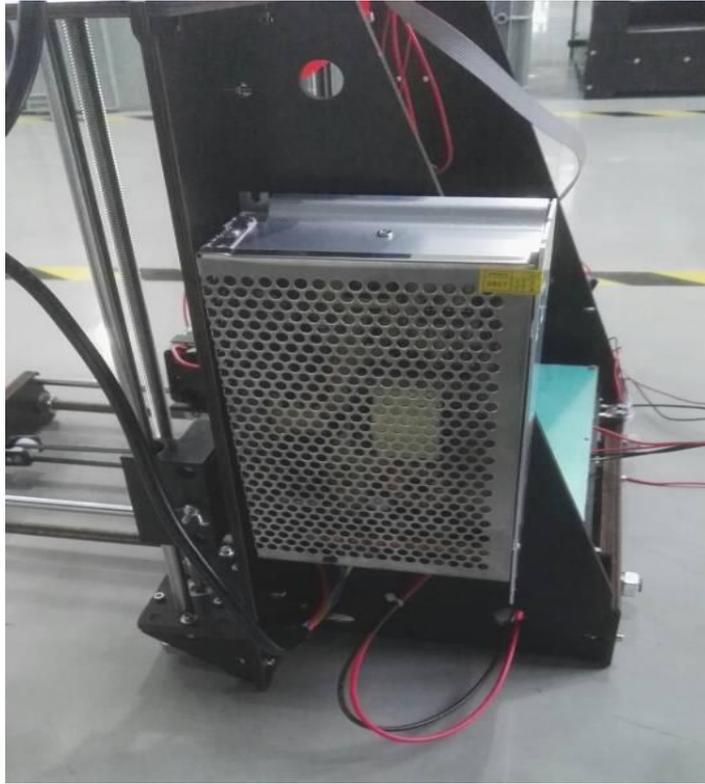
Y axis motor board is a spare part, please refer to the following pictures:



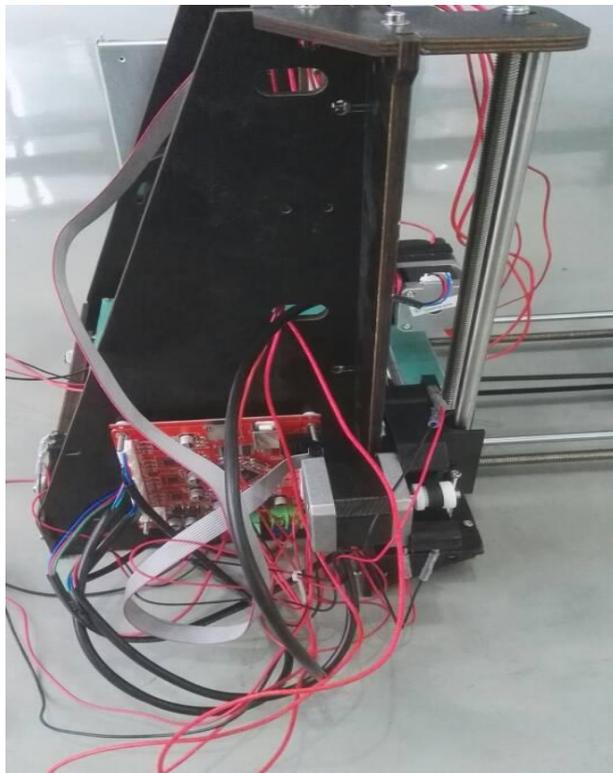
for Y motor



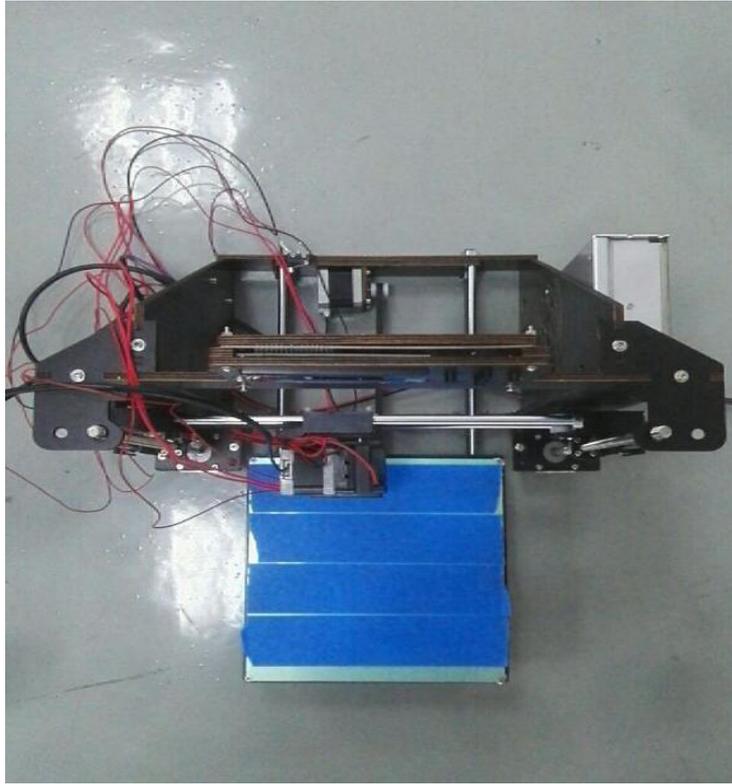
## 8. Finished product display (Picture 37 - 40)



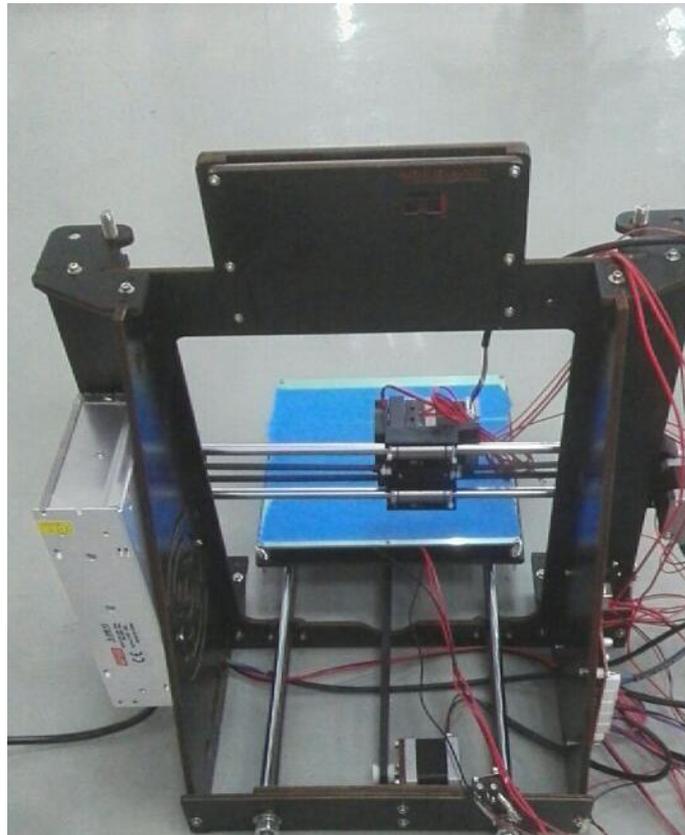
Picture (Right view)



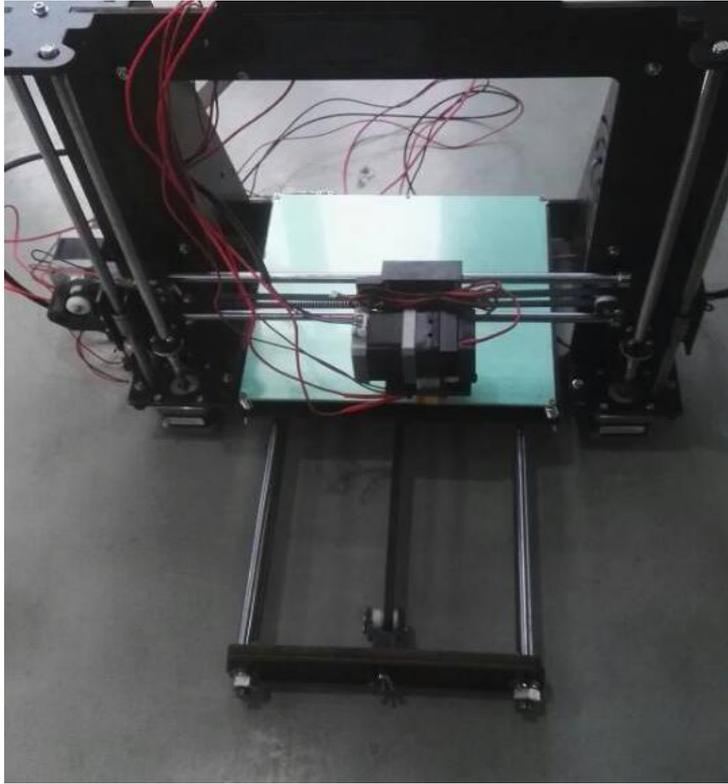
Picture (Left view)



Picture (Top view)



Picture (Back view)



Picture (Front view)

## Chapter 3 Operation

### 1. Suggested Operating & Storage Environment

Operating Environment: Well-ventilated, dust-free area; temperature 15°C-35°C; humidity 20%-80% (no condensation).

Storage Environment: Temperature 0°C-40°C; humidity 10%-80% (no condensation); clean environment without corrosive gas.

### 2. Technical Parameters

Buildable Dimensions: Maximum 200mm\*200mm\*180mm, smaller dimensions are suggested.

Input Voltage: AC 110V-220V

Supporting Operating System: Windows 7 / 8 (32-bit / 64-bit)

Software: Cura

Printing Material: PLA

Material Property: PLA special for 3D printing (exclusive formulation)

Layer Accuracy: 0.1mm-0.5mm

Location Accuracy: X-axis / Y-axis 0.011mm

Thread Diameter: Z-axis 0.0025mm

Spray Nozzle Diameter: 0.4mm

Motion Axis Speed: 30-100mm/s

Suggested Nozzle Moving Speed: 35-40mm/s

Input File Type: stl

Cooling Method: Air-cooled

Highest Printer Head Temperature: 260°C (generally 210°C)

Highest Bottom Plate Temperature: 130°C (generally 65°C)

### 3. Operation & Application Software

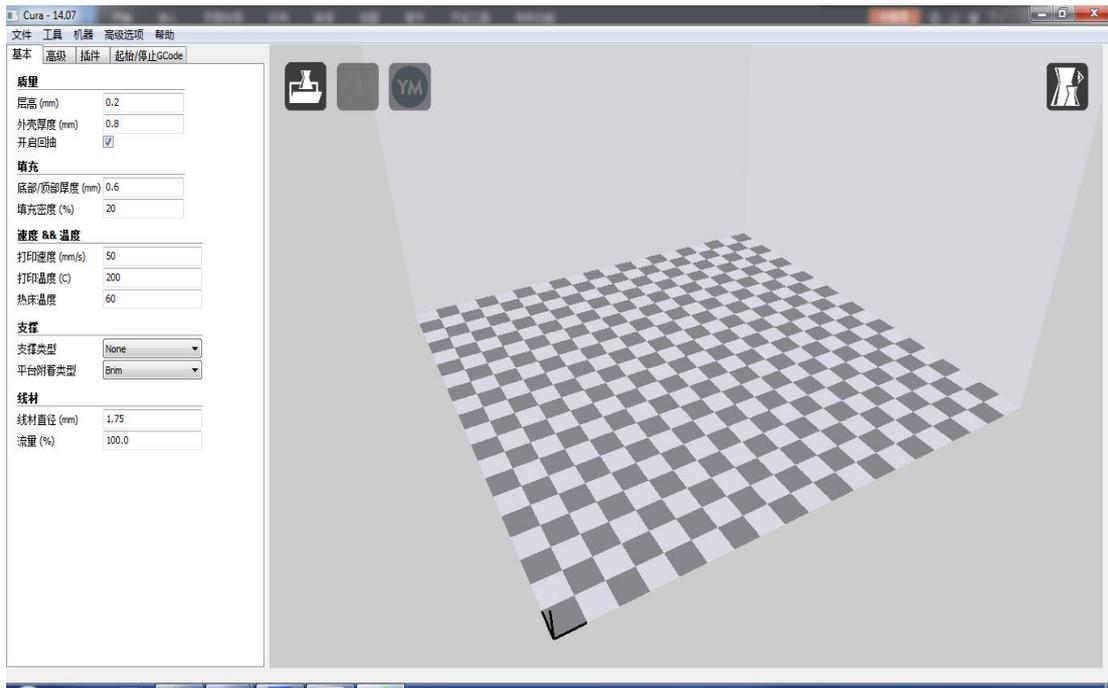
This DIY product can print offline or online. The computer need be installed with Cura14.07, see 3.1 for detailed installation guide.

Open Cura, import 3D STL file, slice the 3D model into GCODE file, save it into SD card. Insert the SD card into the display screen, turn on the printer, enter the main page, select “Build From SD”, select the GCODE file. Wait until the printer head and the bottom plate heating to the preset temperature, start printing, then the printing is complete.

Turn on the printer, the display shows as the picture below. Enter the parameters setting center, set the printer head temperature, bottom plate temperature (generally printer head 200°C and bottom plate 60°C). Exit the parameters setting center, select “Print from SD”, select the printed model. The display shows “Heating...” until the temperature reaches preset temperature, then the printing starts. Cura14.07 identifies STL file and the printed file must be GCODE file.

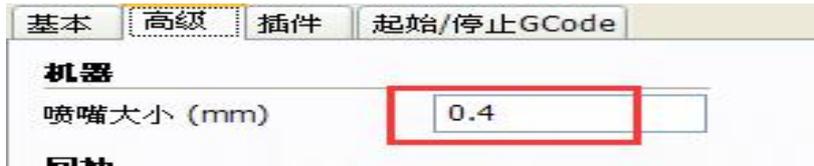


Double-click the icon to open Cura14.07

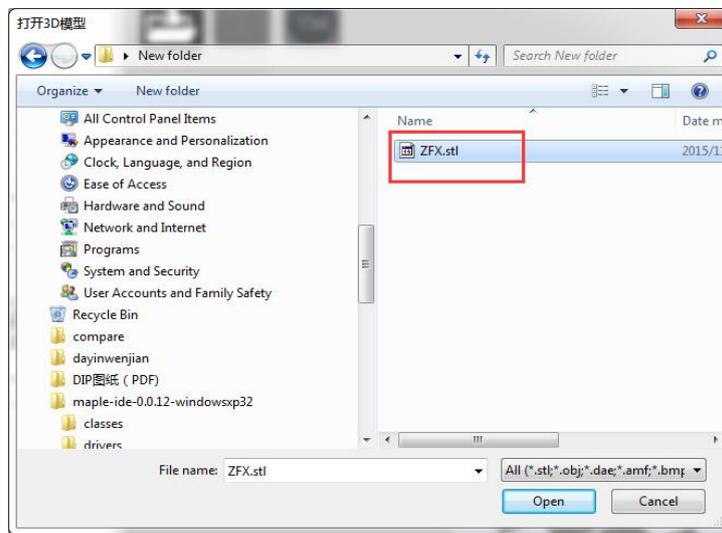


Setting the diameter of the line material as 1.75mm, and nozzle as 0.4mm.





Click the first icon to open the folder, and select the STL file which needs to be printed.



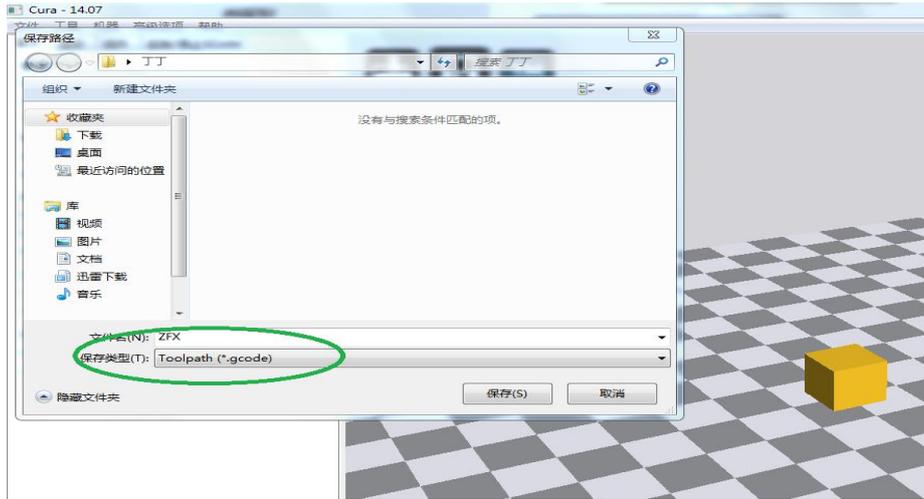
Slicing automatically;



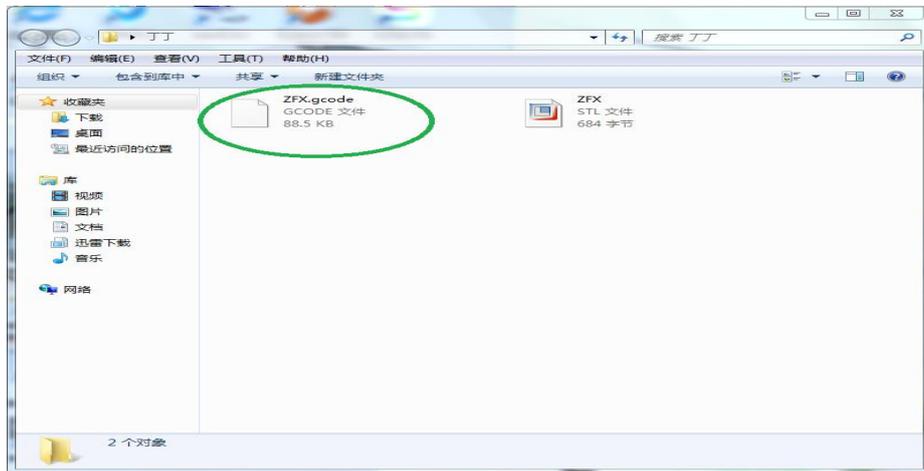
Select the connection icon in the middle to connect a 3D printer after slicing.



If the middle icon appears after slicing, then, click the middle saving icon. Select saving when the window occurred as below.

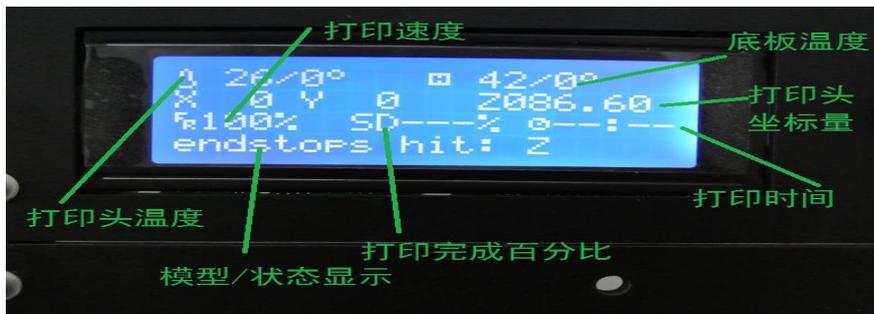


Open the folder into which the printing files needs to be put, copy and paste the file which has been saved before.



Save the file with the SD card.

Turn on the DIY printer, insert the SD card, select “Print from SD”, then, select the file which has been saved before. Consequently, printing starts and until mission finished.



LED screen

Click the function button, enter into the control function as shown of the LED screen, then, adjust the relative parameters.

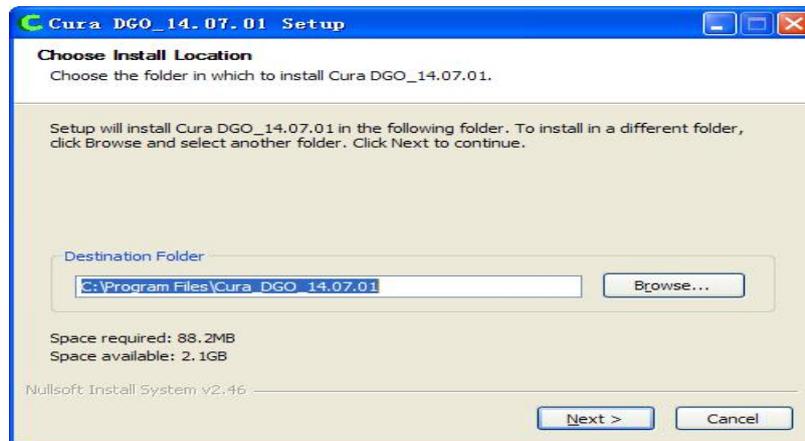


The purpose of the setting, is to adjust the printer head, temperature of baseplate and the printing speed.

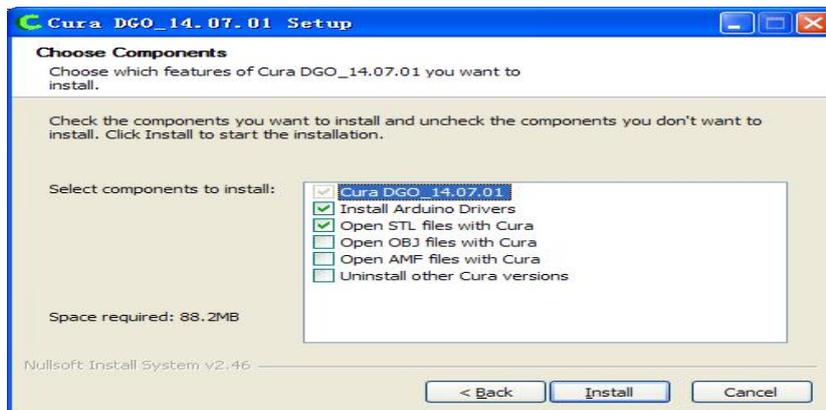
### 3.1 Install the online print software named Cura 14.07

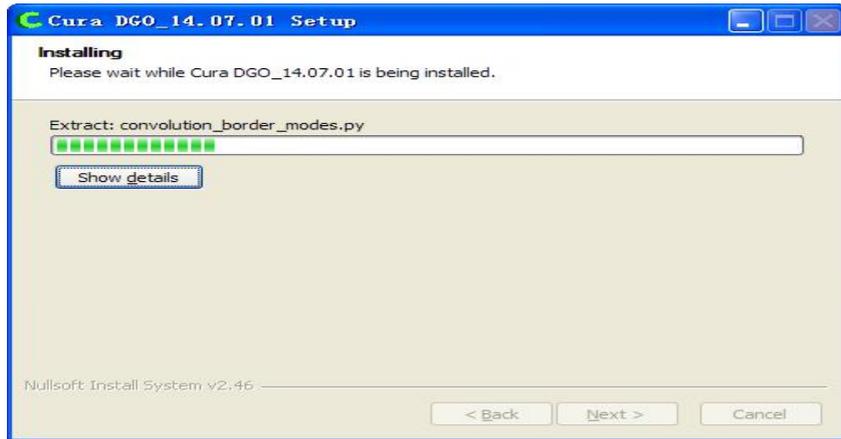
Please close the antivirus software before the Cura 14.07 has been installed.

#### 3.1.1 Double-click Cura\_DGO\_14.07.01.exe, and setup Cura.



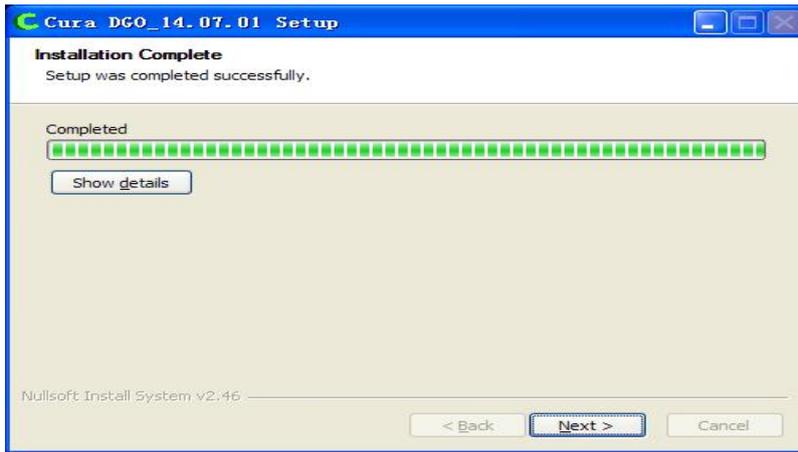
#### 3.1.2 Default installation





3.13 Install the default Arduino driver as below

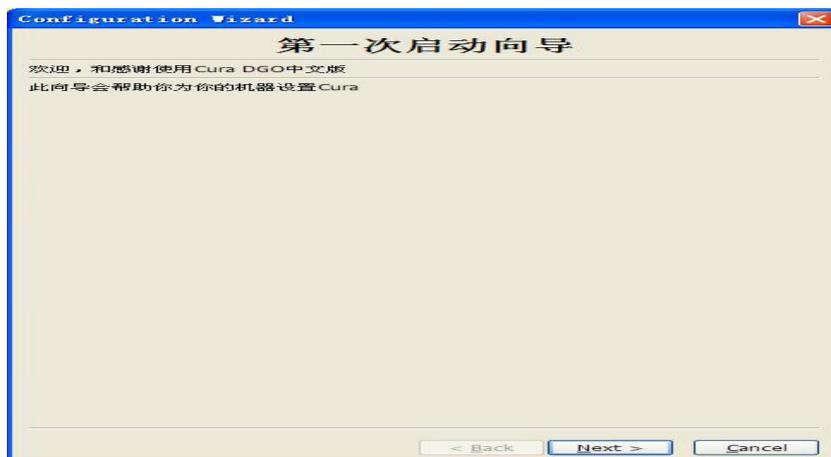




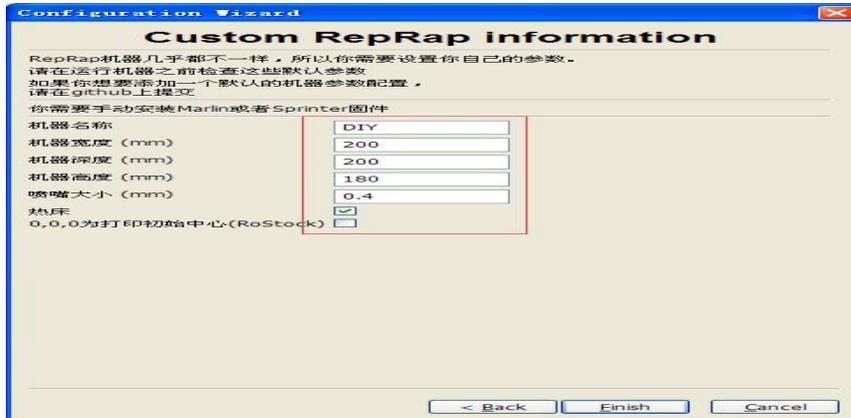
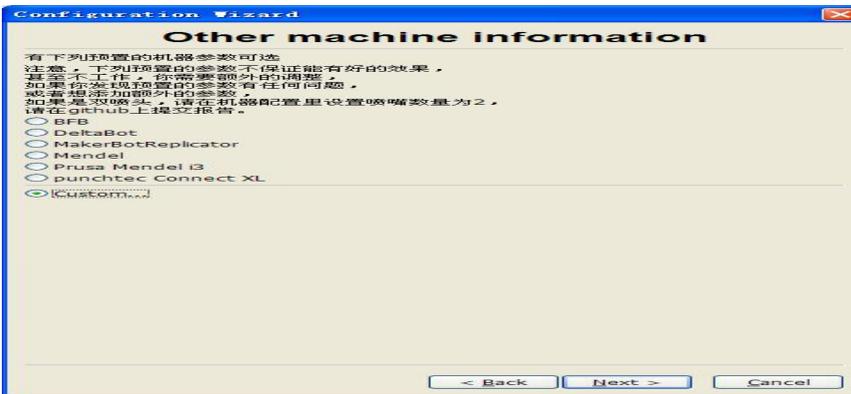
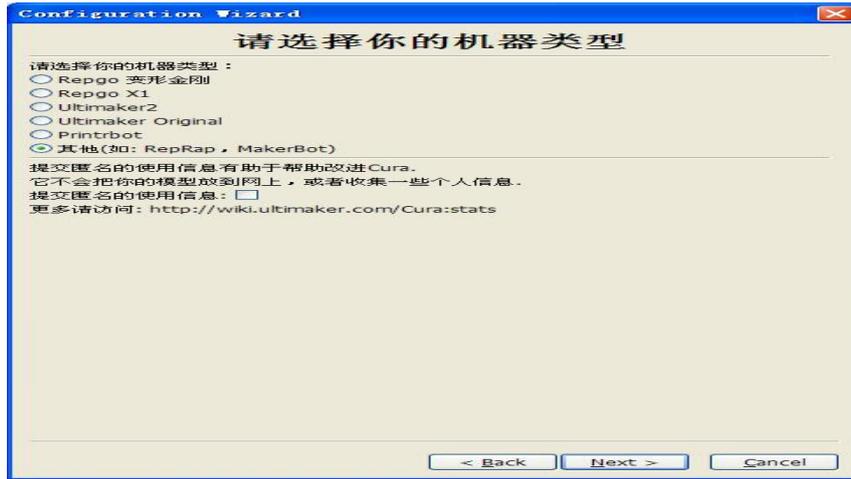
3.14 Installation finished, and open Cura directly.



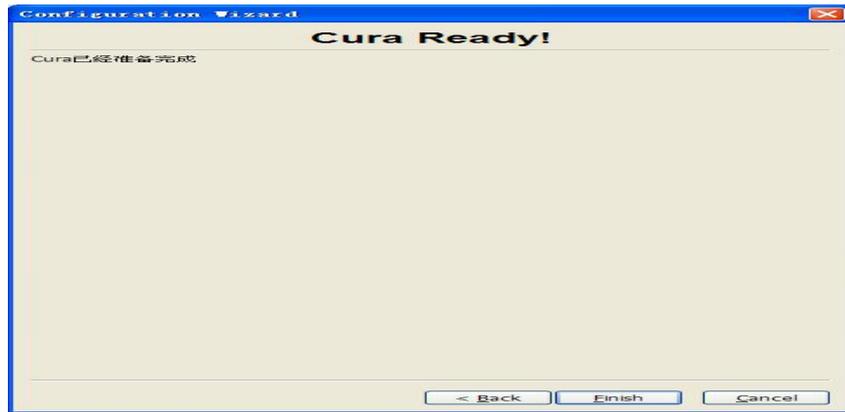
3.15 Start a wizard at the first time



3.16 Select the parameters of the printer, and pay attention on the setting with red box;



3.17 Printer setting finished;

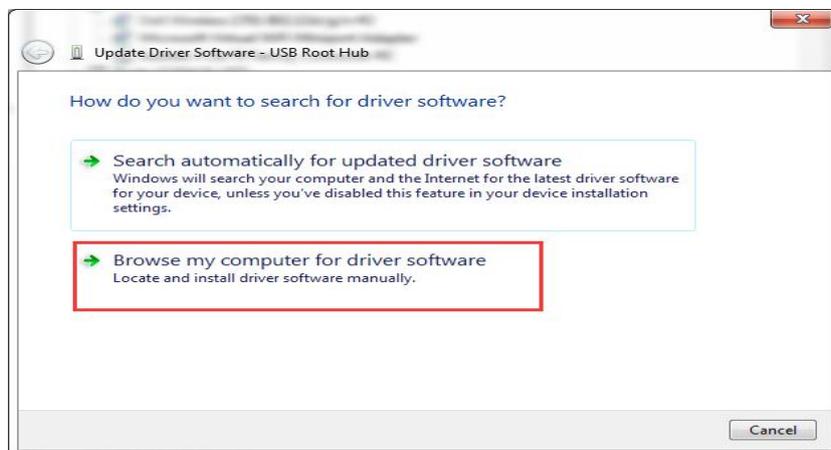


#### 4. Install serial port drivers

- 4.1 Turn on the power of DIY, connect the printer with computer by USB cable;
- 4.2 Select the device manager by right clicking, if there is no suitable serial port driver, a warning with yellow logo in the red box would be occurred as below;



- 4.3 Right clicking “FT232R USB UART”, update the driver program, and select “Browse my computer for driver software”;



- 4.4 Select a suitable driver file to update the driver



4.5 Please close the window as below after updated.



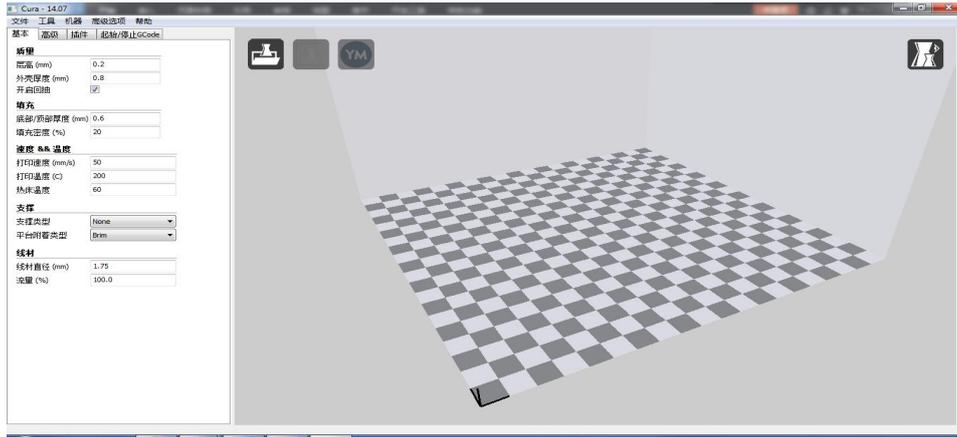
4.6 After driver updated, “My computer---device manager” is shown as below;



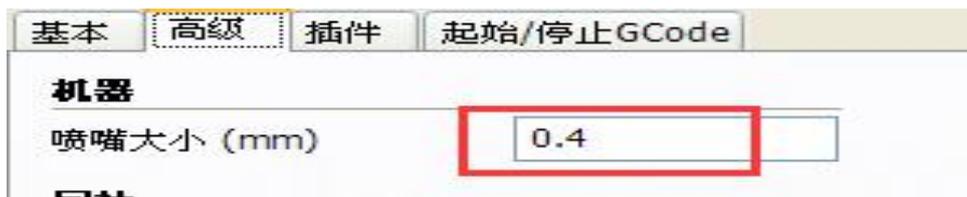
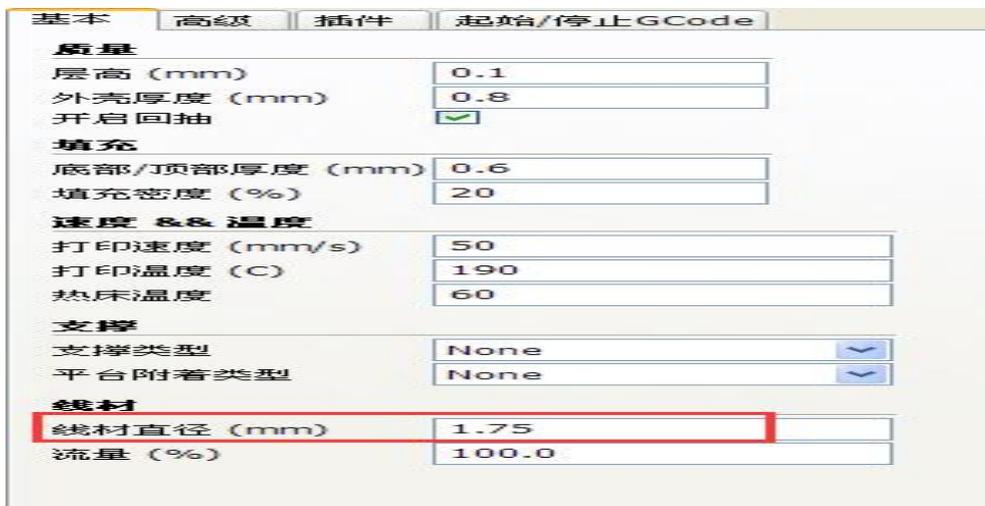
## 5. On-line printing

5.1 Double click the icon to start Cura 14.07





5.2 Setting the diameter of the line material as 1.75mm, and nozzle as 0.4mm.



5.3 Select the first icon to open the folder, choose the STL file which needs to be printed.



5.4 Slicing automatically;

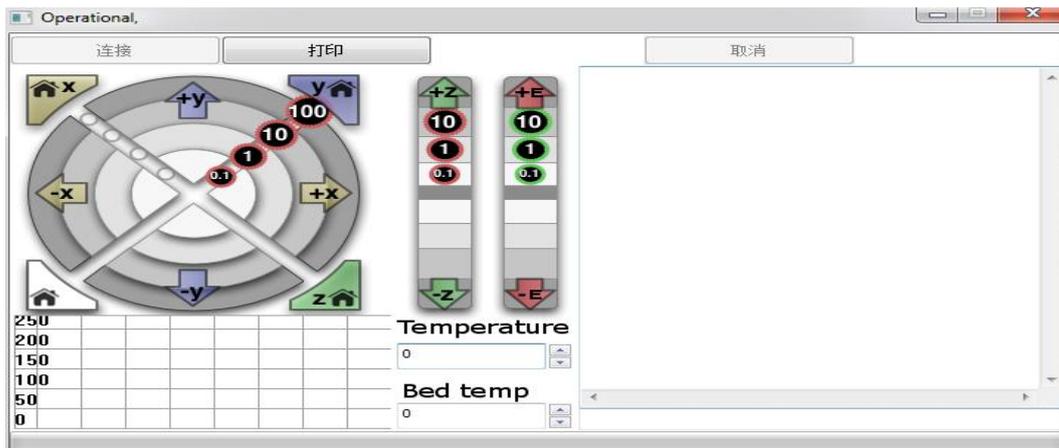


Select the middle icon which means on-line print after slicing;

If the middle icon is shown as a saving icon after slicing, please select “machine---machine setting” to set the port (The port should be considered as the recommendation by computer. For example, the port is COM16 in this instruction



5.5 The on-line print in a success, if there is an on-line print window occurred and the word about “Print” has been switched into boldface.



Select “Print” to heat print head and platform, the print head will return back to the origin of coordinates when the temperature increased to the setting value. Then, the on-line print starts to work.

## **Chapter 4 Maintenance & Trouble Shooting**

### **1. Clean the feeding device of printer head**

It is necessary to clean the print head during the printer is used in a period time. Take apart the print head, move the fan, the stepper motor, and the black plastic block located at the feeding port of the motor, separately. An extruder gear is equipped on the black plastic block. Move and clean the extrude gear, then, install each part in sequence.

### **2. Adjust the stepper motor belt synchronous transmission**

2.1 Adjust the synchronous belt to taking the close-intermeshing with belt pulley.

2.2 Adjust Y-axis' belt to achieve uniform upper and lower tension.

2.3 The belt of X-axis and the belt of Y-axis can be adjusted up to 90 degree (vertical). Additionally, adjust X-axis's belt to achieve uniform left and right tension.

### **3. Maintenance the Z-axis' fixed axis and driving screw**

Have appropriate lubricating grease smeared evenly on the surface of ball bearing steels of X-axis, Y-axis, and Z-axis, independently.

### **4. Common fault and eliminating methods**

4.1 Offset printing:

Please check the belt pulley of the printer whether the belt pulley work in a parallel route, then, tight the belt if there is a loosen occurred.

4.2 Unusual temperature appeared within '0----1024':

Please check the cable, port, and connection of the temperature thermocouple. The temperature thermocouple should be changed if needed.

4.3 'NA' is shown as the temperature:

Please check the cable of the temperature thermocouple if there is any broken. The temperature thermocouple should be changed if needed.

4.4 The motor of X-axis can't work normally, and a shaking phenomenon occurred:

Please check the bearing or the cable of X-axis' motor, if there is any broken. The

cable of X-axis's motor should be changed if needed.

#### 4.5 LCD shows blue screen and no display:

Check the flat cable and interface of the LCD. If no problem, check the LCD. Fine-tune the potentiometer clockwise see if the LCD lights up. If no, replace the LCD.

#### 4.6 Limit switch of the stepper motor fails:

Check if the metal contact plate of the limit switch reaches. If no, adjust the contact plate until it reaches; if yes, replace the limit switch.

#### 4.7 The fan doesn't turn on startup:

Make sure the print head temperature is above 50°C. Cut the electricity and rotate the impeller by hand. If the fan still doesn't rotate, check the interface and reconnect it by screwdriver or test it by battery. Replace the fan if it's identified damaged.

#### 4.8 The motor doesn't run on startup:

Check the wiring, replace the motor driving module or the motherboard.

#### 4.9 The feeding device gets stuck:

The filament is too thick. Clean the spray nozzle and replace the filament.

#### 4.10 The filament skids:

The filament is too thin. Replace the filament.

#### 4.11 The spray nozzle is blocked:

Clean or replace the nozzle, clean or replace the high temperature pip, refeed and reprint with higher temperature.

#### 4.12 Temperature display abnormal:

The thermocouple is disconnected or damaged. Rewire or replace the thermocouple.

#### 4.13 The printed module's edge is warped:

Adjust the butterfly nuts on the four corners of the printing platform bottom plate to make the platform horizontal.

4.14 The printing consumables don't stick to the platform and accumulate around the printer head:

The gap between the spray nozzle and the platform is too big. Readjust the distance.

4.15 The printed module is difficult to take down:

Heat the platform to around 50°C then take down the module completely at a time.

4.16 The driver or the software can't be installed"

The computer system configuration has problem. Reinstall the computer system.

## **Chapter 5 Warranty**

### **1. Quality Assurance**

CTC promises strict parts processing standards and assembling and testing process to ensure high quality of each product.

### **2. After-sales Service Assurance**

- a) In the event of product quality problems within 3 days after receipt of goods, we will repair or replace the product free of charge and bear the freight back and forth.
- b) In the event of product quality problems within 7 days after receipt of goods, we will repair or replace the product free of charge and share half of the freight back and forth.
- c) In the event of product quality problems within 15 days after receipt of goods, we will repair or replace the product free of charge but the freight back and forth need be borne by the customer.
- d) In the event of product quality problems over 15 days after receipt of goods, we will provide free consulting but if need replacing parts, the cost of parts and freight back and forth need be borne by the customer.
- e) Do not upgrade the firmware of the printer without our authorization, otherwise all damage caused by the upgrade won't be covered by our warranty.

### **3. Return Policy**

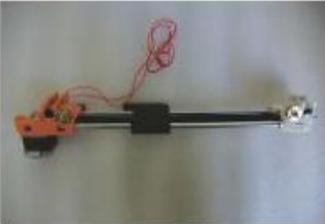
- 3.1 Please check if all items on the packing list are complete once you receive the printer.
- 3.2 Please assemble the printer strictly according to the user manual, otherwise the broken parts won't be covered by our warranty and the customer need bear the cost of parts and freight.
- 3.3 Since the DIY printer is assembled by the customer and the print quality varies according to different debugging precisions, therefore returns after complete assembly won't be accepted.
- 3.4 Return policy base requirements: Make sure the outer package, the parts and the manual are complete and the product stays the same condition as when it's sold and won't affect its second sale. If either one requirement isn't satisfied, the return won't be accepted.
- 3.5 Please check carefully the integrity of the product upon receipt of the goods. If found any quality problem, please take photos and contact us within 5 days.
- 3.6** We won't provide return service if: (1) the outer package, the parts and the manual are not complete; (2) the product is with obvious stains or man-made damage; (3) free gifts; (4) using other brand (not original CTC) printing consumables; (5) all products which have been issued invoice.

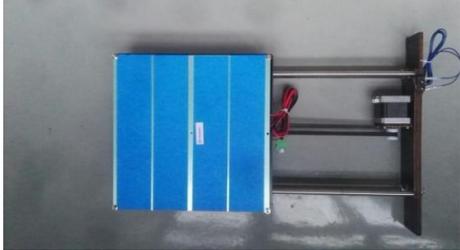
## Chapter 6 Packing List (Appendix)

NO	Name	Specifications	Qty	Pic
1	Smooth rod	D8*L322mm	2	
2	Thread rod	M8*L300mm Z-axis screw	2	
3	M3 Washers	M3	40	
4	Nut	M3	35	
5	Screw	M3 x 8mm	10	
6	Screw	M3 x 16mm	30	
7	Screw	M3 x 30mm	5	
8	Screw Locking Ring	M8	4	
9	Fan Support column		4	
10	High-temperature tube		2	
11	Motherboard Support column		6	
12	Flexible coupling		2	

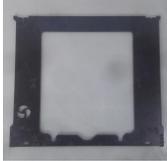
N O	Name	Specifications	Qty	Pic
13	Display Screen cable		1	
14	USB Cord		1	
15	Cable case	Protect cables	1	
16	Serial number		1	
17	Power cable	Connectboard to PSU	1	
18	Nylon ties	For tie cable	1	
19	Power Cable	Power cable and piug	1	
20	PLA Filament	10M*3	1	

N O	Name	Specifications	Qty	Pic
21	Dupont cable		1	
22	Power cable		1	
23	Fan	40*40MM	1	
24		/	/	/
25	Power supply	Input: 115V/1.5A 230V/0.75A Output: DC12V/0-15A	1	
26	Grater		1	
27	Extruder Heating Wire	Mk8 extruder Nozzle size 0.4mm Supplies can use ABS(1.75mm) ,PLA(1.75mm) (Optional) , for filament size 50cm(Soldered on heatbed)	1	

N O	Name	Specifications	Qty	Pic
28	CD		1	
29	Holder		1	
30	Control board		1	
31	A4 Asembly		3	
32	A5 Asembly		1	
33	LED		1	
34	Q Asembly		1	

35	P Asembly		1	
----	--------------	--	---	--

Plank kits (5mm)

N O	Name	Specifications	Qty	Pic
A 1	XZ frame	EUY-M01	1	
A 2	Left side frame	EUY-M02	1	
A 3	Right side frame	EUY-M03	1	
A 4	Z too mount	EUY-M08	2	
A 5	Tripod		2	
A 6	Y shaft motor Fixing plate	Spare	2	

