

DLP 3D PRINTER

CLASSIC

WANHAO DUPLICATOR 7

DESK TOP 3D PRINTER

NEW PRODUCT

2018



**PRINTING
MORE PRECISE,
BETTER VALUE
THE BEST ACCURACY**

USER MANUAL



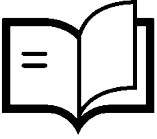
WWW.WANHAO3DPRINTER.COM



SUPPORT@WANHAO3DPRINTER.COM

Important

Getting the most out of your 3D Printer:



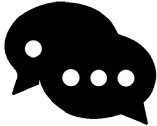
Read the manual carefully

It will help you get set up with ease



Visit www.wanhao3dprinter.com

We've got additional support videos and guides



Google Forum

Join Wanhao Technical Forum for online support

<https://groups.google.com/forum/#!forum/wanhao-printer-3d>



Email support@wanhao3dprinter.com

We're always happy to help

Warranty Note

If you experience any issues with this product, or it's performance is not what you had expected, please contact us at WANHAO before returning the item to the store.

It is likely that we can resolve any problems for you via phone or email.

We can be reached through your local distributor. Or on

Phone: +86-571-23290996(Mon-Sat; 8:30am-5:00pm)

Email: support@wanhao3dprinter.com

Web: www.wanhao3dprinter.com




3D Printer

Warranty Details

The product is guaranteed to be free from defects in workmanship and mother board for a period of 12 months from the date of purchase. The LCD display is consumable parts with Minimal working hours 1200 hours. You may need to purchase and replace it after 1200 hours. Printing with materials other than WANHAO resin which are different from those recommended on the website www.wanhao3dprinter.com, may cause result in damage the printer or bad printing quality. Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the China laws. In case you purchase from WANHAO distributor, your warranty shall be covered by distributor's Warranty and honored by WANHAO distributor too. Our goods come with guarantees that cannot be excluded under the Chinese Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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 86-571-23290996

 support@wanhao3dprinter.com

Model : Duplicator 7





Safety Instructions

Before you get started, please read these important safety instructions.

CAUTION: The WANHAO 3D Printer includes moving parts that can cause injury. Never reach inside of the WANHAO 3D Printer while it is in operation, and allow time for the printer to cool down after operation.



MOVING PARTS



Do not leave the WANHAO 3D Printer unattended during operation



Always wear the glove while handling resin or printing object.



Always take care when using the Scraper. Never direct the Scraper towards your fingers.

- The printer must not be exposed to water or rain, or damage will occur.
- The printer is designed to be used with ambient temperature ranging 15°C - 30°C, and humidity ranging 20% - 50%. Operating outside these limits may result in low quality models.
- In case of emergency, turn off the 3D printer at the power outlet.
- It is recommended that you use eye protection when cleaning/sanding printed models to avoid small particles contacting eyes.

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Congratulations

You have just purchased a new type of 3D printer using Direct UV-light Printing (DUP) technology. This is a newly applied-for method of LCD image creation allow controlled UV light get through the LCD screen which hardens liquid with the light from an UV light source. This revolutionary system is a new way of printing that uses normal UV light as the energy providing source to initiate the free radical polymerisation necessary to change the liquid imagepac resin into your hardened object.

The principle behind your printer

There are two surprising advantages of this new DUP technology:

- i) We can use high resolution low cost LCD screens that are widely available as monitors, tablets, mobile phone and televisions providing phenomenal value for money, which we pass directly onto you.
- ii) The energy used by Duplicator 7 printers is again an order of magnitude lower than used in comparable systems. This is good for your energy bills and the ecology, but there is a huge performance advantage in that there is no unnecessary energy created. All of the available photons strike photoinitiators and hand over their energy. In comparable Digital Light Projector and laser systems there is a lot of excess energy which can lead to over-cure.

Safety Information

Read the instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on the product.

Observe the following guidelines when connecting and disconnecting power cord to the printer.

- Insert the Power cable cord into the socket at back of printer.
- Turn off the printer before Unplug the power cord.
- The printer cooling fan is suppose to run when you tun on the printer.
- Operate on a table or flat, stable surface, ensuring that the machine cannot fall and is level.
- Do not operate outdoors.
- Do not allow resin or any liquids to get inside the chassis, wipe up any liquid spills immediately.
- Store the printer in its original packaging when not in use.
- Plug off the cable cord when not used for a long period of time.





Electrical power

This 3D printer is connected to the electrical network with an INPUT of 110 or 240 VAC, 50/60 Hz, and has an operational voltage of 12 V.

- Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
- If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
- Do not overload a power outlet, strip or receptacle by plugging in too many devices.
- Use the product only with the supplied power supply cord set. If you need to replace the power cord set, make sure that the new power cord meets the following requirements: detachable type, UL listed/CSA certified, VDE approved or its equivalent, 4.5 meters (15 feet) maximum
- In case of malfunction disconnect the printer immediately from network.
- Do not attempt to fix this product by yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all reparation to qualified service personnel. For contact the technical service please send an email to your national supplier or www.wanhao3dprinter.com

Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- The power cord or plug is damaged, cut or frayed.
- Liquid was spilled into the product.
- The product was exposed to rain or water.
- The product has been dropped or the case has been damaged.
- The product exhibits a distinct change in performance, indicating a malfunction.
- The product does not operate normally after following the operating instructions.
- Keep the printer out of the reach of small children.

Disposal instructions

Do not throw this electronic device into the waste when discarding. To minimize pollution and ensure utmost protection of the global environment, please recycle or return to WANHAO for recycling.



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Useful advice

Have supervision when used by a minor.

The resin is an irritant to skin and eyes. Always wear gloves when coming into contact with the liquid resin.

The printer should be operated on a stable and level surface, preferably away from direct ambient light and with sufficient space to be able to open doors

The box contains

- Wanhao Duplicator 7 LCD printer with black hood and platform
- Power cable cord
- VAT with film
- HDMI cable to connect the 3D printer to the secondary video output of your computer (2).
- USB cable to connect your computer to the printer.
- 1 replacement films for the VAT
- plastic spatula
- 250ml UV resin

Recommended items

- Gloves
- Paper towels
- industrial alcohol
- Soft brush or sponge to clean the object
- Plastic container to rinse the resin

Minimum computer requirements

- Dual Core processor or above.
- Windows or Linux OS
- Software NOT compatible with MAC
- 4 GB RAM memory or above.
- Double video output graphics card (one for your monitor, one for the Printer HDMI, with 500MB memory or above. A laptop with dual video output(HDMI) is also possible.

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Download and Install software;

1. For downloading software please visit the link below and according to your PC system download the Windows or Mac version of D7 Workshop.

<http://www.wanhao3dprinter.com/Down/ShowArticle.asp?ArticleID=83>



Download WINDOWS

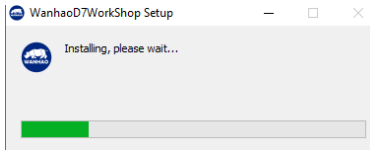


Download MAC

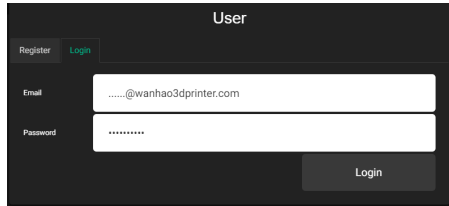
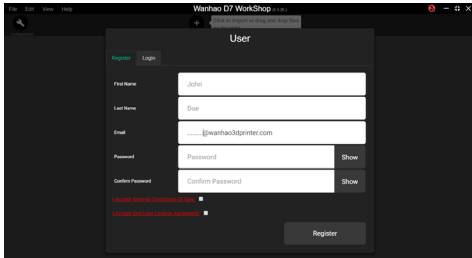


WANHAO.STORE

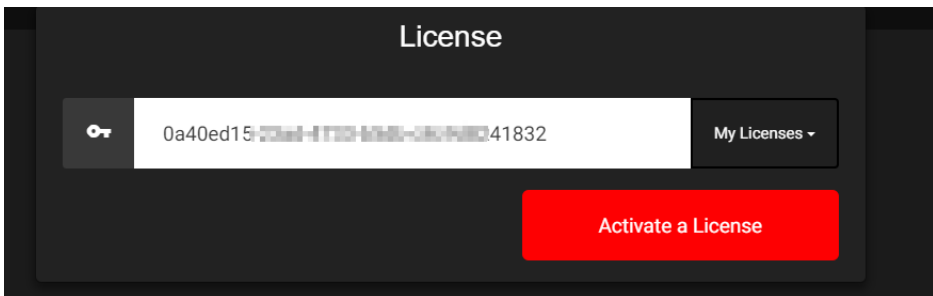
Double Click on the exe file and run the software



2. You need to make an account and register in the software. Or if you had one just login into your account.



You need a License Key that you can active the Slicer. After inputting the License key Click on Active a License.



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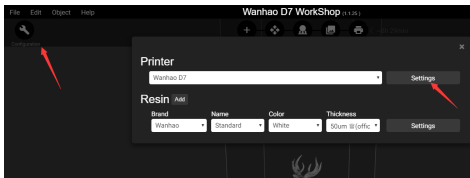
Model : Duplicator 7

3. Connect printer to the PC via USB and HDMI cable to your PC as well as the power plug. Turn On the printer.

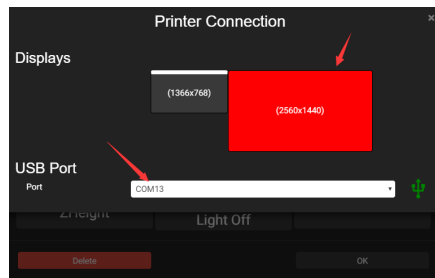


Connecting to printer

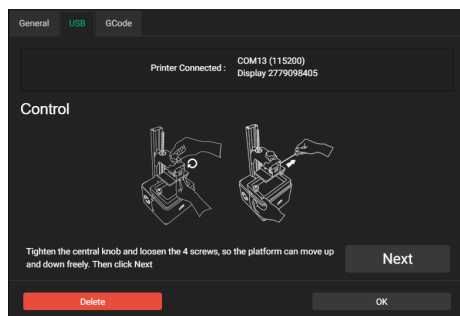
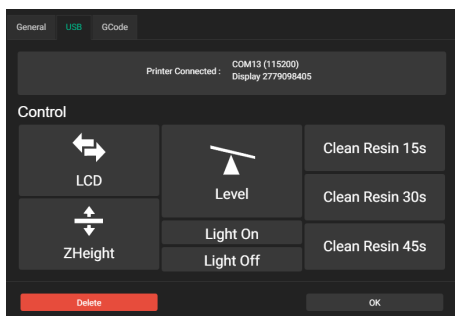
3.1. Click on Configuration/Printer Setting/USB and choose the right COM and resolution (2560*1440) of your printer.



If you are connected to printer properly and Your PC recognizes the correct COM the Red icon turns to the Green which is the sign of you are connected to printer.



3.2 Click On Level and Follow up with Steps and Level the Building Plate. Printer's Building plate starts home positioning. The software guides you how to proceed with Leveling process.



In the last step Click on OK and access to the Software View scene.

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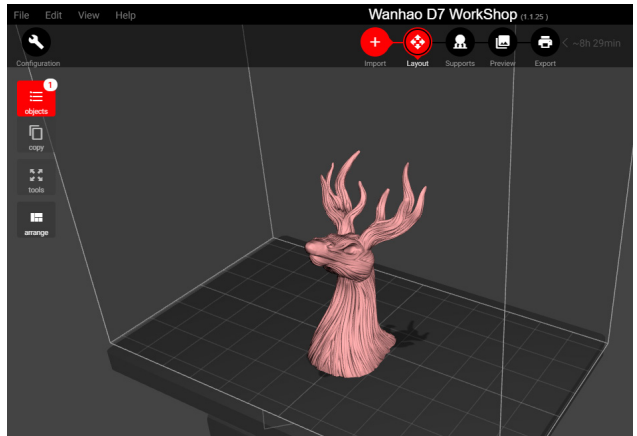
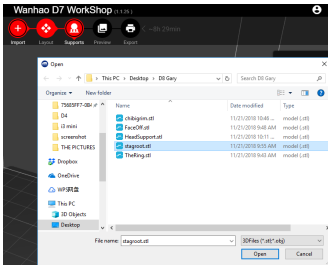


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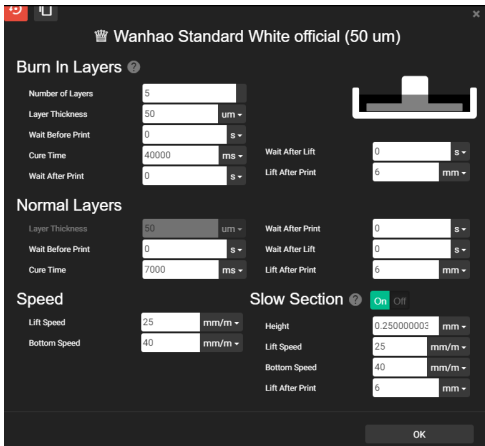
Model : Duplicator 7



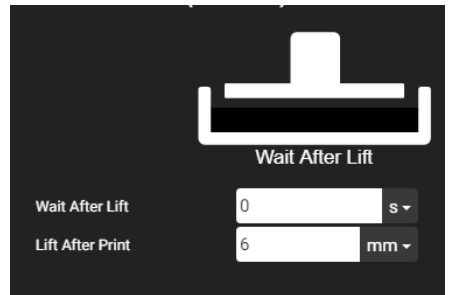
3.3 Click on Import and import a model to the building surface.



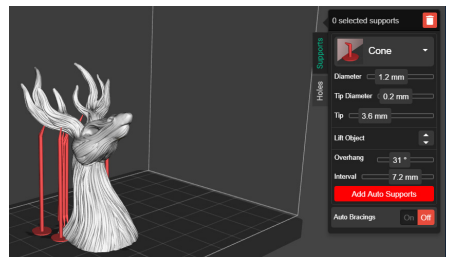
3.4 By Clicking on Configuration and Setting you can set up your resin's Settings such as curing time and Layer Thickness.



The Movable picture on the right top of the Resin Settings Windows is a good guide of understanding how you can set your Life and sequence section.

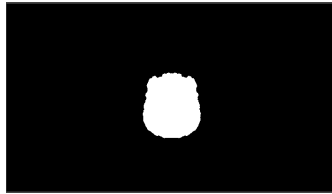


3.5 In Supports you can add supports to your model Automatically and Manually.

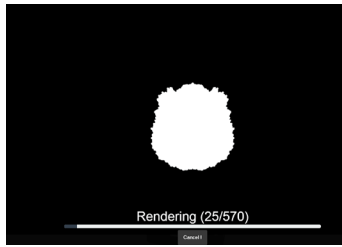
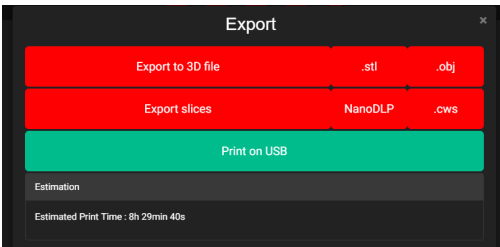


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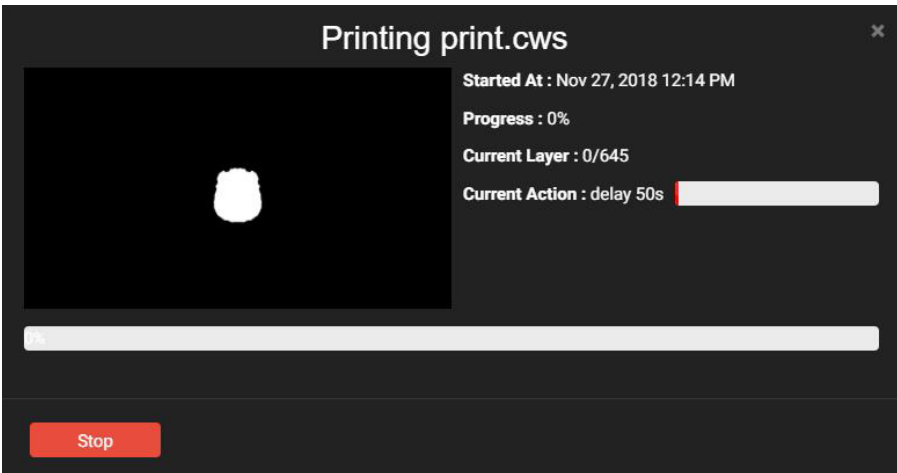
3.6 In Preview menu you can See the Model in different ways the the software gives you few options for that.



3.7 When you Model is ready Click on Export/ Print On USB. Software starts to Render and Generate Gcode of your model.



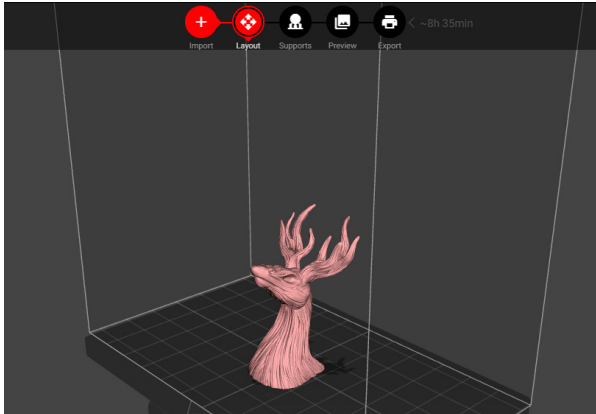
You can Stop printing by clicking on Stop.



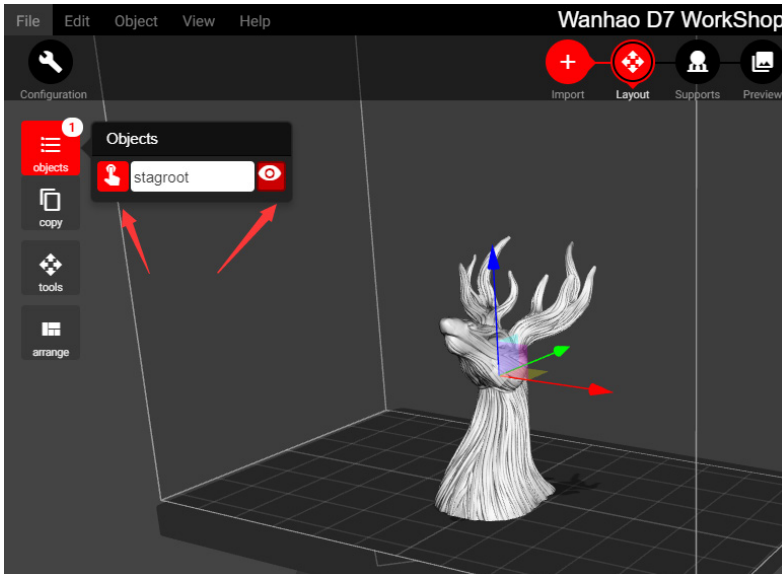
Software Detailed:

Scene View

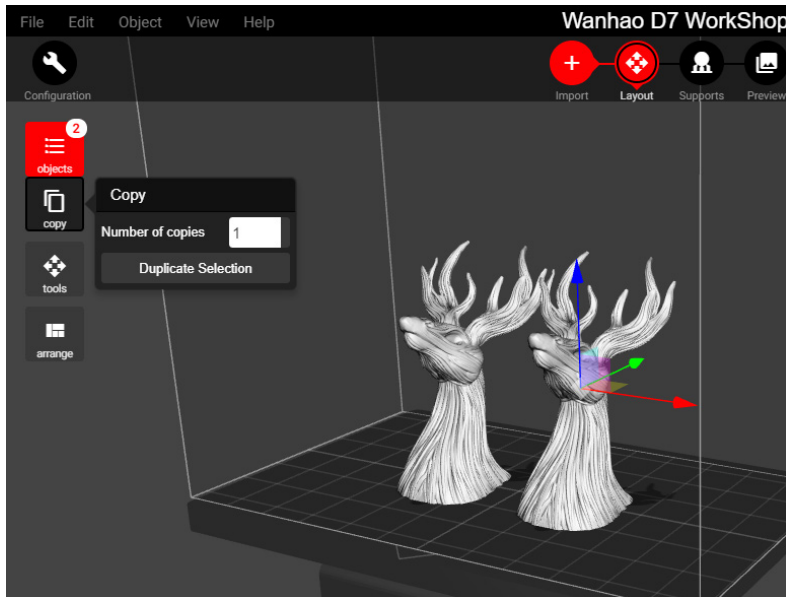
The Scene View allows you to manipulate various aspects of the scene.



In Object menu you can Select and visible or invisible the model. This is very useful tool in case you have few models in the platform and you want to analyze other models.



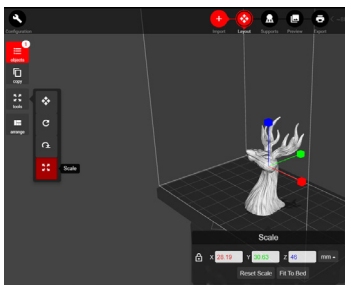
In Copy Section You can duplicate your model as many as you want but ensure that all models would place on the platform. Software will automatically arrange and align models for you. You can set the number of the Copies you want to duplicate the model.



In Tools Menu you can Move,Rotate,Orient ad Scale your model.

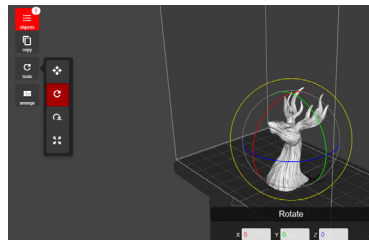
Scale

A model can be scaled (reduced or increased) by selecting it, and using the 'Scale' view to enter in a new scaler value.



Rotating

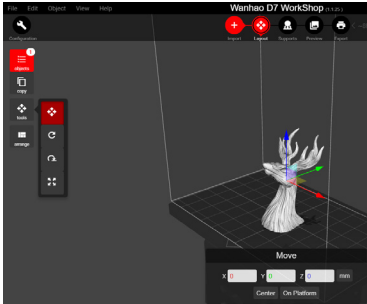
Rotating a model works in a similar way to moving a model. Simply select the model you want to work with, and use the X/Y/ Z +/- buttons to rotate the model by your specified degrees.





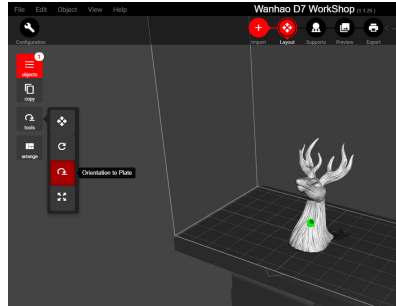
Move

The Move function allows you to move objects on the build platform along the x:y:z axis by the distance entered.



Orientation to plate

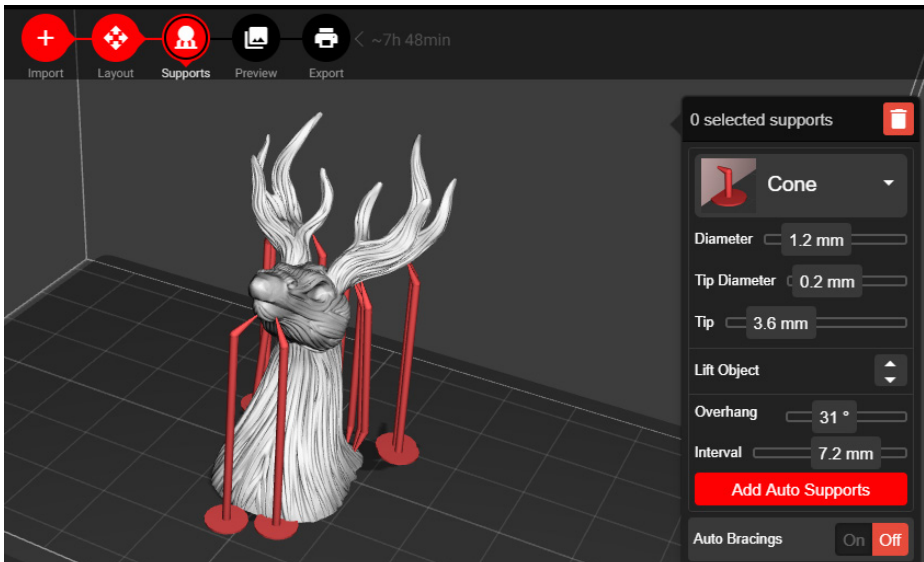
You can place the model all over the building surface and by double clicking on it the model rotates in different angel.



Supports

Supports are sometime required to properly attach a model to the build space. Because of the nature of DPP the lower layers must be supported by the supports unless it has a wide surface in the first layers.

In supports section you can add supports to your model Manually and Automatically. You can adjust the settings in this section based on the model and your preference. You are also able to add Brace to your supports.



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13



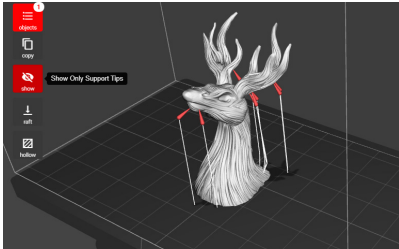
86-571-23290996



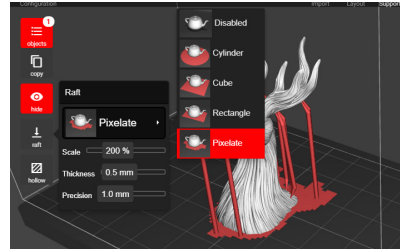
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Model : Duplicator 7

You can Show and Hide the added supports on your model. The software only shows you the supports Tips



You can add Raft to your model. You are able to adjust the Raft settings as well. There are different types of Rafts that you can choose based on your preferences.

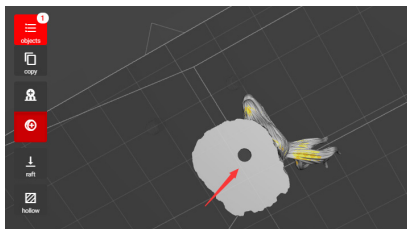


Hollow

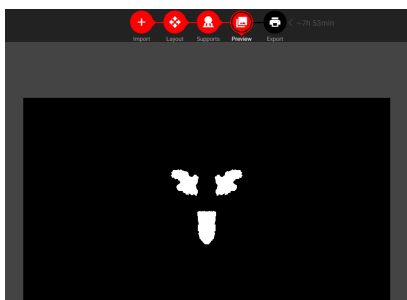
The Hollow feature of D7Workshop helps you to save time and resin. you can adjust the Wall thickness after hollowing it. Not every model have to be hollowed.



You can preview your model before the print. By sliding the bar on the right side of the software you can see the layers of your model that are going to print.

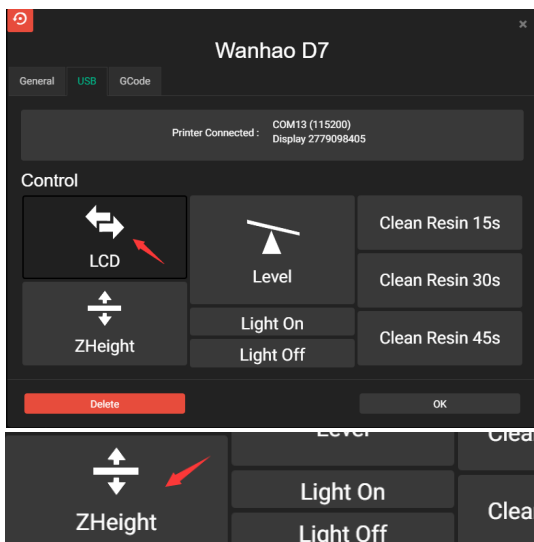


If you hollow your model software also allows you to make a hole into your model. It is recommended that you make the hole somewhere that is not visible after the printing process is finished.

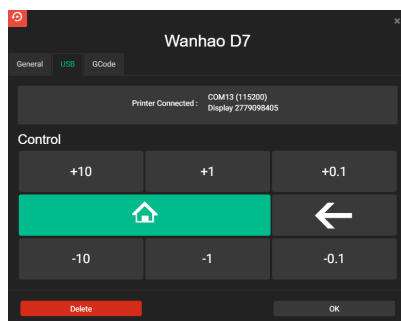


Control Printer

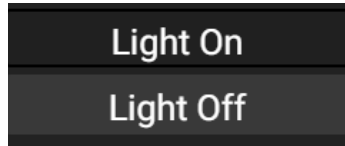
By clicking on LCD you can confirm that the LCD screen functions. The printer will display the Wanhao logo on your screen.



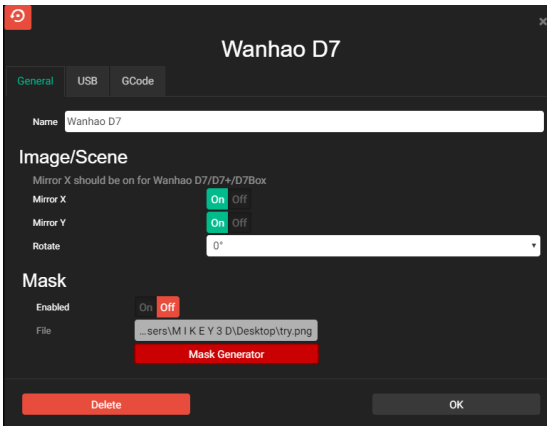
In Z Height you can raise and lower the building platform by 10, 1, and even 0.1mm.



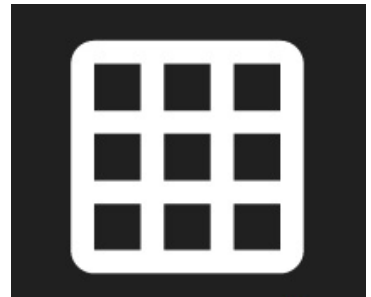
You can control and turn on and off your printer's UV lamp.



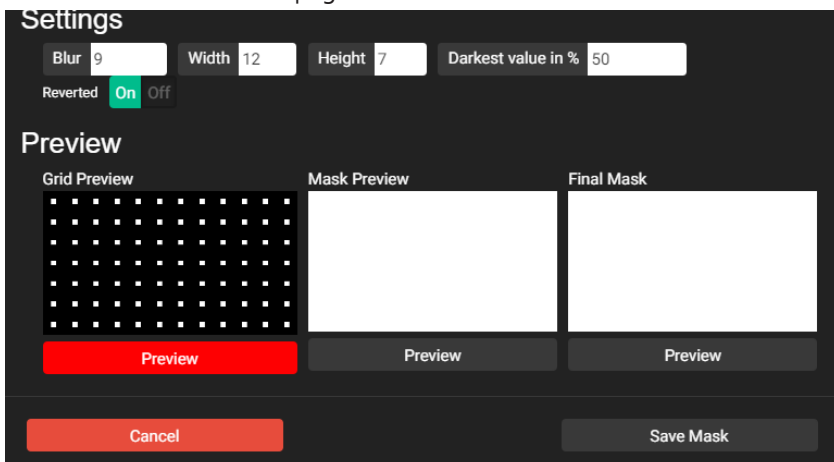
There is an option of cleaning your resin, based on your preference you can choose 15, 30 or 45 seconds to do the clean up process. When the process is done the UV lamp will turn off automatically.



In General tab you can Generate a Mask on your Duplicator 7. Simply click on Mask Generator and Click on Manual.



You can generate your own mask and have a preview of it on your LCD screen. You are able to save the mask as a .png file as well.



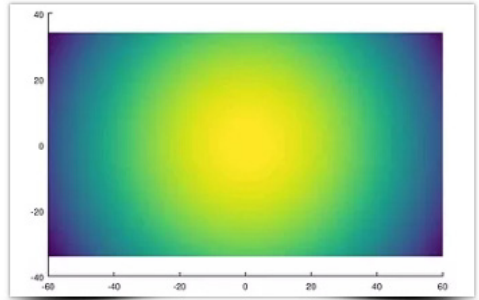
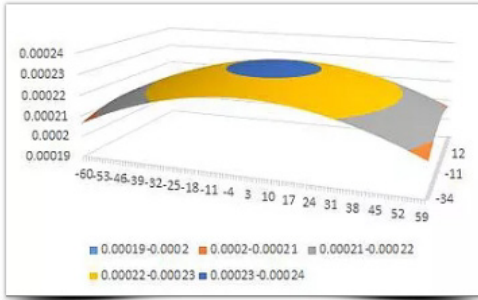
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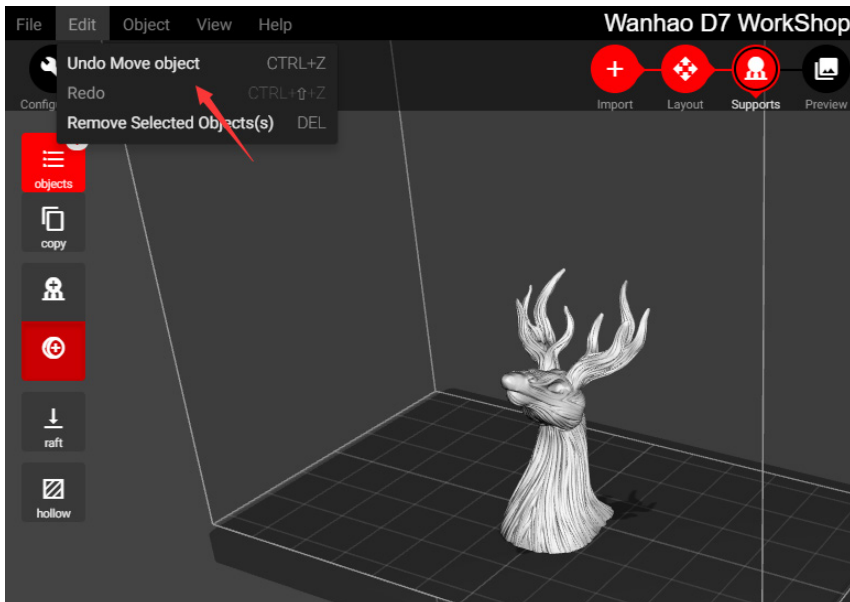
Why you need generate a Mask?

A nonuniform light output means you do not have the same UV intensity across the entire LCD panel. Normally the center of the LCD is brighter than the edge area. The difference sometime can be as high as 25%. If you are printing something fairly large, it means either there is part of your print are over-cured or under-cured. Over-curing usually cause lose of details and Under-curing usually will lead to printing failures.

With a mask image layer displayed on the LCD together with your printing images, the light output can be close to 100% uniformed if the mask is properly made. However, a mask is always recommended to ensure the best printing quality possible.



You can always Undo every time after any action



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3D Printer

Repair and Refurbished Goods or Parts Notice

Unfortunately, from time to time, faulty products are manufactured which need to change components or return to the Supplier for repair

Please be aware that if your product is capable of retaining user-generated data (such as files stored on a computer hard drive, telephone numbers stored on a mobile telephone, songs stored on a portable media player, games saved on a games console or files stored on a USB memory stick) during the process of repair, some or all of your stored data may be lost.

We recommend you save this data elsewhere prior to sending the product for repair.


You should also be aware that rather than repairing goods, we may replace them with refurbished goods of the same type or use refurbished parts in the repair process.

Please be assured though, refurbished parts or replacements are only used where they meet WANHAO's stringent quality specifications.

If at any time you feel your repair is being handled unsatisfactorily, you may escalate your complaint. Please telephone us on 86-571-23290996 or write to us at:

WANHAO Precision Casting Co.,Ltd
77, RENMING ROAD, JINHUA, CHINA
WANHAO Help Desk 86-571-23290996
(Operating Hours: Mon - Sat; 8:00am - 5:00pm)
support@wanhao3dprinter.com
www.wanhao3dprinter.com

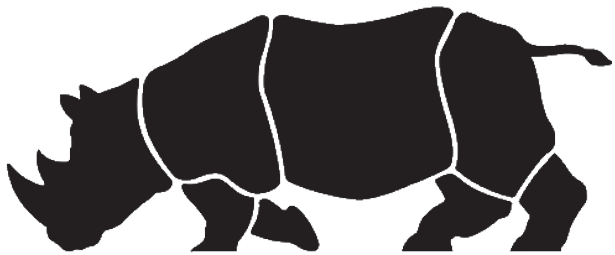
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