WEEDO

X40 3D Printer
User's Guide

Contents

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1.SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- Do not reach inside the printer during operation.

- Always allow the printer and extruded filament to cool before reaching inside.

- Take care to avoid touching hot parts, including heat blocks, extruder nozzle, build platform, and extruded filament.

- Do not wear gloves when operating or repairing to avoid entanglement.

- Keep the printer and all accessories out of reach of children.

- Do not force or tear anything when unpacking and during setup. This may cause damage to the printer and/or its accessories.

- Ensure that the printer is turned off and unplugged from its power source before making repairs or performing service.

- Do not install this device on an unstable surface where it could fall and cause either personal injury or damage to the device and/or other equipment.

- Do not subject the product to extreme force, shock, or fluctuations in temperature or humidity.

- This device is intended for indoor use only.

- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.

- Do not touch the device, the power cord, or any other connected cables with wet hands.

- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.

- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.

- This device uses a grounded power cord and requires a ground connection for safe operation. Ensure that the power source has a proper ground connection. Do not modify the plug or use a "cheater" plug to bypass the ground connection.

- Unplug this device from the power source when not in use.

- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.

- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.

- Use only in a well-ventilated area. Do not use in close, confined spaces.

- Take care when using a scraper to remove a model. Never direct the scraper towards your fingers or body.

- The printer is designed to operate with an ambient temperature ranging from +41°F (+5°C) to +104°F (+40°C). Printing outside these limits may result in low quality prints.

- Use eye protection when cleaning or sanding the printed models to avoid getting small particles in your eyes.

2.INTRODUCTION

Thank you for purchasing this X40 3D Printer! This printer uses the FFF (Fused Filament Fabrication) method of printing. It features a metal frame, heated build platform. It can print 1.75mm ABS, PLA, metal fill, wood fill, and other filament types with melting points below 250°C. The machine with Independent Dual Extruders can print at a speed up to150mm/s and 300x300x400mm printing area. It can print from sliced g-code files stored on a micro SD™ card or from our App. It supports auto leveling, automatic shut-down, with a 4.3-inch touch screen, a removable and a heated build plate.

3.FEATURES

- Supports auto leveling

- Includes a heated, removable, build platform

- Can print using APP or from a sliced g-code file on a SD card

- Supports ABS, PLA, metal fill, wood fill, and other filament types with melting points below 260°C

- 300 x 300 x 400 mm print area

- Can print at speeds up to 80mm/sec.

- Includes WiiBuilder slicing software

- Includes 4GB TF card

- Half assembled

- Support duplicate printing and mirror printing

4.CUSTOMER SERVICE

The WEEDO Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a WEEDO Customer Service representative through the Live Chat link on our website *www.weedo.ltd* or via email at *salesservice@wiibooxtech.com.* Check the website for support times and links. You can check the products wiki website for more information:

*http://www.weedo3dprinter.com/doku.php?id=content:x40*

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5.PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact WEEDO Customer Service for a replacement.

    1x 3D Printer

    2x 10m testing PLA filament

    2x Filament holder

    1x SD card

    1xSD card reader

    1x Metal scraper

    1x USB cable

    1x Set of Allen keys

    1x Spanner

    1x Glue

    1x Power cord

6.PRODUCT OVERVIEW

6.1OverView
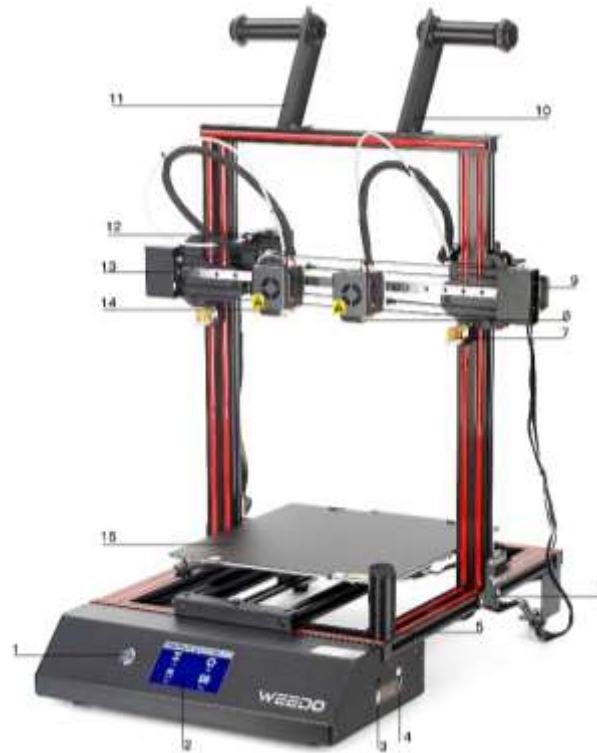
1. Start button
2. 4.3'' touch screen
3. TF card port
4. USB port
5. Camera
6. T Type Fixed bracket
7. Nozzle brush
8. Right nozzle
9. Right X motor
10. Right Filament Holder
11. Left Filament Holder
12. Left Extruder

13. Limit Switch

14.Proximity Sensor

15. Platform

7.INTERFACE SYSTEM

7.1 Interface Operation

**Touch** the printer display with your **Fingertips**.

- Enter into the **Main interface** after **Post**.

- There is a question mark icon in the **upper right corner** of each interface, this is the help button, you can touch the button, it will show you the functions of icons in the current interface.

- In the **Main interface** there are four icons, you can touch different icons to get into **sub-interface**.

- You can click the **Back Button** to return to the previous interface.

- You can click the **Next Button** to go to the next interface.

7.2 Main Interface

- **Status Bar:** Displays the printer information screen, include: **Left Nozzle Temp, Right Nozzle Temp**, **Bed temp**, **IP address**.

- **Print:** Click **Print Button** and get into **Printing File** interface, display a list of TF Card or WIFI Disk, choose the file position you want to print.

- **Setting:** Click the **Setting Button** get into sub-interface. There are **WIFI Setting**, **Language Setting**, **Machine Info**, **Auto Power Off**, **Runout Sensor**, **Post**, **Power Save Mode**, **Update Parameters** Buttons.

- **Maintenance:** Click the **Maintenance** get into sub-interface. There are **Filament Feed**, **Filament Retract**, **Preheat**, **Jog Mode**, **Level Bed**, **Z Offset, Proximity Height, Nozzle Offset Motor** Off Buttons.

- **Help: Error Diagnosis, WIKI** and **Contact Us** in **Help Interface.**

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7.3 Select Print File
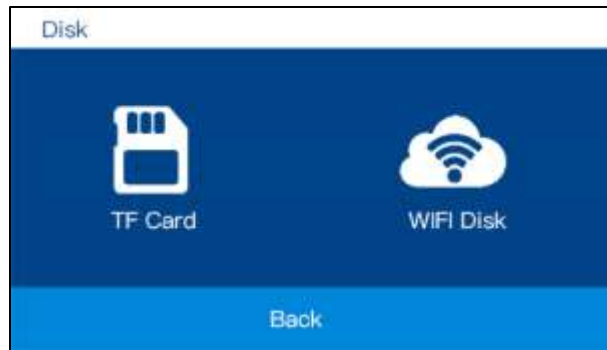
Click **TF Card** and get into **TF Print File** Interface, choose the **Gcode File** in the lists.

◆ Return to the **Main Interface** by clicking **Back icon.** Click **Next icon** to see other files

◆ Click the file you selected, you will see the file information in the (Pic7), the picture of the file, File name, filament type, layer height, infill, printing time. You can select 'print' or choose Dual Mode, after your choose dual mode you can print with duplication and mirror mode.


◆ **Dual Mode interface shows in the below picture.**

7
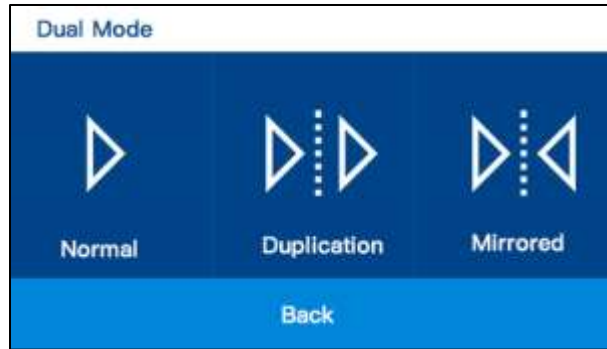
◆ Click the **Back Icon** to get into the previous interface(Pic6)
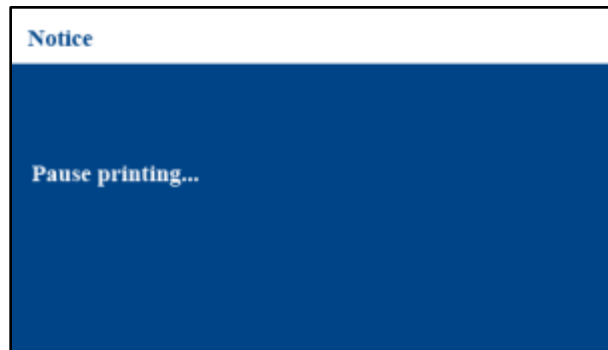
7.4 Printing Interface

- The **help icon** in the upper right corner can help you view a detailed description of the current interface

- It shows **File Name, Printing Speed, Nozzle Temp, Bed Temp, Printing Elapsed Time, Printing Remain Time, Printing Percent.** It can **Quit**, **Pause**, and **Set** the Print process. **File Name** shows the currently printed file name, **Speed** shows the currently print speed, **Nozzle Temp** shows the currently printing nozzle temperature, Bed temperature shows the currently bed temperature. **Elapsed time** shows the time you have printed. **Remain time** shows the printing time left, remaining time is an estimated time, at the beginning of printing, the estimated time will be less accurate. As the printing progresses, the remaining time after calculation will become more accurate. **Print progress bar** shows the progress percentage of printing.

- Click **Quit** and cancel the current print process. Click **Quit** will pop up a prompt window (Pic8) for operation confirmation to prevent accidental touch to cancel printing.
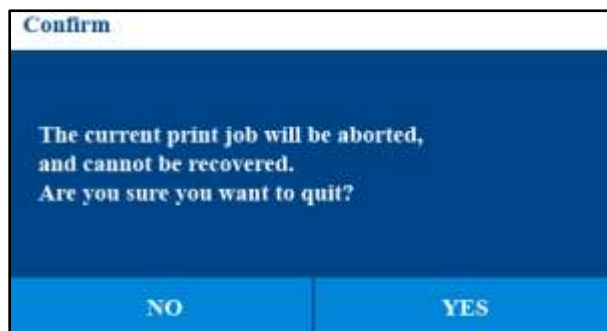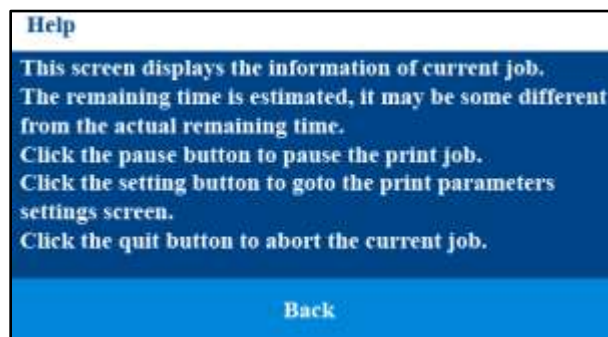
Pic8

- Click **Pause** and it will pop up a prompt window (Pic9) and then pause the current print process. After pausing the print process, Filament operation can be used.

Notice

Pause printing...

Pic9

- Click the **Question Mark Icon** in the upper right corner to display the current interface prompt. (Pic10)

Help

This screen displays the information of current job.
The remaining time is estimated, it may be some different from the actual remaining time.
Click the pause button to pause the print job.
Click the setting button to goto the print parameters settings screen.
Click the quit button to abort the current job.

Back

Pic10

- Click the **Setting** button, printing parameter (**Filament Operation, Printing Temperature, Printing Speed, Auto Power Off, Save and Shutdown**) can be reset. (Pic11 Pic12).

-

Printing Setting			Printing Setting		
Filament Operation	Temperature	Speed	Auto Power Off	Save&Off	
Back		Next	Back	Previous	

Pic11   Pic12

- Click the **Filament Operation** button, if printing is in progress, this function cannot be used, and it can only be used after printing has been paused (Pic13).

Pic13

- Pause the printing process and then click the **Filament Operation** button(Pic14 Pic15). **When your filaments are running out and the model still needs a lot of filaments to print, you can pause and replace the supplies. When you print some models, the model you want different colors, you can also paise and then perform the replacement of filaments**

Pic14

Pic15

- Click the **Temperature** button to change the current printing temperature (Pic16). In the printing progress the printing temperature and bed temperature can be reset.
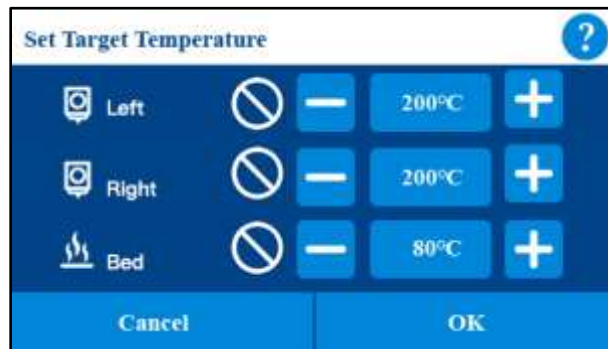
Pic16

- Click the Speed button to change the current printing speed (Pic17). In the printing progress the printing speed can be reset. **Notice: if the speed is set to more than 2**

times, the printing effect on the model surface will become worse. If you want to print faster, set the speed in the slicing software.
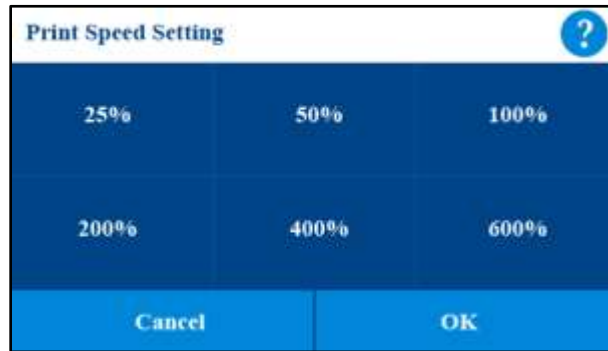
Pic17

- In this interface you can set the **Auto Power Off** function (Pic18) on or off, if this function is on, after each printing completed, the device will automatically shut down. If this function is off, it will not shut down after printing finished.

- When you are printing a model, you suddenly have to go out and do something else, and you are worried about the model printing. At this time, you can select the **Save & Off** function (Pic18), which can save the current printing progress, and then automatically shut down. Next time you turn on the machine, you can continue printing from the previous print progress.

Pic18

7.5 Setting Interface

Pic19   Pic20

11
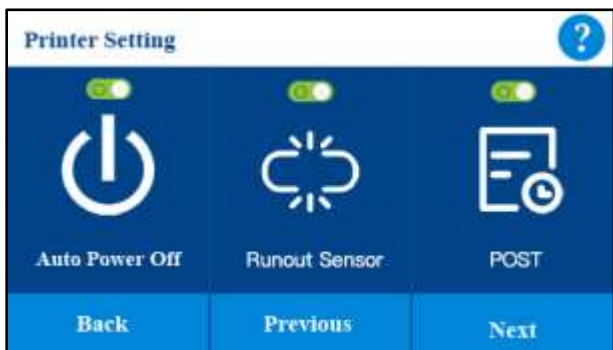
Pic21

- **Wi-Fi Setting:** Set the Wi-Fi for the printer, check the Wi-Fi version、IP address

- **Language Setting:** select different language.

- **Machine Info:** check the machine information, check firmware version, UI version

- **Auto Power Off:** Auto Power off function ON and OFF

- **Runout Sensor:** Runout Sensor function ON and OFF

- **Post:** POST function ON and OFF

- **Power Save Mode:** select the power save mode

- **Update:** update the latest firmware for the printer

- **Parameters:** check parameters, Save firmware parameters to TF card, Load firmware parameters from TF card to printer.

7.5.1WIFI Setting:
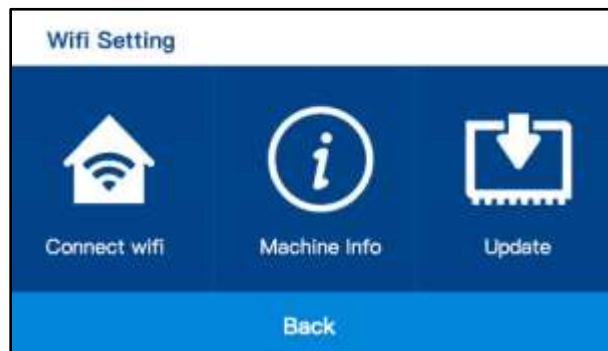
Pic22

- **Connect Wifi:** Connect the printer to WIFI.

  http://www.weedo3dprinter.com/doku.php?id=set_up_wifi_network:x40

  Check this wiki file about how to connect the printer to WIFI

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- **Machine Info:** Check the Information of the WIFI device

Machine Information	
Device Name	WIFICAM
Device Serial	WDACxxxxxxxx
Firmware Version	1.3
IP Address	OFF
AP	UNKNOWN
Cloud Connection	UNAVAILABLE
	Back

- **Update:** When there is a new version of WIFI firmware, Click update, it will begin Firmware OTA update.

7.5.2 Language

Select the language you want to show on the interface.

Language Setting	
English	Spanish
Chinese	Janpanese
Back	

7.5.3 Machine Info:

Machine Information	
Device Name:	X40
Printed Time:	10d 2h 13m
Firmare Version:	1.0.9
UI Versin:	2.5
Device Serial:	WDACxxxxxxxx
WIFI Device:	WIFICAM
QR Code	Back

Pic23

- **Device Name: Printer type**

- **Printed Time:** The time print has printed, the first time you get the print the printed time may not show **zero,** do not worry, all of our machine has tested before leaving the factory

- **Firmware Version:** the firmware version of the printer, the firmware version will change after the new firmware is updated.

- **UI Version:** the UI version of the printer, the UI version will change after the new UI is updated.

- **Device Serial:** unique serial number when the device was manufactured.

- **WIFI Device:** The WIFI module of this printer is WIFICAM

7.5.4 Auto Power Off

Auto Power Off: printer will automatically shutdown after printing finished. It can turn on or turn off.

7.5.5 Runout Sensor

Runout Sensor: printer will paused if the filament runout. It can turn on or turn off.

7.5.6 POST

POST: printer will self-testing when the printer turns on. It can turn on or turn off.

7.5.7 Power Save Mode

Pic24

- **Mode:** Disable means the printer will always power on, if you select 1min and click OK, do not perform any operation on the machine such as 1 minute, the machine will automatically shut down to save power

7.5.8 Update:

If there is a new version of firmware published form WEEDO website or wiki website, you can download it to TF card. The file type is:.wfm and name: flash.
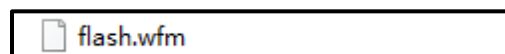
Click update it will update firmware automatically.

7.5.9Parameters

This interface shows the Firmware parameters of the printer, Home Offset, Z-Probe Offset.

If you connect to the computer and do some parameters testing, **please save the parameters to TF card, and Load from TF card for the originally parameters** if your changed parameters gets wrong printing.

7.6 Maintenance interface

Pic25   Pic26
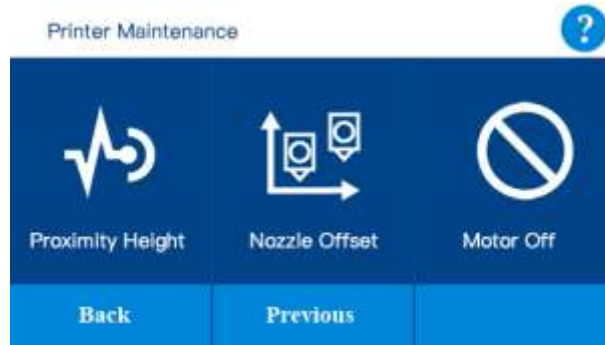
Pic27

- The **help icon** in the upper right corner can help you view a detailed description of the current interface

- **Filament Feed:** Feed the filament to left and right nozzle.

- **Filament Retract:** Retract the filament of left and right nozzle.

- **Preheat:** Set the temperature and preheat the nozzle and bed

- **Jog Mode:** Move X Y Z axis and X Y Z go to home

- **Level Bed：** Adjust the flatness of the platform

- **Z offset：** Set the gap between nozzle and platform

- **Proximity Height:** Set the height of Proximity Switch

- **Nozzle Offset:** set the XY Offset and Z offset of two independent nozzles

- **Motor Off:** Unlock all the motor

- Click the **Back** icon to return to the main interface, Click the **Previous** icon to return to the precious interface, Click the **Next** icon to enter the next interface.

7.6.1Filament Feed:

Click **Filament Feed** icon, get into filament feed interface. Click the **Back** icon to return to the previous interface.

Select the nozzle you want to feed filament, after you select the nozzle, for example select the left nozzle, the nozzle starts heating (Pic29), at this time insert the filament into Filament guide tube from extrude. **Note:** Before inserting the filament into the guide tube, in order to allow the filament to be inserted into the pipe smoothly, straighten the front end of the filament (Picture 30) and then hold the handle of the extruder and insert it from the extruder end. As shown in the figure (Pic31), it can be 2-3cm above the starting joint. **After the filament feeding is completed, the filament will be automatically retracted and returned to the waiting position. This is to allow another nozzle to feed.** Click the **Back** icon to return to the previous interface.

7.6.2Filament Retract:

Click **Filament Retract** icon, get into filament feed interface (Pic32). Click the **Back** icon to return to the previous interface.

Pic32

Select the nozzle you want to retract filament, after you select the nozzle, for example select the left nozzle, the nozzle starts heating (Pic33), when the nozzle is heated to the specified temperature, extruder gear begins to rotate, the filament returned to the waiting position. Click the **Back** icon to return to the previous interface.

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Left Nozzle Filament Retract

Filament retracting...
Please wait a few minutes

210°C

Back

Pic33

7.6.3Preheat:

Click the Preheat Icon get into **Preheat** interface (Pic34). In the interface, Nozzle and Bed can be preheated. Choose the target temperature of nozzle and bed and click **OK** icon, it begins heating, Click the **Cancel** icon to return to the previous interface.

Set Target Temperature

Left   200°C

Right   200°C

Bed   80°C

Cancel   OK

Pic 34

7.6.4 Jog Mode:

Click the **Jog Mode** icon get into Jog Mode interface (Pic35). Click **Return Home** Icon X Y Z will go to the home position. Click X Y Z, it will move in X Y Z direction respectively, there are three step sizes to choose from: 1mm, 1cm and 5cm. Click the **Back** icon to return to the previous interface.

Pic35

7.6.5 Level Bed:

Click the **Level Bed** icon get into Level Bed interface (Pic36).
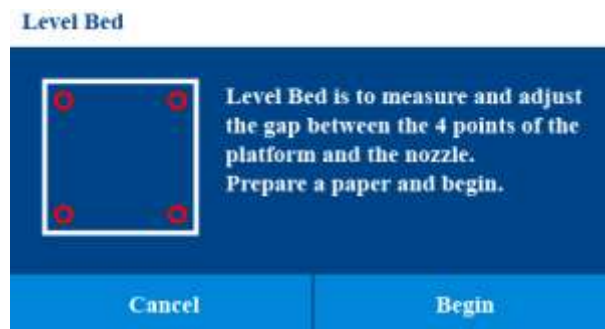
Pic36

Prepare a piece of paper, Click **Begin** icon to enter the leveling process. It will adjust four points. (Pic37-Pic40). Follow the interface prompts to complete the adjustment of each point.
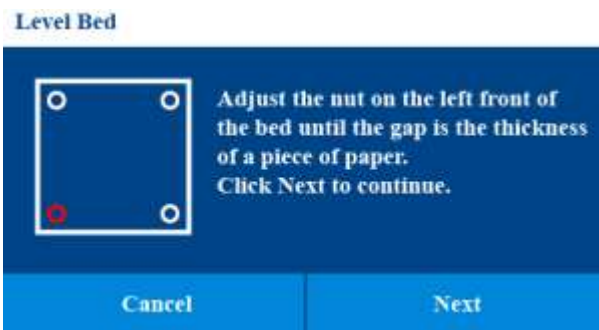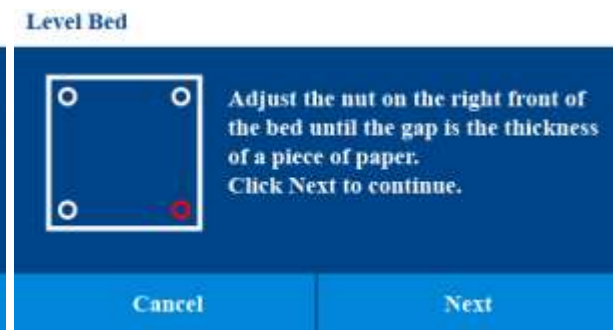
Pic 37   Pic38
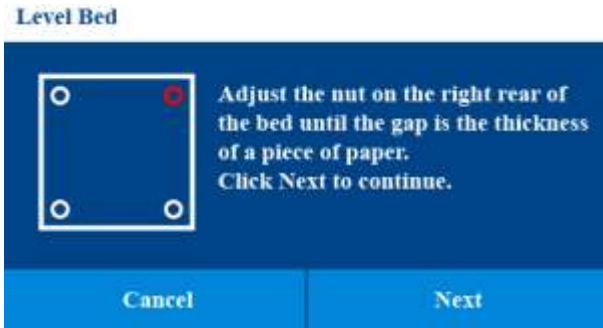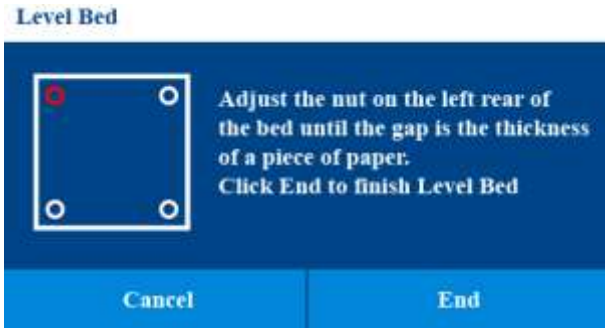
Pic 39   Pic40

7.6.6 Z Offset:

After Level Bed, Please Click the **Z Offset** icon to adjust the gap between Nozzle and platform. **Note: if the gap is too small, the nozzle will leave deep marks on the platform during printing, which may cause plugging of the print head and damage the nozzle and the platform. If the gap is too big, the nozzle will be suspended during printing, causing printing failure.**
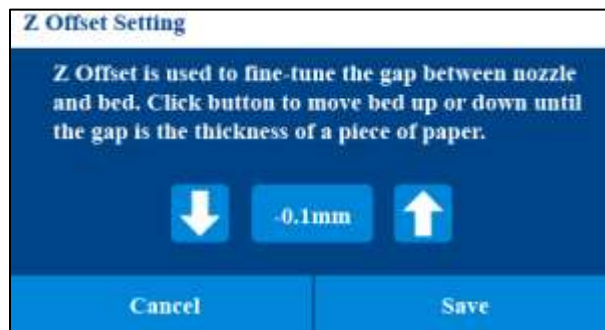
Pic41

Please prepare a business card, after our test, the distance between the nozzle and platform is the best in the thickness of a business card.

Click the **Down** icon the nozzle moves downward, and the gap between the nozzle and the platform becomes smaller, Click the **UP** icon the nozzle moves up, and the gap between the nozzle and the platform becomes larger, after adjusting to the appropriate gap, click **Save icon** to save (Pic41). The value displayed on the interface will be different for different machines.

7.6.7 Proximity Height:

Click **Proximity Height** Icon to adjust the height of proximity switch.

There is a proximity switch on the left side of the nozzle. When we replace the proximity switch, we need to adjust the height of the proximity switch. This function can help us adjust the height of the proximity switch.
Follow the prompts on the interface to complete the adjustment. (Pic42)

Proximity Height adjustment

After moving, the proximity should be on. If it is off, loosen the screw and fine-tune the height of proximity until the switch is turned on. Then fix the position of proximity. Current status is:
ON

Back
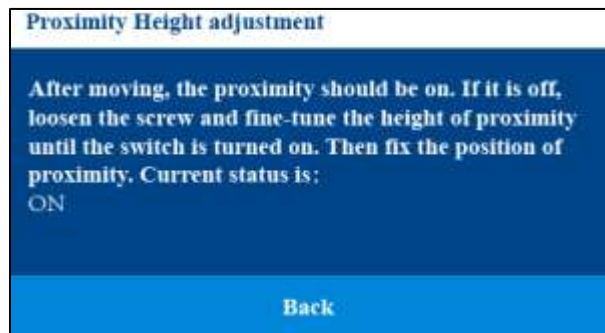
Pic42

7.6.8 Nozzle Offset

Nozzle Offset is used for adjusting the XY nozzle Offset and Z nozzle offset between two nozzles. All these settings are finished before factory. **If you replace a new nozzle for adjust the belt of the printer you have to reset these settings**
This interface includes:
◆ X Coarse Tune
◆ XY Fine Tune
◆ Z Offset Tune

Nozzle Offset Adjustment

X Coarse Tune   XY Fine Tune   Z Offset Tune

Back

Click X Coarse.

Nozzle X Offset Coarse Tune

Print the file NozzleCoarseTune.gcode
Select the number on the block with the smallest deviation
between the upper and the lower layers and Save

1(349)   2(350)   3(351)   4(352)   5(353)

Cancel   Save
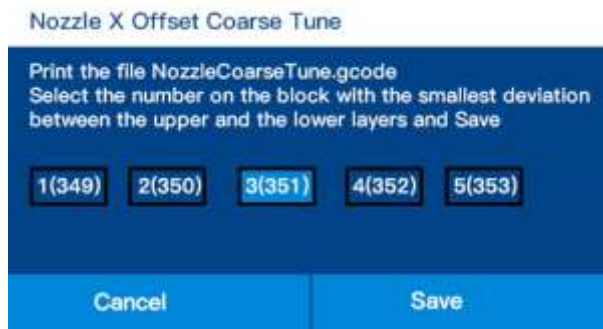
Print the two-color test file in the TF card, the file name is: NozzleCoarseTune.gcode
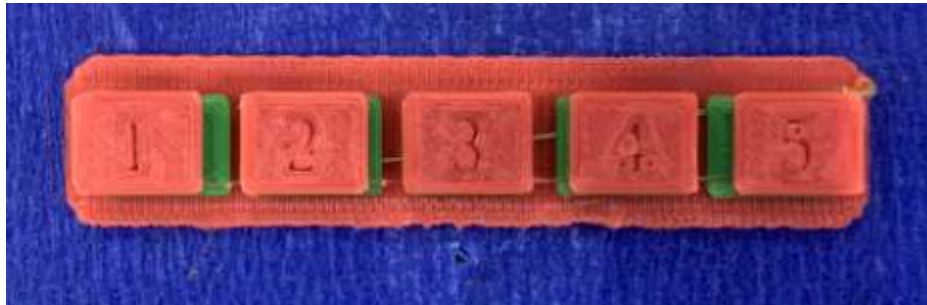
At the end of the print, observe the 5 test blocks and select the one with the smallest X deviation as shown in the following figure: select 3 （this example choose 3, depend on the pictures shows on your printer）

Print the two-color test file in the TF card, the file name is: NozzleFintTune.gcode.

Look at 10 of the printed models that test the horizontal and vertical directions of two colors.

Horizontal direction: from top to bottom, select the test block with the closest overlap of the two colors in the left and right directions. **Choose 5(0) on the model shows.**

Vertical direction (front and rear direction): from the top down, select the test block with the closest overlap of the two colors in the front and rear direction.
Select 2 test block and switch 5 (0) to 2 (- 0.3) and save.

7.8 Help Interface

Click **Help** icon to enter into Help interface.

- **Error Diagnosis:** Diagnose equipment failure step by step**.**
- **Wiki:** Check our wiki website for this printer
- **Contact Us:** contact Us through email or website.

8.WIIBUILDER SLICING SOFTWARE

The printer includes the WiiBuilder slicing software on the included SD card. Use the included card reader to display the contents of the SD card on your PC to install the program.

8.1 Installation

Perform the following steps to install the WiiBuilder slicing software.

1. Locate and run the **WiiBuilder.exe** software on the SD card to install the WiiBuilder software program. The Installer will prompt you for the language to use in the Install Shield Wizard. Use the pull-down menu to select your preferred language, then click the **OK** button to continue.
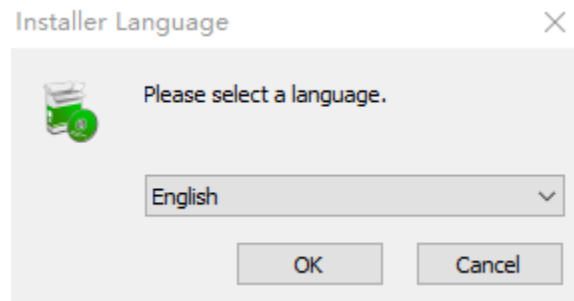
Pic44

2. The Wizard will prompt you to select the install location. If you don't want to use the default install location, use the **Browse...** button to select a different directory. Click the **Next** button when you are satisfied with the install location.
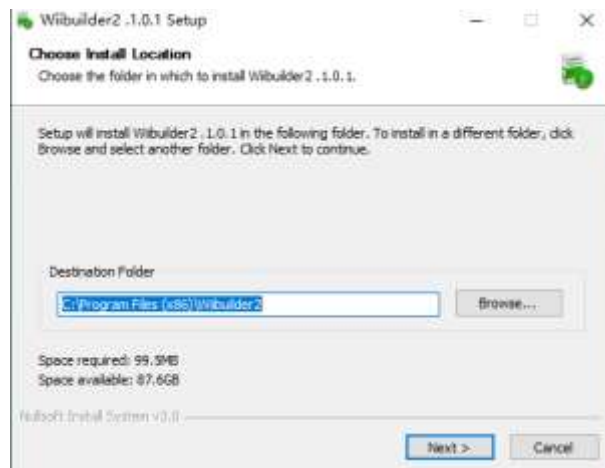
Pic45

3. Click the **Install** button to continue.
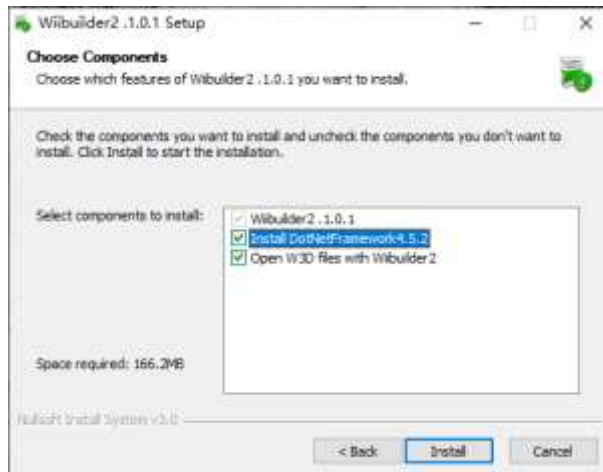
Pic46

4. Once the installation is complete, click the **Next** button to continue.
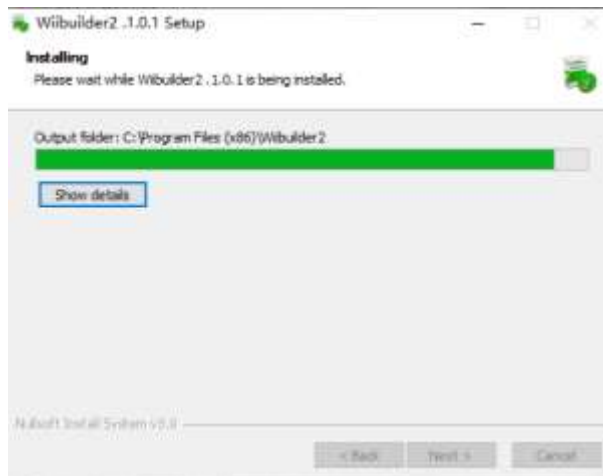
Pic47

5. Click the **Finish** button to complete the installation and launch the program.
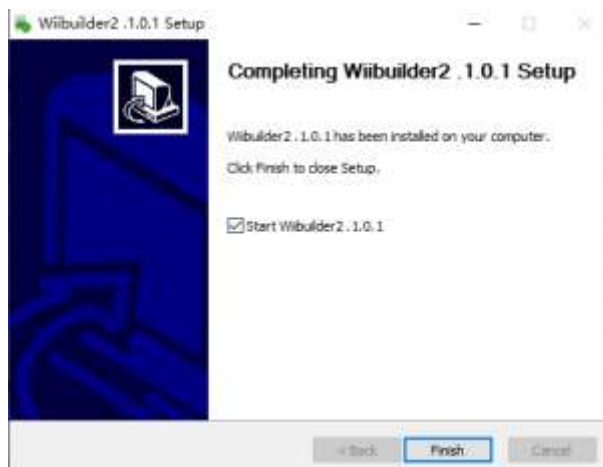
8.2 WiiBuilder Setup

1. Once the program launches, the **Initial Setup Wizard** will launch. It will inform you of several program basics, including how to load model files, the locations of the slice buttons, etc. Read each page, clicking the **next** button to proceed from page to page. Click the **finished** button on the final page to close the Wizard.
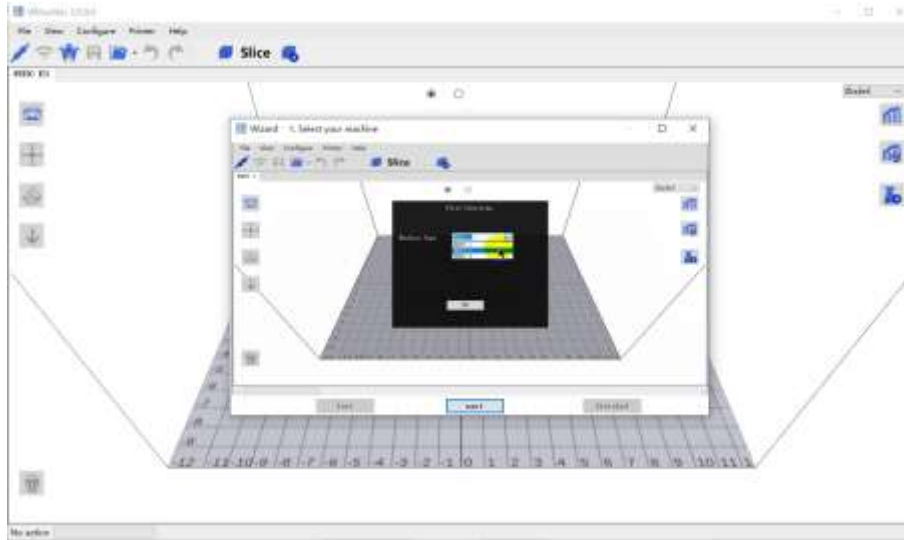
Pic49

2. Once the Wizard closes, you will be prompted to select the printer model and the units of measure you want to use. **ME40 Pro** is the default selection. Click the **OK** button to continue.
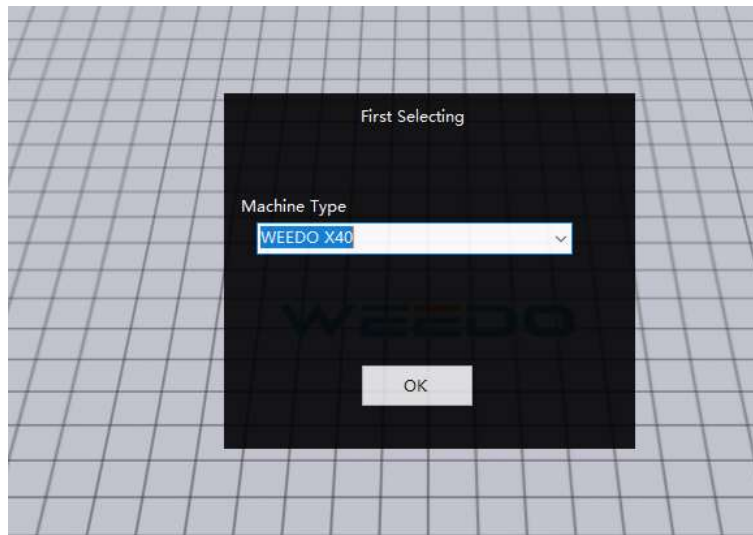
Pic50

3. Click the Toolbar button Slicing Settings, open the Slicing Settings dialog. (Pic51)
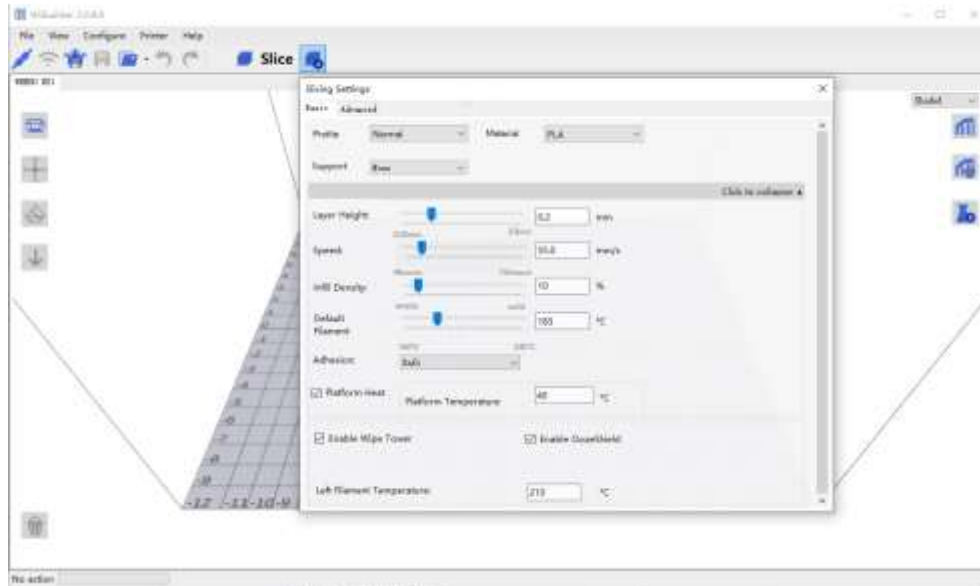
Pic51

4. Click the Advanced tab to display the following dialog. The following sections detail the options on each tab. (Pic52)
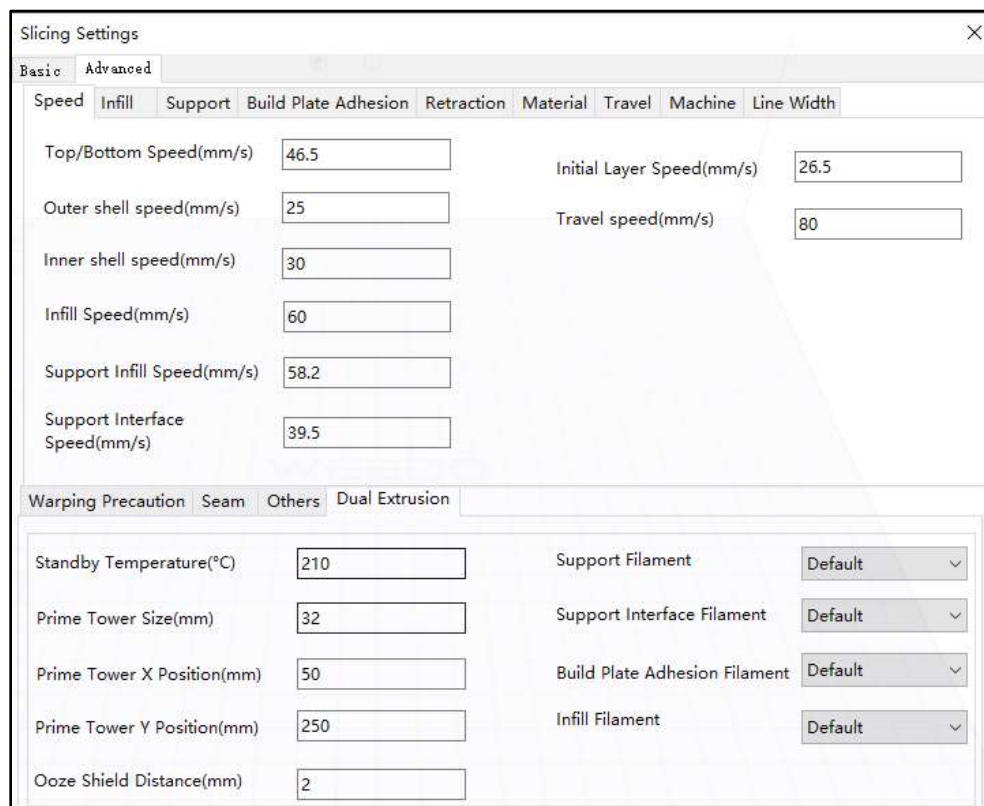
Pic52

5. **Load STL File.** Click **File- Open File**, select your STL file on your computer. You can select example file also. (Pic53)
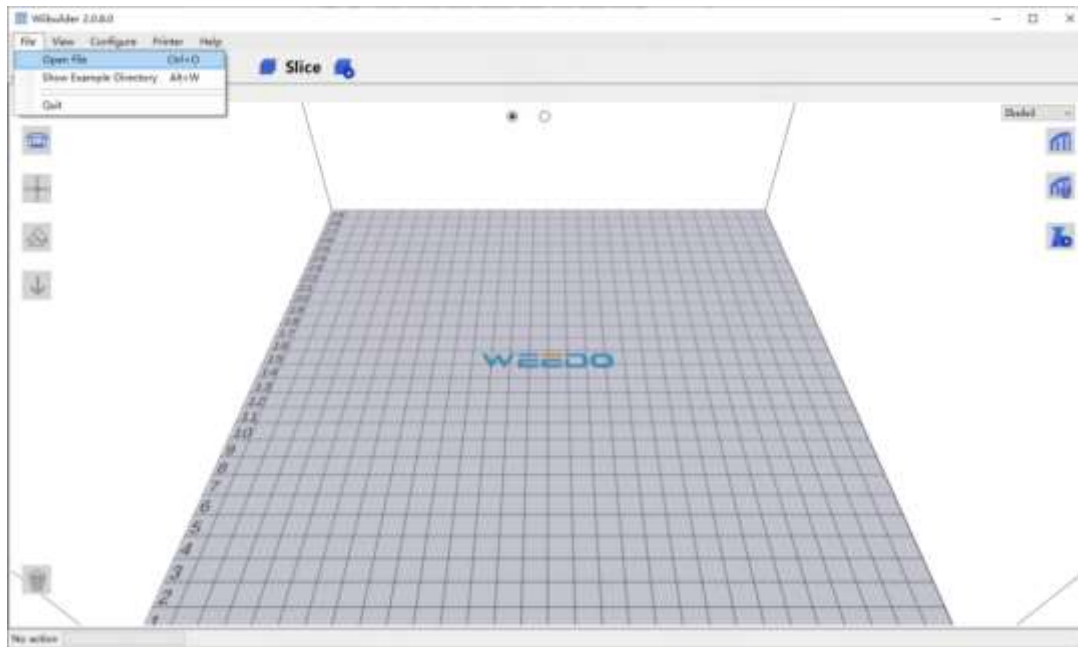
Pic53

6. **Slice File**: Click Slice, it will slice the file. The bottom left corner of the interface shows the progress of the slice (Pic54), and the bottom right corner of the interface shows the estimated printing time and weight of the printing supplies (Pic55). **Note:** you can search this website for free stl model: ***www.thingiverse.com***
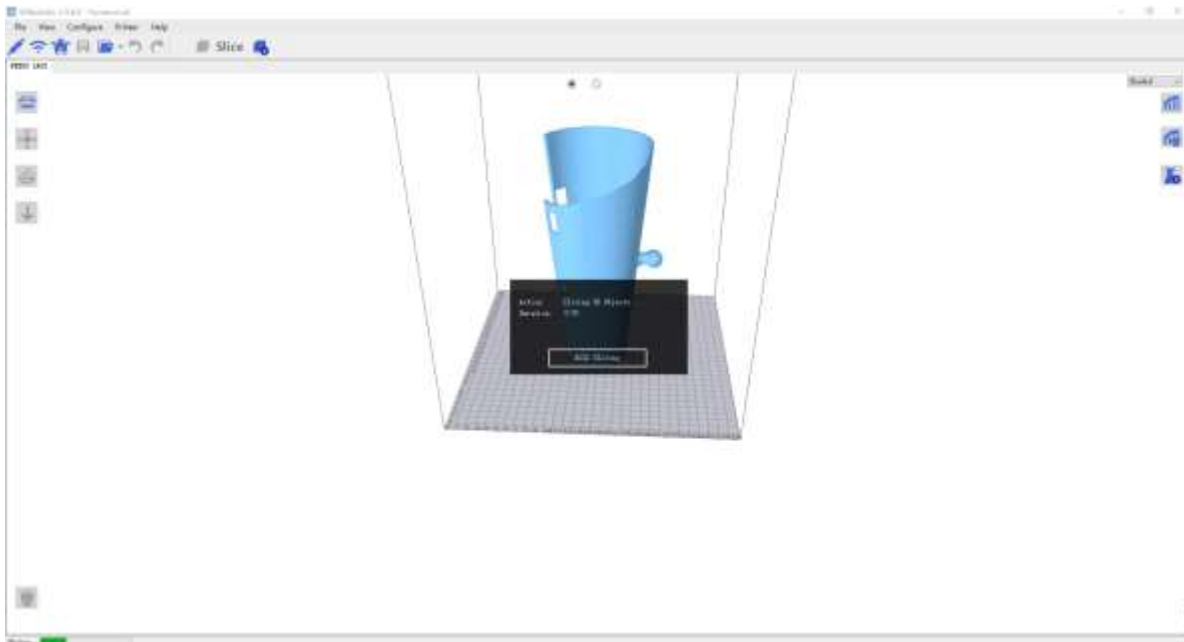
Pic54
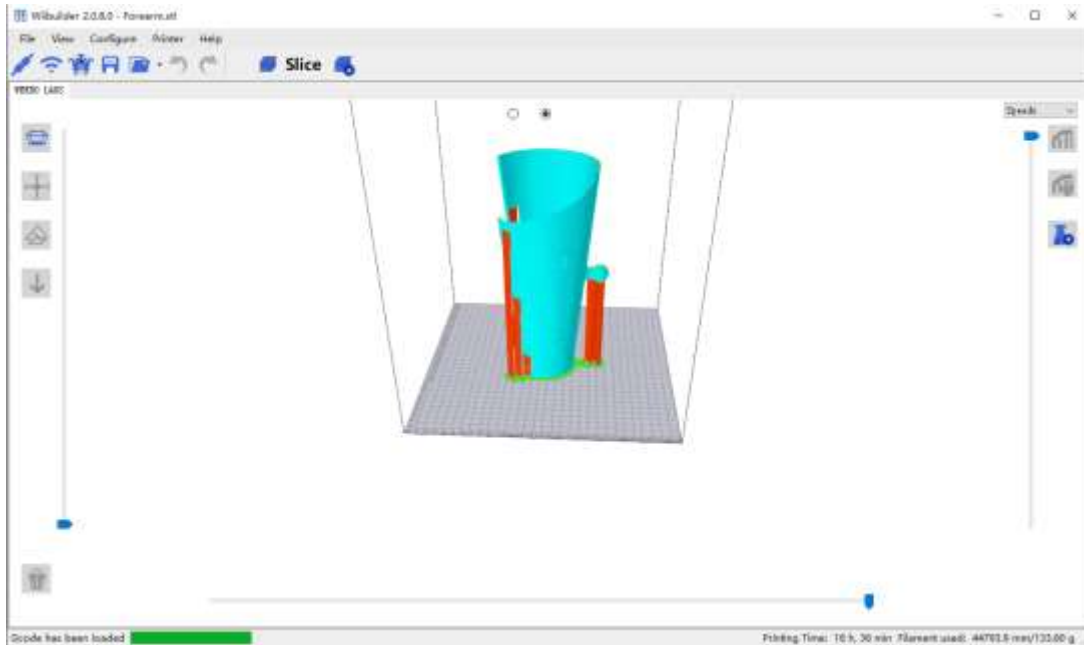
Pic55

7. **Choose Nozzle for single-color model:** If you print a single-color model, you can use left or right nozzle. Click 'edit' in the right side of interface. Click 'forearm.stl' example in Pic56, and in the Material Select the left or right nozzle in the material options. There is a material color option on the right side of the material selection. You can choose different colors, choose different colors, and the model color in the interface will change accordingly. Pic57

Pic56

![WEEDO]
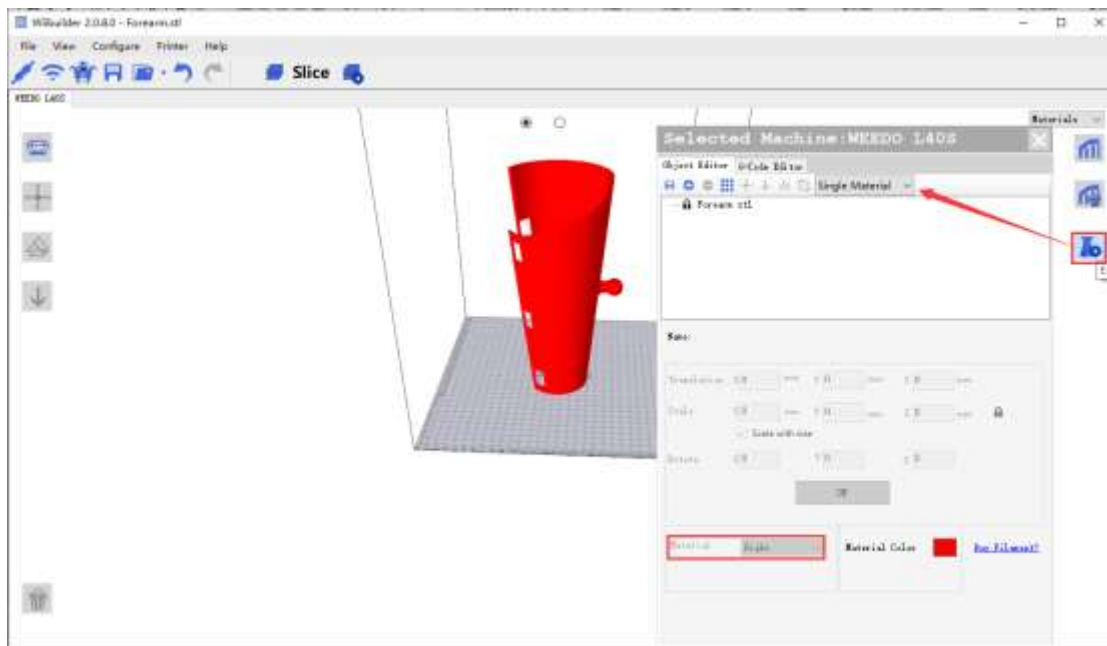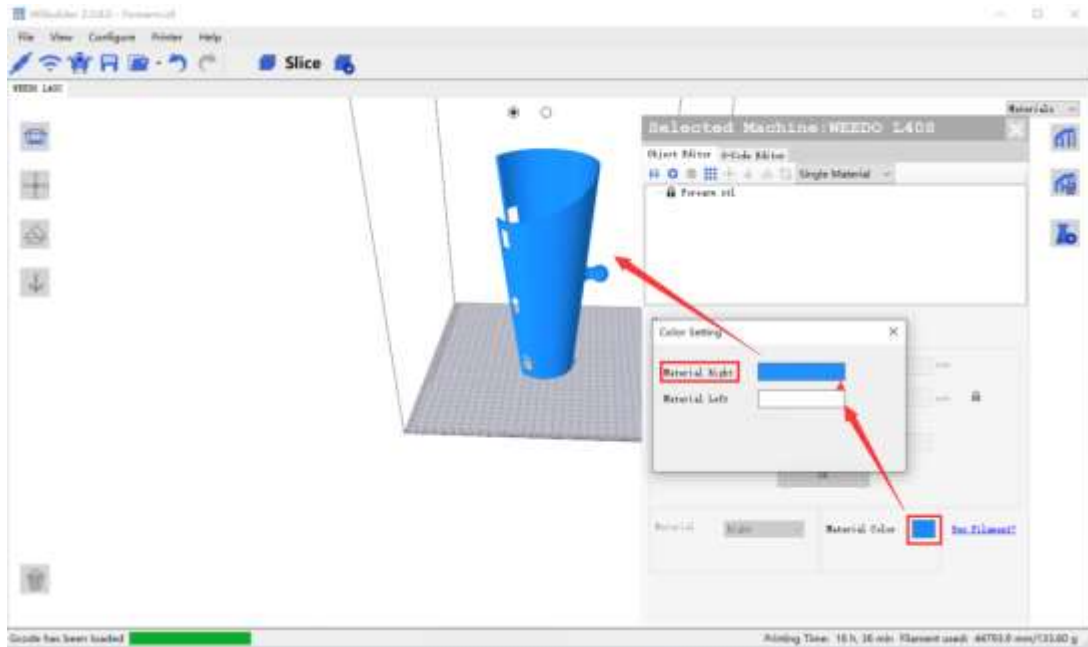
Pic57

8. **How to color different parts of the movable model.** Load a stl file-reno, which is movable show in Pic58, Click 'Split', the model will split into different parts, we can choose different nozzle for different parts to print, show in Pic59. When printing two colors, the upper left corner will print the erase tower for switching colors, show in Pic60
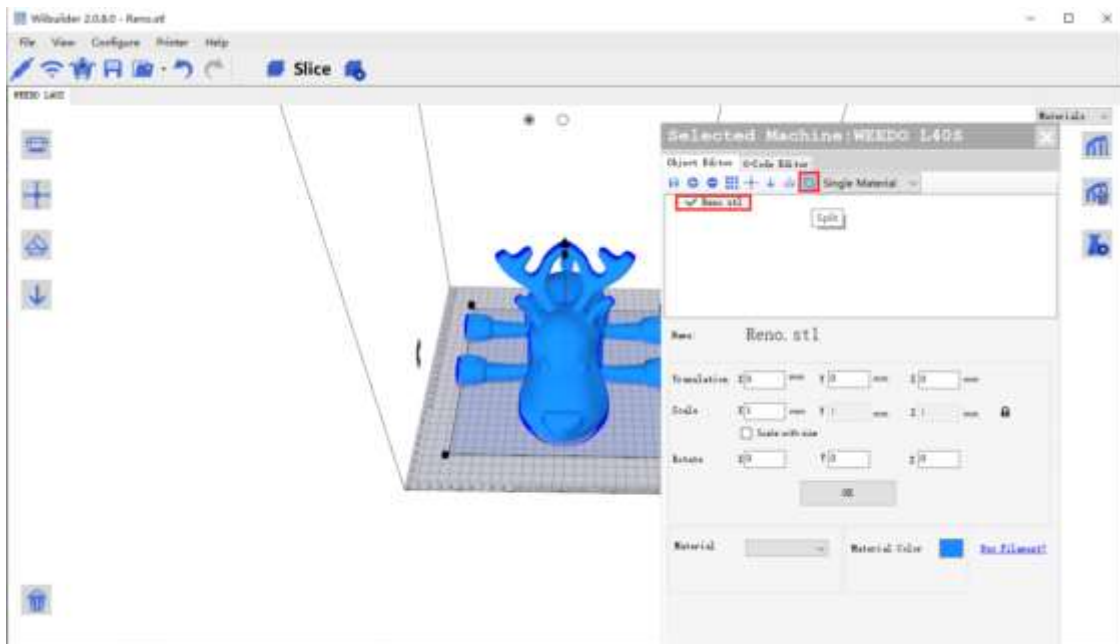
Pic58
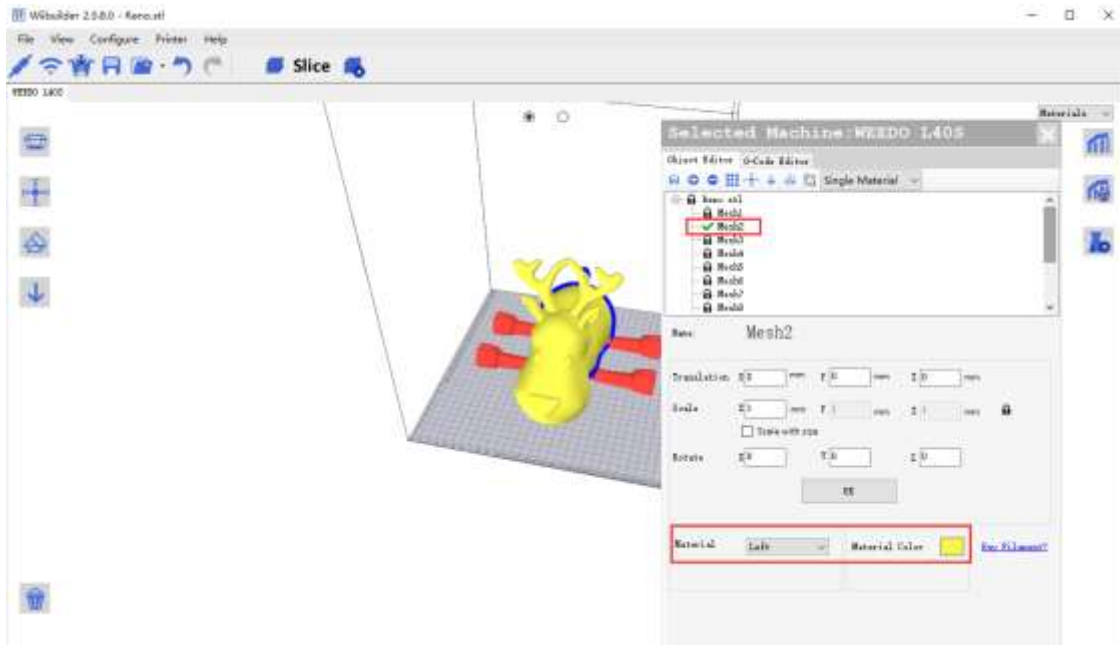
Pic59
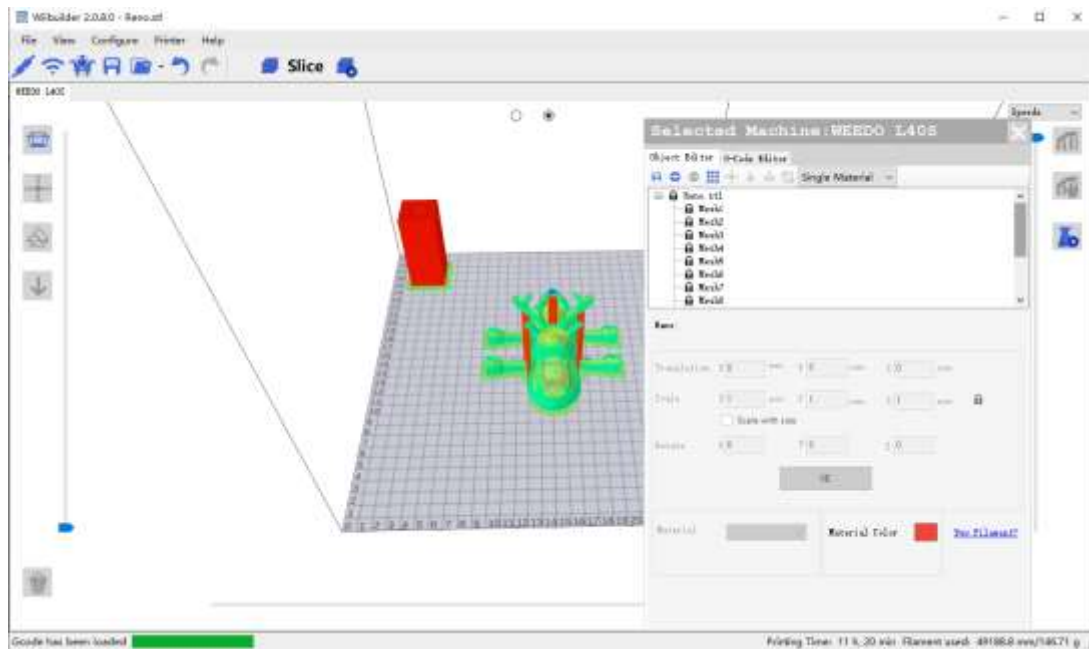
Pic60

When print dual-color model, you can choose different nozzles to print support and fill. In Pic61,

When print dual color, default nozzle is Right Nozzle.

When print single color, default nozzle is depending on the nozzle you choose show in pic56.
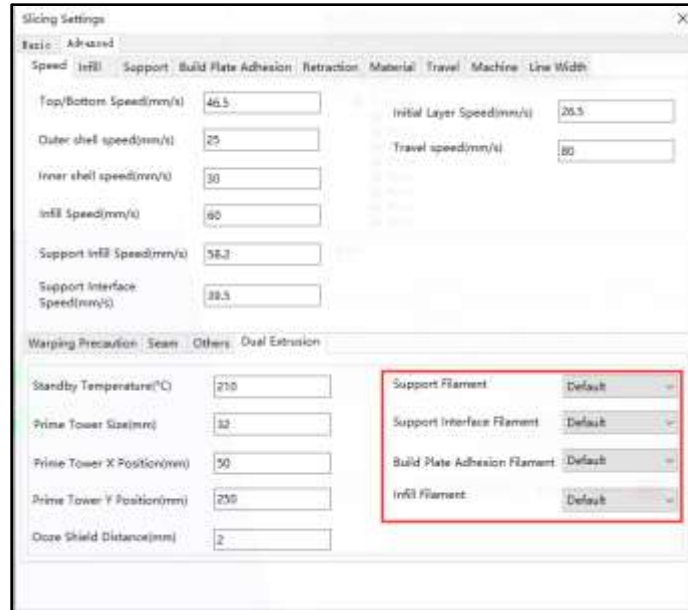
Pic61

9. How to load two models and merge them together.

Load two models simultaneously with the 'Ctrl' key on your keyboard. Show in Pic62.
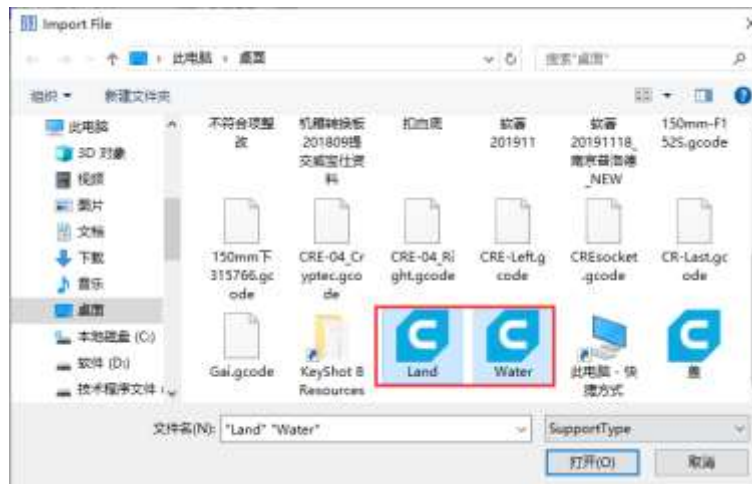
Pic62

After the model is loaded into the software, hold down the ctrl key on the keyboard, click the left mouse button to select both models at the same time, then right-click and select 'Merge Muti-Model', show in Pic63. After merge the model, two model become one model, as show in Pic64. **Note: both models must be models that can be merged to perform this step.**

Set the two-color model according to the setting method of the movable model described above.
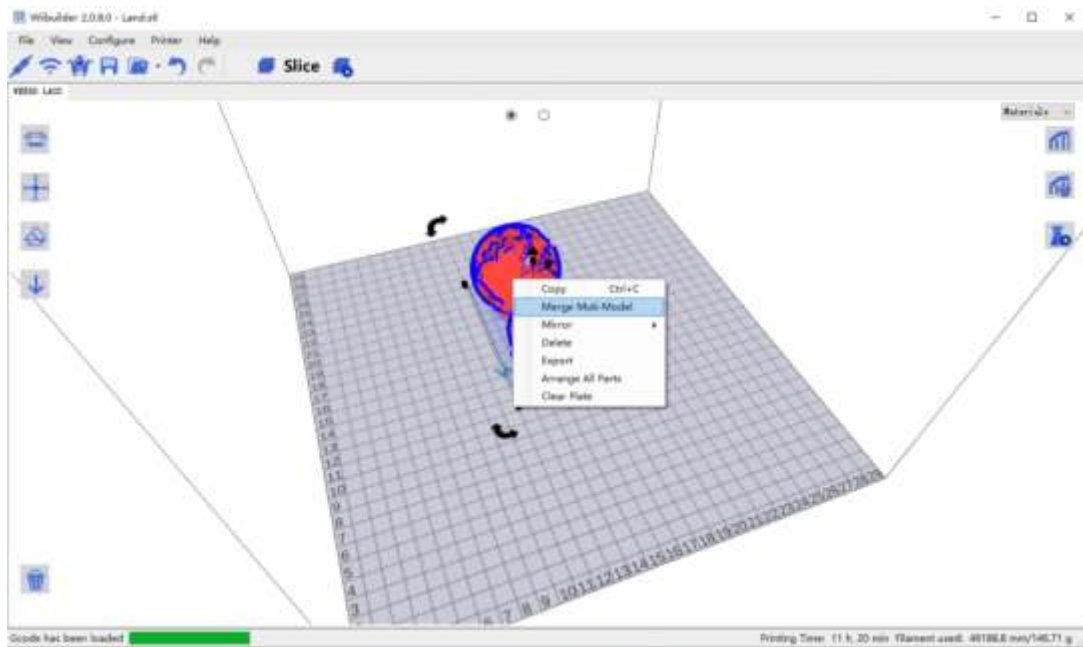
Pic63

Pic64

8.3 Speed Tab

Pic65

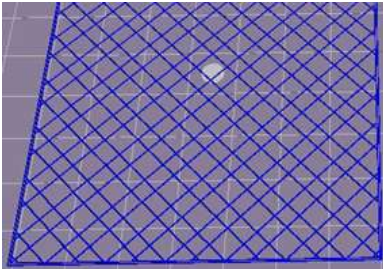The **Speed Tab** features the following options:
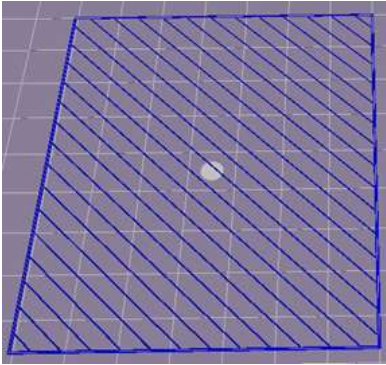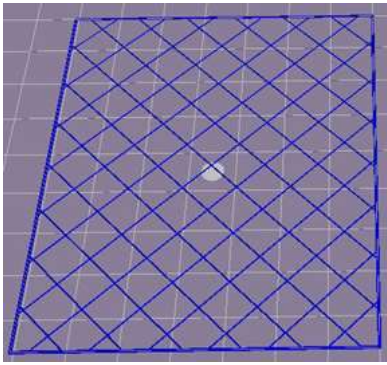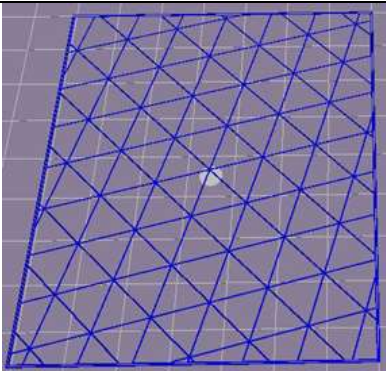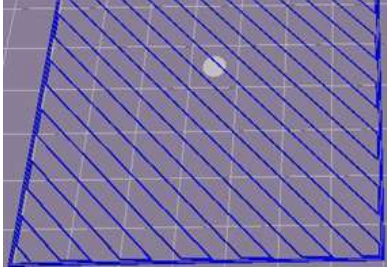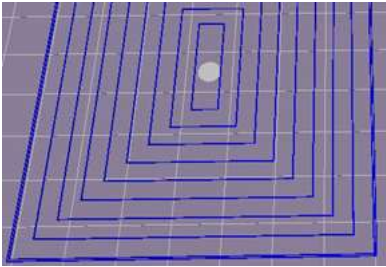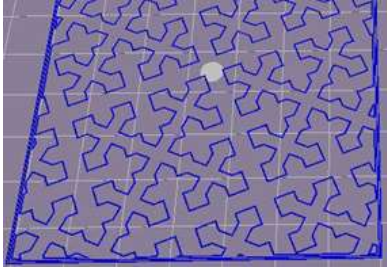
- **Top/Bottom Speed (mm/s):** Sets the printing speed of the top and bottom surfaces of the model.

- **Outer shell speed (mm/s):** Sets the printing speed of the external shell surfaces.

- **Inner shell speed (mm/s):** Sets the printing speed of the internal shell surfaces.

- **Infill Speed (mm/s):** Sets the printing speed of the infill inside the model.

- **Support Infill Speed (mm/s):** Sets the printing speed of infill inside the model supports.

- **Support Interface Speed (mm/s):** Sets the printing speed of the top and bottom surfaces of the model supports.

- **Initial Layer Speed (mm/s):** Sets the printing speed of the first layer of the model.

- **Travel speed (mm/s):** Sets the movement speed of the nozzle when not printing.
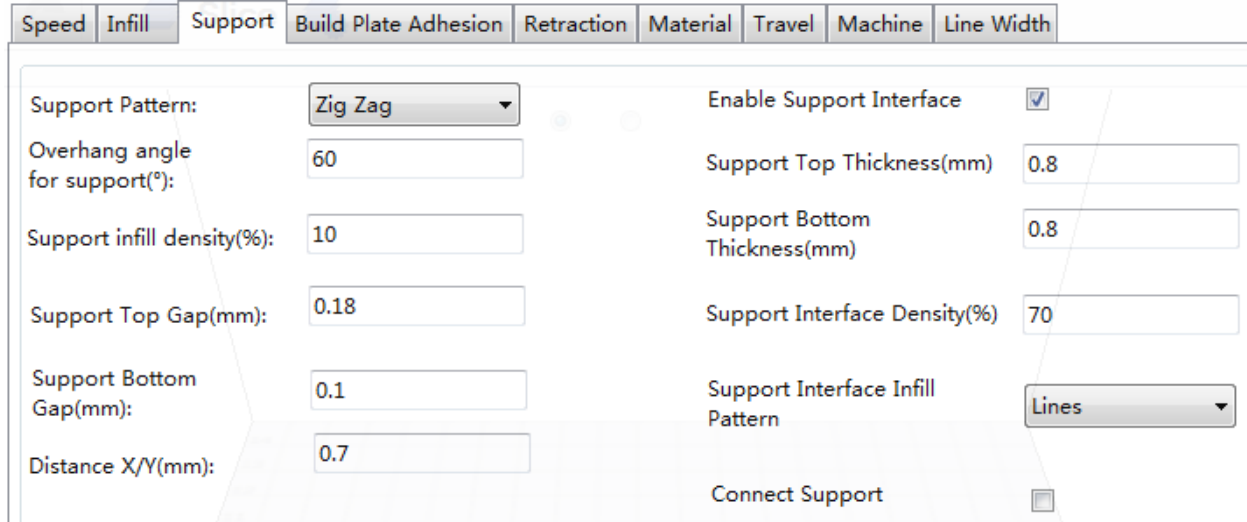
8.4 Infill Tab

Pic66

- **Infill Pattern:** Use the drop-down menu to select one of seven different infill patterns, including **Lines**, **Grid**, **Triangles**, **Zig Zag**, **Concentric**, **Cross**, and **Octet**. The individual patterns are illustrated in the table below.

- **Infill Before Wall:** Check this box to print the model after filling and printing the outline.

- **Outer Before Inner Walls:** Check this box to print the exterior walls before printing the interior walls.

- **Gradual Infill Steps:** For models that need to gradually change the fill rate, this value determines how many layers to change at once.

- **Enable Adaptive Infill:** Check this box to enable the adaptive infill. When a thin wall area appears in the model, the slice engine automatically increases the fill density of this area.

- **Adaptive Infill Threshold**: When the thin wall thickness is less than this value, the slice engine increases the fill density of the area.

- **Adaptive Infill Density**: Infill density used in thin wall area.

Infill Patterns	
Lines	Grid
Triangle	Zig Zag
Concentric	Cross
Octet	

8.5 Support Tab

Pic67

- **Support Pattern:** Use the drop-down menu to select one of five support patterns, including **Lines**, **Grid**, **Triangles**, **Zig Zag**, and **Concentric**. The pattern designs are the same as those of the infill patterns of the same name.

  - **Lines** support is easier to remove and is used on models that require more support.

  - **Grid** support is used on small models, which need fewer supports.

  - **Zig Zag** support is used for models that are particularly difficult to remove. It is stronger than Lines support and is better than Grid support.

- **Overhang angle:** The overhang angle is the angle between the support and the surface of the model. Larger settings make the supports easier to remove, while smaller settings provide better support. The default angle is 60 degrees.

- **Support infill density (%):** Determines the infill density for supports. The higher the density, the stronger the supports.

- **Support Top Gap (mm):** The distance between the top of the support and the model surface. The smaller the distance, the more effective the support, but is more difficult to remove from the model surface, resulting in residual material on the model surface. The larger the distance, the less effective the support, but is easier to remove from the model surface, resulting in a smoother surface.

- **Support Bottom Gap (mm):** The distance between the bottom of the support and the model surface. The effects of this parameter are the same as the effects of the **Support Top Gap (mm)** parameter.

- **Distance X/Y (mm):** The distance between the support and the model surface in the horizontal plane. The effects of this parameter are the same as the effects of the **Support Top Gap (mm)** parameter.

- **Enable Support:** Check this box to use supports.

- **Support Top:** Determines the thickness of the top layer of the supports.

- **Support Bottom:** Determines the thickness of the bottom layer of the supports.

- **Support Interface:** Sets the percentage of infill used inside the supports.

- **Support Interface Infill Pattern:** Use this drop-down menu to choose one of five infill patterns for the supports, including **Lines**, **Grid**, **Triangles**, **Zig Zag**, and **Concentric**. The pattern designs are the same as those of the infill patterns of the same name.

- **Connect Support:** Check this box to connect separate supports into one part.
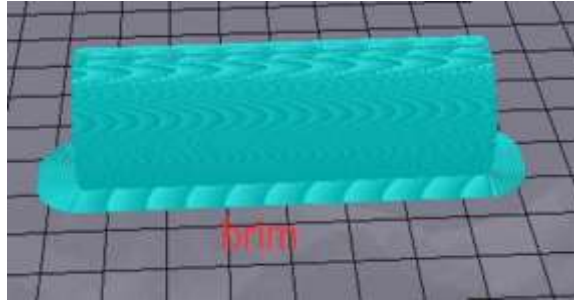
8.6 Build Plate Adhesion Tab

Pic68

- **Raft Air Gap (mm):** The distance between the raft and the model. This determines the difficulty of removing the raft from the model.
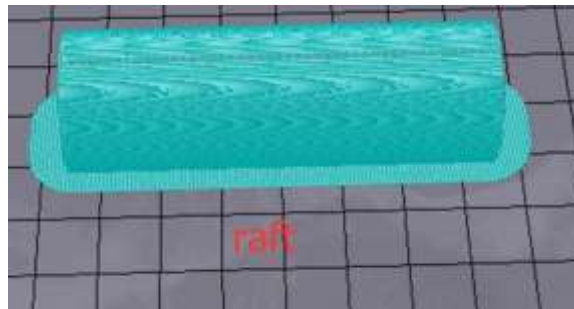

Pic69

- **Raft Extra Margin (mm):** The distance between the edge of the raft and the model surface.

- **Raft Base thickness (mm):** Determines the thickness of the raft.

- **Initial Layer Z Overlap:** Determines the amount of overlap between the first and second layers of the model.

- **Brim line amount:** Sets the number of ring gaskets that are added to the edge of the model in contact with the build platform.

Pic70

- **Skirt Line Count:** Sets the number of anti-overflow lines at the end of the model in contact with the build platform.
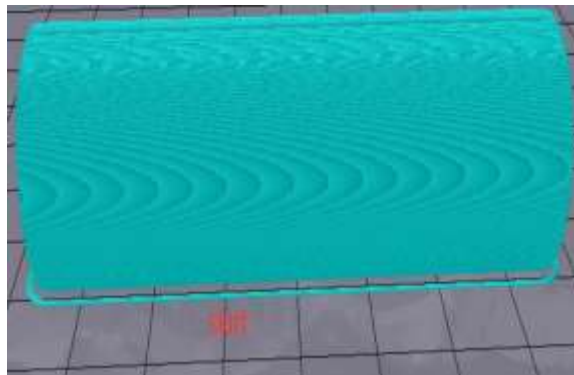
Pic71

8.7 Retraction Tab

| Speed | Infill | Support | Build Plate Adhesion | Retraction | Material | Travel | Machine | Line Width |

Horizontal Travel Retraction ☑   Z Hop When Retracted ☑

Retract at Layer Change ☐

Z Hop Height(mm): 0

Retraction speed(mm/s): 28

Retraction distance(mm): 1.2

Retraction Minimum Travel(mm): 0.8

Pic72

- **Horizontal Travel Retraction:** Check this box to enable filament retraction when the nozzle is not printing and is moving in a horizontal direction.

- **Retract at Layer Change:** Check this box to retract the filament when switching from layer to layer.

- **Retraction speed (mm/s):** Sets the speed at which filament is retracted.

- **Retraction distance (mm):** The distance the filament is retracted within the nozzle.

- **Retraction Minimum Travel (mm):** Sets the minimum nozzle movement distance before printing and before retracting the filament.

- **Z Hoe When Retracted:** Check this box to enable lift the nozzle when filament is returned after retraction.

- **Z Hop Height (mm):** The distance the nozzle is lifted when filament is returned after retraction.
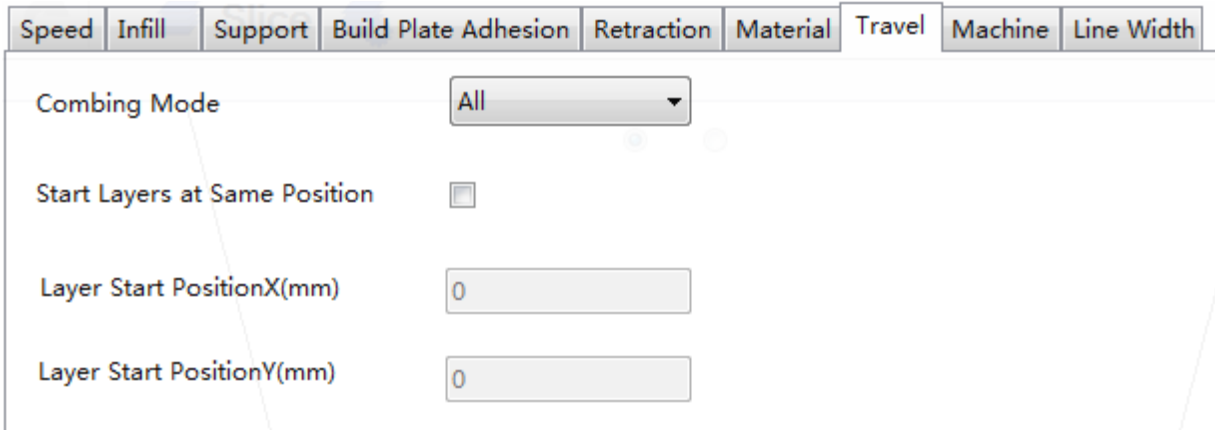
8.8 Material Tab

| Speed | Infill | Support | Build Plate Adhesion | Retraction | Material | Travel | Machine | Line Width |

Filament flow(%): 95

Filament Diameter(mm): 1.75

Pic73

- **Filament flow (%):** Sets the flow rate of filament in the melting state. This is set according to the type of filament being used. In general, the flow rate for PLA or PLA Pro is 90 and the flow rate of ABS is 100.

- **Filament Diameter (mm):** Sets the diameter of the filament being used. This printer only supports 1.75mm diameter filament.
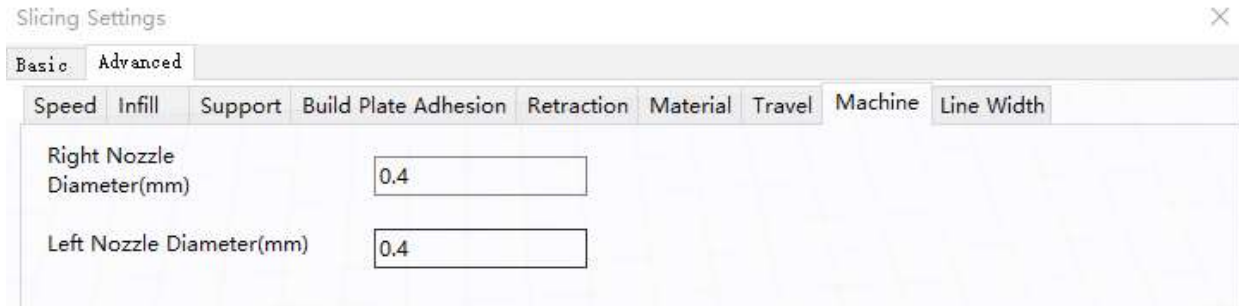
8.9 Travel Tab

| Speed | Infill | Support | Build Plate Adhesion | Retraction | Material | Travel | Machine | Line Width |

Combing Mode: All

Start Layers at Same Position: ☐

Layer Start PositionX(mm): 0

Layer Start PositionY(mm): 0

Pic74

- **Combing Mode:** This option determines how the nozzle will move when not printing. The **Off** option has the nozzle move the shortest distance between the previous extrusion location and the new start location. The **All** option causes the nozzle to move along anything it has already extruded. The **No Skin** option will avoid the outer layers to move the nozzle to the new start location, which can greatly improve print quality.

- **Start Layers at Same Position:** This option changes the accuracy of the model in the same plane. It is generally set by default.

- **Layer Start Position X (mm):** This option allows you to change the X axis coordinates of the position of the model layer.

- **Layer Start Position Y (mm):** This option allows you to change the Y axis coordinates of the position of the model layer.

8.10 Machine Tab
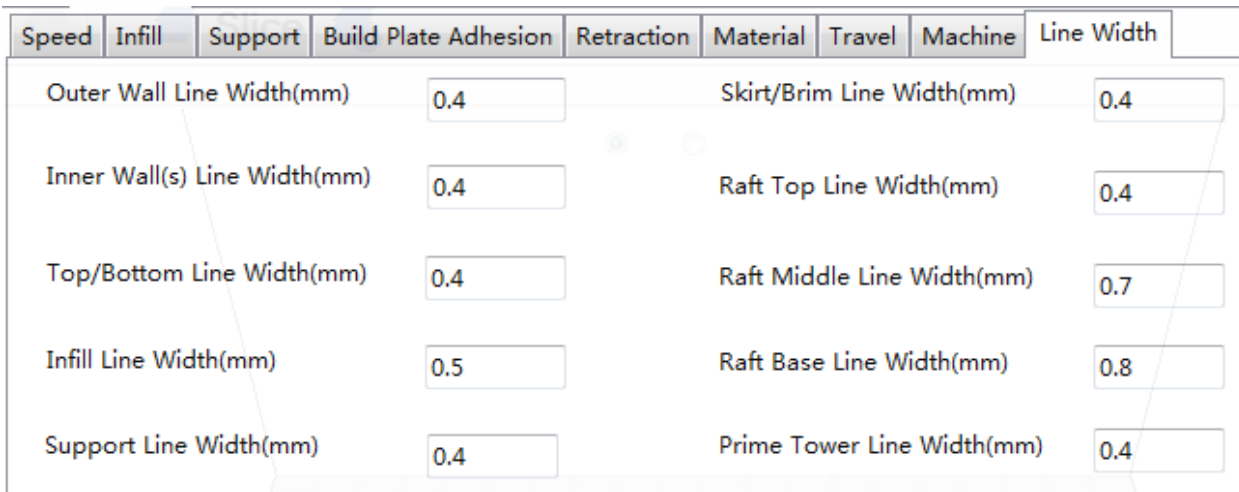
Pic75

- **Right Nozzle Diameter (mm):** Sets the diameter of the nozzle on the right extruder. This printer only has a single extruder, which is designated the right extruder. The nozzle diameter of this printer is 0.4mm.

- **Left Nozzle Diameter (mm):** Sets the diameter of the nozzle on the left extruder. This printer only has a single extruder, which is designated the right extruder.

8.11 Line Width Tab

Pic76

- **Outer Wall Line Width (mm):** This is the width of the outermost wall line. By lowering this value, higher levels of detail can be printed.

- **Inner Wall(s) Line Width (mm):** This is the width of a single wall line for all walls except the outermost wall.

- **Top/Bottom Line Width (mm):** This is the width of the top and bottom lines.

- **Infill Line Width (mm):** This is the width of a single infill line.

- **Support Line Width (mm):** This is the width of a single support structure line.

- **Skirt/Brim Line Width (mm):** This is the width of a single skirt or brim line.

- **Raft Top Line Width (mm):** This is the width of the lines in the top surface of the raft. These lines can be thin so that the top of the raft is smooth.

- **Raft Middle Line Width (mm):** This is the width of the lines in the middle raft layers. Making the second layer extrude more causes the lines to stick to the build plate.

- **Raft Base Line Width (mm):** This is the width of the raft base layer. These should be thick lines to assist with build plate adhesion.

- **Prime Tower Line Width (mm):** This is the extrusion width of the prime tower.

8.12 Dual Extrusion Tab

Pic77

- **Standby Temperature (°C):** Sets the temperature of the second extruder when not actively printing.

- **Prime Tower Size (mm):** This is the extrusion width of the prime tower. The prime tower is a location that the printer will use to switch nozzles during dual extrusion to prevent a gap in the model by printing a small amount of filament at the prime tower location.

- **Ooze Shield Distance (mm):** This is the size of the circle of protection layers printed on the edge of the model.

- **Support Extruder:** Selects which extruder to use for printing support structures.

- **Support Interface Extruder:** Selects which extruder to use for printing supports.

- **Build Plate Adhesion Extruder:** Selects which extruder to use for printing the initial layer.

- **Infill Extruder:** Selects which extruder to use for printing the infill.

8.13 Warping Precaution Tab

Pic78

- **Z Offset (mm):** When the Z axis bias is set to negative, the nozzle will print closer to the build platform, which helps reduce warping on large models.

- **Extra Skin Wall Count:** This value sets the number of contours on the outer surface of the model.

- **Initial Layer Increment (°C):** This value is used to increase the printing temperature of the first layer, which helps reduce warping on large models.

8.14 Seam Tab
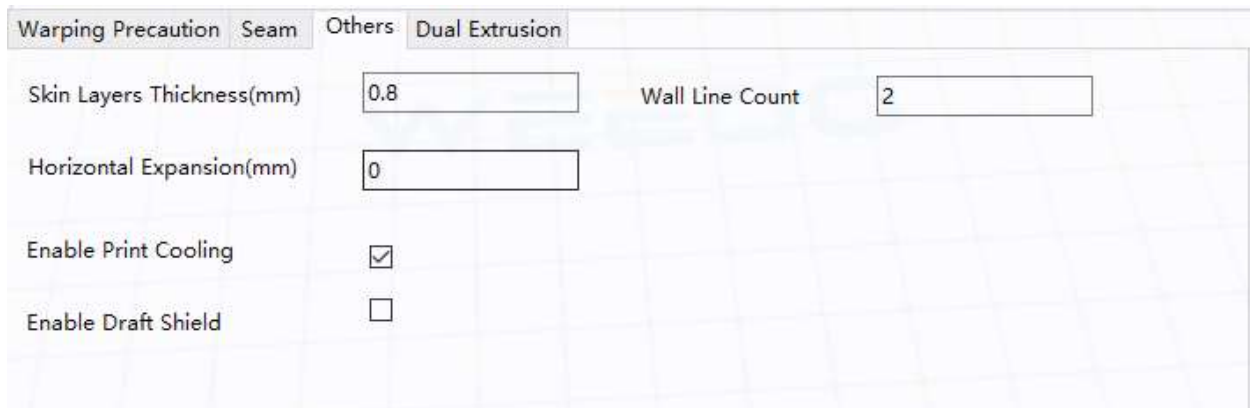
Pic79

Note: The Z Seam is where the printer finishes its motion when printing the skin (outside layer) of a model. This can result in a small blob or zit where the printer changes the Z height. If in alignment, there can be a noticeable line up the side of the print, referred to as a Z Seam, because the filament continues to ooze at the start/stop location. The options on this screen are used to mitigate this effect.

- Z Seam Type: Determines where the Z Seam will appear.
  - **Shortest:** This option selects the most time efficient start/stop location.

o **User Specified:** This option allows you to specify the X and Y start/stop location, which determines where the Z Seam will appear.

o **Random:** With this option, the printer will randomly choose the start/stop location, which prevents building a column.

o **Sharpest Corner:** The start/stop location and the Z Seam will appear in the sharpest corner of the model.

- **Z Seam X (mm):** This option is the X location of the Z Seam. This option can only be set when the Z Seam Type is set to **User Defined**.

- **Z Seam Y (mm):** This option is the Y location of the Z Seam. This option can only be set when the Z Seam Type is set to **User Defined**.

- **Hiding Seam Preference:** This option is only available when the Z Seam Type is set to **Sharpest Corner**. It determines whether the Z Seam will be on the inside or outside of the corner.

- **Z Seam Relative:** Checking this box will set the Z Seam in respect to the object's center, whereas leaving the box unchecked will set the Z Seam along the absolute position on the build plate. This option is only available when the Z Seam Type is set to **User Defined**.

8.15 Others Tab

Pic80

- **Skin Layers Thickness (mm):** This option determines the thickness of the top and bottom skin layers.

- **Horizontal Expansion (mm):** Thermoplastics tend to shrink when cooling. This option allows you to fine tune the part size to offset shrinkage for prints that require tighter tolerances.

- **Skin Alternate Rotation:** Typically, a 3D printer will print solid layers for the top and bottom layers. When doing this, it changes direction 90 degrees from layer to layer. This setting changes that behavior to add an additional 45 degrees of rotation every two layers.

The following images illustrate the normal print direction of the first three layers.
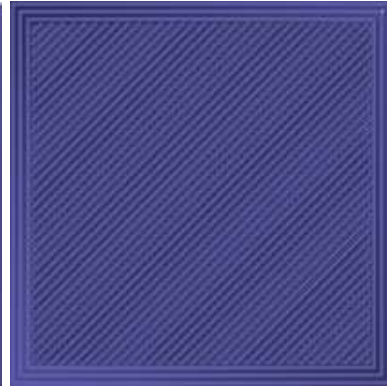
| Pic81 | Pic82 | Pic83 |

The following image illustrates the print direction of layer three when the **Skin Alternate Rotation** option is enabled.

Pic84

- **Enable Print Cooling:** When enabled, cooling air will be directed at the printed part.

- **Enable Draft Shield:** When enabled, this printer will print a wall around the model to prevent environmental breezes or drafts from affecting the cooling. This is typically used when **Enable Print Cooling** is disabled for filament that needs a longer cooling time, such as ABS.

- **Wall Line Count:** This option determines the number of walls to print.

9.SPECIFICATIONS

Model	X40
Maximum Printing Area	7.9" x 5.9" x 5.9" (300 x 300 x 400 mm)
Filament Diameter	1.75mm
Nozzle Diameter	0.4mm
Printing Speed	20 ~ 150 mm/sec
Positioning Accuracy	XY Axis: 0.011mm Z Axis: 0.0025mm
Supported Filament Types	ABS, PLA, PLA Pro, TPU, TPE, PET, Metal fill, Wood fill, etc.
Supported Software	WiiBuilder
Supported File Formats	.STL, .g-code, .OBJ
Print Interface	SD card, WIFI
Supported Operating Systems	Microsoft® Windows®
Input Power	24 VDC, 25A
AC Adapter Input Power	100 ~ 240 VAC, 50/60 Hz
Dimensions	19.1" x 24.4" x 26" (485 x 620 x 660 mm)
Weight	28.7 lbs. (13kg)

10.TECHNICAL SUPPORT

WEEDO is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website **www.weedo.ltd** or through email by sending a message to **support@wiibooxtech.com**. Check the website for support times and links. Check **www.weedo3dprinter.com** for product wiki

WEEDO

11.SAFETY NOTICE

WARNING: Do not use this product near water, for example, in a wet basement or near swimming pool or in an area where accidental contact with water or liquid might occurs

WARNING: Avoid using this product during an electrical storm. There may be a remote risk of electric shock from the surge caused by lightning

WARNING: The external power adapter or AC power cord is the equipment's disconnection device. The power outlet must be located nearby the equipment and its access must be easy

WARNING: Use this product in a well-ventilated area