UNIZ

USER MANUAL

APPLICABLE TO

SLASH OL/SLASH PLUS/SLASH PLUS UDP
SLASH PRO OL/SLASH PRO/SLASH PRO UDP
SLASH J UDP/SLASH DJ2

UNIZ DESKTOP 3D PRINTER

DISCLAIMER

Please read and understand the contents of this user manual carefully. Failure to read the manual may lead to personal injury, inferior results or damage to the SLASH. All users who operate the Slash are expected to understand the contents of the manual in order to operate the device smoothly, efficiently and safely.

The conditions or methods used for assembling, handling, storage, use or disposal of the device are beyond the control of UNIZ Technology LLC. For this and other reasons, UNIZ does not assume responsibility and expressly disclaim liability for loss, injuries, damage, or expense arising out of or in any way connected with the assembly, handling, storage, use or disposal of the product.

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CONTENTS

A WELCOME

SLASH SERIES 3D PRINTER ·····01

B SETTING UP YOUR PRINTER

UNBOXING ·····02
PRODUCT DESCRIPTION ·····04
SLASH PRINTER TYPES ·····06
ACTION BUTTON COLOR GUIDE ·····07
PRINTER ACTIVATE AND UPGRADE ·····18

C UNIZ SOFTWARE USER MANUAL

SOFTWARE INTERFACE ·····17
START YOUR FIRST PRINTING JOB ·····19
ADDITIONAL TOOLS ·····32

D DESIGN RULES

DESIGN RULE ·····33

E TROUBLE SHOOTING

TROUBLE SHOOTING ·····34

F ROHS AUTHENTICATION

ROHS AUTHENTICATION ·····42

G APPENDIX

TECHNICAL SPECIFICATIONS ·····43

A WELCOME
SLASH SERIES 3D PRINTER

This user manual is designed to help you start your SLASH series 3D printer experience. Learn everything about using your SLASH 3D printer by following the instructions in this user manual and experience how easy it is to produce great quality prints.

You might be familiar with other types of 3D printers. Regardless, it is still essential that you read this manual carefully in order to make the most out of your SLASH printer.

Federal Communications Commission

Conformite Europeenne

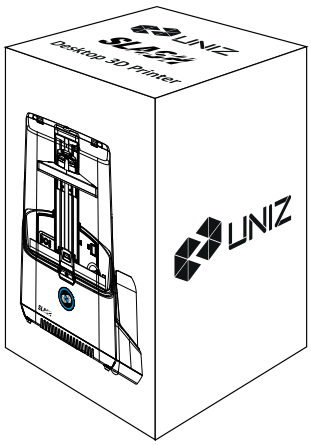
B SETTING UP YOUR PRINTER UNBOXING

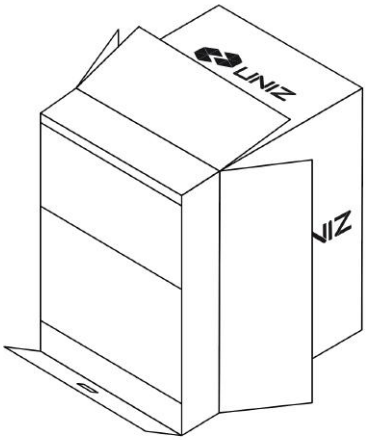
UNBOXING

The SLASH comes in reusable, durable packaging that has been specially designed to protect your SLASH in transport. To properly unpack your SLASH, please follow the steps described below.

START UNBOXING

Start unpacking by correctly orienting the cardboard box, then slide the foam packaging out of the box by pulling the cardboard handle beneath the printer while holding the box.





OPEN IT UP

On the foam packaging, you will find the Quick Start Guide and accessories.

REMOVE THE FOAM PACKAGING

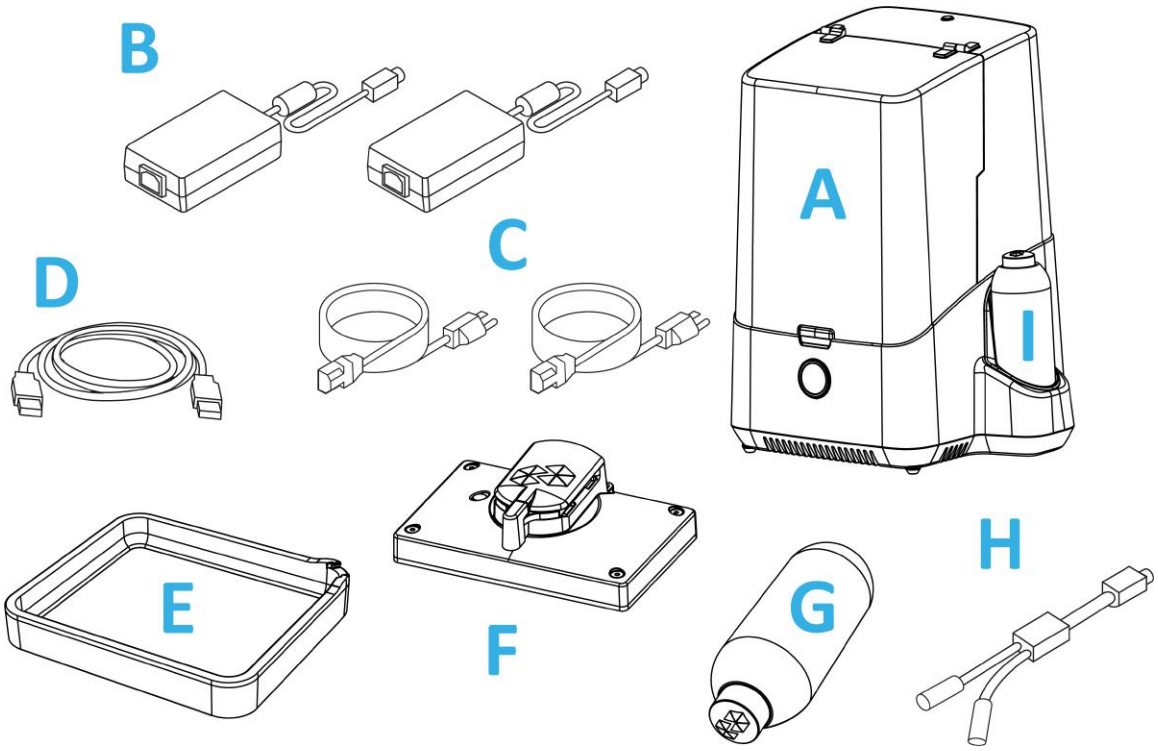
In the foam part on top of your SLASH, you will find all accessories of your SLASH. Take these out and put them aside. Open up the package by removing the foam wrap at the middle. Now you can take out the SLASH and place it on your desk. Make sure you hold the SLASH by the aluminium casing while carrying it.

REMOVING PROTECTION

There is some packaging material around the machine. You may remove it.Then, your SLASH is ready for use!

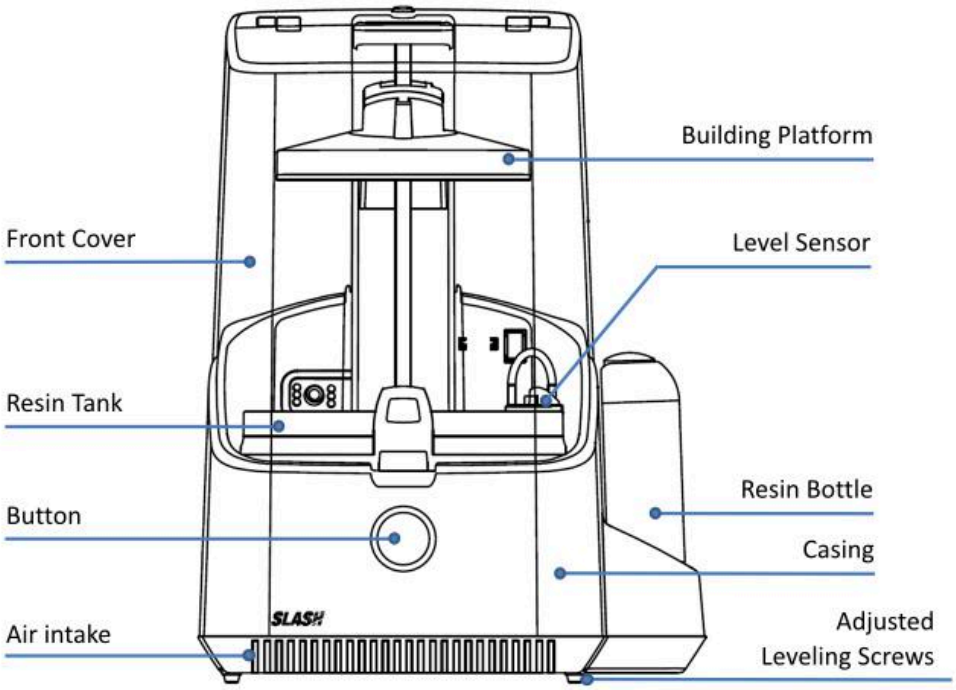
PACKING LIST

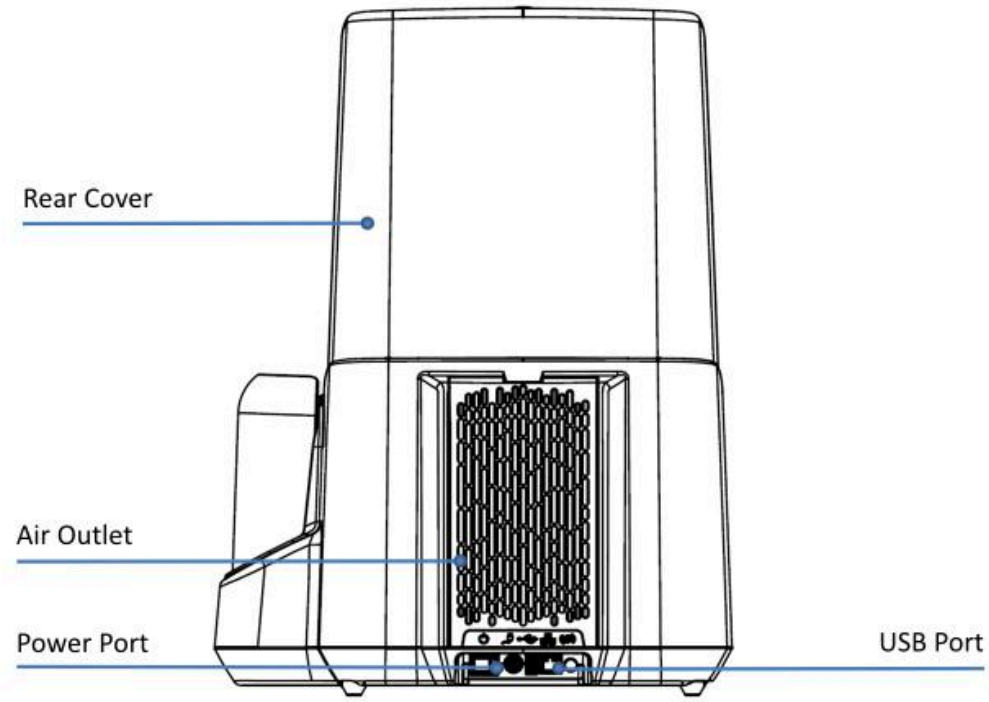
Supplied with your package is the UNIZ desktop 3D printer and several other accessories. This is everything you need to start printing. Check if all accessories are included before continuing.



A . UNIZ Desktop 3D Printer
B . Power Adapter x 2
C . Power Cable x 2
D . USB Cable
E . Resin Tank
F . Building Platform
G . Resin Bottle
H . Power Combiner
I . Cleaning Bottle

PRODUCT DESCRIPTION




Rear Cover
Air Outlet
Power Port
USB Port

SLASH PRINTER TYPES

You can identify the printer's type by checking the label underneath the printer and on the box.

ACTION BUTTON COLOR GUIDE

Breathing red

Printer busy (starting up/paused/z axis moving)

Progressing blue

Data transfer in progress

Green

STANDBY-The printer is connected and waits for a command.

Breathing green

Data transferred, waiting for touch confirmation.

Progressing green

Printing in progress-The lights indicate completed progress.

PRINTER ACTIVATE AND UPGRADE

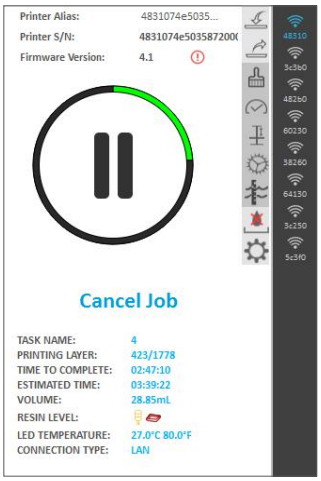
1. Printer Network

Check if the printer is connected to the Internet and set up for the printer connection.

Note: The Printer's Wi-Fi feature supports 2.4GHz band only, it does not support 5 GHz connections.

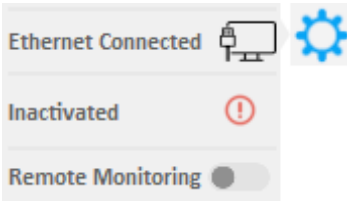
Method 1: UNIZ Desktop

1. Plug into a power supply and switch on the printer.
2. Connect the printer and PC via USB and start the software.
3. Select the printer in the list to open the printer control interface.



4. View network status

Press the “Printer Settings” button open the submenu. The first item is the Network which shows the connection status.

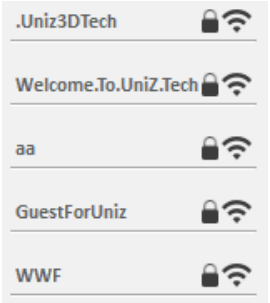


- Wi-Fi Disconnected means the current Wi-Fi is not connected and needs to be configued.
- Wi-Fi Name means the current Wi-Fi is connected.
- Ethernet Disconnected means the current Ethernet is not connected and needs to be configured
- Ethernet Connected means the current Ethernet is connected.

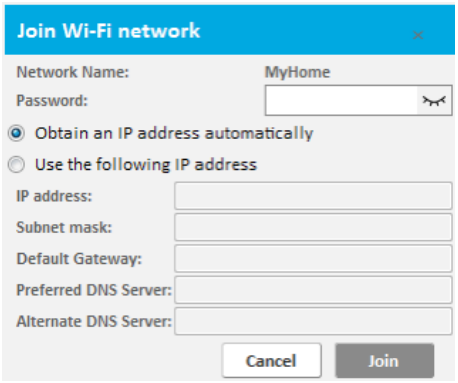
5. Set up the network

This function only supports setting via USB connection.

- Click the first item. The Wi-Fi list will pop up in the left if it is Wi-Fi connection;

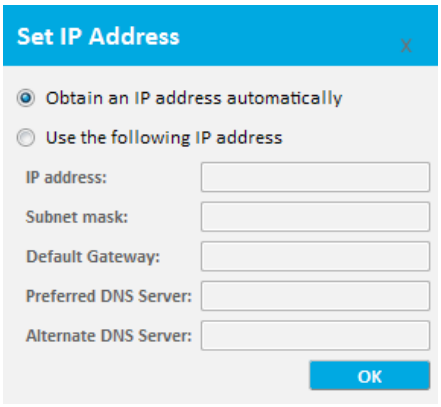


Click the Wi-Fi name on Wi-Fi list configure the IP address settings.



In the box you can enter password and obtain IP address automatically or set fixed IP address manually.

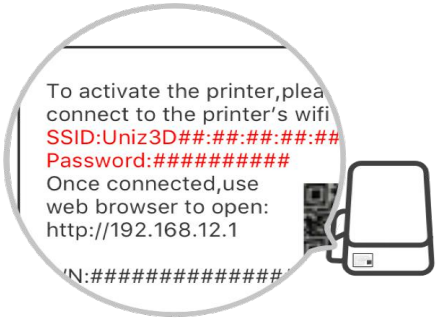
- Click the first item. The IP address settings should pop up if you are connected via Ethernet. (software should be 1.2.0 or higher version and firmware should be 4.1 or higher version).



In the box you can obtain IP address automatically or set fixed IP address manually.

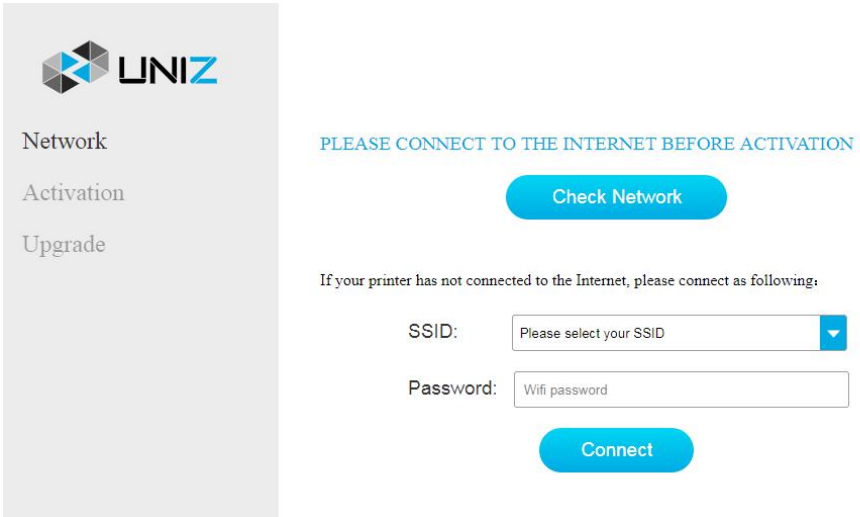
Method webpage·

1. Plug into a power supply and switch on the printer.
2. Connect to the printer's Wi-Fi hotspot.
   a. Find the SSID and Password on the side label.
   b. Access the Wi-Fi Setting of your mobile device, and connect to UNIZ3D##:##:##:##:##:## as shown in the SSID.



3. Check and Set Network.
   a. Find IP address on the side label.

   b. Open the browser on PC or mobile device and enter the IP address; open the printer page and select the "Network" option.



c. Click Check Network to check if the printer is connected to your network.
d. If the printer is not connected to the Internet, please choose your home Wi-Fi hotspot, type in the password and click the Connect button.
e. After the printer is connected to your home Wi-Fi hotspot and Internet, disconnect your PC or mobile device from the printer Wi-Fi and reconnect to home or office network.

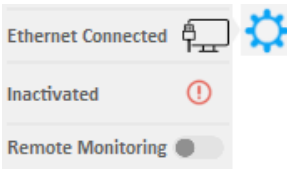
Tips: After setting up the connection, please make sure that PC or mobile device and printer are connected to the same LAN to ensure that PC or mobile phone can control the printer through the network.

2. Activate the printer

Before activation, make sure that the printer is powered on and connected to the network. Slash OL or SLASH PRO OL models must be activated before printing. After successful activation, the printer will automatically launch a seven-day trial period in which the SLASH OL/PRO OL will become and function as a SLASH PLUS UDP/SLASH PRO UDP.

Method 1: UNIZ Desktop

a. Start the UNIZ Desktop and select the printer in the list to open the printer control interface
b. Click the “Printer Settings” button to open the submenu. The second option shows the activation status
c. Click the item to execute the activation function.
If the printer is inactivated, clicking this item will activate the printer and the system will bind the printer to the currently logged-in user.



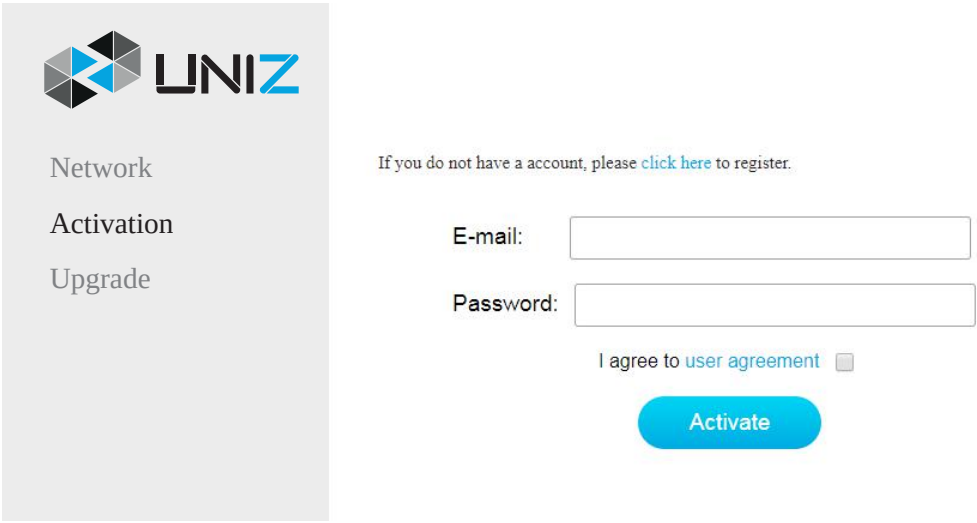
Method 2: UNIZ App

Printer activation is supported by UNIZ App of 1.2.0 or higher.
a. Click the "Printer" button in the main menu of App, find the printer that needs to be activated in the list of printers, and open the printer control panel.
b. Click the "Utilities" button on the control interface to enter the setting interface. The third item is the activation function, showing the activation status ("Inactivated "or" Activated ").
c. Click “Inactivated”/ “Activated” to activate/reactivate the printer with the current login account.

Method 3: Activate from the webpage

a. Connect the PC or mobile device to the printer's Wi-Fi and open the printer page in the browser.

b. Select the Activation tab in the printer page and input UNIZ account and password, then click the Activate to complete the activation.



3. Updating the Firmwaret

Before upgrading the firmware, make sure that the printer is powered on and is connected to the internet.

Method 1: Upgrade from the UNIZ Desktop

a. Launch the software and select the printer to open the printer control interfacet.

b. An icon will show next to the firmware version when there is a new version available. available. Click the icon to start upgrading. Restart the printer when the upgrade is finished.

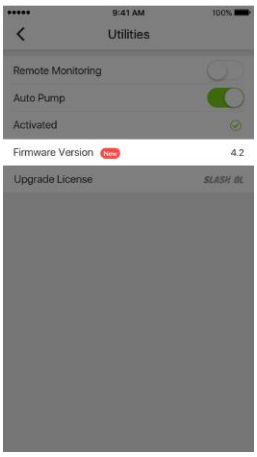
Method 2: Upgrade from the UNIZ App

(1) Check the firmware version of the current printer

Click "Printer" in the main menu of App, find the printer that needs to be updated in the list of printers, open the printer control panel, click the "Utilities" button, and you can see the current firmware version in the window.

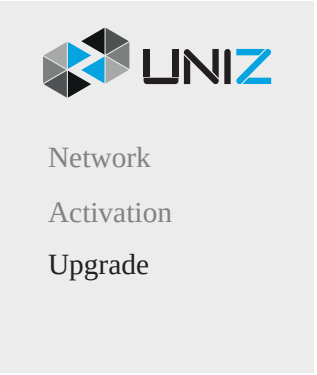
(2) Updating the firmware

An icon "New" will show next to the firmware version when there is new version firmware available. Click the icon to start upgrading. Restart the printer when the upgrade is finished.



Method 4: Upgrade from the webpage

a. Connect the PC or mobile device to the printer Wi-Fi and open the printer page in the browser.
b. Select the Upgrade tab in the printer page and click Upgrade firmware to start the printer firmware updated. Restart the printer after the upgrade is complete.



4. Upgrading the Printer License

Before Upgrading the license, make sure that the printer is powered on and is connected to the network.t
Software Requirements:
UNIZ APP 1.2 or higher
UNIZ Desktop 1.2 or higher
Printer Firmware 4.0 or higher
SLASH OL and SLASH PRO OL support license upgrades. The printer type will change as follows:
SLASH OL-> SLASH PLUS UDP
SLASH PRO-> SLASH PRO UDP
(1) You can purchase license upgrades from the online store by visiting official website https://www.uniz.com.
(2) Click My Printer in the left menu of the Dashboard from the website to show the activated printers under the current username and choose the one that needs to be upgraded. Select the purchased license in the Upgrade License list and click Upgrade to complete the process.

S/N	Alias	Printer Type	Upgrade License	State	Action
341f0ace5035c2180000040000000000	x1	SLASH			Status
2824050e503587200000840000000000	test-2	SLASH			Status
642e018e503587200000840000000000		SLASH OL	1850 Upgrade		Status
341f098e503587200000840000000000	yi ce...	SLASH Pro	1852 Upgrade		Status

Tips: The printer will be shown only when activated with the current account.

(3)License upgrades can be executed in the UNIZ App or the UNIZ Desktop printer control interface.

●UNIZ Desktop

a. From the ‘connected printers menu’ in the top right, select the printer in the list of printers, and open the printer control interface.

b. Click the "Upgrade License" button below

If the user has not purchased the license or if the printer and the license have not been bound, the system will display a notification that directs to the purchasing webpage.

If the printer and the license have been bound, the system will start the upgrading process.

Please restart the printer manually after the upgrade is complete. The printer model should change upon the next power up.

●UNIZ App

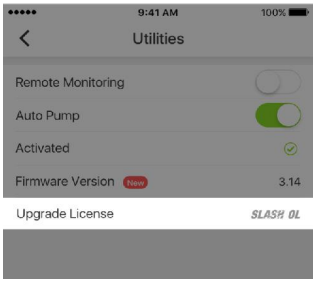
a. Click the "Printer" button in the main menu the app, select the corresponding printer in the list of printers, open the printer details control panel, click the "Utilities" button, and the “Upgrade License” option can be seen in the window.

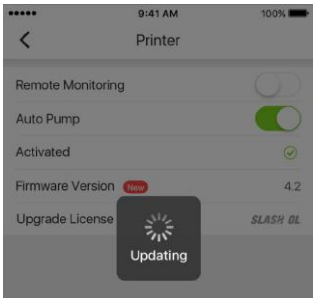
b. Click the “Upgrade License” option

If the user has not purchased the license or if the printer and the license have not been bound, the system will link to the corresponding license purchasing webpage or remind the user to go Dashboard for binding;

If the printer and the license have been bound, the system will start the upgrading.

Please restart the printer manually after upgrade is complete and the printer model will shift into the upgraded model.





5. Trial and Trial Expiration

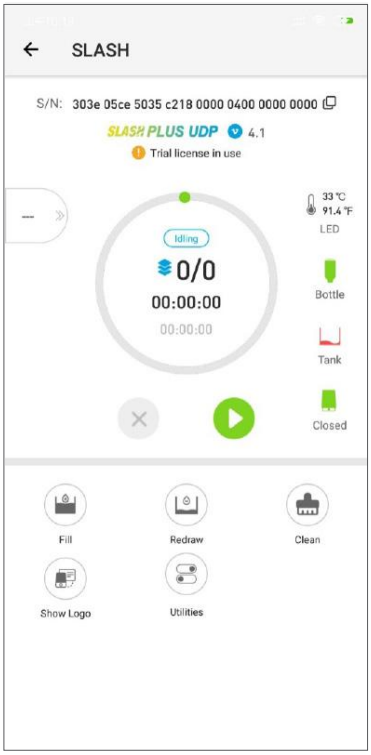
SLASH OL and SLASH PRO OL models automatically get a seven-day free trial with SLASH PLUS UDP or SLASH PRO UDP models after successful activation.

In trial

During the trial period, check whether the printer is connected to the Internet and whether the resin bottle information is normal before printing.

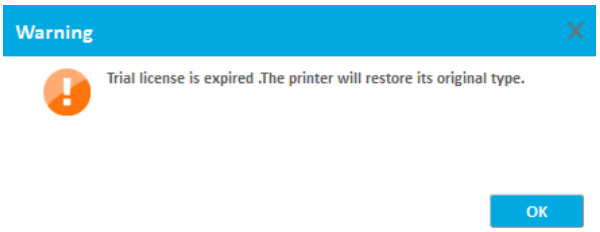
During the trial period, the trial status will be shown under the firmware version in the printer control panel (In use/Expired).

On the left is the Desktop printer control interface, and on the right is the App printer control interface.

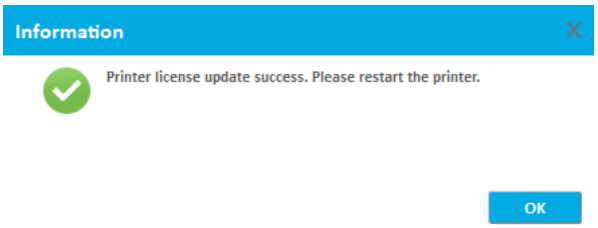


Trial Expiration

(1) If the trial period has expired, the system will pop up the dialog box as shown below after opening software control panel or clicking “Starting Print”.



(2) Click “OK” and the printer will perform the printer reset operation. After the reset operation is completed, the system will prompt as below.

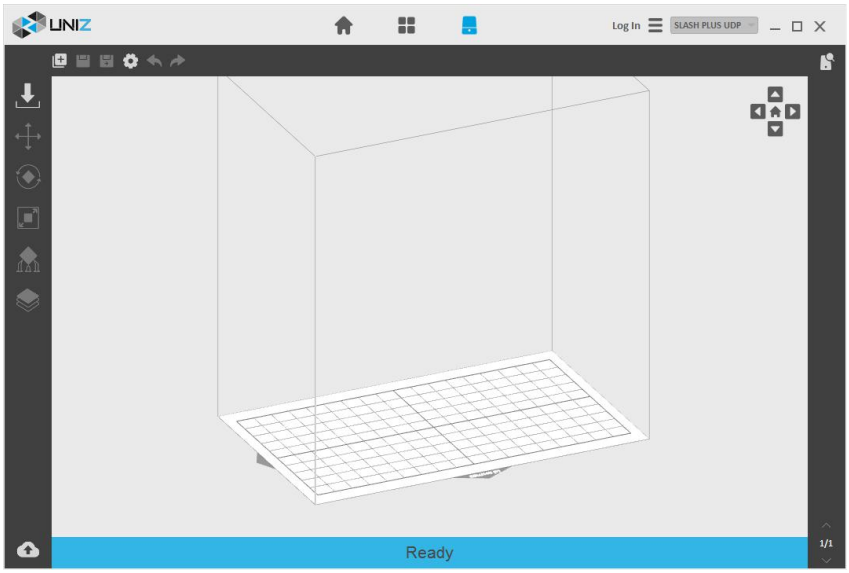


(3) After the next restart, the printer will be restored to its original model.

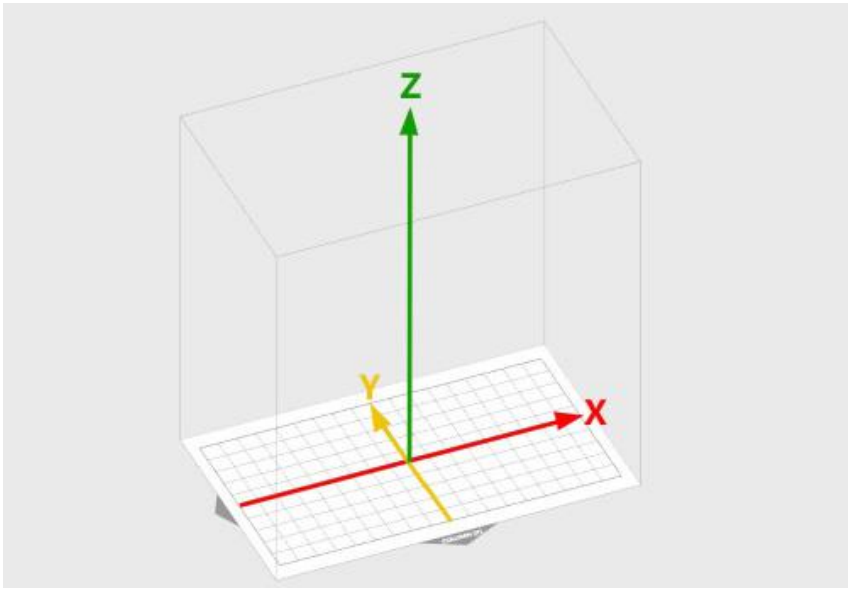
C | UNIZ SOFTWARE USER MANUAL

1. Software Interface

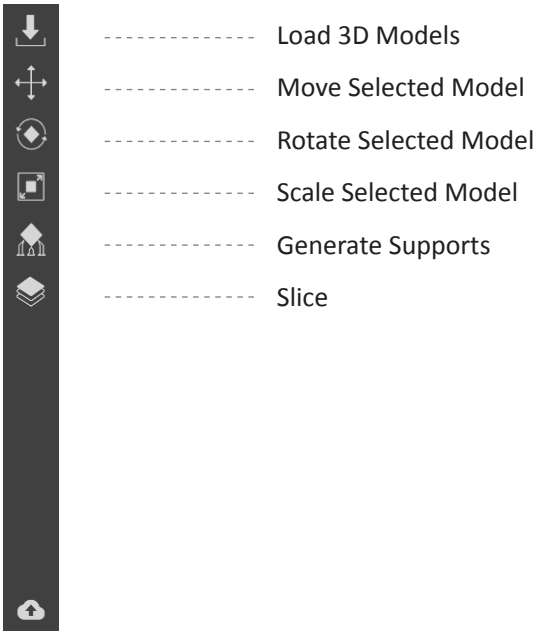
Open UNIZ Desktop and click Control button to show the 3D model viewer.



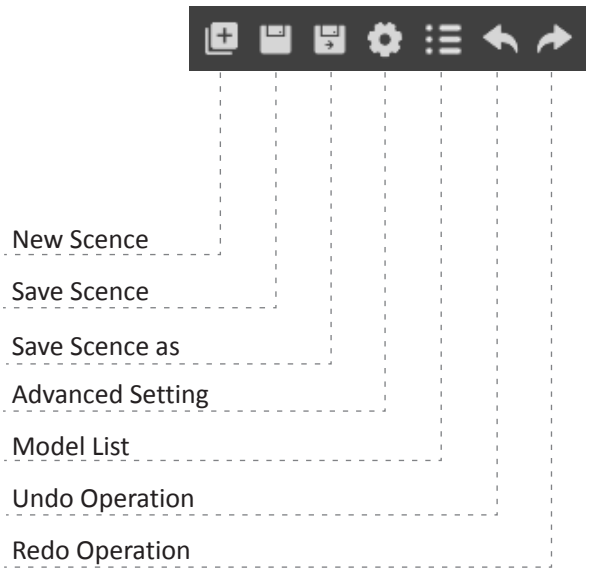
1.1 Viewer



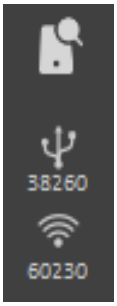
1.2 Main Tools



1.3 Additional Tools



1.4 Printer Control



Uniz provides printer control function based on USB and network connection. This function also supports multiple printers' control. Printer connected via USB will be marked with the icon in the right printing tool bar.

Click the Search button in the tool bar to search all the printers (only selected printer type) in the same network of the computer which will be marked with the icon.

Printer connected via both USB and network will be marked with the icon and USB communication will be prior.

1.5 Status Bar

The status bar appears along the lower edge of the window and shows software progress, such as loading, generating supports, and slicing

2. Start Your First Printing Job

2.1 Load 3D Models

To load one or more 3D models, you may either drag-and-drop onto the 3D viewer, click Load File Button from the Main Tools, or double click on the file directly (if UNIZ Desktop+ is set as default software to open such file format). Supported file formats: STL, OBJ, AMF, 3MF and UNIZ.

Tips: UNIZ file does not support multiple loads in parallel.

2.2 Select Object(s)

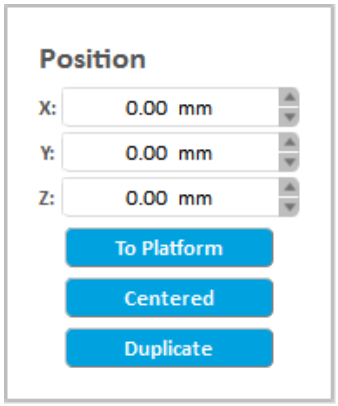
Click the left mouse button on an object to activate it for further operations. Click and drag the pointer across objects to select multiple objects. The activated objects will turn blue once selected.

2.3 Change View

Viewing your model from preferred angle will benefit model positioning. To rotate the view, right click and drag around the activated object. To pan, hold the shift key and click-drag with right mouse or hold down the scroll wheel and move mouse around. To zoom in or out, use the scroll wheel.

2.4 Change Position

Pressing the “Position” Button will open following sub menu.

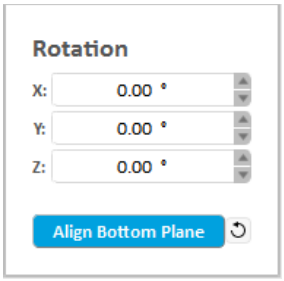


- Once the Position tab is open, hold the left mouse button on the object and move the mouse to move the object freely in the X-Y plane. If the “Shift” key is held down, the object will be moved up and down along the Z-axis instead.
- The activated object can also be moved by inputting X/Y/Z values in the field, press “Enter “to apply changes.
- Bring the active part in contact with platform.
- Use the “Centered” button to center active part on platform.
- Use the “Duplicate” button to duplicate the active part.

Tips: Make sure the models are distributed evenly on build platform. Un-balanced forces on the build platform may result in inferior precision or cracking of the printed parts. Once supports are attached to a model, its Z-position cannot be modified.

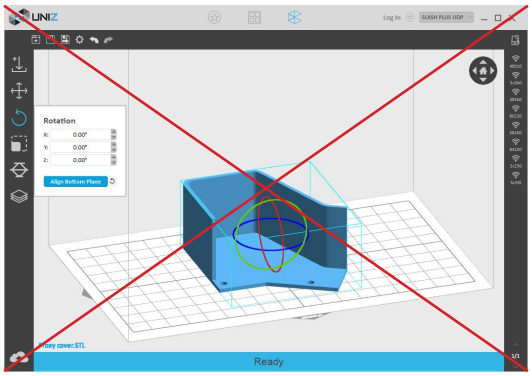
2.5 Change Orientation

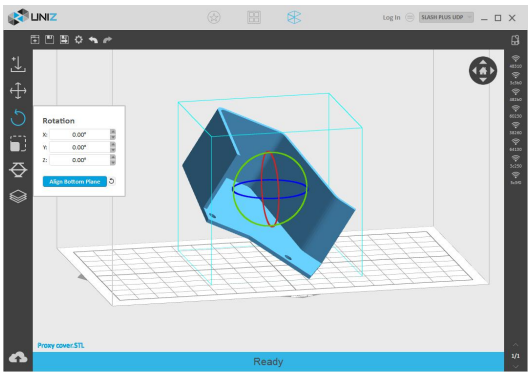
Press the “Rotation” Button on the main tools will open following sub menu.



- Once the Rotation tab is open, hold the left mouse button on the object and move the mouse to freely rotate the object.
- Rotate any model more precisely in one of the three main axes by dragging one of the circular rings on the manipulator.
- The activated object can also be rotated by inputting X/Y/Z values in the field. Press “Enter” to apply changes. UNIZ's orientation tools are relative not absolute, so the X, Y, and Z rotation angles reset to 0 degrees after applying a rotation.
- Press “To Align Bottom Plane” button to align the selected plane to the bottom of build platform.
- Click the “Reset” Button to restore the activated object to the original status.

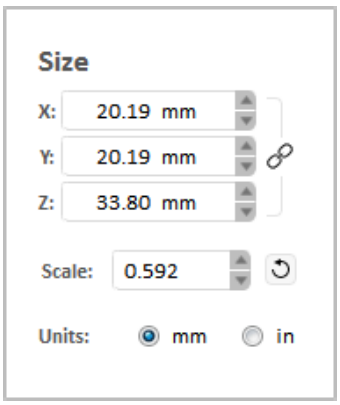
Tips: Large Flat surfaces or Long Straight lines with supports may be printed at an oblique angle of at least 10° to the build platform to increase the success rate. The forces during peeling may distort thin layers of a flat surface or a line mounted on the support structures if printed horizontally. If a planar surface or thin line is oriented at an oblique angle, there is only little overhang for each new layer. Furthermore, thin-walled parts occupy significant less area in a slice when printed at an oblique angle.





2.6 Change Size

Press the “Size” Button on the main tools will open following sub menu.



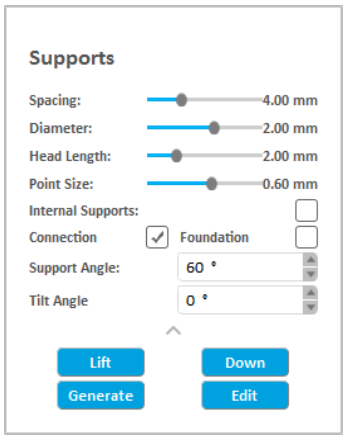
- Once the Size tab is open, the activated object can be scaled freely by holding the left mouse button on the object and moving the mouse.
- The activated object can also be scaled by inputting X/Y/Z values in the field. Press ‘Enter’ to apply changes. The object will scale uniformly in Uniform Scaling mode. In Non-uniform Scaling mode the object will scale independently for each axis without affecting the other axes.
- If you prefer to scale to a fixed ratio put a value into the scale box.
- Click the ‘Reset’ Button to restore the activated object to the original size.
- Units: toggle between millimeters and inches.

Tips: Changing an object’s size will break previously generated supports and you will need to redo these.

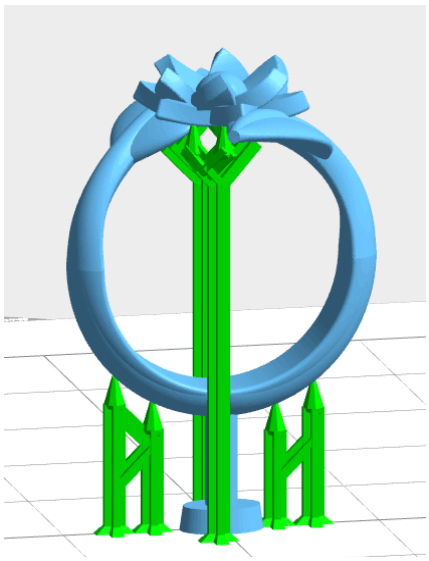
2.7 Generate Supports

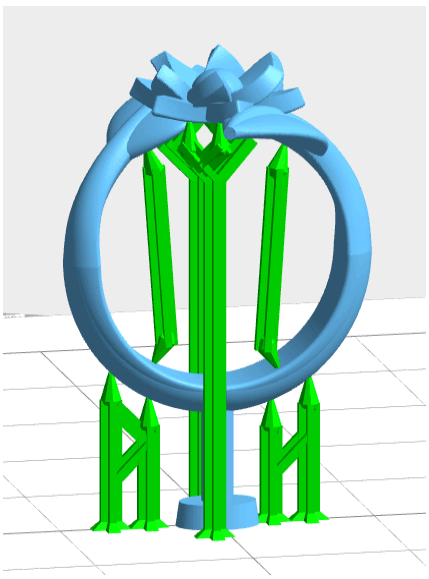
Some models need additional support structures to print successfully, especially those with overhangs. Press the “Supports” Button on the main tools to open the Supports sub menu.

Once the Supports tab is open, supports can be added to the active object by pressing the “Generate” button. Support parameters can be adjusted using spacing, Support Diameter, Head Length, and Point Size sliders.

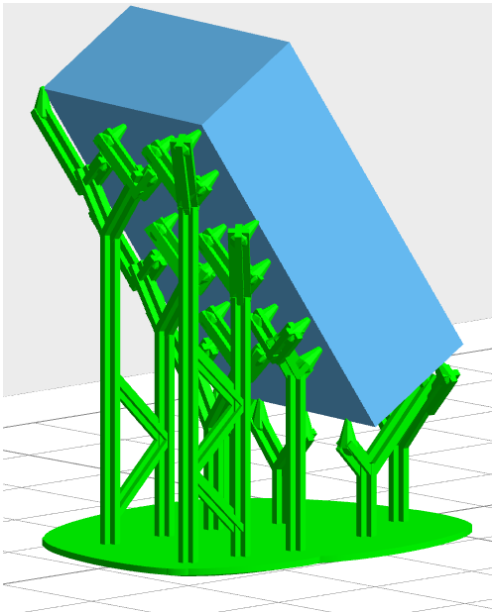


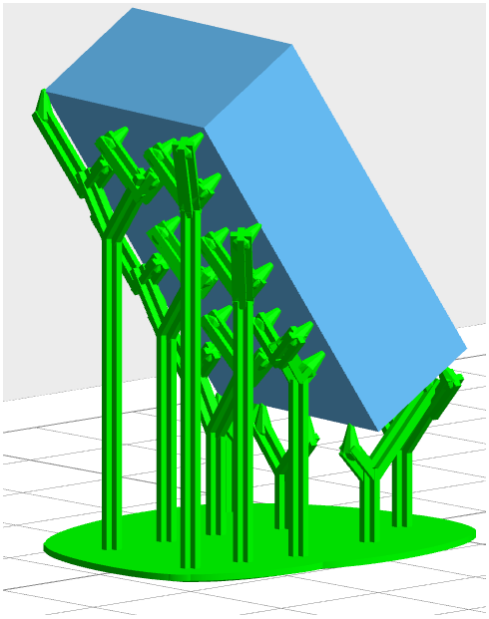
- Spacing defines the closest distance between two adjacent supports.
- Support Diameter defines the diameter of the support pillar.
- Head Length defines the length between the straight support pillar and angled pillar to the object (point).
- Point Size defines the diameter of the support where it touches the object.
- Internal Supports, checking this box will generate supports inside the model to shore up overhangs. Without internal supports, the overhangs may fail during print.



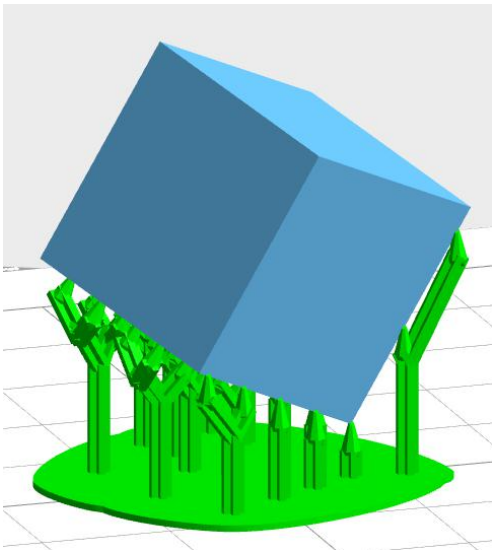


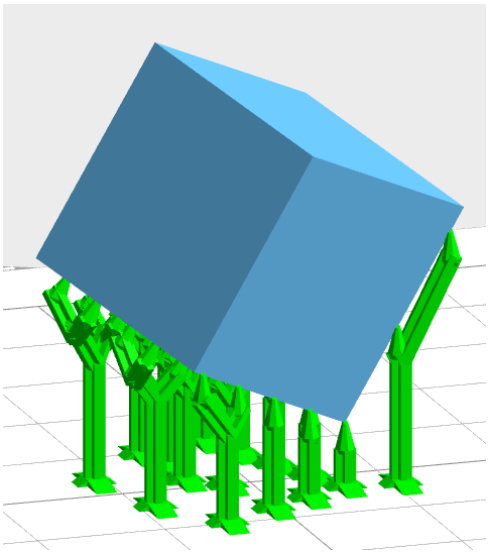
- Connection, Long supports are unstable in structure. Click the connection check box to add connection parts between long supports for increasing supports stability when generating supports. The left picture below shows supports with connection and the right one shows supports without connection. This box is checked by default. Foundation, Click the check box to add Foundations when generating supports. The left picture below shows supports with foundation and the right one shows supports without foundation





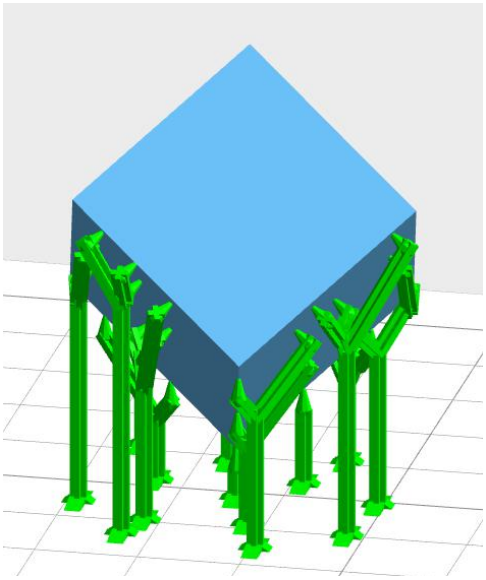
- This box is checked by default. The system will recalculate the foundation when the user finishes and quit the function of editing supports manually.

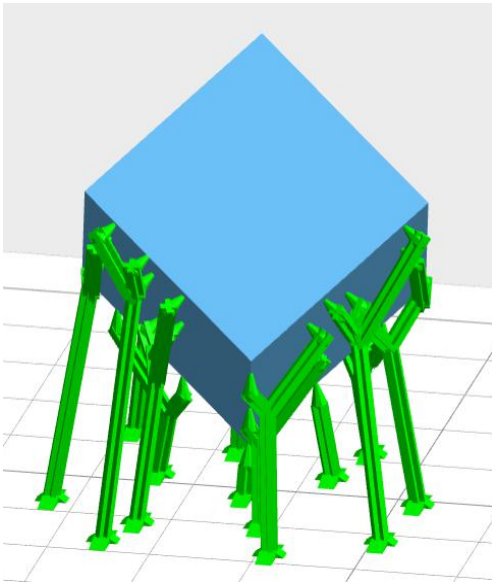




- Support Angle, Supports will be generated when the angle between the model part surface and the horizontal direction is smaller than the support angle, otherwise they will not be generated. The bigger the support angle is, the wider the scope of generating support. Set this value to prevent generating supports at steep places and to eliminate unnecessary supports. You can manually set the angle ranging from 45°to 75°, and the default angle is 60°
- Tilt Angle, To ensure discontinuous exposure in part area under the UDP mode, supports need to be tilted. Users can manually set the tilt angle ranging from 0°to 20°, and the default angle is 0°.

The left picture below is vertical supports and the right is with tilted supports.





- “Lift”: lift the activated object from the build platform upwards by 5mm.
- “Down”: push the activated object down to the build platform.
- “Generate”: generate the support structure using the current settings for all selected models.
- “Edit”: allow the user to manually add, modify, or delete support structures.
- Entry/Exit Manual Edit

Press the “Edit” button, the system enters manual edit support mode. Even if the object is not selected, you can edit supports manually. Click the “Edit” button again, the system will return to automatic support mode.

Add Support

Trace the mouse cursor over the model, when your cursor appears as a green line, clicking on the surface of the model will add a support. If the cursor appears as a red line, it means a support is not needed.

Modify Support

Click on the surface of the support and, it will be highlighted to indicate that it has been selected.

Once selected, you can drag and drop the support to a target location. If the support turns red while moving, the position of the support is not ideal and therefore it is not recommended.

You can also change the Support Radius, Header Length, or Point Size sliders to modify support properties.

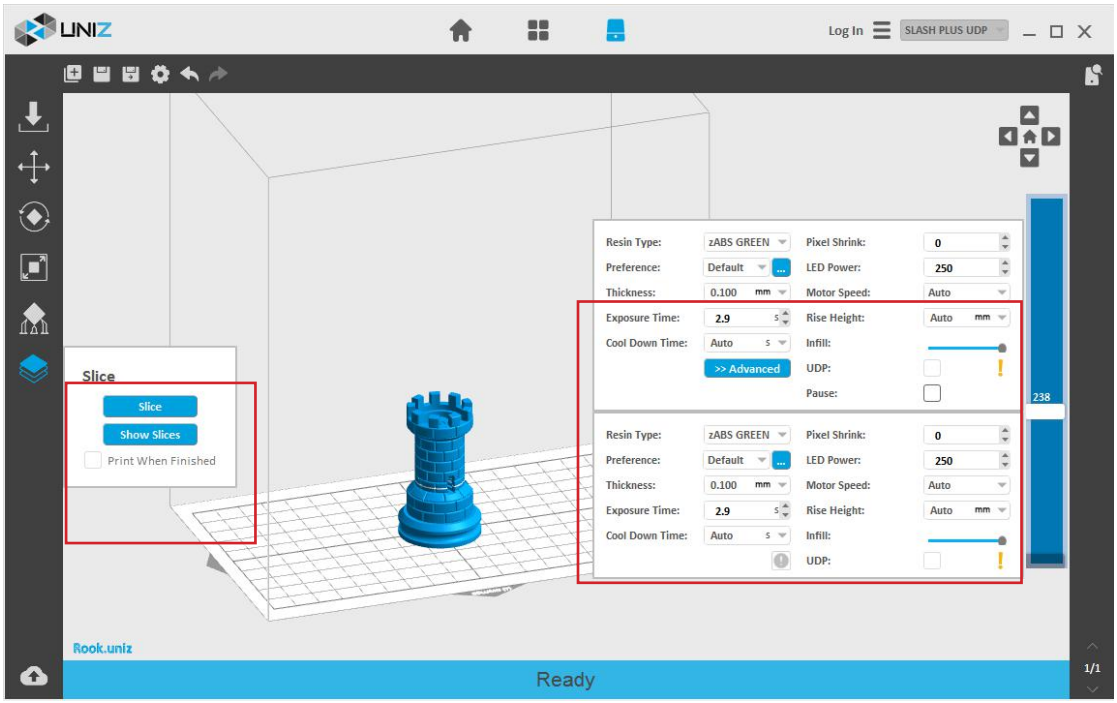
Delete Support

Once a support is selected simply press the “DELETE” key to remove it.

Tips: The “Lift”, “Down”, “Generate” buttons are only enabled when a model is being selected.

2.8 Slice

Press the “Slice” Button on the main tool bar and it will open two sub menus, one on the left and one on the right. The left menu is to start Slice and Show Slices, and the right drag bar and menu is for customization of slice profile.

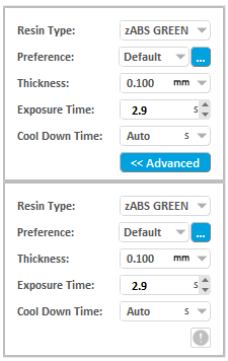


a. Slice Parameters

Slice parameters allow users to customize the slice parameters of each segment of a model.

After version 1.2.0 and the upper Desktop sets a separate slider at the third layer by default and users cannot move this slider in the bar. The Exposure Time of the first three layers will be set directly in the slice parameter interface rather than in the advanced settings.

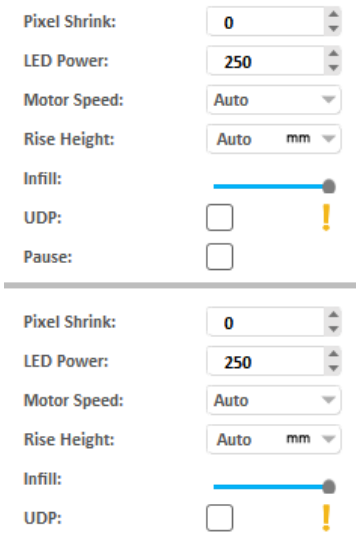
Since 1.3.0 version, “Slice Parameters” has been adding “Preference” and “LED Power”, accordingly “LED Power” will be removed from “Advanced Settings”. Uniz Desktop will no longer memorize “Exposure Time”, therefore “Restore” function be abolished. Users can memorize favorite printing parameters by “Preference”.



- “Resin Type” provides different default values for different resin type.
- "Preference": Each resin can define multiple preference to memorize frequently-used printing parameter, including: Layer Thickness, Exposure Time, Cool Down Time, Pixel Shrink, LED Power, Motor Speed, Rise Height, Infill, UDP Mode. Right click on button, popup “Preference Editor” dialog. In “Preference Editor”, click “Add” to create a new preference and click “Remove” to delete the selected preference. Note: Preference values are obtained directly from the slice parameters interface and there are not editable; Only the self-defined preference is deletable.
- “Thickness” is the layer thickness, which is related to Z resolution.
- “Exposure Time” is the exposure time of a layer in a particular segment segment, and it may vary due to a different layer thickness setting or different resin types, i.e. zWax resin takes about 2x exposure time per layer compare to zABS.
- “Cool Down Time” is the time to cool down the exposed layer to protect the polymer film from overheating. To prolong the lifetime of the resin tank film, it is recommended to keep the film temperature under 50 degrees Celsius. Overheating the film can cause it to warp, delaminate and break.

Tips: Avoid exposing the same spot or area over and over; try to orient the model’s walls or pillars in oblique angle so the exposure area changes on subsequent layers.

Pressing the “Advanced” Button will open following sub menu.



- “Pixel Shrink”: Shrink or expand the slice polygons. If value is zero do nothing; If positive shrink slice, if negative, then expand. The unit is pixels.
- “LED Power” sets the power to the UV LEDS and will have an impact on curing of the resin Power of LED module. 150-250 is suggested.
- “Motor Speed” defines the speed of electric motor that controls the peel motion of the platform.
- “Rise Height” defines the travel height of the peel motion.
- “Infill”: drag the slider horizontally to modify the infill ratio ranging from 0% to 100%. The model will be:
  - hollowed but not filled when the ratio is 0%;
  - hollowed and filled by the ratio when the ratio is among 10% to 90%;
  - filled but not hollowed when the ratio is 100%;

View the Advanced Settings for the hollowing wall thickness and infill type.

- “UDP” option will be added into the slice parameters when users choose the printers with UDP function. Users need to check this box when printing UDP model. The Cool Down Time, the

Motor Speed and the Rise Height will apply the default value set by the software and they cannot be modified by the users from the interface.

- "Pause" sets a pre-set pause at the layer of choice during printing, and the pause can be resumed after pressing the Resume button in the printing control tab.

b. Customize Your Own Z Resolution

By Dividing the model the model into multiple segments and defining different slice parameters, Z resolution customization can be used to balance print speed and surface quality.

Click the block on the slider bar to start customizing print parameters. The white line shows the division layer of the two adjacent segments. The upper menu sets the properties of the segment above the division, and the lower menu sets the properties of the lower segment. You may drag the slider block to change the division location or double click on blank space on the slider bar to add another division layer. Press the Delete key when dragging the slider block to erase the division layer. The last division layer cannot be deleted.

Double click the selected slider and you get a text box. Type layer in the text box and then press ENTER key to finish and close the editing.

Click the "+" Key to move the slider up one layer incrementally until it reaches the next slider or the top layer of the model.

Click the "-" Key to move the slider down one layer incrementally until it reaches the next slider.

Notice: The slider at the bottom (that marks the third layer) does not support operations by the +/- button.

Click the "PageUp" Key to select the separate slider above.

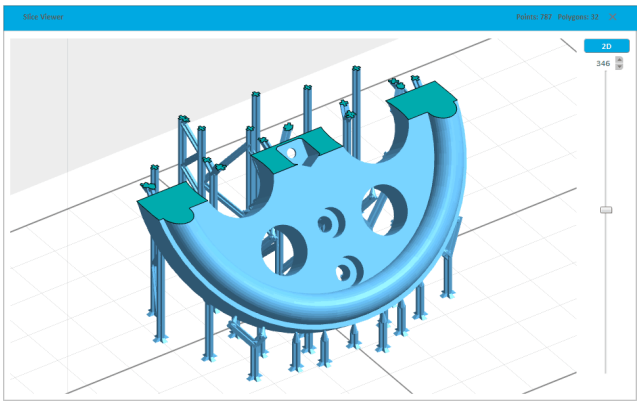
Click the "PageDown" Key to select the separate slider below

c. Slice Tools

Click the "Slice" Button to slice all models on the build platform with the defined parameters. The estimated print information will show in the status bar.

Estimated Time 00:12:40	Volume 17.20ml	Layers 57

Click "Show Slices" Button to check any individual layer of the sliced model.



You can input a specific layer number in the top right to quickly move to that layer
Drag the right slider vertically to view each layer.
Click the Up/Down arrow to view the previous/next layer incrementally.

If Print When Finished is checked, the sliced data will be sent to the selected printer in the right bar automatically. The printer still needs confirmation to print via the main button located at the front of the printer.

Tips: "Print When Finished" will only be enabled when a printer is connected, the corresponding Printer Control Panel is open, and the printer is in ready status.

2.9 PRINT

Printer connected via USB will be marked with the icon in the right printing tool bar.

Click the button in the tool bar to search all the printers in the same network . These will be marked with the icon.

a. Print Tools

Press the printer icon / to open the Printer Control Panel / .The Printer Control Panel is used to control the printer for printing and regular maintenance. Press the icon the icon to close the Panel.

Start Job: Click "Start" Button , the system will send the current slice data to printer and start printing.

Pause Job: Click "Pause " to suspend a printing job.

Resume Job: Click "Resume" to resume a paused printing job.

Cancel Job: Click "Cancel Job" to cancel the current printing job.

Renaming a Printer: Double clicking the printer name or s/n to input a new alias and press enter to finish renaming.

Upgrade firmware: An icon " " will show next to the firmware version when there is new version firmware available. Double click the icon to start upgrading. Restart the printer when the upgrade is finished.

Fill Resin: Click "Fill" to start pumping resin from the bottle into the tank. Click again to stop.

Redraw Resin: Click "Redraw" to start redrawing resin from the tank back into the bottle. Click again to stop.

Full Screen Clean: Click "Clean" to expose the entire screen in order to fully cure and clean the resin at the bottom of the tank. Debris from previous jobs may damage the LCD screen in the next job. The Clean function will form an entire resin film entrapping the debris from previous jobs.

Once the resin film is removed, the resin tank is clean and ready for the next print job.

TIPS: It is recommended to check the bottom of resin tank before every print job. When there is debris either floating in the resin or sticking to the bottom of vat, it can damage the LCD. NOTE: DO NOT remove the resin tank during cleaning exposure. After exposure, however, you may lift the resin tank to remove the cured resin film.

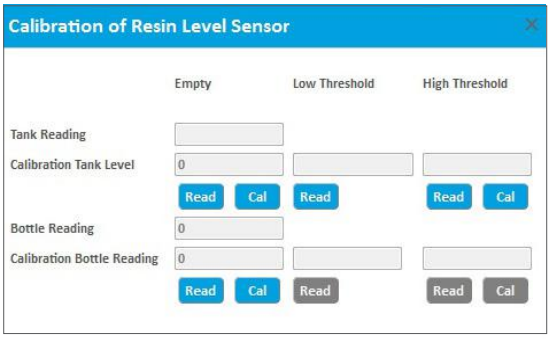
Show Logo: Show Logo is used to verify if the LCD screen is functional. Before using this function, remove the build platform and resin tank, then click "Show Logo" Button to show the UNIZ logo on the LCD screen to test communication and LCD screen.

Reset Z-Axis Zero Position: Reset Z-axis Zero Position is used to re calibrate the vertical motor. Please remove the resin tank and wipe clean the build platform before using this function. On the popup box, click "Yes" Button, then push the build platform down manually to touch the LCD screen. Then click "Yes" again, and the build platform will rise back up.

This function is used if there are issues relating to the initial distance between the build platform and the screen. This may help with failed prints or adhesion issues.

Z-axis Compensation: Enter a value to set a compensation value for the z-axis. This will shorten the z-axis height from the mechanical calibrated value.

This function is used only when the printed model is smaller than the theoretical value along the Z axis direction. The adjustment value is equal to the theoretical value minus the actual value.



Calibration of Resin Level Sensor: Click "Calibration of Resin Level Sensor" button to open the dialogue box.

Resin Tank Level Cal

1. Install an empty resin tank and, attach resin sensor to the tank;
2. Calibrate Tank Empty Level: Clicking "Read" and "Cal" button until "Tank Reading" is

within ±50.

3. Calibrate Tank Low Threshold: Replace the empty Tank with a Tank filled with 2-3mm resin (or fill the empty Tank with 2-3mm resin), click “Read” button.
4. Calibrate Tank High Threshold: Replace the Tank with a Tank filled with 7-8mm resin (or fill the Tank with 7-8mm resin), click “Read “button, and finish the Tank Level Calibration by clicking “Cal” button.

Calibration of Bottle Resin Level

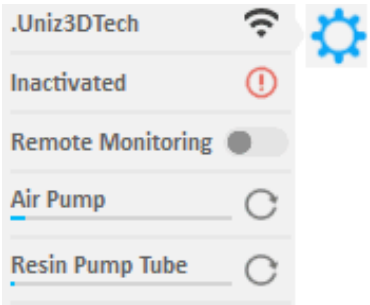
1. Install an Empty Resin Bottle, and install Resin Level Sensor to the Resin Tank
2. Calibrate Bottle Empty Level: Clicking “Read” and “Cal” button until “Bottle Reading” is within ±50.
3. High/Low threshold is not available in this version.

Auto Pump

1. Click “Auto Pump” Button to turn on / off automatic pumping. If resin level is too low in the tank and “Auto Pump” is on, the printer will pump resin from the bottle into the tank automatically.

Printer Settings

Press the “Printer settings” button to popup the submenu including three functions: Network, Activation,Remote Control, Retime Air Pump and Retime Resin Pump Tube.



1. Network

This shows the printer connection network status and provides network settings. It supports automatic and manual IP configuration.

This function only supports setting via USB connection.

TIP: The Printer's Wi-Fi feature supports 2.4GHz band only, it does not support 5 GHz connections.

2.Activation

This shows the activation status of the printer. Click to start activating.

3. Remote Control

This shows the remote control status. Users can manually turn on/off the remote control function.

When this function is started for the first time, the system needs to register the printer to the IoT which may take some time.

4. Air Pump

Display running-time and recommended lifespan of Air Pump. Click right button , it will restart timer.

5. Resin Pump Tube

Display running-time and recommended lifespan of Resin Pump Tube. Click right button , it will restart timer.

Upgrade License

An icon 

at the bottom of the printer control panel means this type of printer can be upgraded. Click the icon to start upgrading the license.

b. Print Process

Send Data to Printer: Click “Start” Button to send the sliced model to the selected printer.

Complete File Transfer: Once you click Start, UNIZ Desktop’s progress bar and the printer’s front LED circle button will indicate the file transfer progress by lighting in blue.

Confirm Print Job: Make sure that your printer is ready to print and then touch the printer’s front circular button to confirm print job.

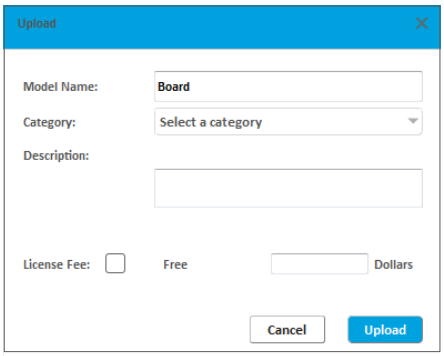
WARNING: Before final confirmation, please make sure the build platform, resin tank, and resin bottle are installed. Make sure the build platform and resin tank are clear of debris. Make sure the resin level sensor is properly installed.

After confirmation, you may disconnect your computer from the printer.

Do not disconnect the printer and the software or turn off the UNIZ software during the data transmission.

2.10 Upload Slice (Optional)

If you want to share your print to the UNIZ Cloud, press the “Upload” Button on the main tools to open following sub menu.



After your upload completed, you can see the review progress in Uploaded Models item in Library. Once the model is approved, the slice will be displayed on the UniZ store.

3. Additional Tools

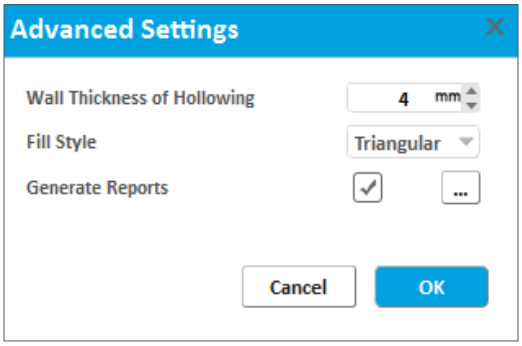
New Scene: The current scene will be discarded, and a new scene will be created.

Save Scene: Save the current scene in UNIZ file format which includes 3D model data, support structures, operation history (translation, orientation, scaling), and slice profile. You can load any saved scene and resume editing at a later time.

Save Scene as: Save current scene to another .UNIZ file.

Advanced Settings:

- "Wall Thickness of Hollowing" sets the shell thickness of parts hollowed with the advanced settings in the slice menu.
- "Fill Style" sets the fill style of parts hollowed with the advanced settings in the slice menu.
- "Generate Reports": Tick the left checkbox to create reports automatically whenyou start a printing. Click the right button to modify saving path of reports.



Model List:

Model List provides a modeless dialog for viewing, finding, selecting, hiding, duplicating and deleting models in 3d scene.

Undo Operation: Undo previous operation.

Redo Operation: Redo a previously undone operation.

D DESIGN RULES

Models Printed in UDP mode must conform to certain design rules in order to print successfully and prevent damage to the printer. Read more about the design rules at the link below.

Download link: https://www.uniz.com/support/design_specification

E TROUBLE SHOOTING

	Problems	Reason
1	The first layer is not sticking correctly	The calibration for platform init correct position
		Build platform surface is too model falls into the resin tank
2	Model with layering issues	The suction force between the r models is too strong
		Insufficient adhesion between p
3	Abnormal LCD performance under the show logo function: no display-ing, flickering or different displaying on left/right side	The LCD cable is not inserted pr LCD cable
		The screen is damaged
4	A strip of part fail to print	A row of lights are damaged c board

	Solutions
ial point is not in	Follow z-axis calibration procedure and calibrate again.
smooth, printed	Use provided sandpaper to roughen the surface of the build platform and clean up.
esin tank film and	1. Replace with a new resin tank; 2. Remove the resin tank, clean the LCD panel and the bottom of the resin tank film; wipe them with alcohol and then with a dry paper towel. (Note: touch ONLY the glass part of the screen, the area covered with black tape should not be touched); 3. Increase cool down time.
rinted layers	Use provided sandpaper to roughen the surface of the build platform and clean up.
roperly; damaged	Follow the guidance to re-insert or install the LCD cable.
	Follow the guidance to replace the LCD panel.
on the LED light	Return to the factory for repair.

	Problems	Reason
5	Stripy or grainy defects on the printed model	Black spot or black bar appears
		The tension of the resin tank enough
6	Edge warp defects on the printed model	Problems with supports structu
		The model bottom is not presse tightly
7	There are wavy lines on the XY plane	Wrinkles on the resin tank film
8	Liquid or solid resin residue appear on the screen surface	Solid resin residue on the bot platform causes damage to the

	Solutions
on the screen	LCD panel may be over heated. Let it cool or follow the guidance to replace the LCD panel.
film is not strong	Return to the factory for repair.
ures	Follow the guidance to manually add the supports
ed to the XY plane	Check the first layer slice for any error
	Replace with a new resin tank and increase the cooling time properly for the next print
ttom of the build resin tank film	Replace with a new resin tank and clean the residual resin on the screen

	Problems	Reason
9	The resin leaks from the right bottom of the printer	Resin bottle not inserted into t
		The top vent hole of the resin been pierced
10	Excessive printed part appears. Light leaks outside the screen display area	Light-blocking tape is damaged
11	Printed model has ripples or wavy lines on the side face	Shaky Z axis
12	Oily liquid exuded from the seams area in front of the label at the printer bottom, and the level of the liquid in the coolant tank has significantly reduced	There is leak from the liquid co
13	Considerable size differences exceeding 1mm among the first several layers or between the left and the right of the printer	The bottom of the build platfor panel are not parallel

	Solutions
the right place	Clean up the residual resin according to the guidance and replace with a new resin bottle, make sure the bottle is inserted all the way in
bottle has not	Pierce either top hole of the resin bottle with the provided awl
d	Replace with new tape, cut and cover any exposed area
	Adjust the tightness of the lead screw nut and the build platform holder according to the guide
ooling system	Replace with new LCD cooling module or return to the factory for repair.
rm and the LCD	Adjust the build platform parallelism according to the tutorial video

	Problems	Reason
14	The build platform could not descend after it rises to the highest, with abnormal sound during the starting or finishing process of printing.	Z-axis limit switch is dysfunct
15	Automatic pumping failed.	Light-blocking tape is damage
16	Abnormal display appear on the front light of the printer	There is poor contact in the c board cable or program erro
17	Touch problems occur with the front light of the printer	The circuit board has broken
18	Abnormal sound can be heard from the rear cooling fan	The fan cable has stuck or th tightened

	Solutions
ional.	Check if the micro switch cable is broken; return to the factory for repair if it is well connected
ed	Replace with new tape, cut and cover any exposed area
circuit r	Reinsert the cable and restart
	Replace with a new circuit board according to the guidance
e bolt is over	Remove the rear fan filter cover and check if there is any cable interference; adjust the tightness of the bolt accordingly

F ROHS AUTHENTICATION

Hazardous Substance						
	Pb	Hg	Cd	Cr(VI)	PBB	(PBDE)
Mainboard	√	√	×	√	√	√
Motor	√	√	×	√	√	√
Platform	√	√	√	√	√	√
Column	×	√	√	√	√	√
Power	√	√	√	√	√	√
Fans	√	√	×	√	√	√
Cooling Board	√	√	√	√	√	√
Resin Tank	√	√	√	√	√	√
LCD Board	√	√	√	√	√	√
LED Board	√	√	×	√	√	√

Substances (RoHS2011/65/EU)
This table is prepared according to the standard of Restriction of Hazardous

G APPENDIX
TECHNICAL SPECIFICATIONS

SLASH OL		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 200mm 7.5" × 4.7" × 7.9"
	XY Resolution	150μm
	Highest accuracy*	±70μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS UDP ready**
	Support	Uniz smart support technology
	Printing Speed	Up to 600 mm/hr (UDP mode) Up to 200 mm/hr (Normal mode)
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 530 mm [W×H×D] 14" × 16" × 21", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

*Highest accuracy only achievable at integer multiples of smallest pixel sizes.
**Not applicable to all geometries, UDP specific design rules apply.

SLASH PLUS		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 200mm 7.5" × 4.7" × 7.9"
	XY Resolution	75μm
	Highest accuracy*	±20μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS
	Support	Uniz smart support technology
	Printing Speed	Up to 200 mm/hr
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 530 mm [W×H×D] 14" × 16" × 21", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

*Highest accuracy only achievable at integer multiples of smallest pixel sizes.

SLASH PLUS UDP		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 200mm 7.5" × 4.7" × 7.9"
	XY Resolution	75μm
	Highest accuracy*	±20μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS UDP ready**
	Support	Uniz smart support technology
	Printing Speed	Up to 600 mm/hr (UDP mode) Up to 200 mm/hr (Normal mode)
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 530 mm [W×H×D] 14" × 16" × 21", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

*Highest accuracy only achievable at integer multiples of smallest pixel sizes.
**Not applicable to all geometries, UDP specific design rules apply.

SLASH PRO OL		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 400mm 7.5" × 4.7" × 7.9"
	XY Resolution	150μm
	Highest accuracy*	±70μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural pee Up to 100x more durable than PDMS UDP ready**
	Support	Uniz smart support technology
	Printing Speed	Up to 600 mm/hr (UDP mode) Up to 200 mm/hr (Normal mode)
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 730 mm [W×H×D] 14" × 16" × 29", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

*Highest accuracy only achievable at integer multiples of smallest pixel sizes.
**Not applicable to all geometries, UDP specific design rules apply.

SLASH PRO		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 400mm 7.5" × 4.7" × 15.8"
	XY Resolution	75μm
	Highest accuracy*	±20μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS
	Support	Uniz smart support technology
	Printing Speed	Up to 200 mm/hr
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 730 mm [W×H×D] 14" × 16" × 29", 18KG/40LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

*Highest accuracy only achievable at integer multiples of smallest pixel sizes.

SLASH PRO UDP		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	192 × 120 × 400mm 7.5" × 4.7" × 15.8"
	XY Resolution	75μm
	Highest accuracy*	±20μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS UDP ready**
	Support	Uniz smart support technology
	Printing Speed	Up to 600 mm/hr (UDP mode) Up to 200 mm/hr (Normal mode)
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 730 mm [W×H×D] 14" × 16" × 29", 18KG/40LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

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**Not applicable to all geometries, UDP specific design rules apply.

SLASH DJ2		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	Duo LCD*, 120 × 68 × 200mm 4.76" × 2.67" × 7.9"
	XY Resolution	47μm
	Highest accuracy**	±10μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS
	Support	Uniz smart support technology
	Printing Speed	Up to 200 mm/hr
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 530 mm [W×H×D] 14" × 16" × 21", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

* Equipped with two LCD modules, outputting the same slices.

* * Highest accuracy only achievable at integer multiples of smallest pixel sizes

SLASH J UDP		
Printing	Printing Technology	LCD Stereolithography
	Build Volume	120 × 68 × 200mm 4.76" × 2.67" × 7.9"
	XY Resolution	47μm
	Highest accuracy*	±10μm
	Layer Thickness(Z resolution)	10, 25, 50, 75, 100, 150, 200, 300μm Profile customizable
	Separation Mechanism	Polymer film natural peel Up to 100x more durable than PDMS
	Support	Uniz smart support technology
	Printing Speed	Up to 600 mm/hr (UDP mode) Up to 200 mm/hr (Normal mode)
	Resin Level Control	Automatic level control
Hardware	Dimension/Weight	350 × 400 × 530 mm [W×H×D] 14" × 16" × 21", 14KG/30LB
	Operating Temperature	Suggested 18–28° C Suggested 64–82° F
	Power Requirement	100-240VAC, 6A 50/60Hz
	Optical System	5500 Lux blue LED array liquid cooling system
	Mechanical	Cast Aluminum & CNC, Injection Molding
	Connectivity	USB, Wifi, Ethernet
Desktop Software	System Requirement	Windows 7 and up (64-bit only) Mac OS X 10.7 and up (64-bit only) 16GB RAM, OpenGL 2.1 Discrete Graphics
	Advanced Features	Multi-printer management Built-in advanced model repair Ultra large file support (1GB+)
	Compatible Format	STL, OBJ, AMF, 3MF, UNIZ
Mobile Apps	Compatible Systems	iPhone, iPad, Android Phone and Tablet

* Highest accuracy only achievable at integer multiples of smallest pixel sizes


UNIZ