

**YIDIMU**

**LCD 3D Printer  
User Manual**

# Precautions

Please keep in mind the following precautions during assembly and use. Failure to follow these warnings may result in damage to the machine or even personal injury.

1. There is a FEP film at the bottom of the resin vat. It can't be pierced or scratched by sharp objects. Otherwise, the machine may not print properly.
2. The resin in the vat must be kept clean and free of cured resin and floc.
3. During the printing process, try to keep the top cover closed and keep the machine steady. Do not shake the machine.
4. After printing, turn off the power.
5. Please keep the equipment working on a stable surface.
6. If the power cord is damaged, the cable must be replaced by the manufacturer.
7. Do not power off the device during its operation.
8. After the model is printed, use a scraper to remove, taking care not to scratch your hand.
9. It is forbidden to print in the air (take off the resin vat or the vat without resin). If printing the air is severe, the LCD screen will be damaged.
10. After the skin touches the resin, please wash it in time.
11. If there is a model in the platform and resin vat after printing is finished, do not press reset ( reset on the bottom ), otherwise it will crush 2K screen.

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# Technical Specification

## Printing :

Build Volume: 120 (L) x 65 (W) x165 (H) mm

Layer Thickness: 0.025mm/0.05mm/0.1mm

Print Speed: 20mm/h (Z axis)

XY Resolution: 47um

## Machine:

Dimensions: 220 (L) x200 (w) x426 (H) mm

Packaging Size: 292 (L) x272 (w) x622 (H) mm

## Software:

Slicer: YidimuLCD

File Format: STL

System: win7 up

## Physical:

Materials: 405nm UV-resin

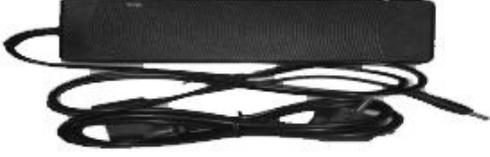
Connectivity: USB memory

Light Source: UV led

Input Voltage: 220V AC47-63 Hz

Rated Power: 85W

# Packing List

			
	Print platform 1PCS	Resin vat 1PCS	
			
PANTHER LCD 3D Printer 1PCS	250g Resin 1PCS	USB memory 1PCS	
			
Scraper 1PCS	Tweezer 1PCS	Tool kit 1PCS	Finger cots 10PCS
			
Funnel 10PCS	Dust-free towel	Masks 1PCS	Gloves 2PCS
			
Power adaptor/Power cord 1PCS	Protective Glasses 1PCS		

# Product Overview



# Machine Testing

The machine must be tested before printing for the first time. The test content includes: Z-axis reset, light on/off, up and down movement.

First plug in the power and turn on the AC power switch, then turn on the switch of machine. After the boot is completed, the interface is as shown in Fig. (1) (Note: It takes about 25 seconds for the machine to boot up, please be patient)



Fig. (1)

### (1) Z-axis reset

After the machine is powered on, click “Reset” on the touch screen to observe whether the machine returns to zero. If the machine can't move normally, turn off the power and contact the tech support.

### (2) Light on/off

After the machine is powered on, click “Lights On” on the touch screen to observe whether the LCD screen of the machine displays the following fig. (2). If it cannot be displayed

normally, please disconnect the power and contact the tech support.

Click “Lights off” on the touch screen to observe the machine whether the LCD screen is dark. If it cannot be darkened, you should disconnect the power supply and contact the tech support.

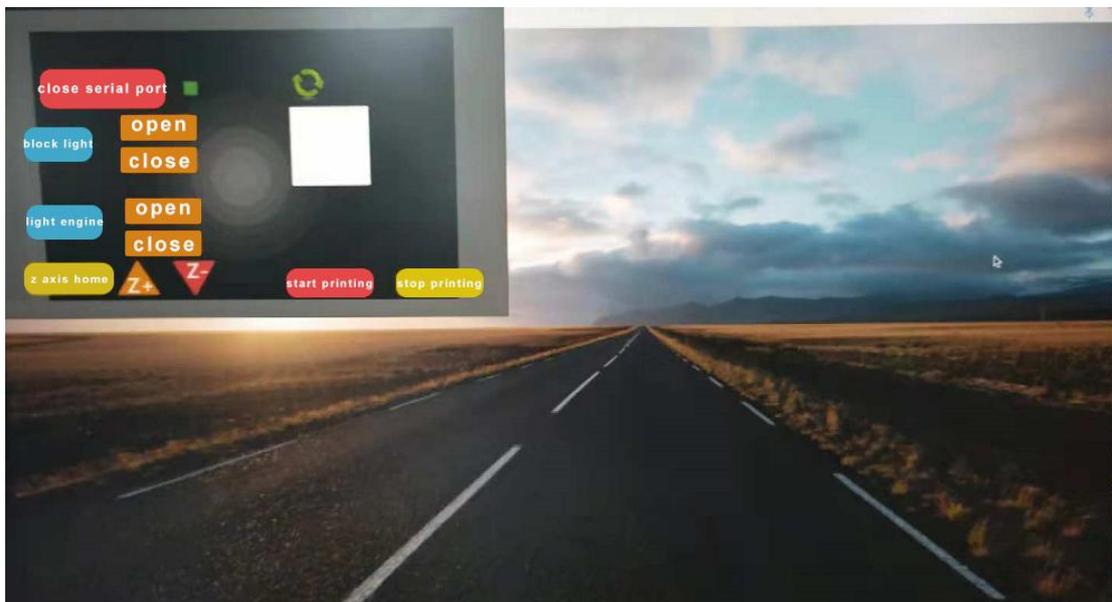


Fig.(2)

(3) up and down movement

Before moving up and down test, first click “Reset”. After the machine stops, click “Move Down” to observe whether the machine moves down. After the machine stops, click “Move Up” to observe whether the machine moves up. Note: The machine cannot move up at the home position.

## Software Installation and

# Operation Instructions

## 1.1 Install YidimuLCD slicing software

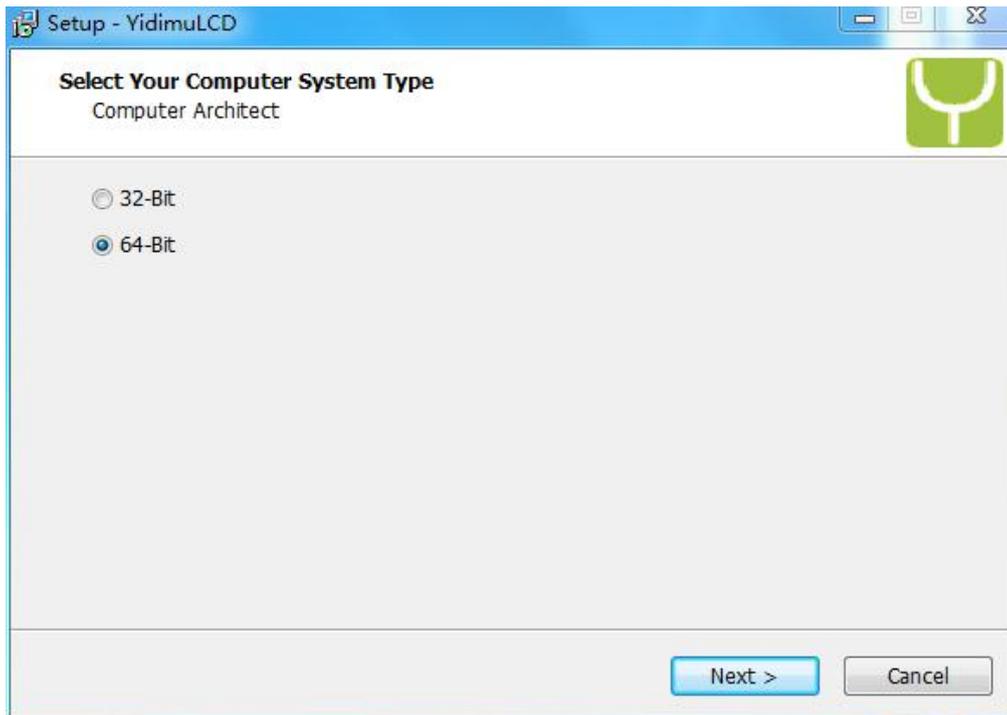
First find“Setup\_YidimuLCD.exe” in the USB flash disk (as shown below)



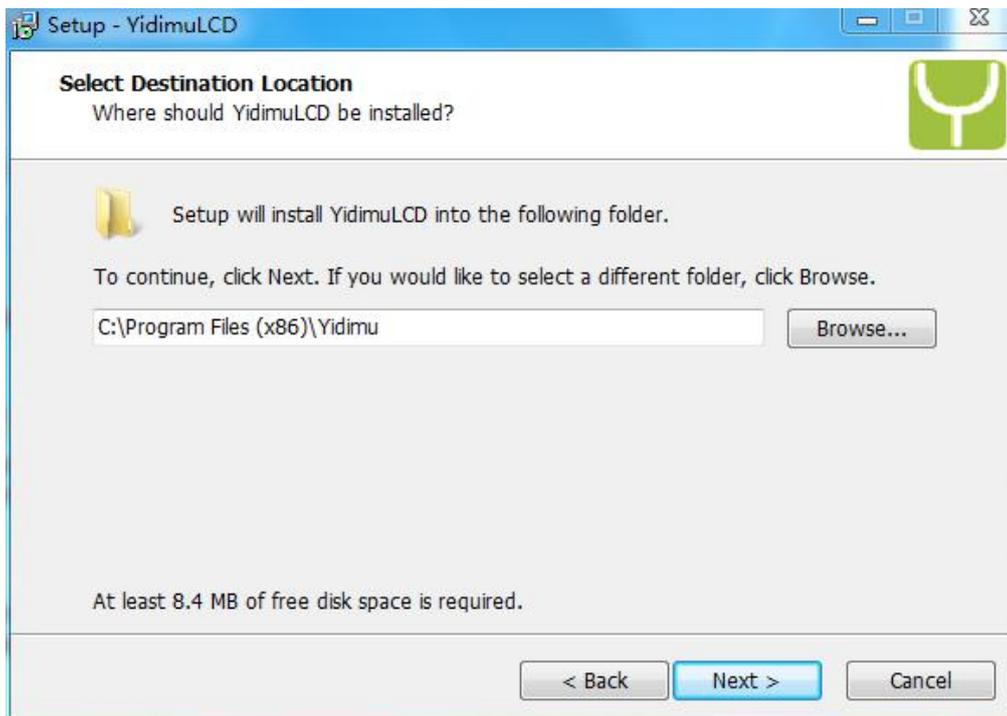
Double click to open“Setup\_YidimuLCD.exe”to install the application, select the software display language



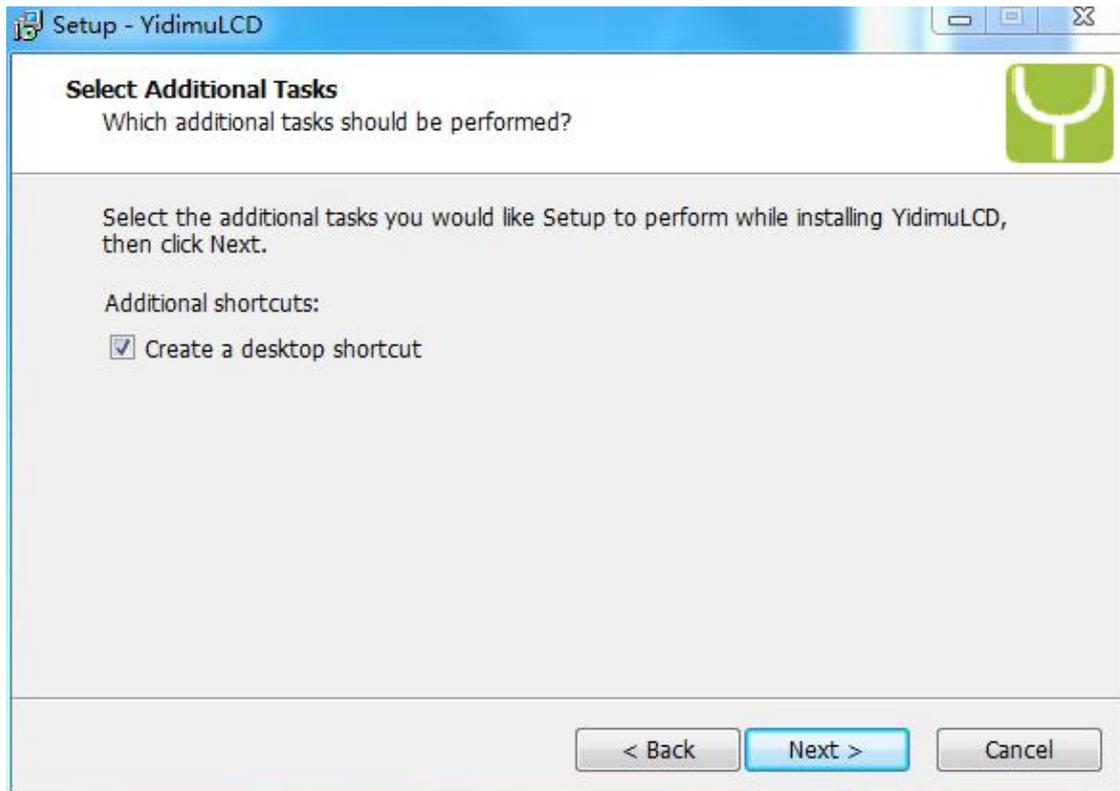
Click OK to select the number of bits you need to install the software to match the number of computer operating system bits.



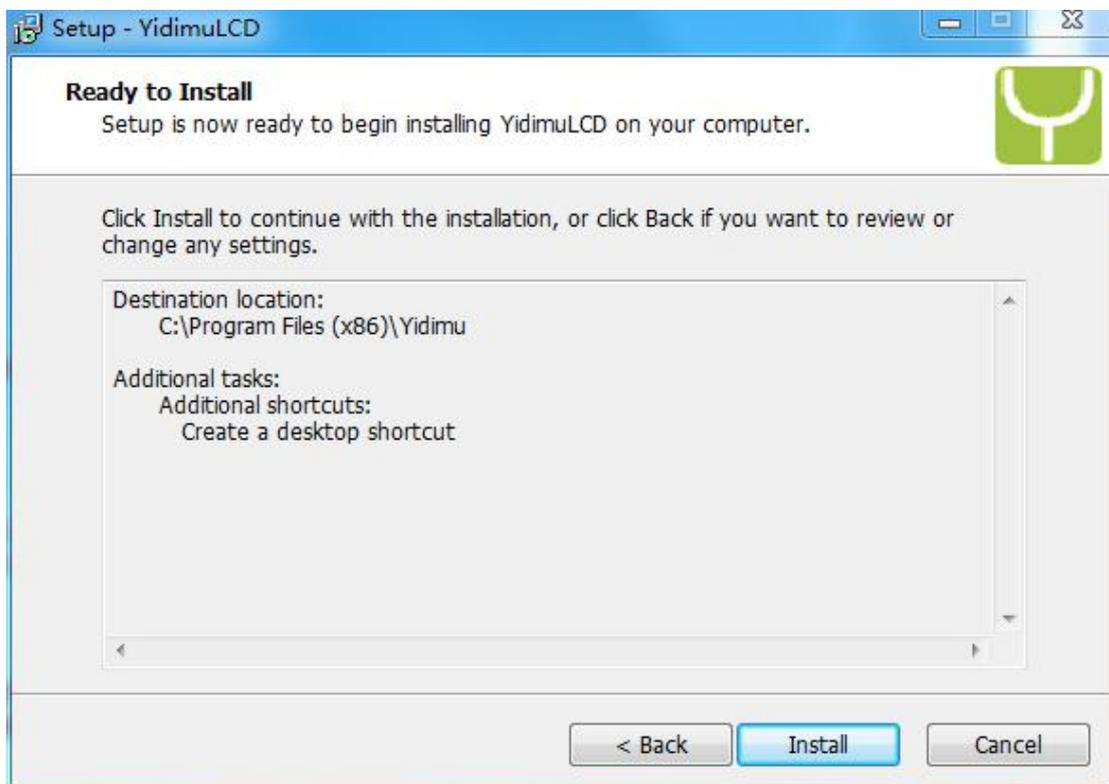
## Select software installation location



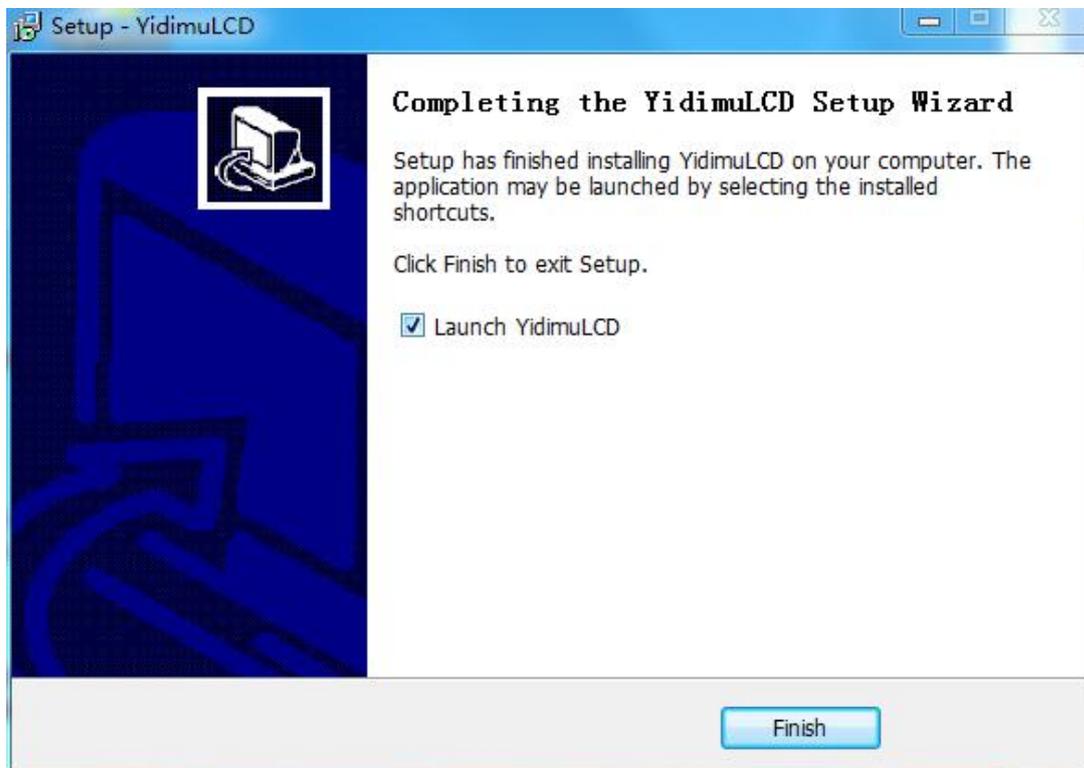
## Choose whether to create a shortcut



## Click Install

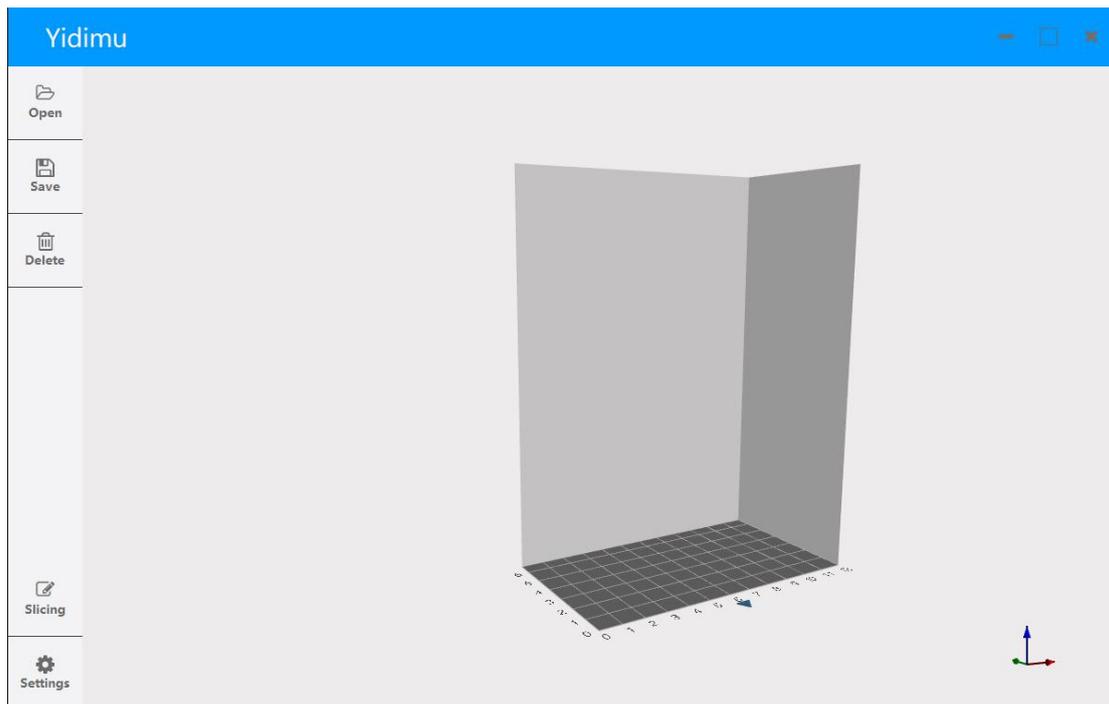


The installation is complete, choose whether to run the software immediately



## 1.2 Function

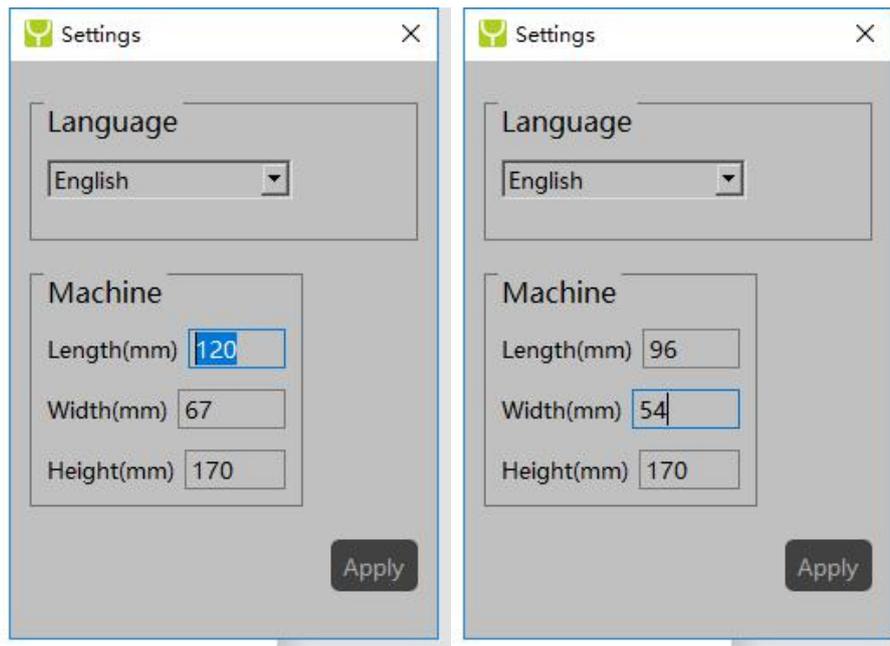
### Description



The blue area is the title bar, the left part is the tool bar, and the right part is the view area.

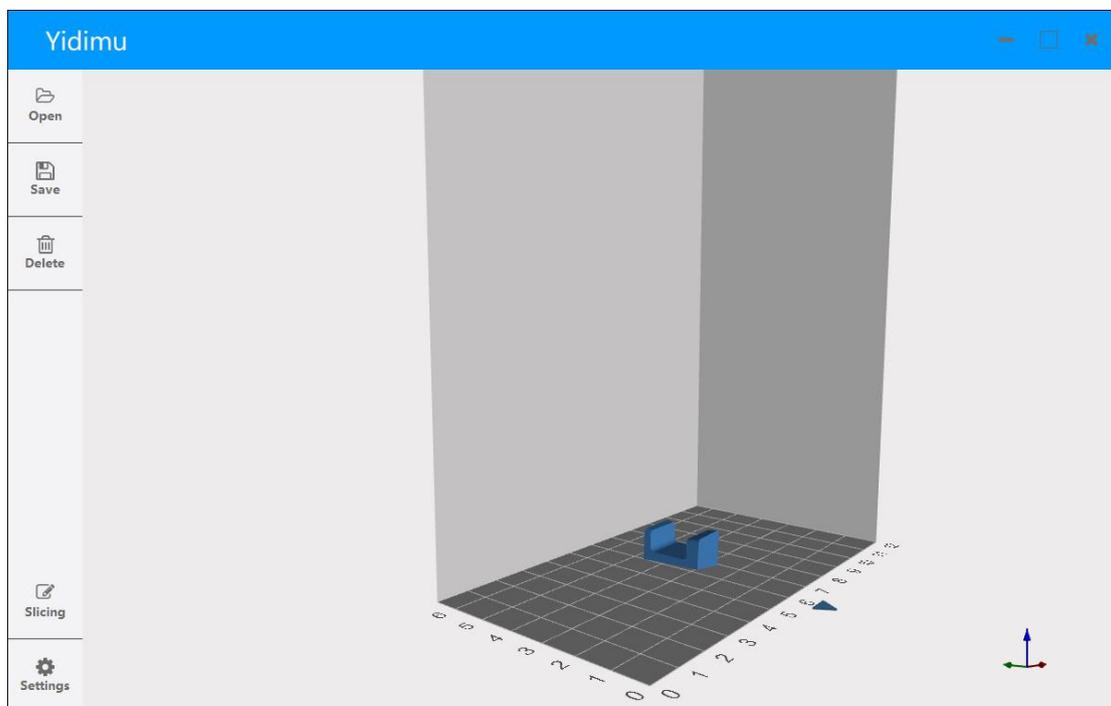
### 1.2.1 Basic Settings

After installing the YidimuLCD, open the software and click **【Settings】**. In general, the length is set to 120mm, the width is set to 67mm, and the height is set to 170mm. For high precision molding, the length is set to 96mm and the width is set to 54mm, and the height is set to 170mm. After the user chooses to set it, click the Apply button.



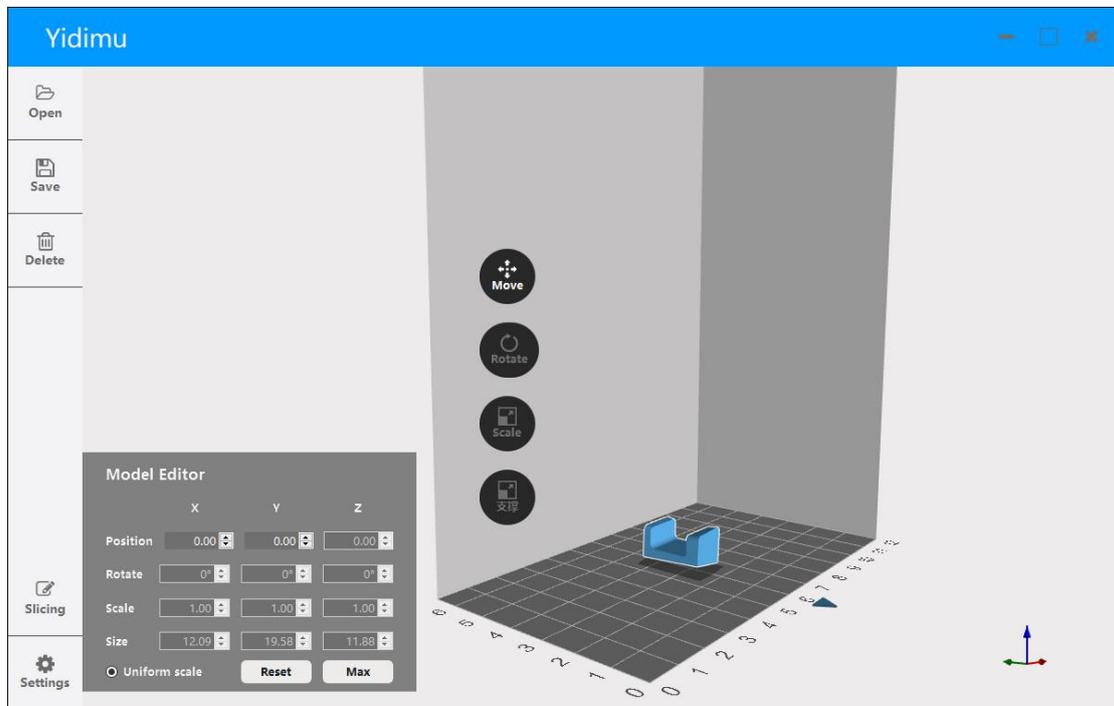
### 1.2.2 Input the file

Click the Open Tool button and select the 3D model file in the .stl format. The model is shown as below



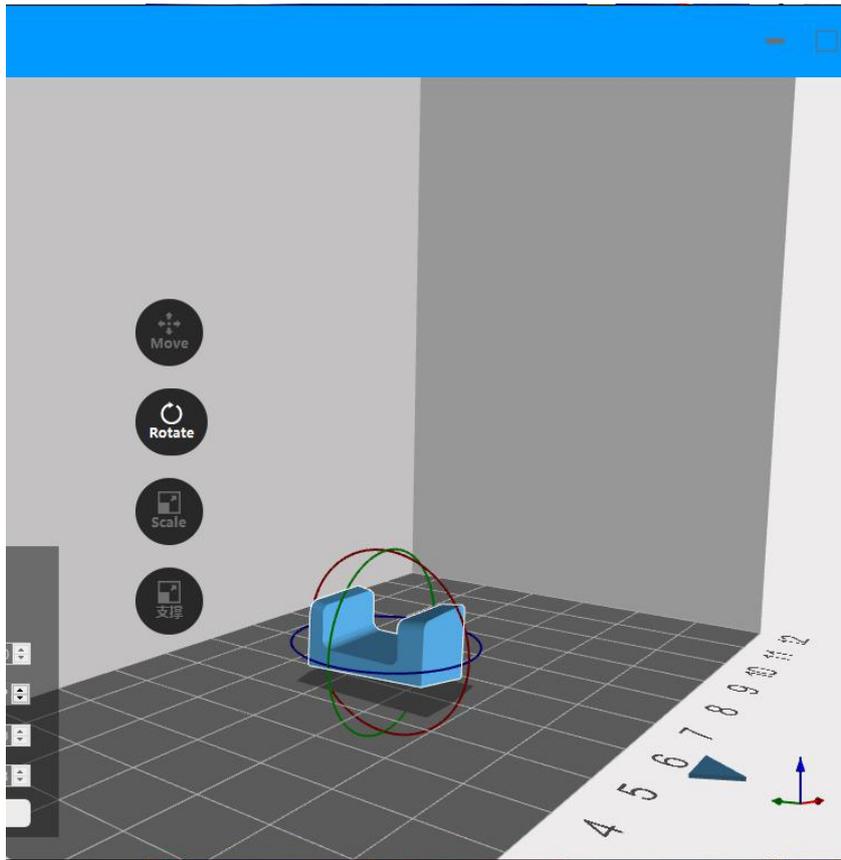
Using the mouse, left click on the model to select the

model. The view interface displays the model editing interface, including “Move”, “Rotate”, “Scale” and a model edit list under each option. As shown below

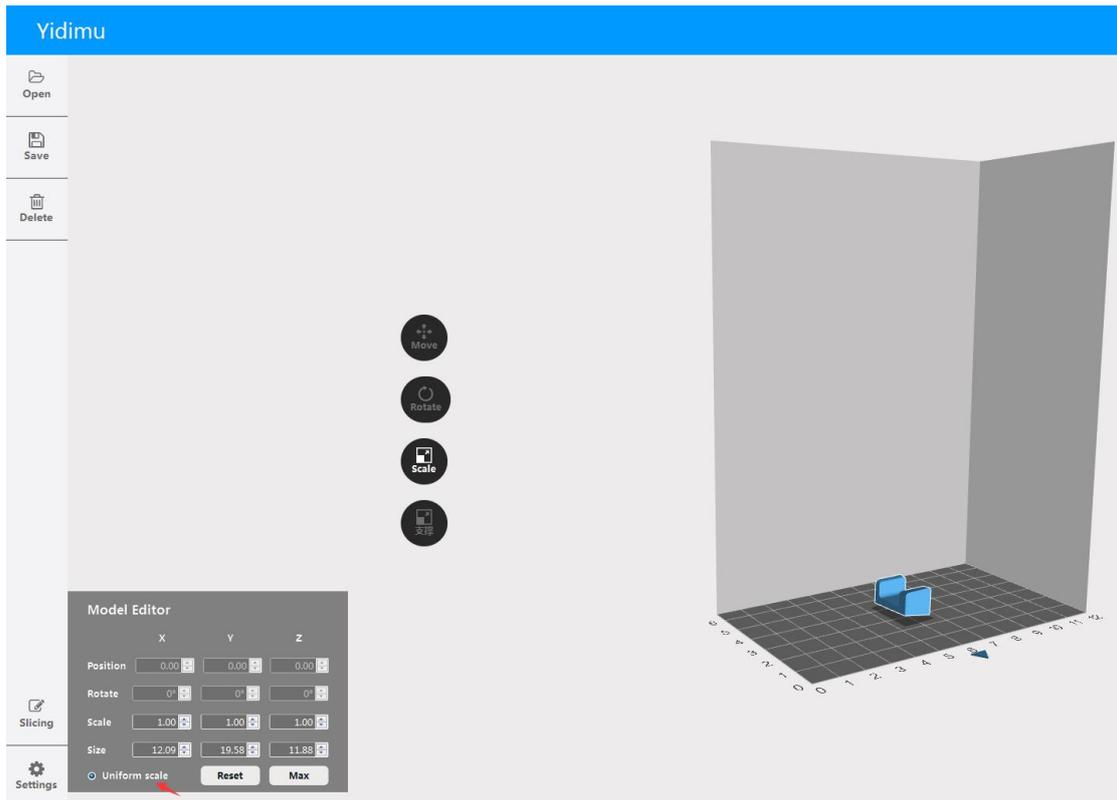


1) **Move:** The user can manually enter the specific data in the list box or left click and hold on the model, then you may change the model position by dragging it around.

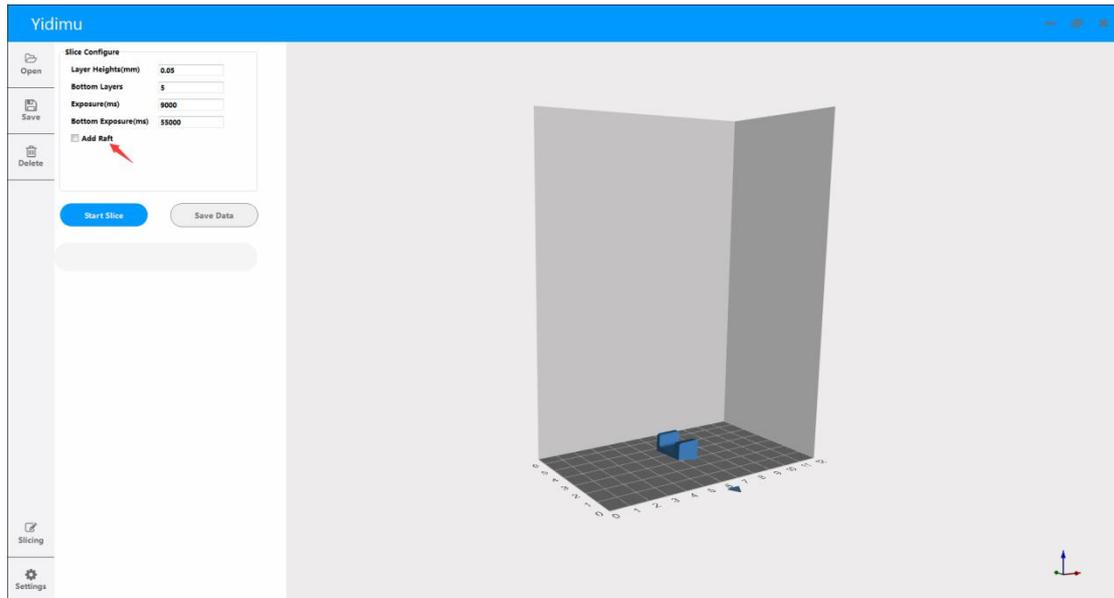
2) **Rotate:** Select the Rotate option button, and the user drags the x, y, and z axes on the model to rotate the model. You can also enter the degree of rotation in the list for model rotation.



3) **Scale**: Select the zoom option button, the user can select the model to zoom, or cancel the lock ratio on the interface, and then select a plane of the model to zoom on a single axis.



4) Add base: check the base, it will automatically add the base according to the size of the model during the printing process.



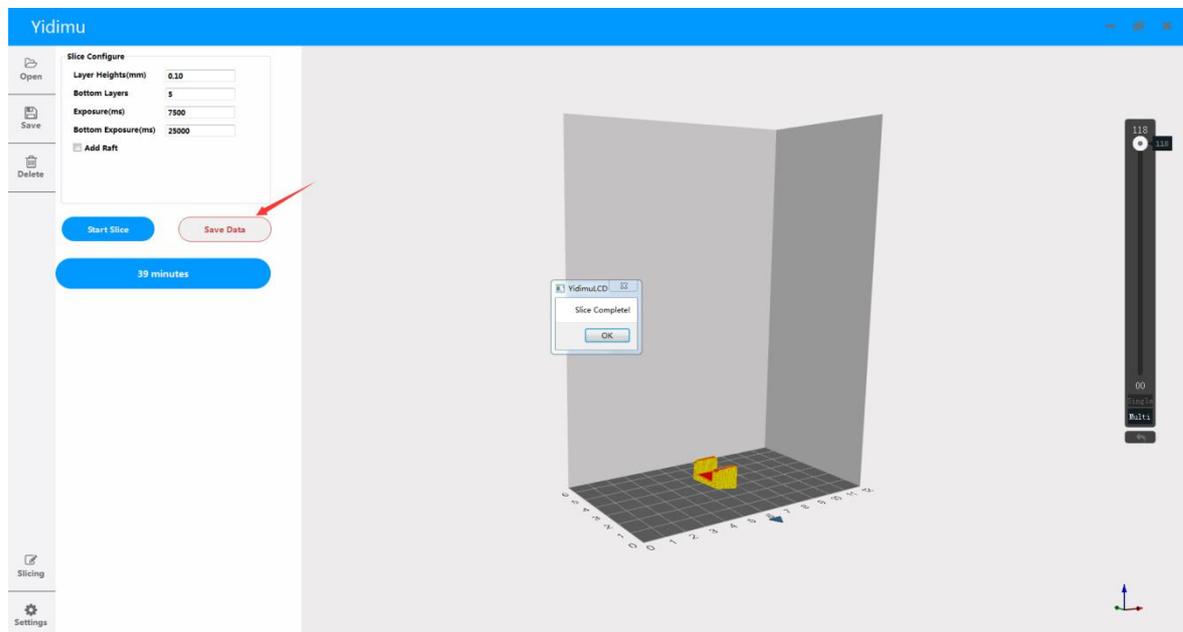
5) Support: Select the model, select the support option button, and left click on the model to add the support surface.

6) Select the model, click the delete button on the left or press the Delete button directly to delete the model.

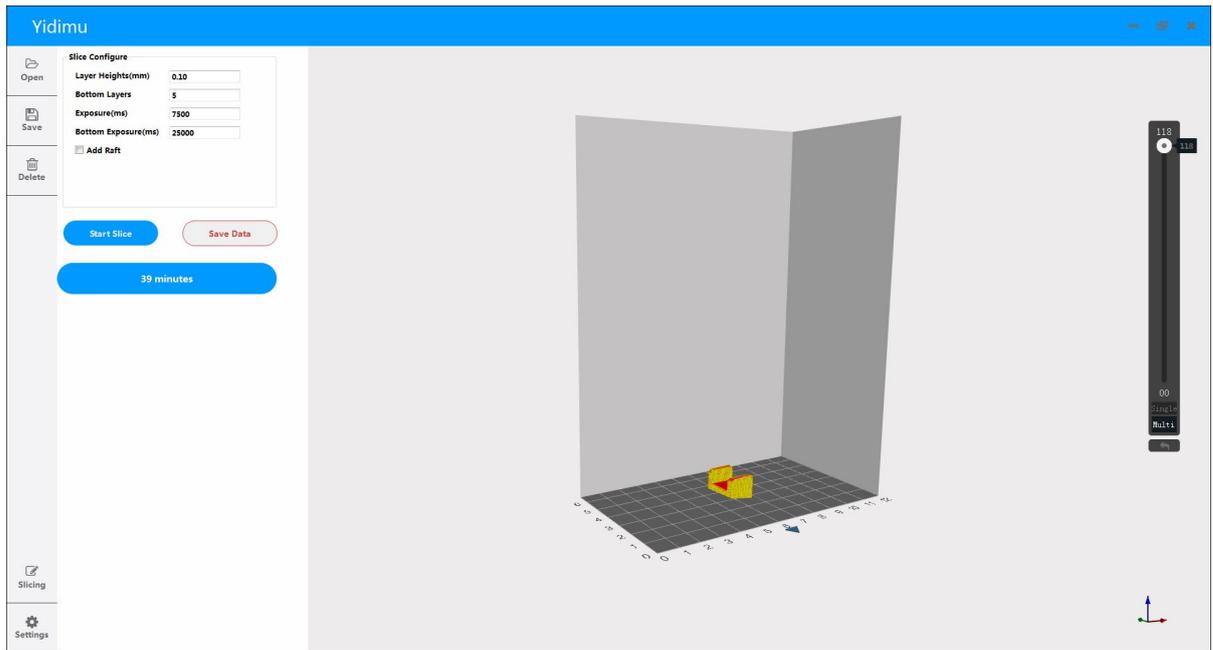
### 1.2.3 Model Slicing

After clicking the slice button, the slice parameter setting interface will appear. The user sets the parameters of the print model on this interface. Including layer thickness, bottom layer number, exposure time, bottom exposure time. In general, the bottom exposure time is set to 55000, the number of bottom layers is set to 5, and the exposure time is set to 9500. The layer thickness is determined by the case, the normal printing is set to 0.1, the precision printing is set to 0.05, and the ultra-precision printing is set to 0.01. Finally click on the Start

Slice button to slice. (In the case of printing some small areas and requiring high assembly precision, the exposure time is set to 7000-8500. When printing some models with large areas and requiring not high precision but with many small features, the exposure time is set to 9500-11000, will be better). After the slice is complete, insert the USB memory and click Save to USB memory.



## 1) Slicing Display



Users can control the slider to display slicing data.

## Assembly and Leveling Instructions

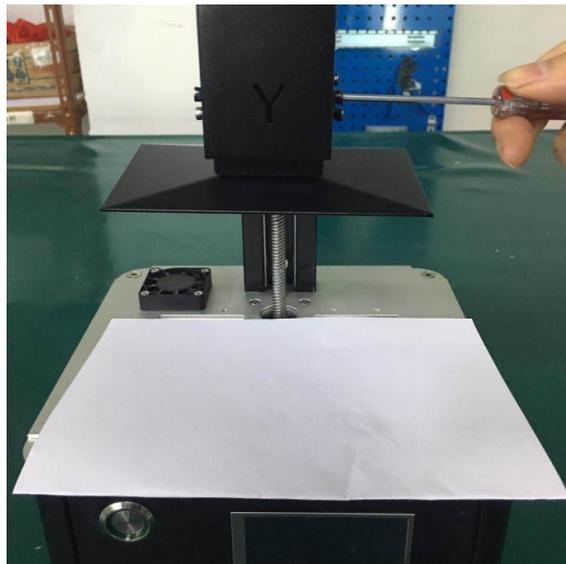
(1) Check the appearance of the outer box of the 3D printer for scratches, bumps, etc. Check the corners of the box for any deformation or cracking.

(2) Open the box and take out the machine and accessories. Check and ensure the 2K LCD screen and platform are clean and free of dust.

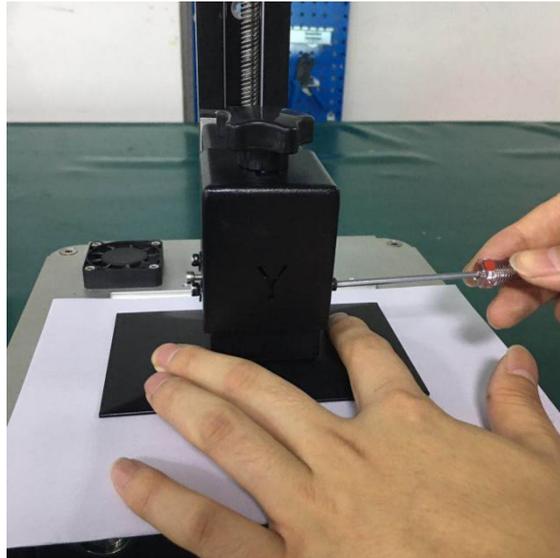
(3) Click the move up on the touch screen (10MM for one click) to move the Z axis up to the middle position.



(4) Install the print platform to the bracket, tighten the black platform fixed knob, fold a piece of A4 paper in half and place it on the 2K screen, loosen the screws on both sides of the platform, so that the platform can move up and down.



(5) Press the auto level on the touch screen, then let the Z axis down and stop automatically. Press the platform gently with your left hand and tighten the screws on both sides of the platform with your right hand.



(6) After the leveling is completed, move the platform to the middle, then align the resin vat with the two screw holes underneath and secure the screws with a wrench.



(7) After the above steps are completed, the leveling is finished and till now you can start to print.

# Printing Process Instructions

1.Preparation before printing (including machine testing, model slicing).

2.After the model is sliced, save it to the USB memory, and then insert the USB memory into the USB port of the machine.

3.Install the print platform and resin vat on the machine and slowly pour the resin into the vat until it reaches 1/4-1/3 volume of the vat.

4.Click “Search File” on the touch screen, wait a moment, click on the file you want to print, and then click OK. (Note that sometimes you don't find the file after clicking “Search File”, and then click “Search File” once. You can save no more than 7 print files in USB memory (please delete unnecessary print files in time). Do not save the file as Chinese name.)

5.After printing, waiting until the resin stop dropping from the platform and then unscrew and remove the platform, then use the scrapper to remove the model and wash it with alcohol. (Note: In the case of incomplete curing or failed prints, there might be some resin residues left in the vat. It is recommended that after each printing, please filter the resin by a funnel and use dust-free towel to carefully wipe clean the residues left in the vat or on the platform. Otherwise the 2K LCD screen may be impacted and broken during next printing or leveling.

# FAQ and Machine Maintenance

## 1. FAQ Summary

### (1) Model not sticking to platform or model warping

Re-leveling, if there is still a problem that cannot be attached after re-leveling, you need to increase the first layer exposure time up to 3000~5000ms.

### (2) Z axis homing to the top does not stop

Check if the light limit cable is loose.

## 2. Machine maintenance

(1) The power must be cut off during maintenance.

(2) Wiping the resin vat and the print platform with a dust-free towel.

(3) The resin should be placed in a shaded place and stored in a sealed container.

(4) If the machine is not used for a long time, please place the machine in a dry and ventilated environment.

(5) To switch the resin colors or different types of resin, please clean the original resin vat first. If use alcohol to clean the resin vat, please also wipe clean the alcohol in the vat.