

EN/CN-A02 Foto 8.9

# **Quick Start Guide**

## ═ 快速启动指南 ═

#### 中文P16

#### **▲** WARNING

- 1. Please put on gloves while using photopolymer resin to avoid direct contact with hands.
- To ensure the printing quality, please don't open the light shield unless it's necessary.
- Unused photopolymer resin needs to be stored in a dark, dry, and cool place.
- 4. Please clean the finished model with anhydrous alcohol.
- 5. Please ensure that the platform is installed correctly and no items before operating to avoid damaging the LCD screen.

#### ⚠ 注意事项

- 1. 对光敏树脂溶液进行操作时,请戴上手套,避免与皮肤直接接触。
- 2. 打印时若非必须请勿打开遮光罩,避免外界光照影响打印效果。
- 3. 未用完的光敏树脂溶液需放置在避光环境,保持环境阴凉通风。
- 4. 模型在打印完成后可用无水乙醇(无水酒精)进行清理。
- 5. 操作时请确保平台安装正确, 无异物, 避免损伤LCD屏幕。

This guide is only applicable to Flashforge Foto 8.9 3D printer 本手册仅适用于闪铸科技 Foto 8.9 3D打印机

#### **Foreword**

Note

Each 3D printer has undergone a printing test before leaving the factory. If there are residual consumables in the feed resin tank or slight scratches on the printing platform, it is normal and will not affect the use.

#### Dear customer:

Thank you for choosing and using the products of Flashforge Technology. Thank you for your great support and help. The product quality and performance of Flashforge Technology are excellent. For your convenience, please read the manual carefully before use, and strictly follow the instructions of the manual. The entire Flashforge Technology team is always ready to provide you with the best quality service. No matter what problems you encounter during use, please contact us according to the telephone and email provided at the end of the manual.

In order for you to experience our products better, you can also obtain equipment operating knowledge from the following channels:

#### Quick Starter Guide

Please unpack it carefully, you can take out the attached quick start guide from the top layer of foam. The quick start guide will help you get familiar with the device as quickly as possible and successfully complete the first printing experience.

### Notice

## Safety tips: Please make sure to read the following safety tips carefully

#### Work Environment Safety

- ◆ Keep your work place tidy.
- ◆ Do not operate in the presence of flammable liquids, gases or dust.
- ◆ Children and untrained personnel should not operate the equipment alone.

#### **Environment Requirements**

#### Place Requirements

◆ Temperature: RT 15-30°C

◆ Moisture: 20%-70%

• The device must be placed in a dry and ventilated environment. The distances of the left, right and back side space should be at least 20cm, and the distance of the front side space should be at least 35cm.

#### **Electrical Requirements**

- Be sure to ground the device; do not modify the plug of the device. (Ungrounded/incorrectly grounded/modified plugs will inevitably increase the risk of leakage)
- ◆ Do not expose the device to humidity and hot sun. (Wet environment will increase the risk of leakage/exposure will accelerate the aging of plastic parts)
- ◆ Do not abuse the power cord, and be sure to use the power cord provided by Flashforge.
- ◆ Do not use the device during thunderstorms. If you do not use the device for a long time, please turn off the device and unplug the power cord.

#### Personal Safety

- ◆ Please don't direct touch the photopolymer resin with hands.
- ◆ Please put on gloves and masks during operation.
- ◆ Please don't look at the light source directly.
- ◆ Do not operate the device while you are tired or under the influence of drugs, alcohol or medication.

#### Cautions

- Operate the device in a well-ventilated environment
- ◆ Do not leave the device unattended for long
- ◆ Do not make any modifications to the device
- ◆ Do not operate the device in bright light.
- ◆ Never use the device for illegal activities.
- ◆ Never use the device to make any food storage vessels.
- ◆ Never use the device to make any electrical appliance.
- ◆ Never put the model into your mouth.
- ◆ Do not remove the models with force.

#### Photopolymer Resin Requirements

◆ Please store the photosensitive resin solution in a dark and dry environment. Please place it in a place out of the reach of children. Please ensure that the label surface of the bottle is facing the eye-catching direction.

#### Photopolymer Resin Storage

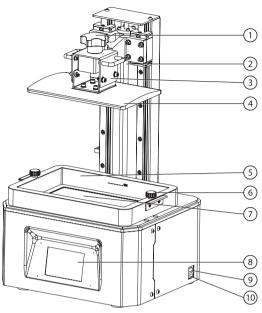
 Unused photopolymer resin needs to be stored in a dark, dry, cool place, and out of the reach of children. Ensure the bottle body logo faces in an eye-catching and visible direction.

#### Legal Notice

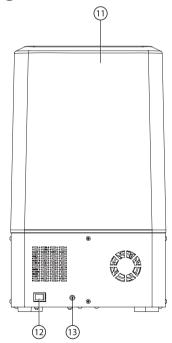
◆ The user has no right to make any changes to this manual. Flashforge Technology will not be responsible for any safety accidents caused by customers disassembling or modifying the equipment by themselves. Without the permission of Flashforge no one may modify or translate this manual. This manual is protected by copyright, and Flashforge reserves the right of final interpretation of this manual.

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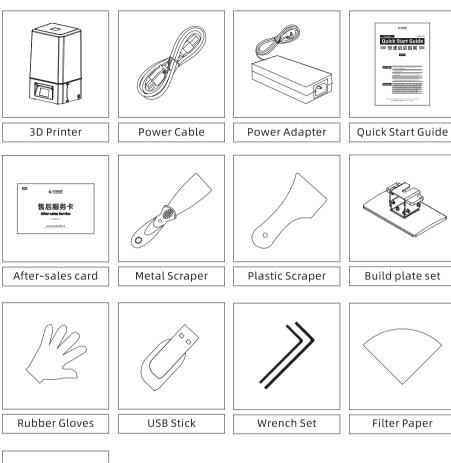
## Getting To Know Your 3D Printer



- 1. Platform Tighten Knob 2. Z-axis
- 3. Leveller 4. Build Plate 5. Resin Box
- 6. Box Tighten Knob 7. LCD
- 8. Touched Screen 9. Ethernet
- 10. USB Stick Port 11. Light Shield
- 12. Power switch 13. Power Slot



## **Accessory Box**

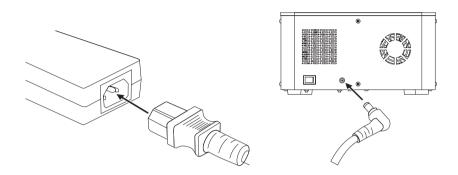




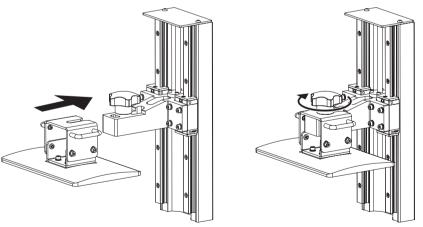
**Resin Box** 

## Leveling

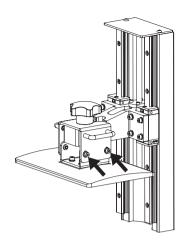
Open the paper box and take out the 3D printer on the desk. Remove all protective foam and plug in the power cable.



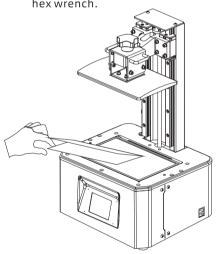
1. Connect the power adapter and power cable. Plug the output end of the power adapter into the power input port on the back of the printer and turn on the switch.



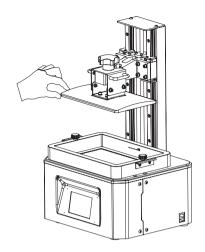
2. Install the build plate on the plate holder. 3. Tighten the platform tighten knob.



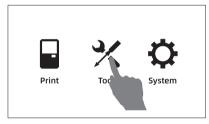
 To loose the screws on both sides of the build plate by using an inner hex wrench.

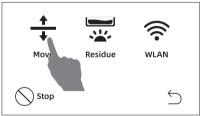


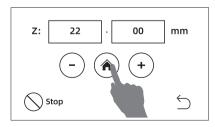
6. Remove resin box. Put a piece of A4 paper folded in half on the 8.9' LCD screen.



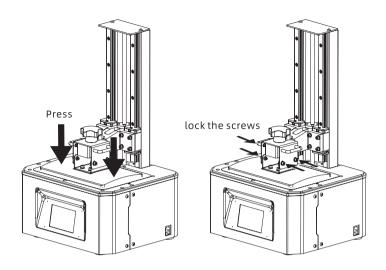
5. Make sure it can move free but not to fall.





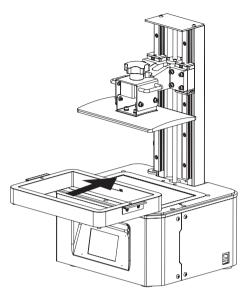


 Click [Tool] - [Manual] and open a new window. Click [Home] and wait for stop movement of Z-axis.

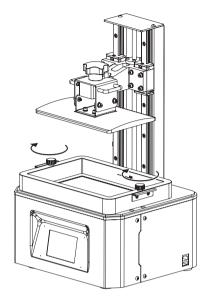


- 8. Press the top of the build plate with one hand to let four corners of build plate to touch the LCD screen evenly. Pre-tighten the screws on both sides of the platform and then lock them separately during the process. Twitch paper and feel the resistance.
- Notice: It must level for the first using. Suppose changing the new build plate and new screen, and it has to level again. It needs to level when the printing abnormal, such as the board on the side of the print model fell.

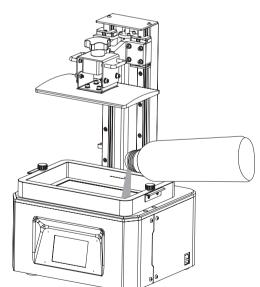
## **First Printing**



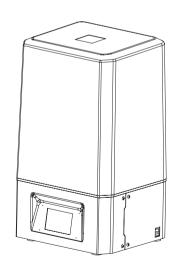
1. Make sure the LCD screen, build plate and resin box is clear enough. Install the resin box on the LCD screen.



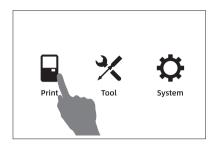
2. Tighten the knobs to fix the box.

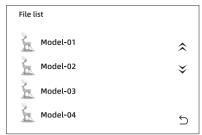


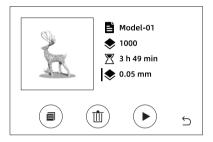
 After confirm the installation of resin box and build plate, pour the resin into the resin box. Note that capacity shall not exceed the mark line in the resin box.



4. Close the light shield after all above preparatory steps.





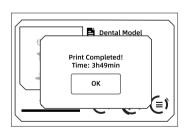


5. Click the [Print] to enter the model list. Click the model file to star the printing.

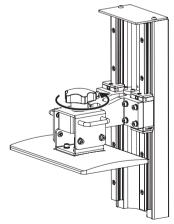
Note

Do not open the top cover during printing to avoid eyes hurt.

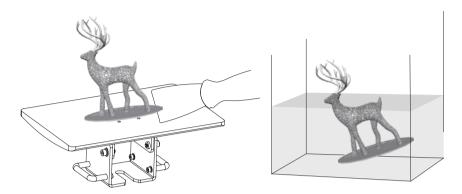
## **Post-processing**



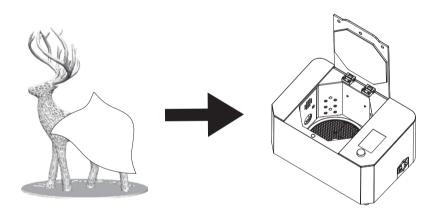
 There will be a prompt on the touch screen when the printing is completed. Click [OK] and then open the top cover.



- 2. Loose the nut to remove the build plate.
- Note: Be careful not to damage the FEP film in the resin box or the LCD screen during removal.



3. Remove the model via the metal scraper and clean the model in the cleaning box with anhydrous alcohol to wash off the excess resin.



4. After cleaning, dry the model via a dust-free cloth or an air gun. It would be better to solidify the model again via curing box.

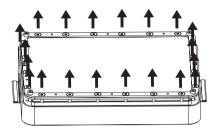
#### Note

During installation and removal of the build plate, please be extra careful to prevent the LCD screen from damage by build plate falling down.

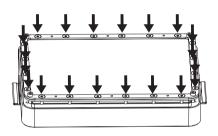
- ◆ When the printing time is relatively long, please observe the printing regularly to avoid accidents and stop printing if the model is incomplete or dropped.
- ◆ Please make sure the printing environment keeps clean with less dust.
- ◆ Please confirm the installation and leveling gaps for several times when do the leveling if you are new to 3d printing.

## Replace the FEP film in the resin box

Please refer to the following steps when install or replace the FEP film.



 Loose the screws at the bottom of the resin box to remove the film fixing frame and remove the overused FEP film.





- Align the FEP film with the screw holes and clamp it between the two fixing frames; then tighten the screws.
- Note: There are upper and lower sides of the frame; please verify the correct side through the screw holes.

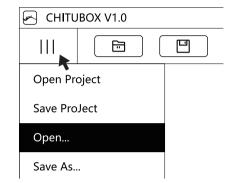
- 3. Re-install the film fixing frame to the bottom of the resin box and tighten the screws to make the FEP film tense. Then pour the water or resin into the resin box to check if there is leakage. Replace the FEP film and re-install it if there is.
- ◆ Note: please take care of the FEP film in the above steps to avoid damage and dirt.

## **Software Operation**

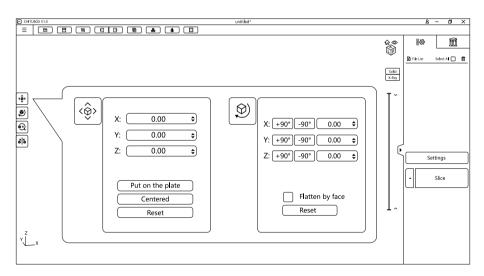
#### **CHITUBOX**



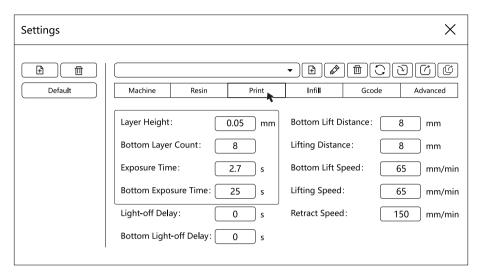
1. Install and turn on the ChiTuBox64.exe program.



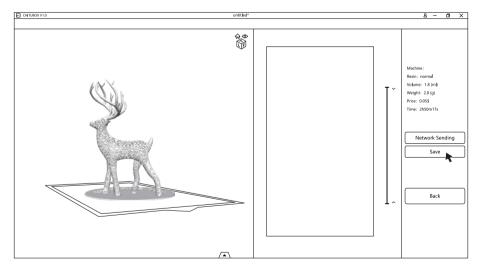
Click the [Open...] in the menu at the upper left corner to select the model files.



3. Move the model to the right position through movement and rotation. The model cannot be lower than the mesh surface above the raft.



4. Click the [Settings] and the pop-up window will appear. Generally, it is enough to adjust the 'Layer Height', 'Bottom Layer Count', 'Exposure Time', and 'Bottom Exposure Time'.



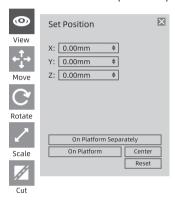
- 5. After all parameters being set, click the [Slice] and a tip 'Slicing' will show at the bottom right of the interface. When the slicing is done, a preview interface will display.
- 6. Click the [Save] to save the file type as '.svgx'; choose the folder and click [Save].

#### FlashDLPrint



FlashDLPrint.exe

1. Install and run the FlashDlprint.exe program.



3. Use movement and rotation to place the model in an appropriate position. The model should not be lower than the network surface of the bottom plate.



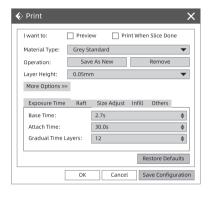
5. Click [OK], select the file type ".svgx ", select the save location, and click [Save S].







2. Click Load, select the model file.



4. Click Print, and a print window pops up. (Generally just adjust "layer thickness", "bottom number", "exposure time", "bottom exposure time", etc.)

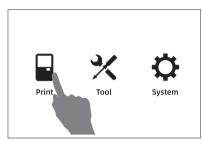


## Slicing model ...

6. At this point, "Slicing..." will be displayed at the bottom of the interface., after the section is completed, the interface changes into the section preview interface.

#### Load the model files

1. Copy the '.svgx' file to the USB stick on the computer. It would be better to remove USB stick from computer after 'Safely Remove USB stick' note to avoid file damage.

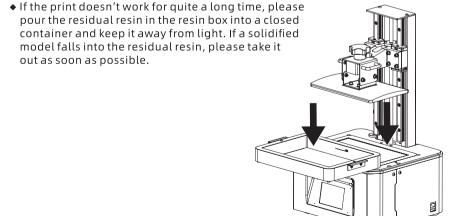




Insert USB stick into the USB stick port in the machine. Click [Print] on the screen to enter file list and scroll down your page to find the target model file. Please do not remove USB printing during printing.

#### Maintenance

- ◆ Please keep two parts shown in the picture below clear without dust and fingerprint.
- ◆ Do not pour the used residual resin back to the resin bottle.
- ◆ The waste resin can be poured into the sealing bag for sealing and then be exposed to the sun until the resin solidifies.
- ◆ If the resin drops onto the LCD screen, please wipe it with non-woven fabric in time; if the resin has solidified, please wipe it via non-woven fabric with alcohol.
- ◆ Do not clean the residual resin in the resin box with something sharp to avoid the damage of FEP film.



#### 前言

#### 注 意

每台3D打印机在出厂前都经过打印测试,若料槽内存在耗材残留或打印平台有 轻微划痕,都属正常现象,不影响使用。

#### 尊敬的用户:

感谢您选择、使用闪铸科技的产品。感谢您的大力支持和帮助。闪铸科技的产品质量优、性能上佳。为了您使用方便,请您在使用之前仔细阅读该说明书,并严格按照说明书的指示进行操作。整个闪铸科技团队时刻准备为您提供最优质的服务。在使用过程中无论遇到什么问题,请按照说明书结尾所提供的电话、邮箱与我们进行联系。

为了您能够更好地体验我们的产品,您还可以从以下途径获取设备的操作知识:

#### 快速启动指南

请您小心拆箱,您可以从最上层的泡沫中取出附带的快速启动指南。快速启动指南将帮助您以最快的速度熟悉设备并成功完成初次打印体验。

## 注意事项

安全提示: 请确保认真阅读以下安全提示

#### 工作环境安全

- ◆ 请保证打印机的工作台面干净整洁。
- ◆ 请保证打印机工作时远离可燃性气体、液体及灰尘。设备运行产生的高温有可能会与空气中的粉尘、液体、可燃性气体反应引发火灾。
- ◆ 儿童及未经培训的人员请勿单独操作设备。

#### 设备运行环境要求

- ◆ 室内温度在15-30度为官。
- ◆ 湿度在20%-70%为宜。

#### 设备放置要求

◆ 设备需要放置于干燥通风的环境中。设备 左侧、右侧以及后侧必须要留至少20cm 的空余距离,前侧必须要留至少35cm的 空间距离。

#### 用电操作安全

- ◆ 请务必将设备接地。切勿改装设备的插头。未接地 / 未正确接地 / 改装插头必然会增加漏电风险。
- ◆ 请勿将设备暴露在潮湿或烈日环境中。潮湿环境会增加漏电的风险/暴晒会加速塑件老化。
- ◆ 请勿滥用电源线,务必使用闪铸科技提供的电源线。
- ◆切勿在雷雨天气使用设备。
- ◆ 如长时间不使用设备,请关闭设备并拔下电源线插头。

#### 个人操作安全

- ◆请勿用手直接触碰光敏树脂溶液。
- ◆ 在操作设备时,请带上橡胶手套和口罩。
- ◆请勿直视光机光源。
- ◆请勿在饮酒、服药之后操作设备。

#### 设备使用提示

- ◆ 切勿长时间离开正在运行的设备。
- ◆请勿自行对该设备进行任何改装。
- ◆ 请勿在强光环境下讲行打印作业。
- ◆ 请在诵风的环境下操作设备。
- ◆ 请勿利用该设备进行违法犯罪的活动。
- ◆ 请勿利用该设备制作食物储存类产品。
- ◆ 请勿利用该设备制作电器类产品。
- ◆ 请勿将打印模型放入口腔。
- ◆ 请勿用蛮力卸下打印模型。

#### 模型排布注意事项

◆ 模型排布尽量避免形成倒扣漏洞状; 打印密集排布的模型可以适当降低曝光时间。

#### 法律申明

◆客户若自行拆装或改造设备造成任何安全事故,闪铸科技概不负责。未经闪铸科技允许,任何人不得对该手册进行修改或翻译。本手册受版权保护,闪铸科技对本手册保留最终解释权。

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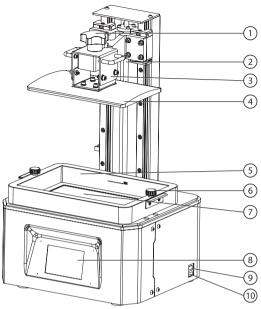
#### 设备兼容耗材要求

◆ 在使用该设备时,请使用闪铸提供或指定的耗材。市场上耗材鱼龙混杂,质量良莠不齐。质量低劣或不兼容的耗材可能容易影响打印成功率、影响使用体验。

#### 耗材储存要求

◆请将光敏树脂溶液存储在阴暗干燥的环境下,请放置在儿童不可触及的位置,请保证瓶身标识面朝向醒目可视方向。低温存储的溶液需要摇匀,且恢复到室温(20℃以上)后使用。

## 设备介绍



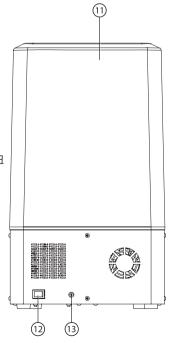
1. 平台紧固旋钮 2. Z轴 3. 调平板

4. 成型平台 5. 溶液盒 6. 溶液盒紧固旋钮

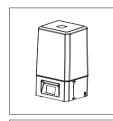
7. LCD 8. 触摸屏 9. 以太网插口

10. USB插口 11. 遮光罩 12. 电源开关

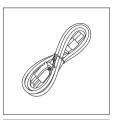
13. 电源线插槽



## 配件清单



3D打印机



电源线



电源适配器



快速启动指南



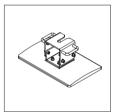
售后服务卡



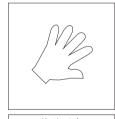
金属铲刀



塑料铲刀



成型平台组件



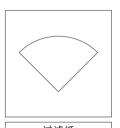
橡胶手套



U 盘



扳手配件包



过滤纸



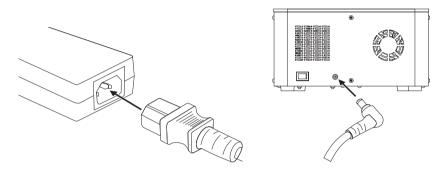
溶液盒组件

扳手配件包:扳手、螺丝刀、螺丝

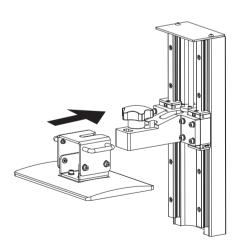
成型平台组件:成型平台、调平板、把手

溶液盒组件:溶液槽、薄膜、薄膜固定框、溶液盒紧固旋钮

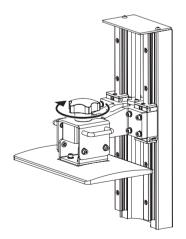
打开纸箱,小心去除打印机及配件,撕除打印机上缠绕的泡沫,将打印机通电。



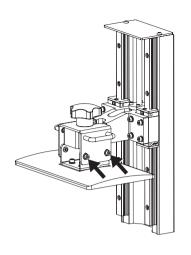
1. 连接电源适配器和电源线,将电源适配器输出端插入打印机背部的电源驶入端口, 打开开关。



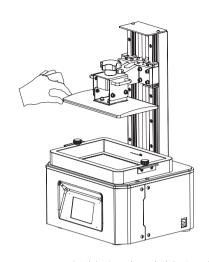
2. 将平台组件安装到平台支架上。



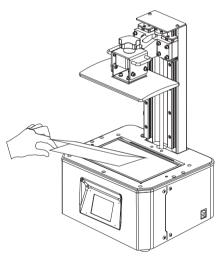
3. 拧紧平台固定旋钮。



4. 使用内六角扳手将调平板两侧螺钉拧松。



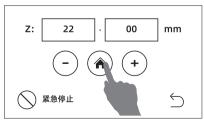
5. 用手摇动打印平台,确认打印平台 能够自由晃动。



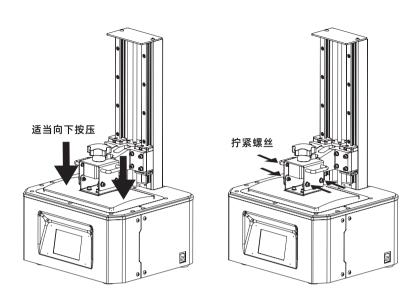
6. 取下溶液槽,放一张A4纸对折后放在LCD 遮光屏上。





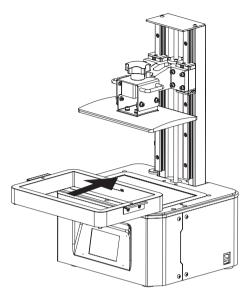


7. 点击[工具]--[Z轴移动],进入Z轴移动界面, 点击[home]图标,然后等待Z轴移动停止。

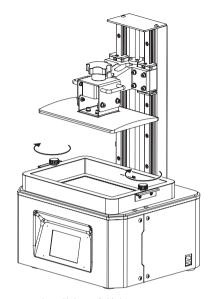


- 8. 用手适当按压平台上方,使平台的四个角受力均匀的贴合在屏幕上。在按压的同时, 先将平台的调平板两侧螺钉预拧紧,然后再分别锁紧。锁紧后,抽动A4纸,松紧程 度,以阻力较大但能抽出为最佳。
- ◆注意:打印平台调平后才能实施作业。除首次使用时,更换新打印平台组件、遮光屏更换等情况发生也需要进行打印平台调平操作。若出现打印异常,例如打印模型一侧掉板,也可尝试打印平台调平操作解决。

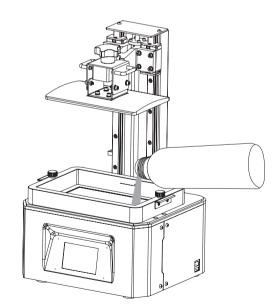
## 首次打印



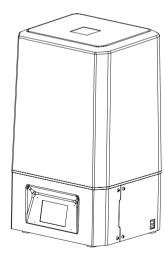
1. 确认LCD遮光屏、打印平台和溶液槽清洁 无异物。将溶液槽安装在LCD遮光屏上。



2. 紧固旋钮固定锁紧。



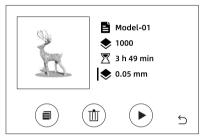
3. 确认溶液盒和打印平台安装无错位后,将光敏 树脂缓慢倒入溶液盒中,溶液盒中的光敏树脂 液高度必须在上限标记线以下。



4. 完成上述准备后,盖上遮光罩。



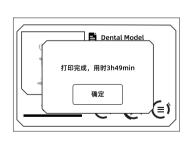




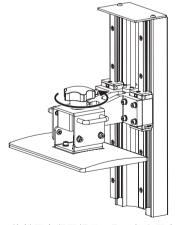
5. 点击打印,进入模型列表。找到要打印的模型文件,点击模型文件,点击开始打印。

注 意 打印过程中不要打开遮光罩,避免眼睛损伤!

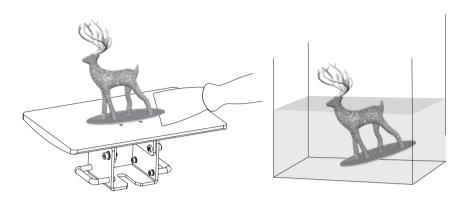
## 打印结束后处理



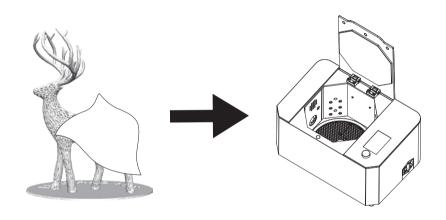
1. 待打印完成后,显示屏会显示打印完成提示, 此时点击[确定],打开遮光门。



- 2. 旋松平台紧固螺母, 取下打印平台。
- ◆注意:取下模型时,小心不要戳伤 溶液盒底部FEP膜或者LCD投影屏。



3. 用铲刀将模型铲下,放入装有酒精的设备中进行清洗。



4. 完成清洗后,用无尘布擦干或用气枪吹干模型。放入固化箱内进行二次固化。

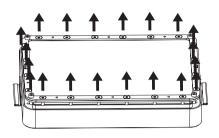
#### 注 意

安装平台和取下平台时,需要格外小心,防止平台掉落砸坏LCD投影屏。

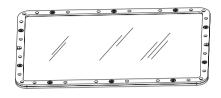
- ◆打印时间较长时,为防止意外情况,需定时观察打印情况,出现模型残缺、掉落,停止打印。
- ◆注意使用环境卫生,保持清洁,避免灰尘较多。
- ◆ 新手进行平台调平时,请多次确认安装、调平间隙情况。

## 更新溶液盒FEP膜

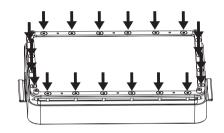
#### FEP膜需要安装或者更换时进行



1. 拆卸溶液槽底部螺钉,将薄膜固定框从 溶液盒中拆下,取掉旧的FEP膜。



- 2. 将FEP膜对准螺钉孔位,夹装在两个固定框中间,拧紧螺钉。
- ◆ 注意:安装固定框有正反面,通过螺钉孔槽可确定正确安装面。



- 3. 将薄膜固定框装回溶液盒底部,拧紧螺钉使FEP膜拉紧。然后在溶液槽中导入水或者溶液,检查是否发生漏液,如有漏液更换FEP膜重新安装;
- ◆注意:以上过程注意保护FEP膜,防止破损、脏污。

## 软件操作

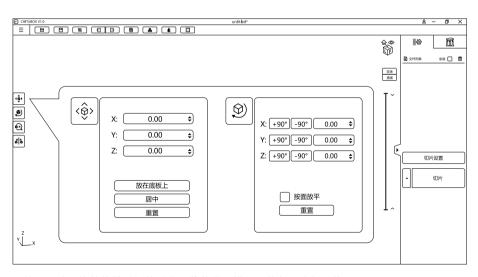
### снітивох



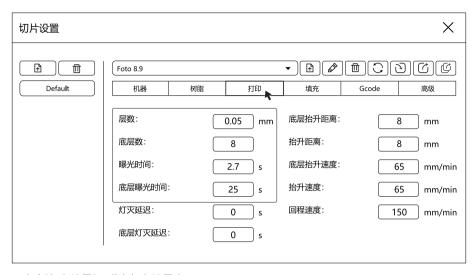
1. 安装并运行ChiTuBox 64.exe程序。



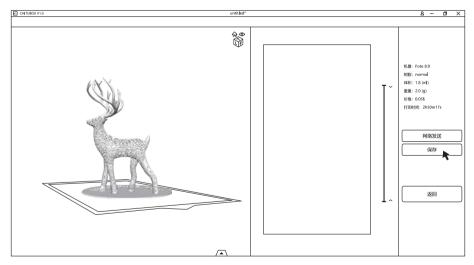
2. 打开左上角菜单按钮,点击[打开...],选择模型文件。



3.使用平移、旋转将模型摆放到合适的位置,模型不能低于底板网格面。



4.点击[打印设置],弹出打印设置窗口。 (一般只需调"层厚"、"底层数"、"曝光时间"、"底层曝光时间"等)



- 5.打印设置参数调好后,点击[切片],此时界面右下方会显示"正在切片…",等待切片完成后,界面变为切片预览界面。
- 6.点击[保存],文件类型选择".svgx"文件,选择保存位置,点击[保存s]。

#### **FlashDLPrint**



FlashDLPrint.exe

1. 安装并运行FlashDLPrint.exe程序。



3. 使用移动、旋转将模型摆放到合适位置, 模型不能低于底板网络面。



5. 点击[确定],文件类型选择".svgx"文件, 选择保存位置,点击[保存s]。





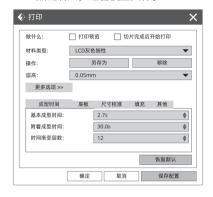


Load

Supports

Duint

2. 点击载入, 选着模型文件。



4. 点击打印,弹出打印窗口。(一般只需调 "层厚"、"底层数"、"曝光时间"、 "底层曝光时间"等)。



## 正在切片 ...

6. 此时界面下方会显示"正在切片…",等待切片完成后,界面变为切片预览界面。

#### 模型导入

1. 将模型的 ".svgx" 文件在电脑端复制到U盘里。拔出U盘时先在电脑安全弹出U盘,再拔U盘,避免模型数据遗失或损坏。

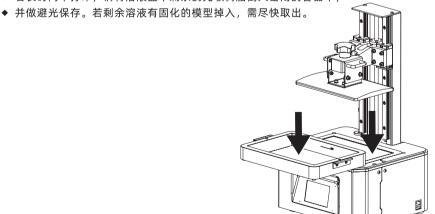




2.将U盘插在设备USB接口,在主界面点击打印进入文件列表,点击上下翻页按钮,找到需要打印的模型文件,则表示模型文件被成功识别。如需打印,U盘不能移除。

## 设备维护

- ◆ 请保持下图所示两处透光部位洁净,保证无尘无指纹。
- ◆ 切勿将使用过的光敏树脂溶液倒回原溶液瓶。
- ◆ 废弃的光敏树脂溶液倒入密封袋密封,随后放在阳光下曝晒直至树脂固化。
- ◆ 如不慎有溶液滴落在LCD投影屏上,请及时用无纺布擦拭赶紧;如溶液已固化,请将无纺
- ◆ 布浸润酒精后擦拭干净。
- ◆ 使用锐器处理溶液盒内的残留物,很容易伤害FEP膜,减少寿命甚至导致破损无法使用。
- ◆ 若长时间不打印,请将溶液盒中剩余的光敏树脂倒入密闭的容器中,







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