

**MIICRAFT**



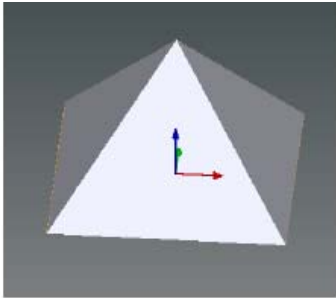
# **Utility V6.1.0 & Touch screen Panel User Manual**

Sep. 2019

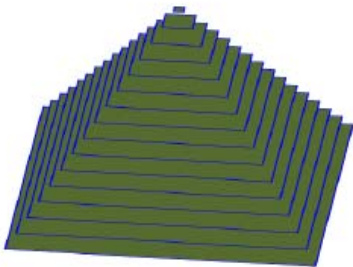
# Printing work flow

This manual focus on the work flow of 3D file preparation and Printing setting

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1. Get 3D file (\*.stl) from
  - a. CAD
  - b. 3D scanner



2. 3D file preparation
  - a. Repair 3D file
  - b. Build supports
  - c. Slice (Layer thickness)



3. Printing setting
  - a. Material selection
  - b. Tilt speed
  - c. Printing optimization



4. After printing
  - a. Post curing
  - b. Remove supports
  - c. Grinding (optional)

# Main Content

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1. System requirement
2. Open Utility and Connect to printer
3. Set layer thickness
4. Import file
5. Hot key
6. Semi-Auto mode
7. Duplicate and resize model
8. Auto arrangement
9. Auto support
10. Model arrangement

# Main Content

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10. Build supports
11. Build support – View mode
12. Tool bar
13. Prepare printer connection
14. Printer setting
15. Printer setting (.mps)
16. Print via computer
17. Engineering mode (computer)
18. Printing record and update firmware
19. Print via touch screen panel
20. Touch screen panel – Engineering mode

# System requirements for using Utility

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These are the basic requirements for using Utility on a PC. If your device does not meet these requirements, you can still install Utility, but may not have the greatest experience with Utility.

Operating system:	Windows 10
CPU:	Intel Core i7 or above
RAM:	8 GB or above
Hard drive space:	250 GB SSD or above
Graphic cards:	Dedicated Graphics 2GB or above ; Support Open GL 3.3 or above
Browser:	Use Google Chrome only
Wifi Dongle: (Optional)	D-Link DWA-127 Wireless Networking Adapter



D-Link DWA-127

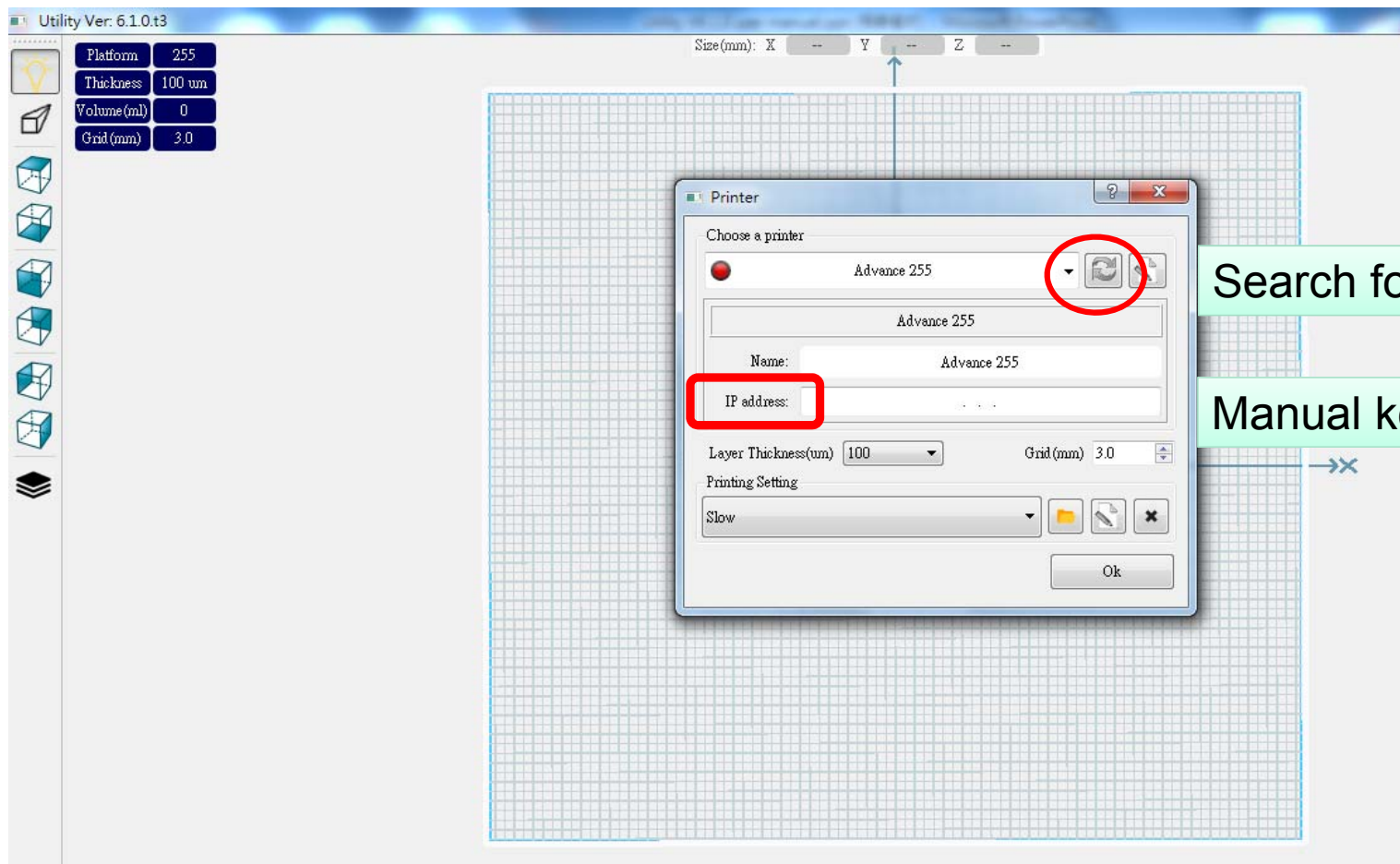


# Open Utility and Connect to printer

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- 1) Unzip the installation file, and click Utility.exe
- 2) Need to connect to printer first, otherwise cannot use Utility

Utility.exe



Search for connected printer

Manual key in IP location of printer

- Printer connection method introduce in the next page

# Open Utility and Connect to printer

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## 1) Connect your printer with laptop

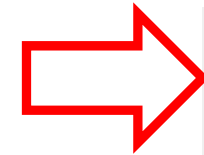
- Basic** : Connect printer and laptop by RJ-45 cable [Initiating time 1 minute ]
- LAN** : Connect both printer and laptop to local area network [Initiating time a few seconds ]
- IP sharer** : Connect both printer and laptop to IP sharer [Initiating time a few seconds ]
- WIFI dongle** : Insert WIFI dongle into printer USB port => Panel: Engineering mode => Wifi  
=> Connected WIFI dongle => Key in IP(Wifi) location shown on printer on Utility  
[Initiating time a few seconds ]



# Choose a Printer

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- 1) Select printer, also select building platform size.
- 2) Set Z layer thickness. Set building platform grid size.
- 3) Set printer information whenever using this panel.



Platform	255
Thickness	100 um
Volume (ml)	0
Grid (mm)	3.0

Printer Information

A screenshot of the 'Printer' dialog box. It features a 'Choose a printer' section with a dropdown menu showing 'Advance 255' and a status indicator (red dot). Below this is a text box also containing 'Advance 255'. Further down are fields for 'Name:' (Advance 255) and 'IP address:' (empty). At the bottom, there are dropdowns for 'Layer Thickness(um)' (100) and 'Grid (mm)' (3.0), followed by a 'Printing Setting' dropdown (Slow). An 'Ok' button is at the bottom right.

Printer

Choose a printer

Advance 255

Advance 255

Name: Advance 255

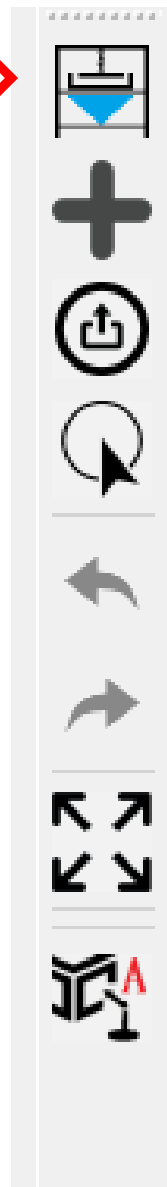
IP address: . . .

Layer Thickness(um) 100 Grid (mm) 3.0

Printing Setting

Slow

Ok



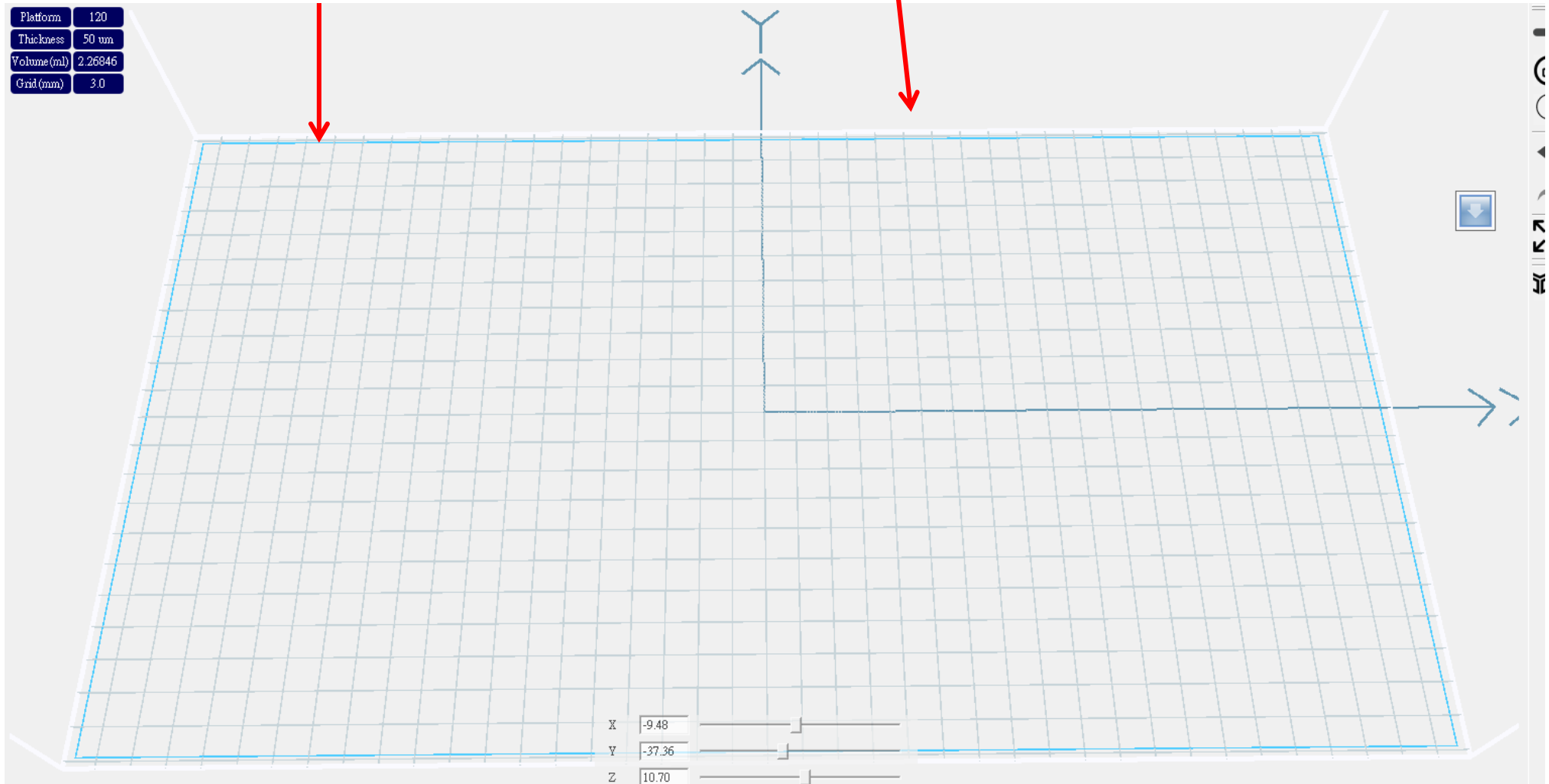


# Open Utility and Connect to printer

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White frame is the largest printing boundary

Blue frame is suggest printing boundary



# Import file

- 1) Two way to import .stl file
  - ① Tool bar, icon as picture on the right
  - ② Drag the .stl file from folder into Utiltiy



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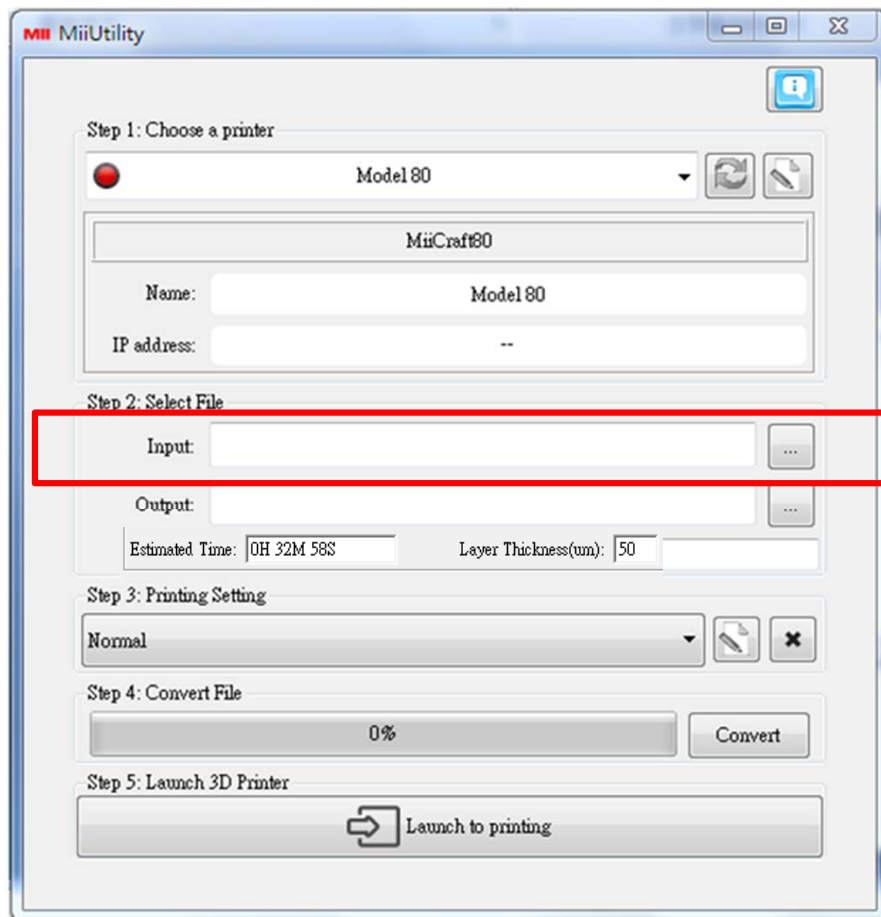


# Import file

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1) How to import .slc file (sliced file)



① Tool bar, icon as picture on the right

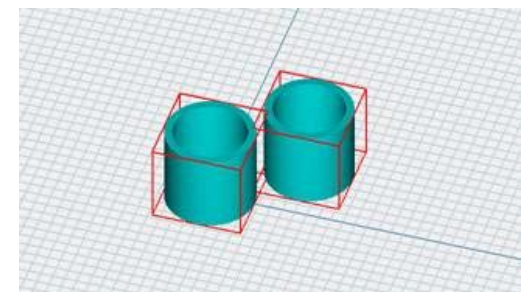
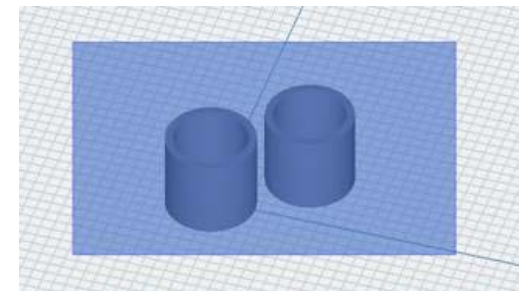


Select .slc file

# Hot key

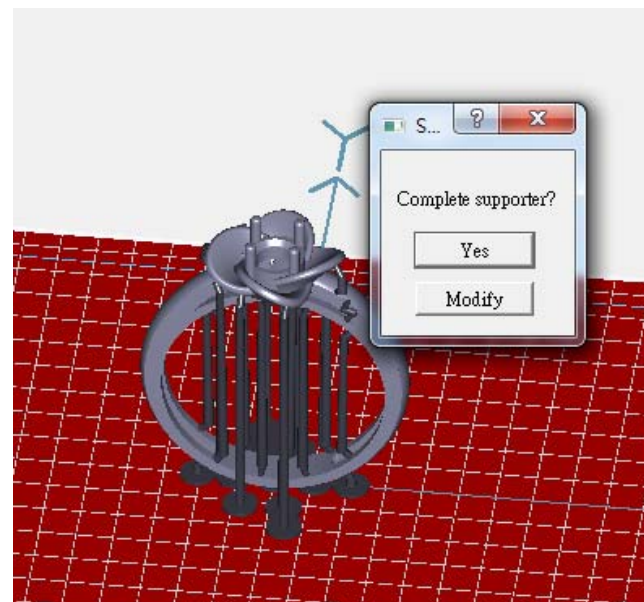
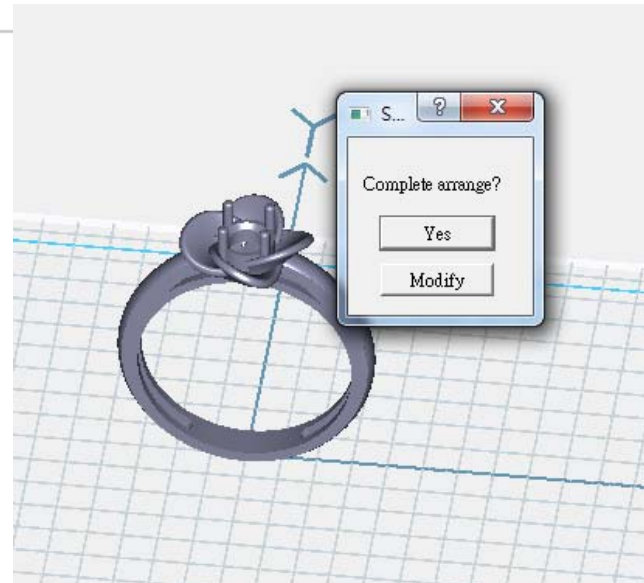
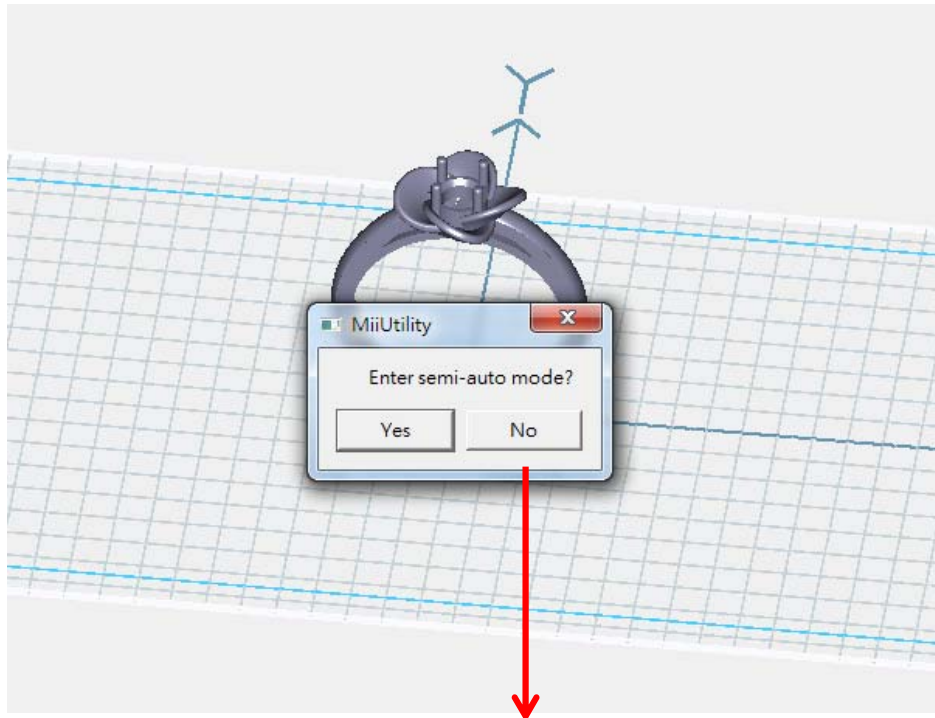
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- **Right Mouse Button** –Rotate platform
- **Middle Mouse Scroll** -Zooms in and out making the view of the build area larger or smaller
- **Middle Mouse Button** -Move platform
- **Alt+E** = Move model 
- **Alt+R** = Rotate model 
- **Ctrl + D** = Duplicate object
- **Ctrl + mouse click** = Multi select the object
- **Ctrl + mouse click + drag** = Move multiple object
- **Mouse click + drag area** = Box selection

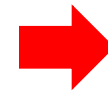


# Semi-Auto mode

- 1) Import model
- 2) Click Tool bar “Printer”
- 3) Enter Semi-auto mode
- 4) Click Yes → Auto arrangement & Auto support → slicing → convert



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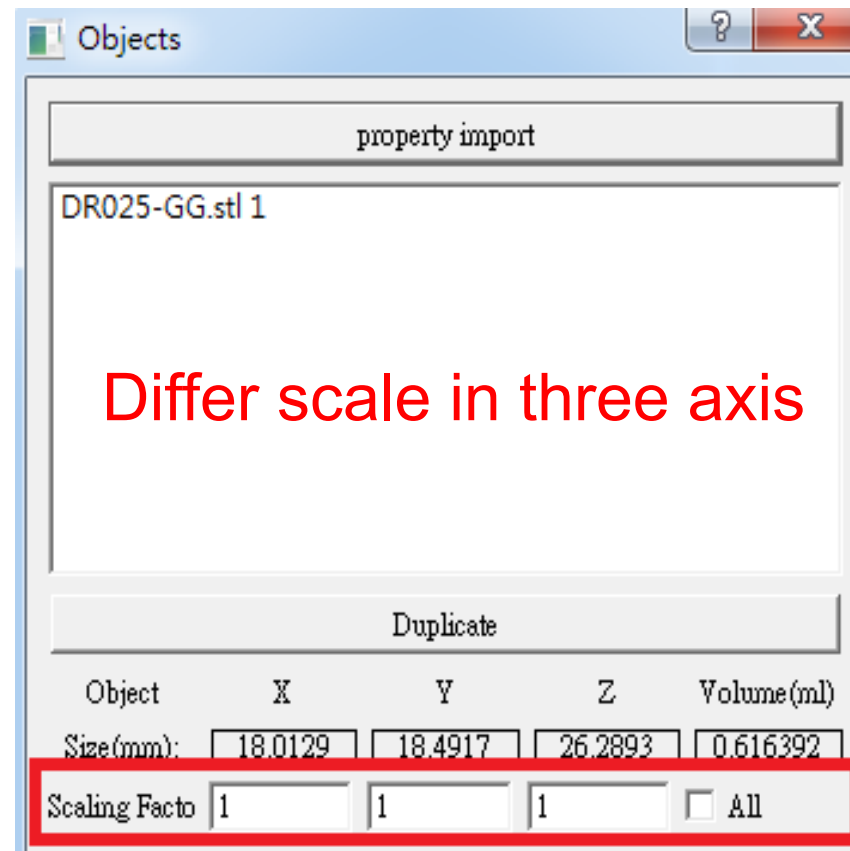
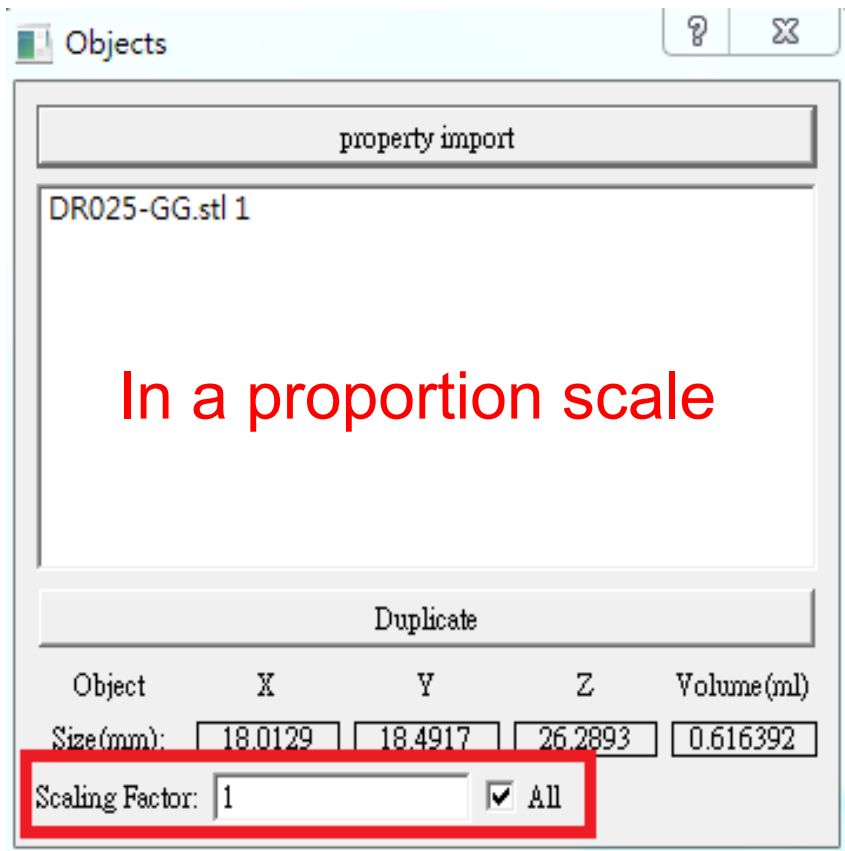


\* If user already customize model arrangement and build support, click “No” to move on to slicing.



# Duplicate and Resize Model

- 1) Tool bar, icon as picture on the right
- ① Note: When the file name is high light, means the model been selected, now instruction is active.
- ② Select “all” to do amplify or minify in a proportion scale

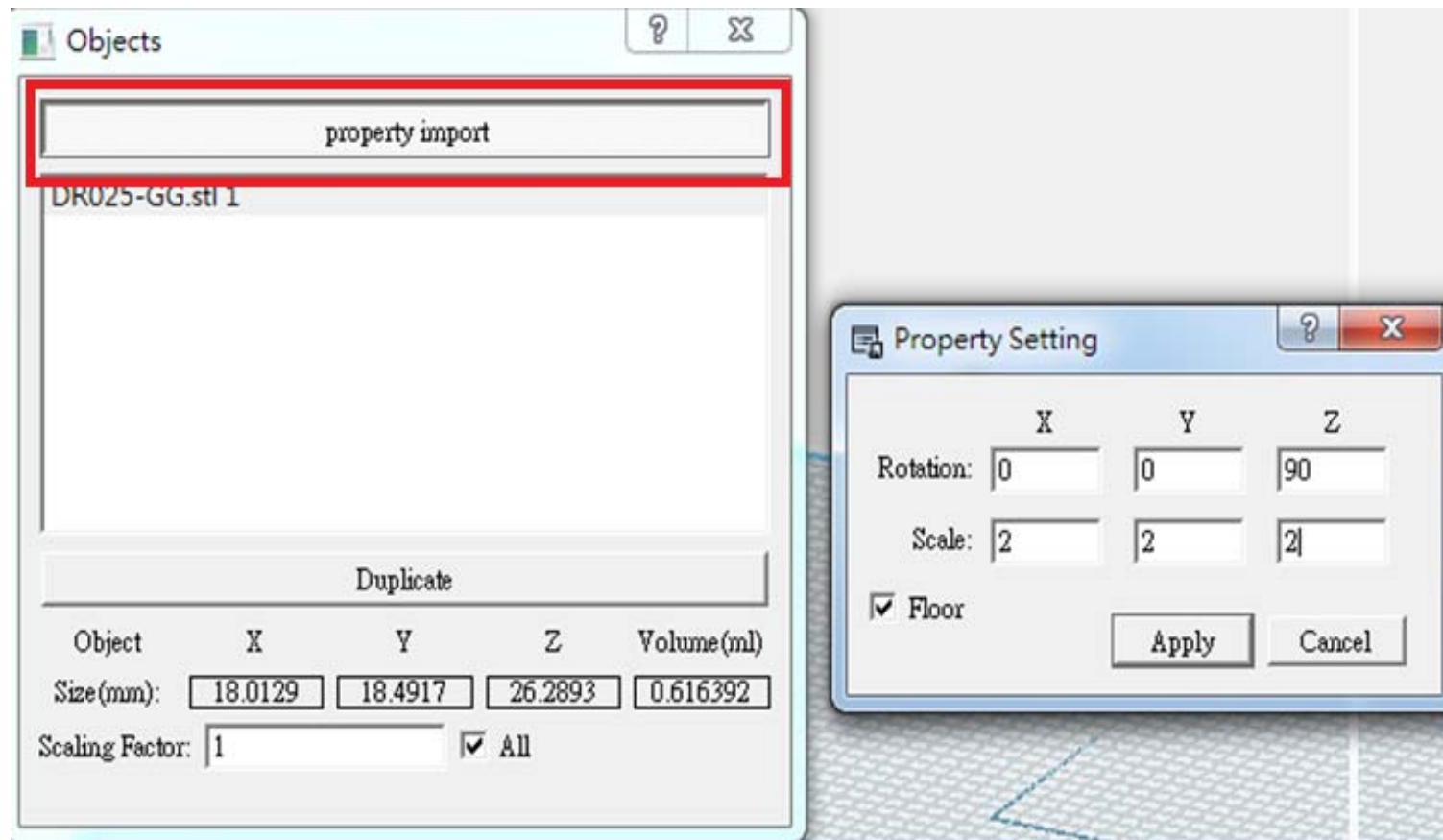


# Duplicate and Resize Model

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2) Property import, the setting will apply to every model import later

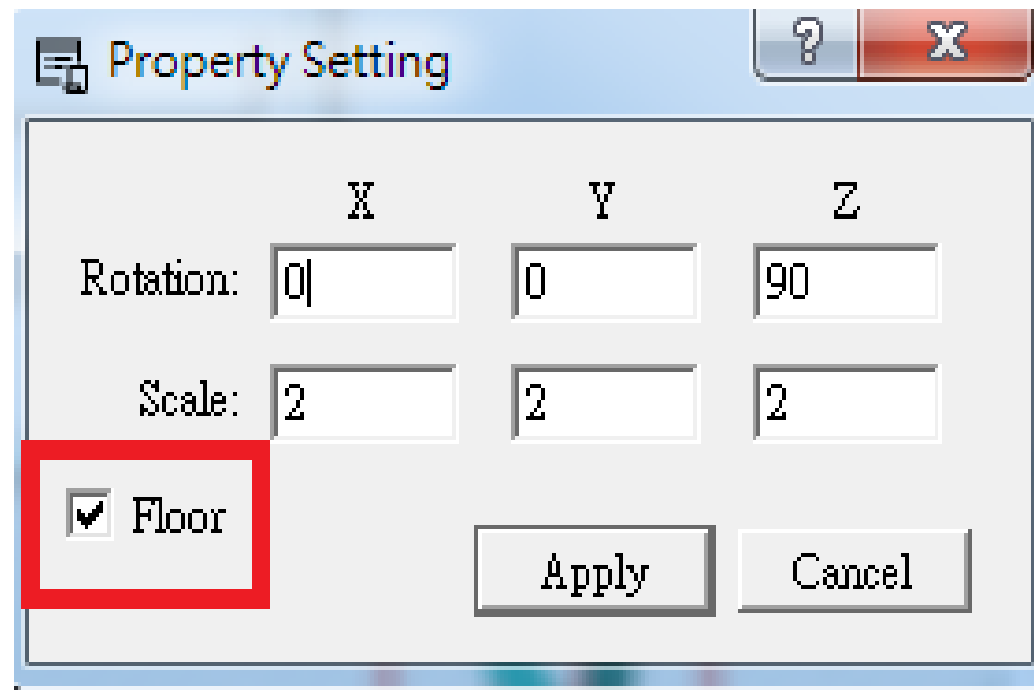
EX: Property import setting Z axis rotate 90 degree, X,Y,Z amplify 2 times, so the model import later will all follow this setting



# Duplicate and Resize Model

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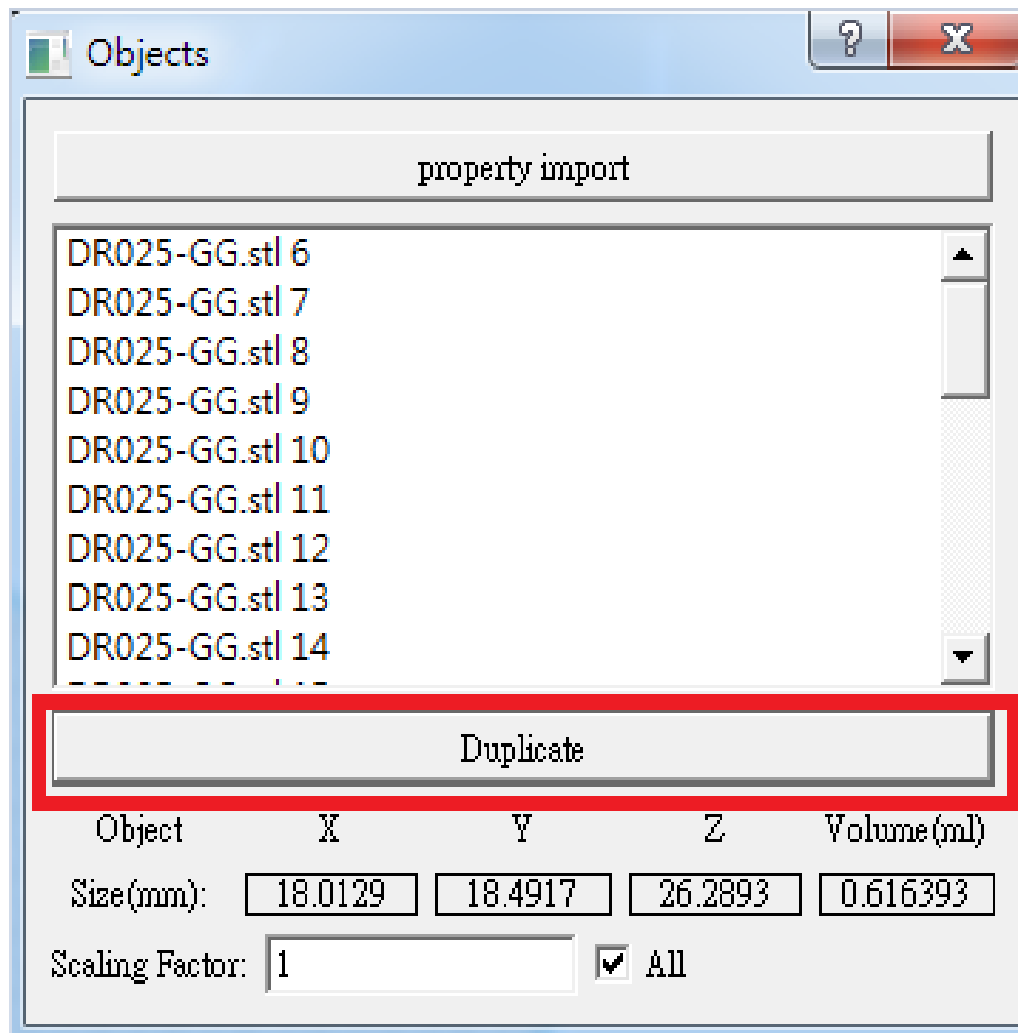
- 3) Property import, select “Floor” to let model import with Z coordinate zero





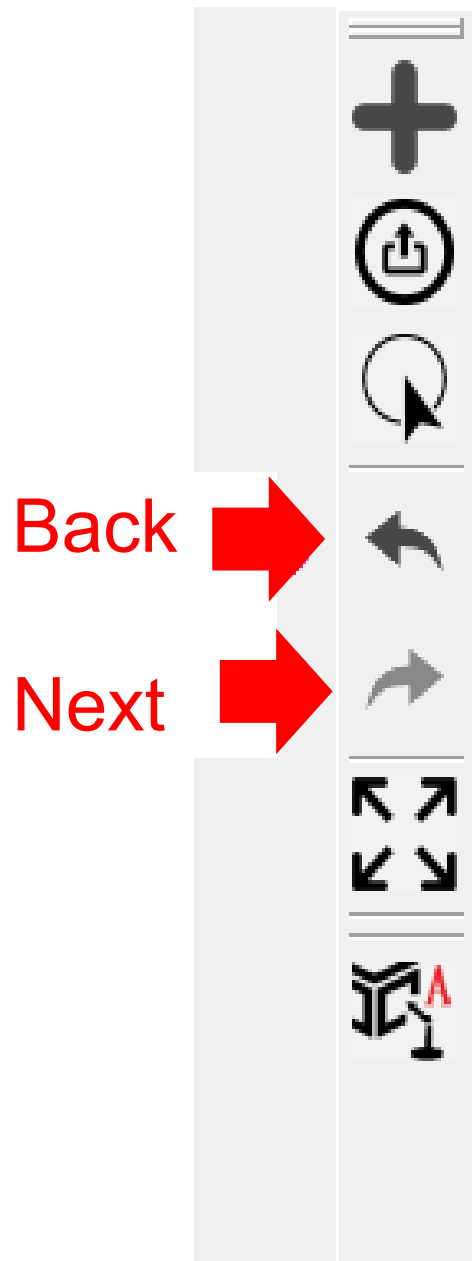
# Duplicate and Resize Model

## 4) Duplicate selected model



# Back and Next

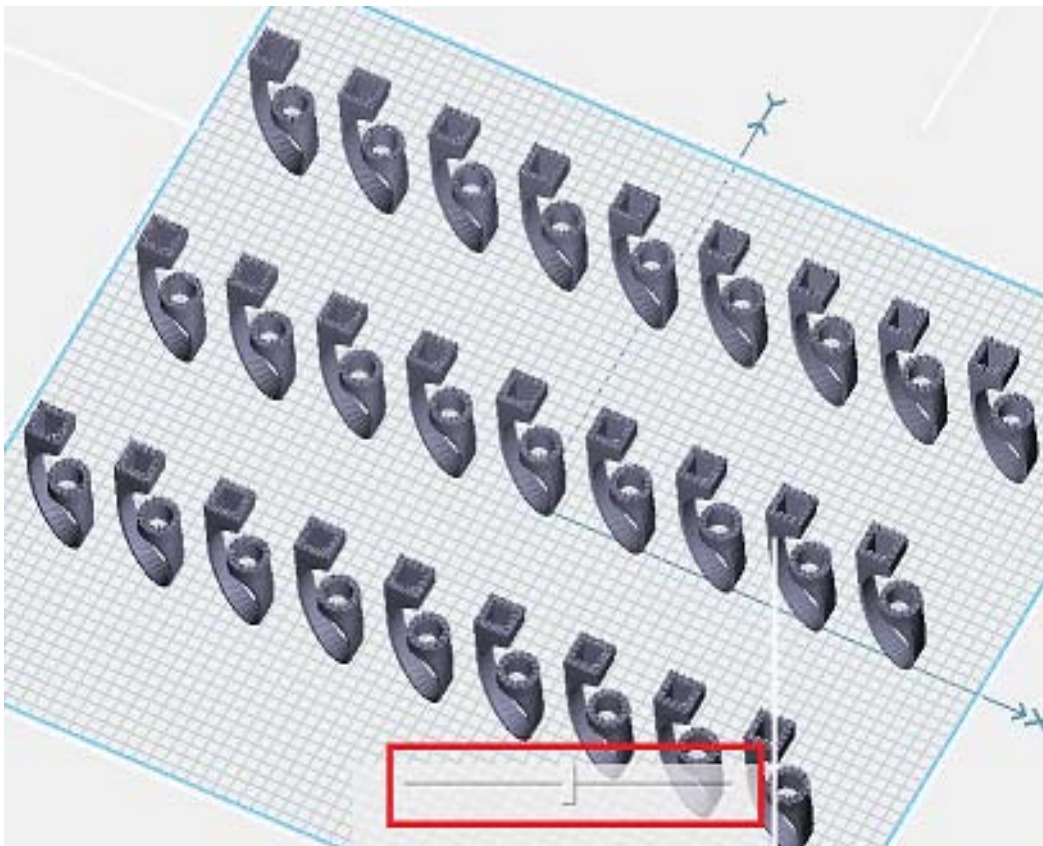
1) Tool bar, icon as picture



# Auto arrangement

## 1) Tool bar, icon as picture on the right

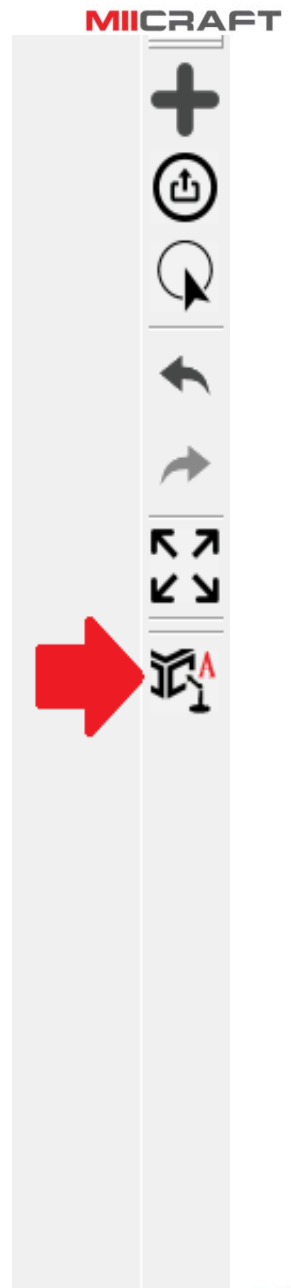
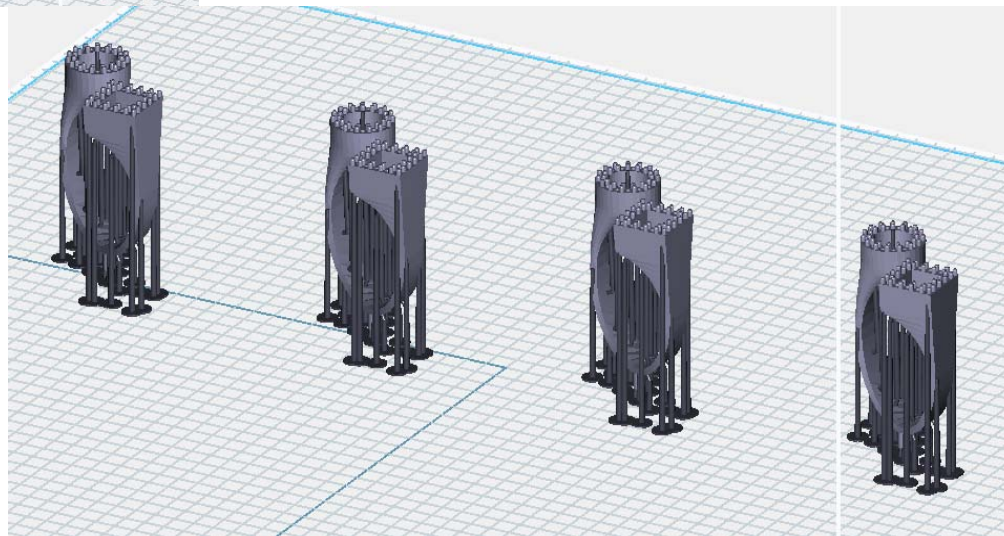
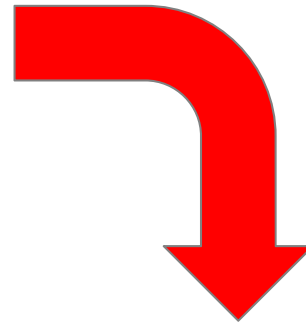
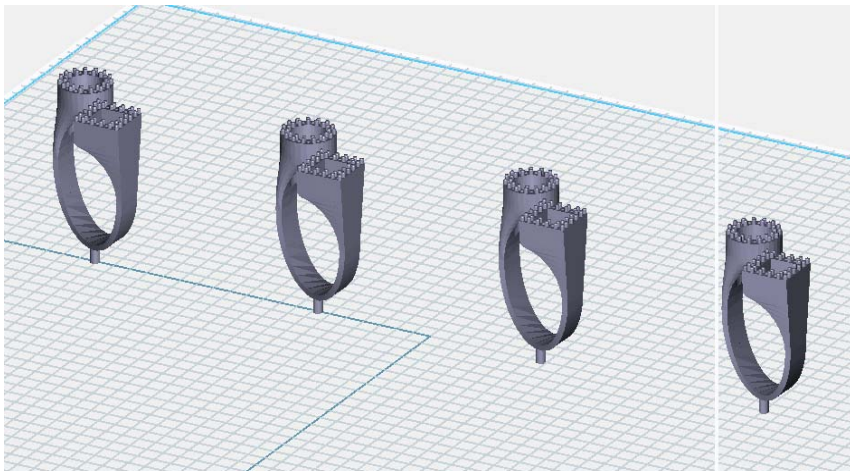
Multiple model auto arrangement, and can adjust the spacing with horizontal scroll bar



# Auto support

1) Tool bar, as picture on the right

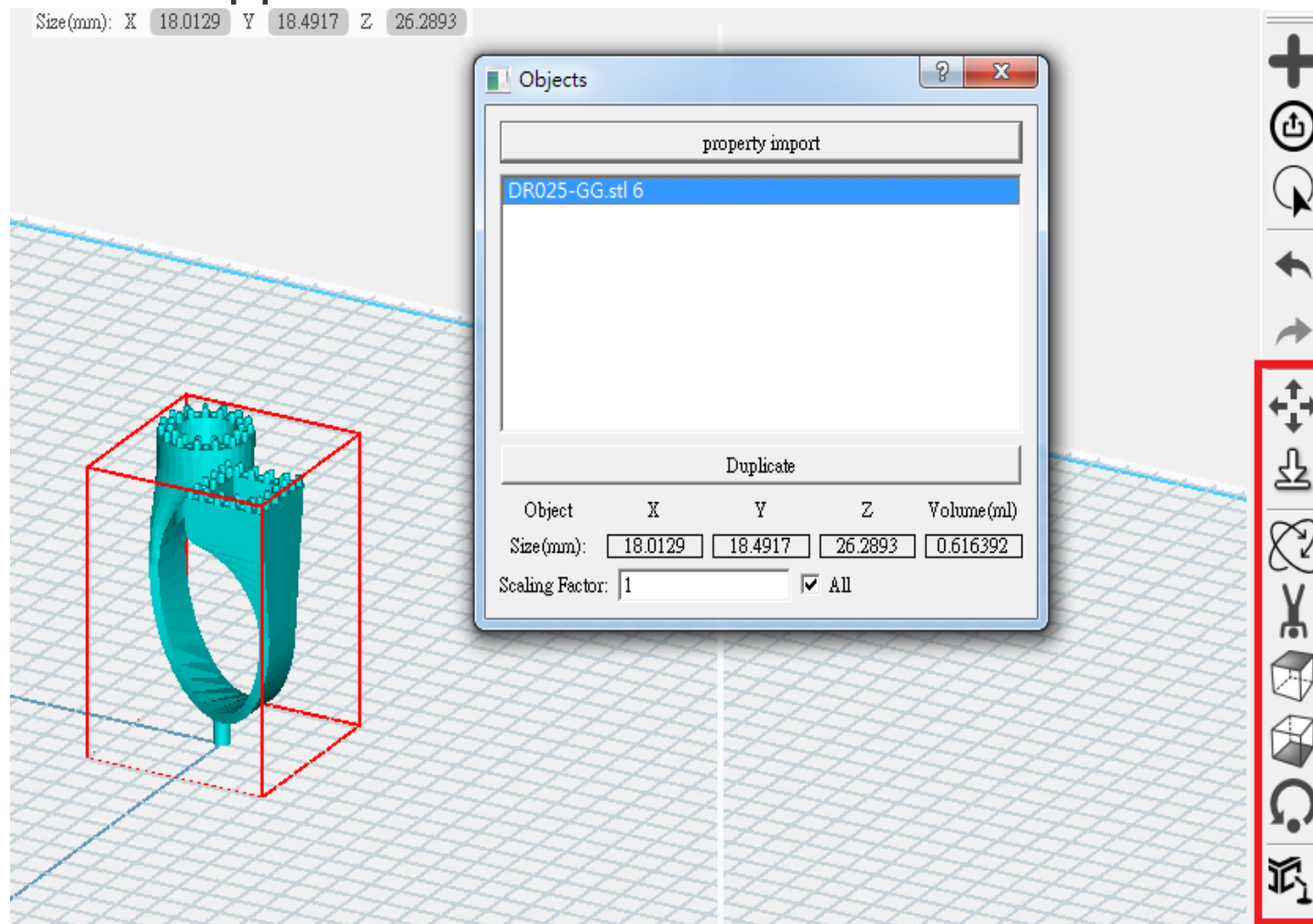
Build auto support for every model



# Model arrangement

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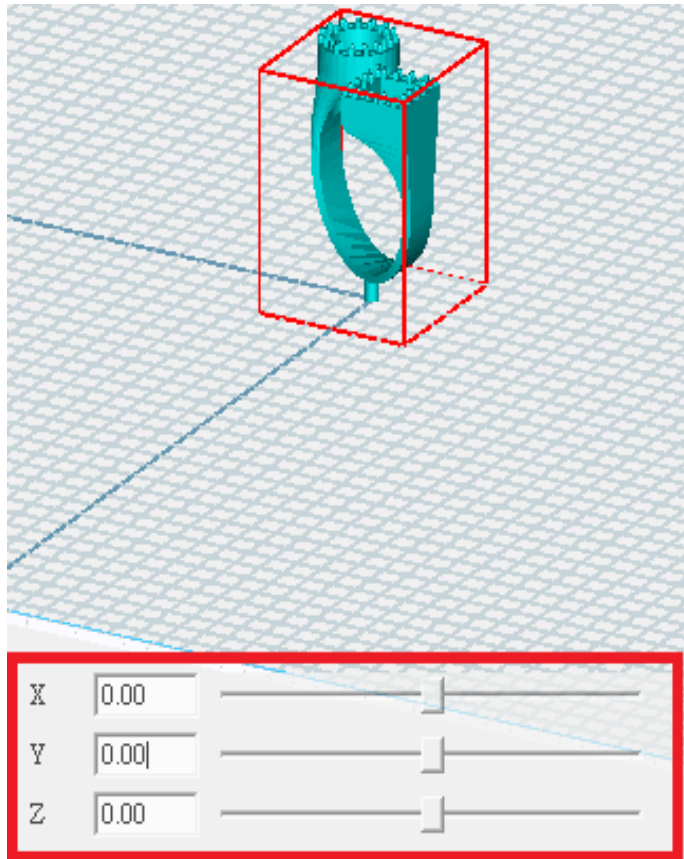
Select one model (been high light), more setting shows up in tool bar (as below red box), here you can do customize model arrange, and build customize support



# Model arrangement

1) Select model, and click on tool bar

- ① Drag and move the model
- ② Or set X, Y, Z coordinate



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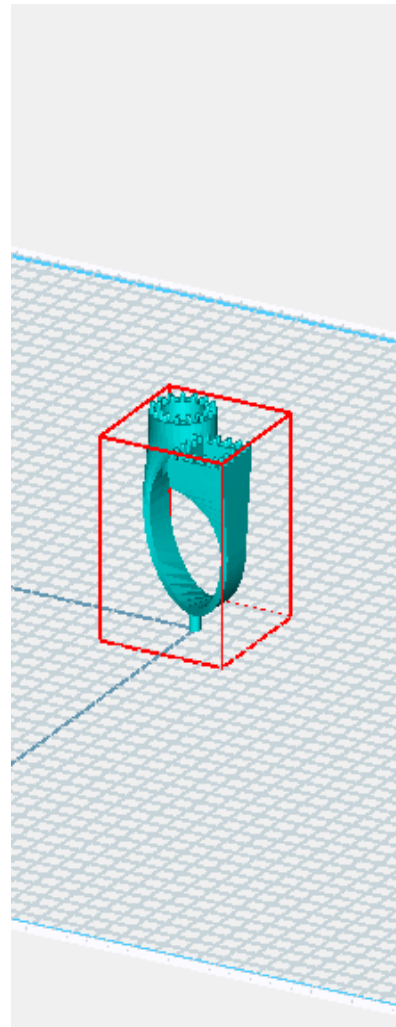
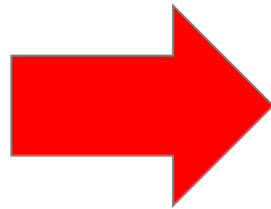
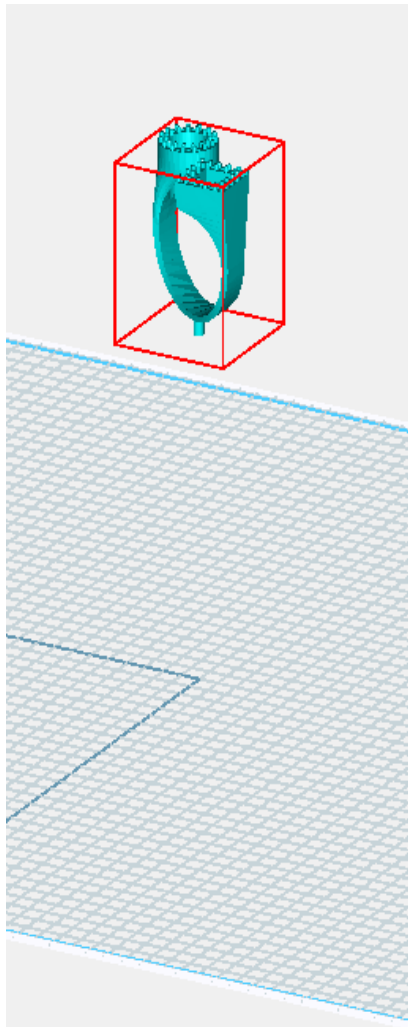


# Model arrangement

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2) Select model, and click on tool bar

Put model down to floor

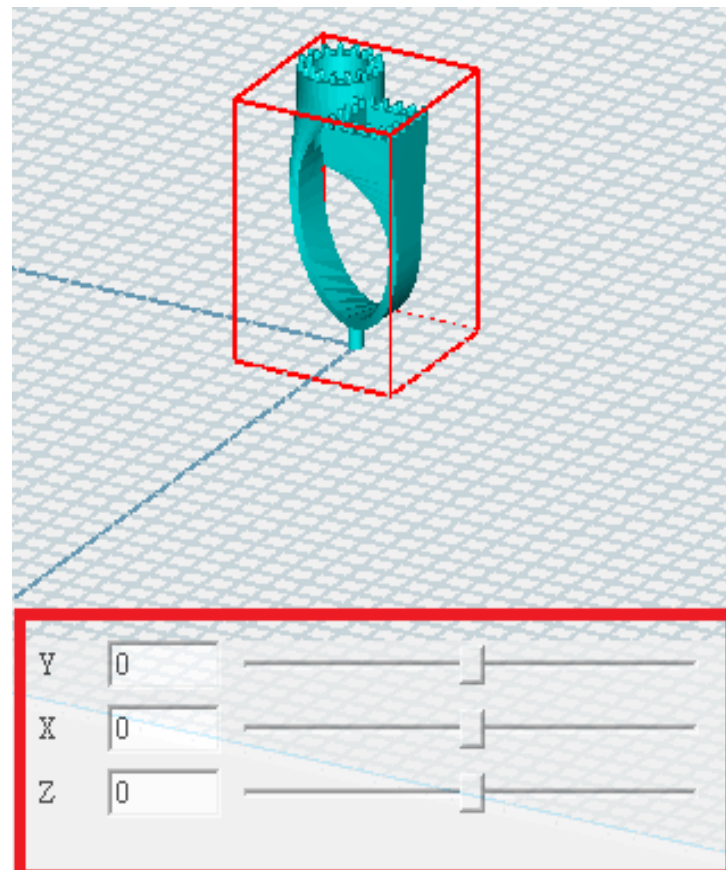


# Model arrangement

3) Select model, and click on tool bar

① Set X, Y, Z axis rotation degree

② Or use horizontal scroll bar



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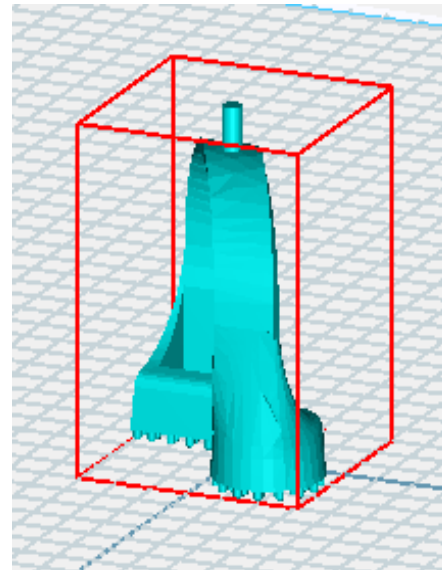
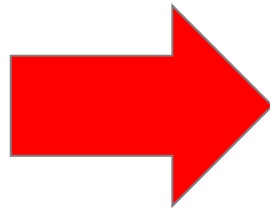
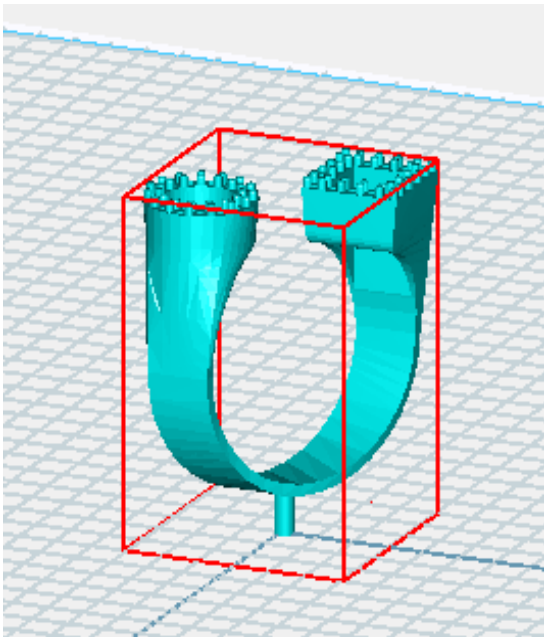




# Model arrangement

4) Select model, and click on tool bar

Put model upside down



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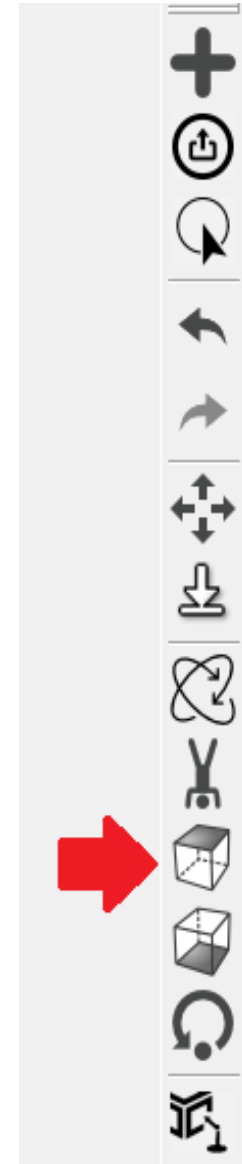
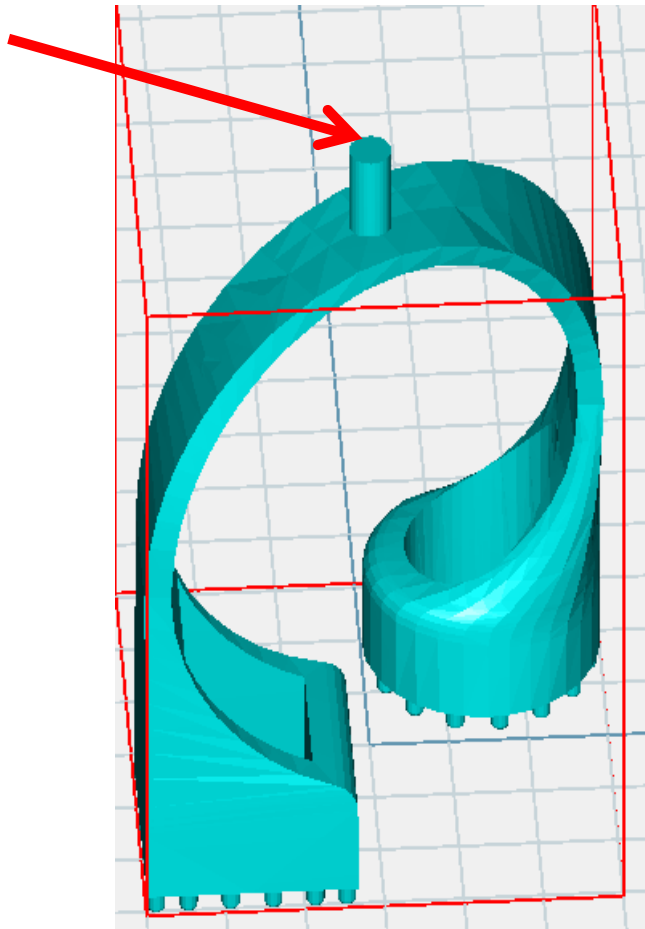
# Model arrangement

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5) Select model, and click on tool bar

Click on one side, face up

EX: Select this side

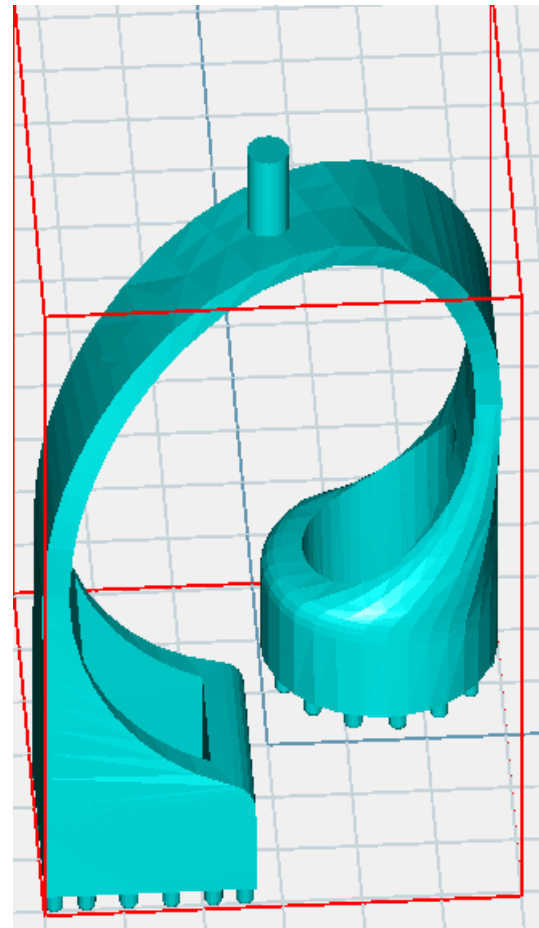
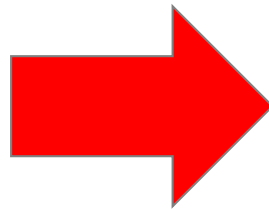
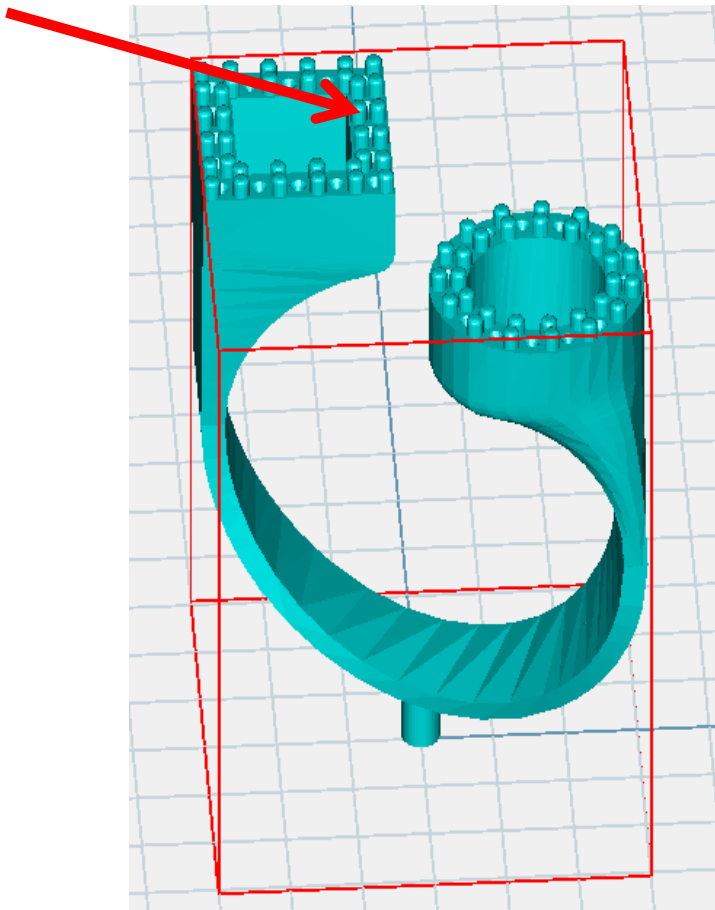


# Model arrangement

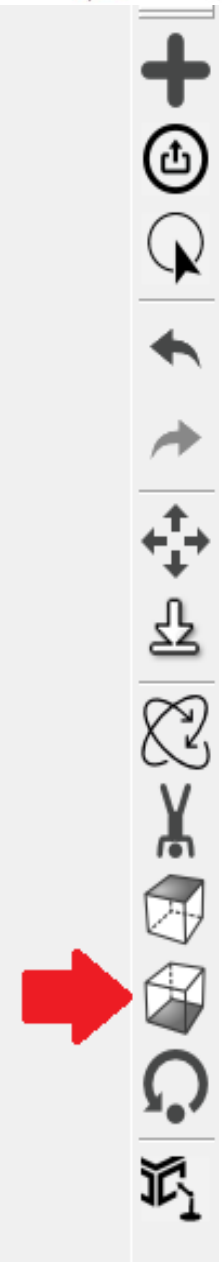
6) Select model, and click on tool bar

Click on one side, face down

EX: Select this side



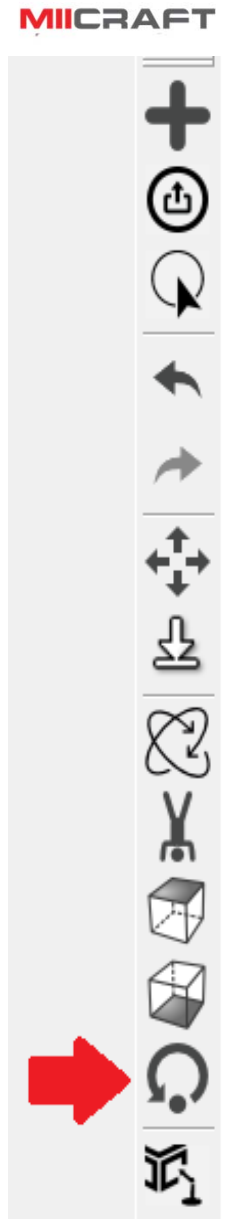
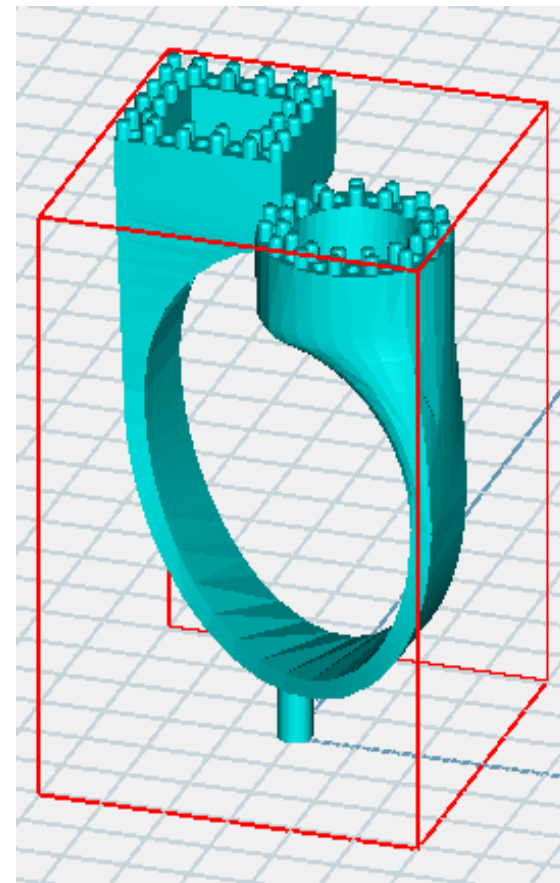
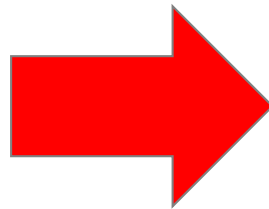
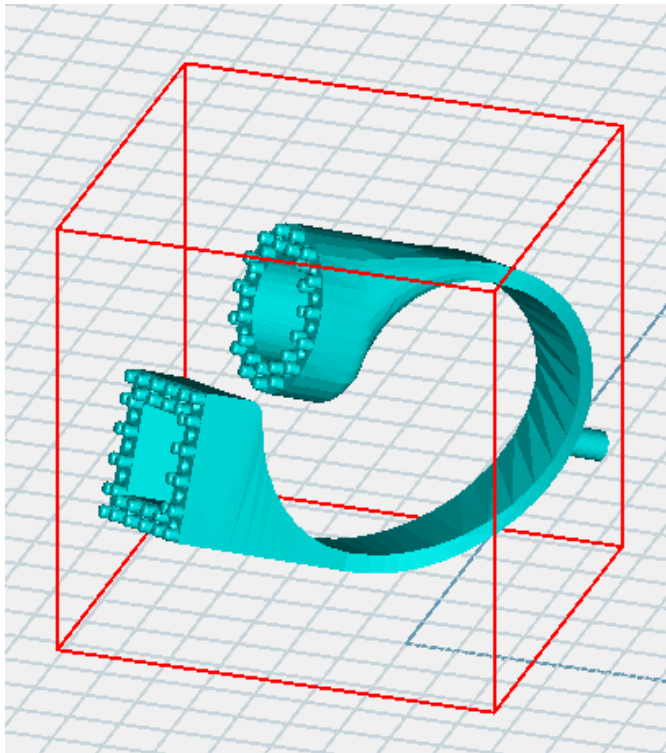
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# Model arrangement

7) Select model, and click on tool bar

Back to the default rotation

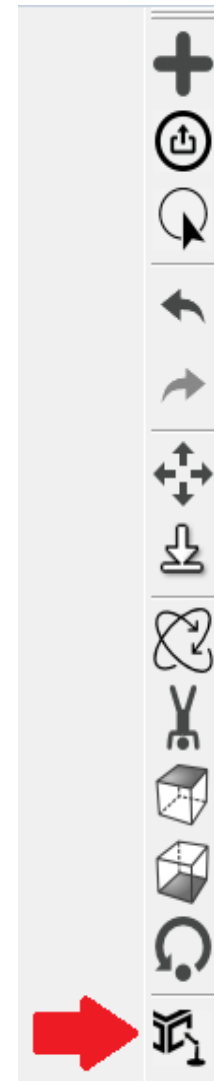
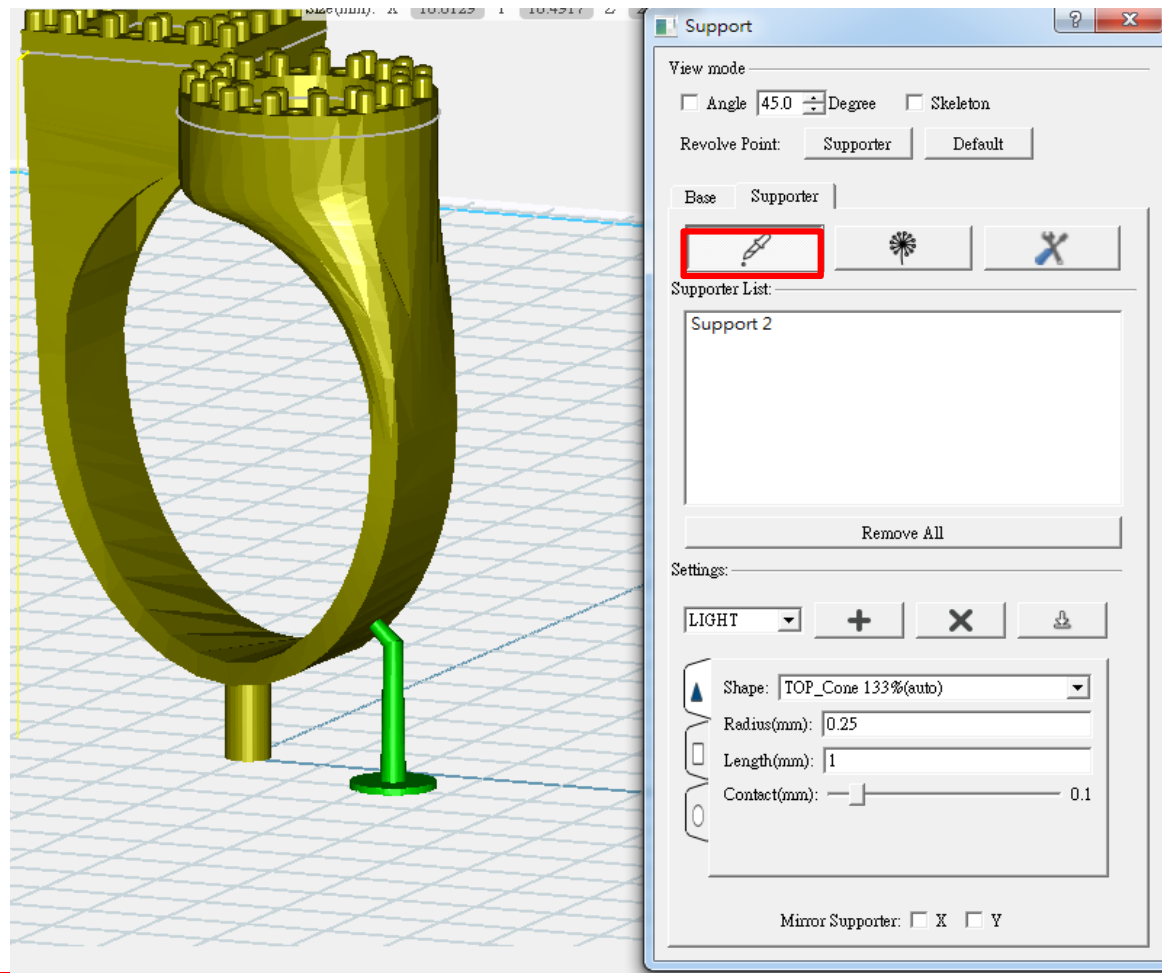


# Build supports

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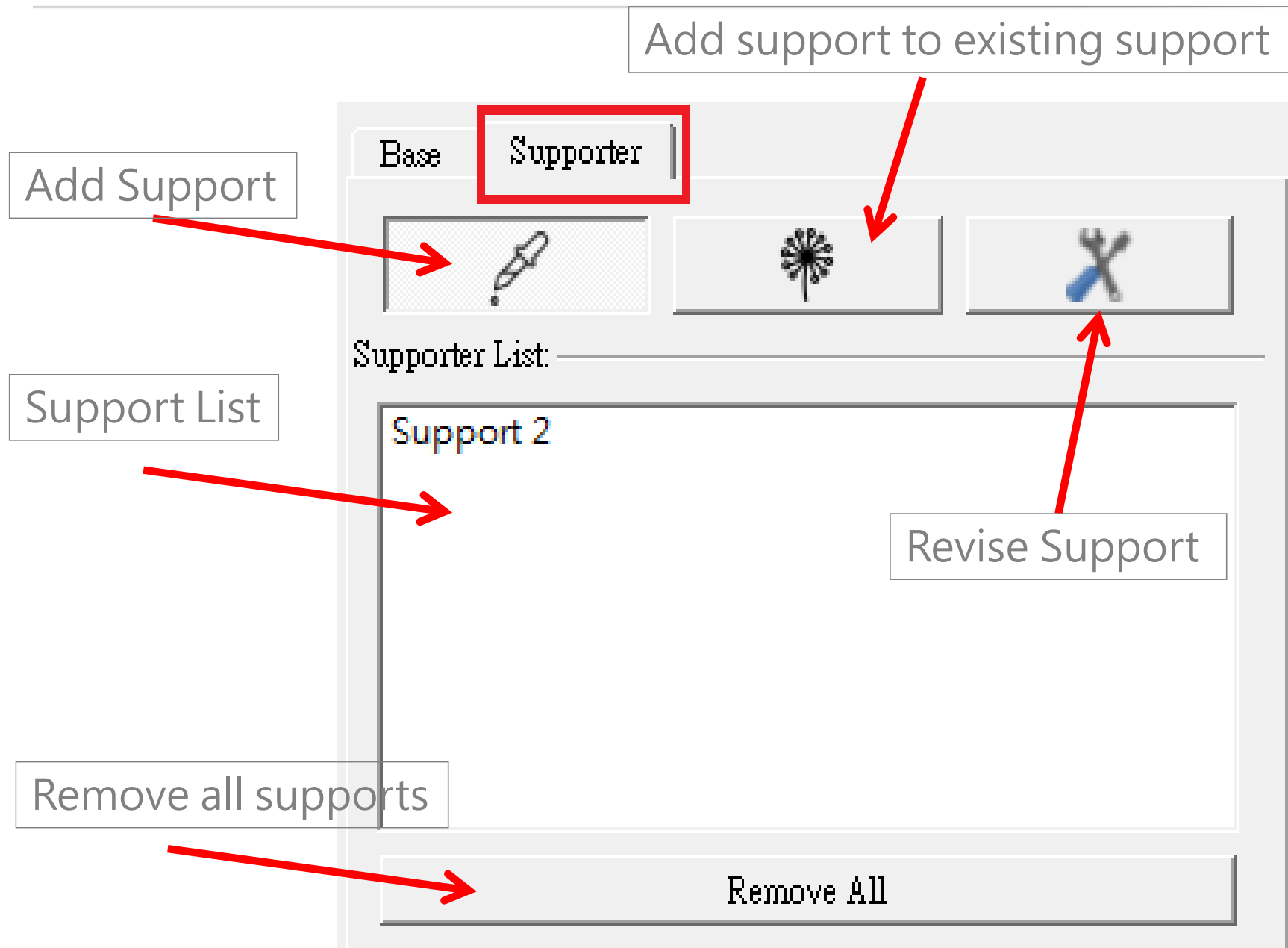
Select one model (been high light), more setting shows up in tool bar (as below red box), here you can build personalize support

① Add support, click where you'd like to add support



# Build supports

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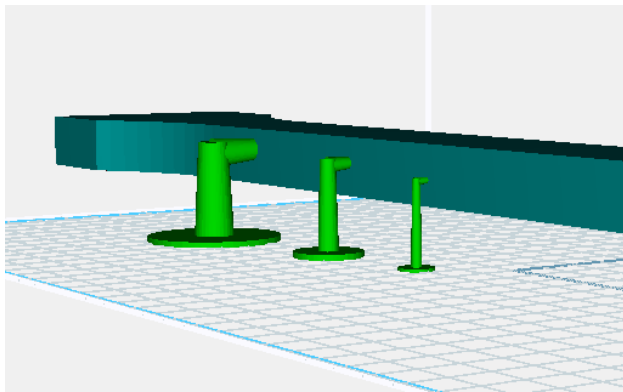
# Build supports

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## 1) Support setting

(a) 3 kinds of basic support setting can be selected by user preference

- LIGHT
- MEDIUM
- HEAVY



Can customize and save support setting

- EDIT

Settings:

**a** **b** **c** **d**

LIGHT

Shape: TOP\_Cone 133%(auto)

Radius(mm): 0.25

Length(mm): 1

Contact(mm):  0.1

Mirror Supporter: ☐ X ☐ Y

# Build supports

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- (b) Add support setting
- (c) Delete support setting
- (d) Save support setting

Settings:

**b** **c** **d**

LIGHT

Shape: TOP\_Cone 133%(auto)

Radius(mm): 0.25

Length(mm): 1

Contact(mm):  0.1

Mirror Supporter: ☐ X ☐ Y



# Build supports

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Customize support setting

One support can be separate into top, middle and bottom

Top support setting:

- a) Top support shape
- b) Top support radius
- c) Top support length
- d) Top support and model contact

Top  
Middle  
Bottom

Settings: \_\_\_\_\_

▲

□

○

Shape:

Radius(mm):

Length(mm):

Contact(mm):

Mirror Supporter: ☐ X ☐ Y

a  
b  
c  
d

# Build supports

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## Middle support setting

### a) Middle support shape

Middle

Settings:

EDIT

Shape: MID\_Cone 133%(auto)

Mirror Supporter: ☐ X ☐ Y

a

# Build supports

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## Bottom support setting

- a) Bottom support shape
- b) Bottom support radius
- c) Bottom support thickness

Bottom

The screenshot shows a 'Settings' dialog box for the 'Bottom' support type. The dialog has a title bar 'Settings:'. Below the title bar are three buttons: 'EDIT' (with a dropdown arrow), a '+' button, an 'X' button, and a button with a printer icon. The main area of the dialog contains three input fields: 'Shape: BOTTOM\_Circle' (with a dropdown arrow), 'Radius(mm): 1.5', and 'Thickness(mm): 0.25'. To the left of these fields is a vertical list of support types: a triangle, a square, and a circle. The circle is selected and highlighted in blue. To the right of the input fields are three red labels: 'a' next to the Shape field, 'b' next to the Radius field, and 'c' next to the Thickness field. At the bottom of the dialog is a section labeled 'Mirror Supporter:' with two checkboxes, 'X' and 'Y', both of which are unchecked.

Settings:

EDIT + X [Printer Icon]

Shape: BOTTOM\_Circle

Radius(mm): 1.5

Thickness(mm): 0.25

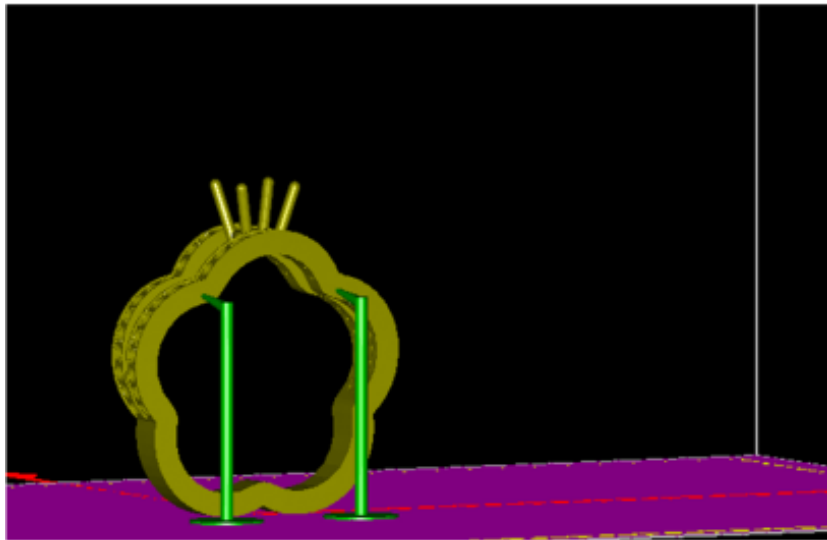
Mirror Supporter: ☐ X ☐ Y

# Build supports


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Mirror supporter:

Build symmetrical supports according to X axis or Y axis



Settings:

EDIT + X 

Shape: BOTTOM\_Circle

Radius(mm): 1.5

Thickness(mm): 0.25

Mirror Supporter: ☐ X ☐ Y

# Build Base

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Base available or not

Base

Supporter

☐

Base:

Base type

BASE\_Rectangular

Base size

Object Size:

100%

Thickness(mm):

0.5

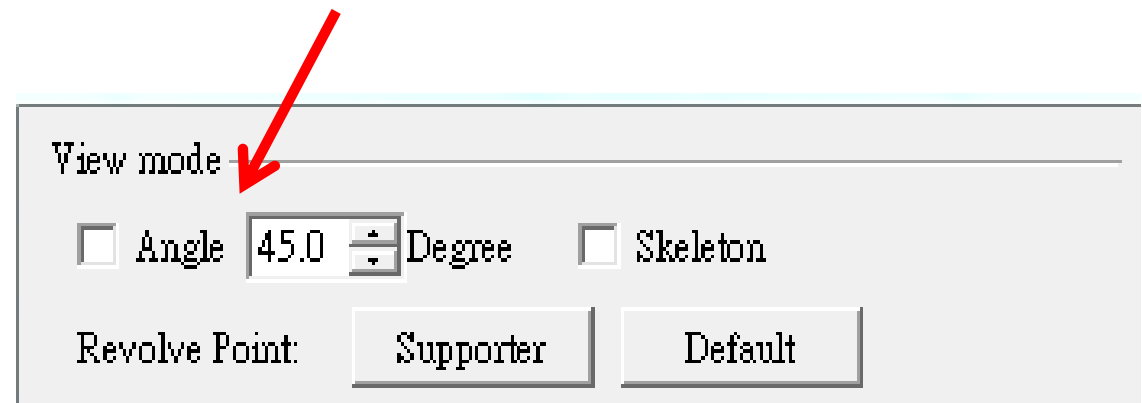
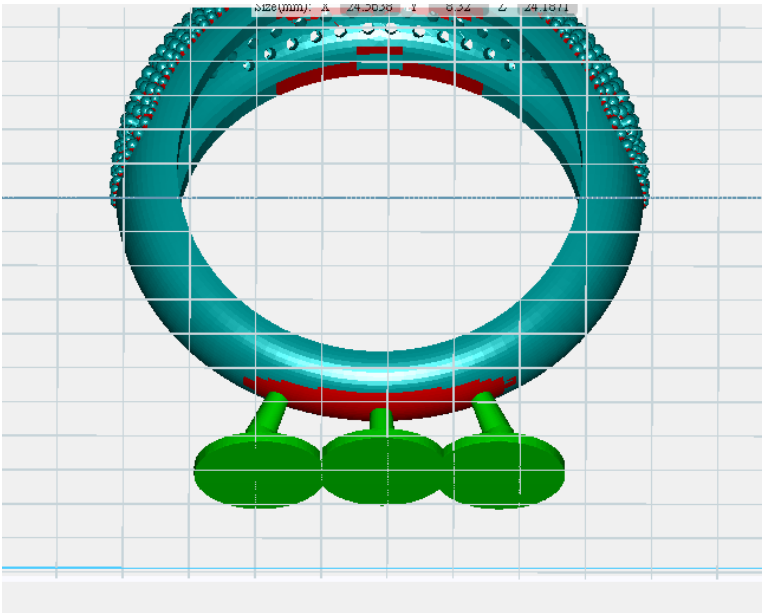
Base thickness

# Build support – View mode

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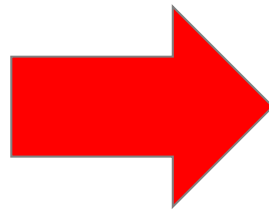
Angle Indicator will help identify the bevel angle of object surface

- a) Below a certain angle will become red in preview
- b) These red area indicates area more flat and possibly hang in air, where need to build supports



# Build support – View mode

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# Build support – View mode

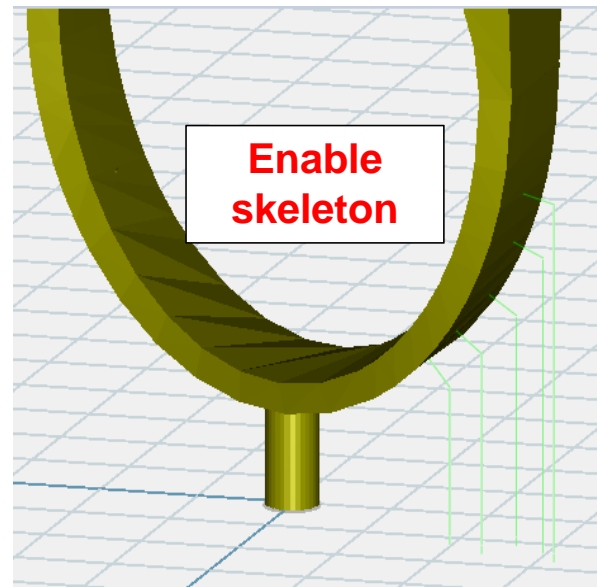
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Show support in line

View mode \_\_\_\_\_

☐ Angle   Degree ☐ Skeleton

Revolve Point:





# Build support – View mode

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View mode \_\_\_\_\_

☐ Angle   Degree ☐ Skeleton

Revolve Point:

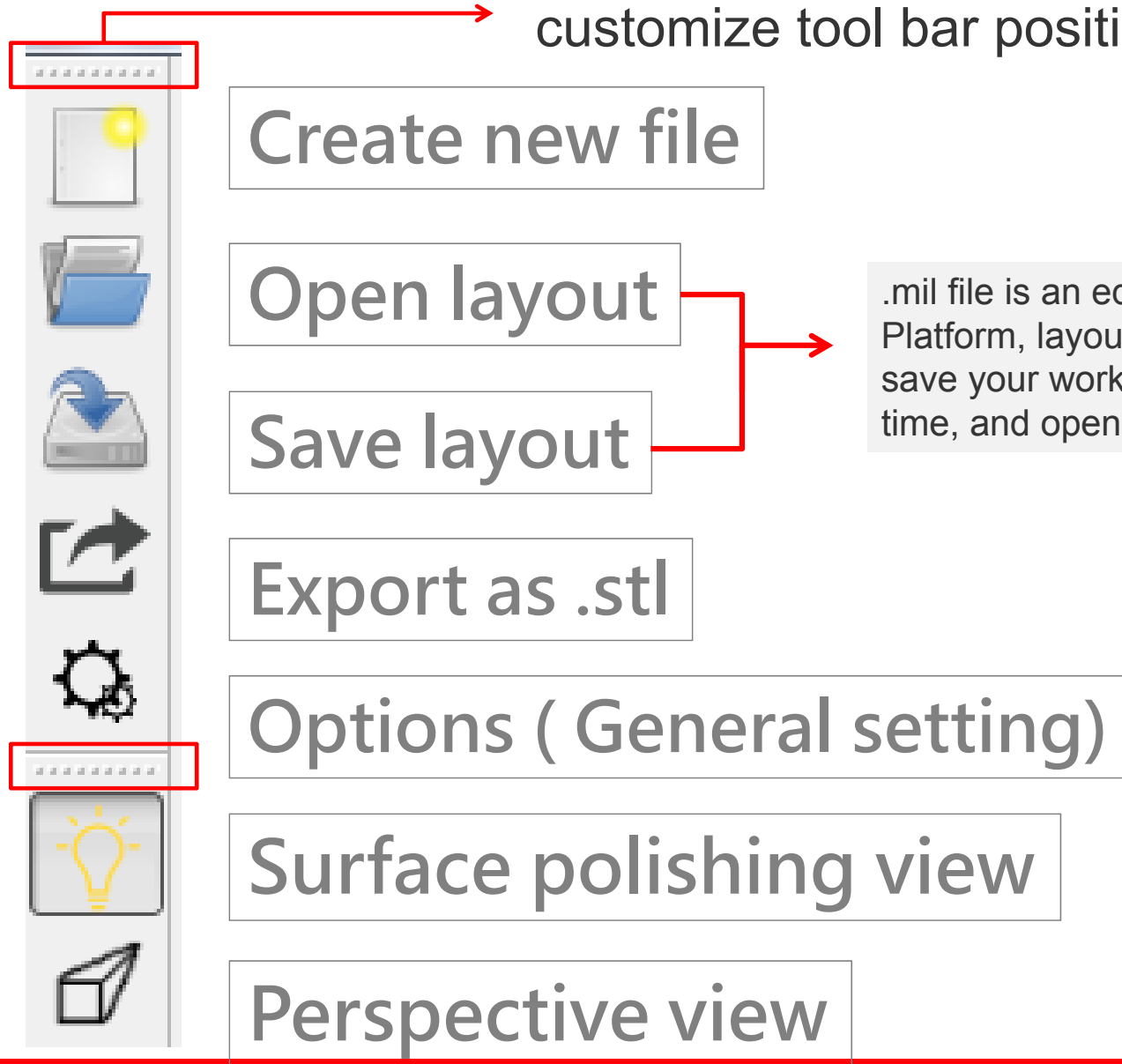
- a) Select one support
- b) Click Revolve point: supporter
- c) Use fix support as view rotation center
- d) See the 360 degree position of support

Default (Use platform as view rotation center)

# Tool bar

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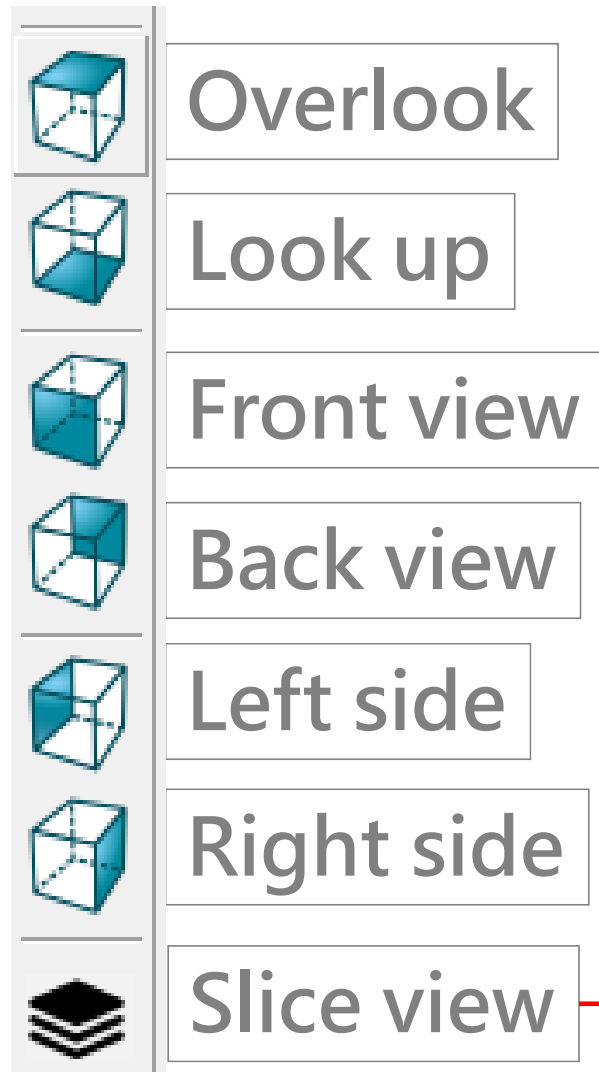
Click and drag the tool bar, use can customize tool bar position



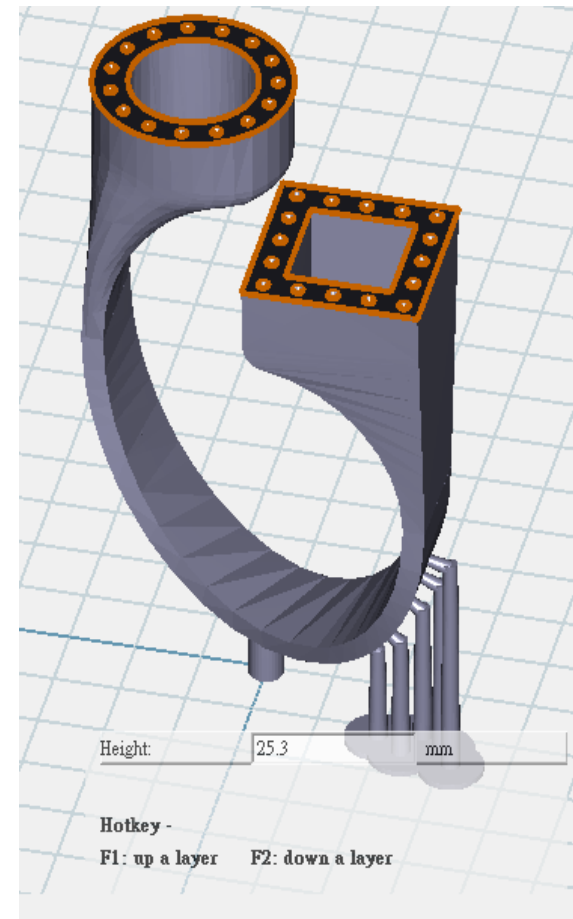
.mil file is an editable format for Utility Platform, layout, supporter function, you can save your working status as .mil file at any time, and open .mil file to continue editing

# Tool bar

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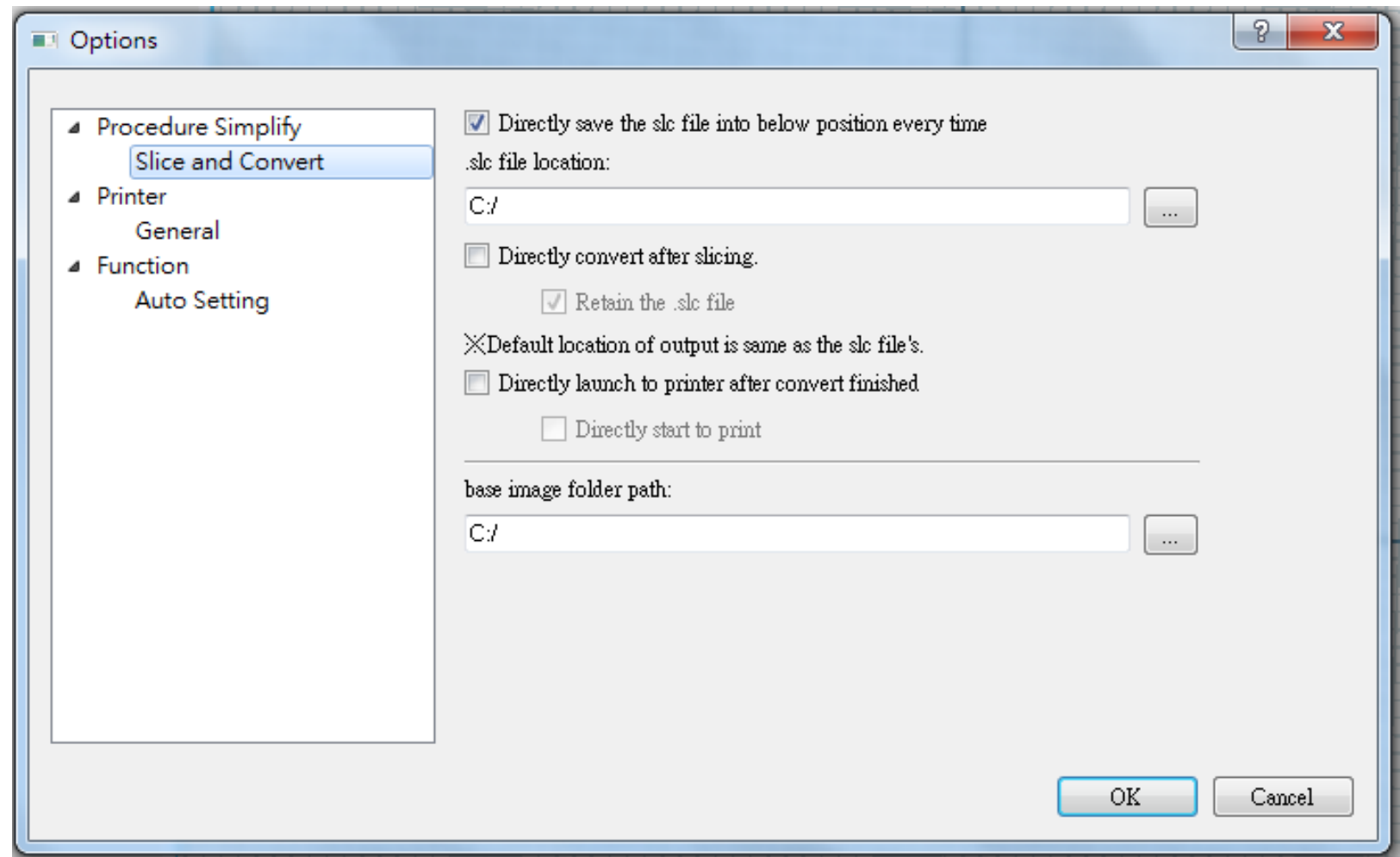
Slice view  
Preview each layer  
(but not export .slc yet)



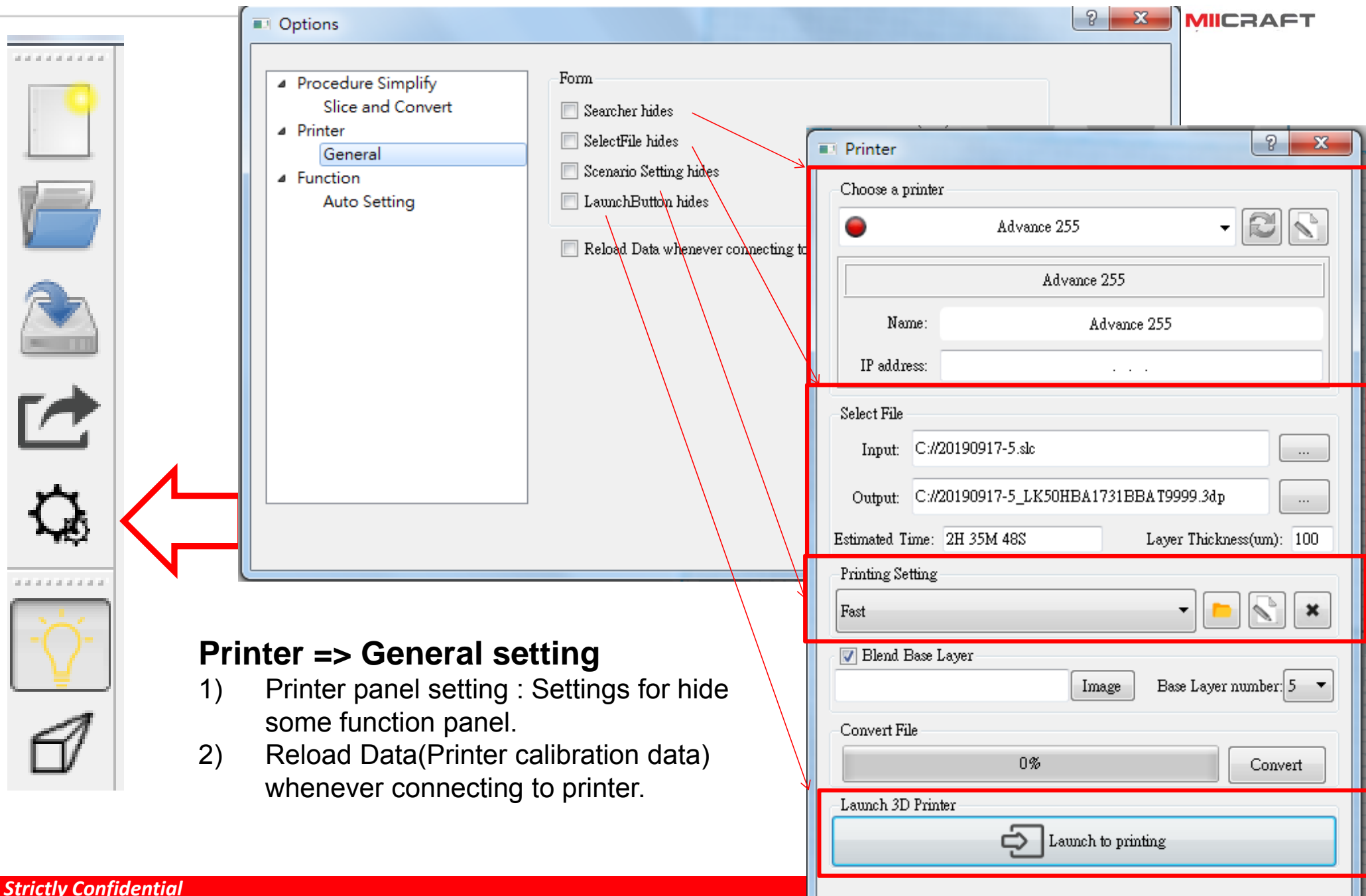
# Tool bar – Options setting

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- 1) Procedure Simplify : Settings for skip some procedure enquiry alert every time.



# Tool bar – Options setting



**Options**

- Procedure Simplify
  - Slice and Convert
- Printer
  - General**
- Function
  - Auto Setting

**Form**

- ☐ Searcher hides
- ☐ SelectFile hides
- ☐ Scenario Setting hides
- ☐ LaunchButton hides
- ☐ Reload Data whenever connecting to

**Printer**

Choose a printer

Advance 255

Advance 255

Name: Advance 255

IP address: . . .

Select File

Input: C:/20190917-5.slc

Output: C:/20190917-5\_LK50HBA1731BBAT9999.3dp

Estimated Time: 2H 35M 48S Layer Thickness(um): 100

Printing Setting

Fast

☒ Blend Base Layer

Image Base Layer number: 5

Convert File

0% Convert

Launch 3D Printer

Launch to printing

**Printer => General setting**

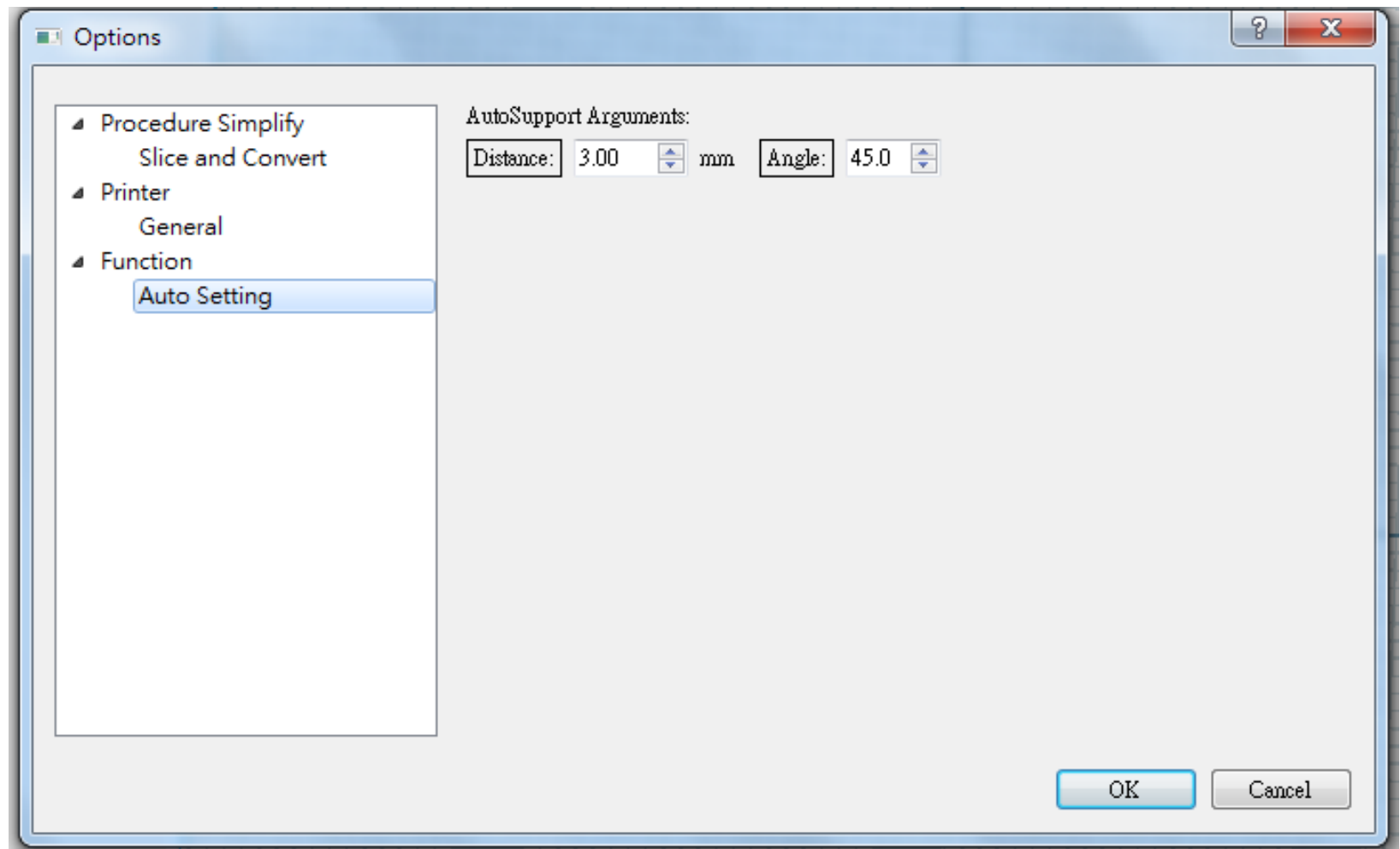
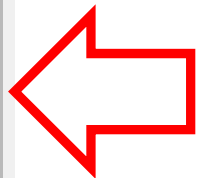
- 1) Printer panel setting : Settings for hide some function panel.
- 2) Reload Data(Printer calibration data) whenever connecting to printer.

# Tool bar – Options setting

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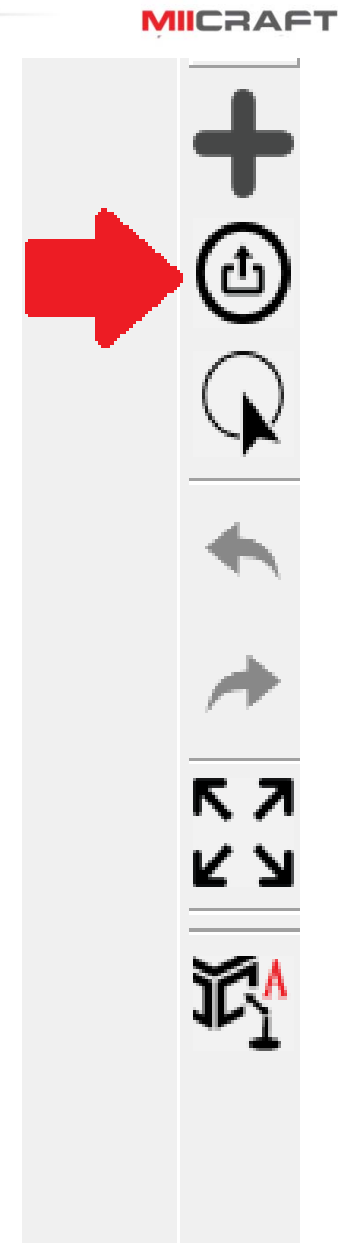
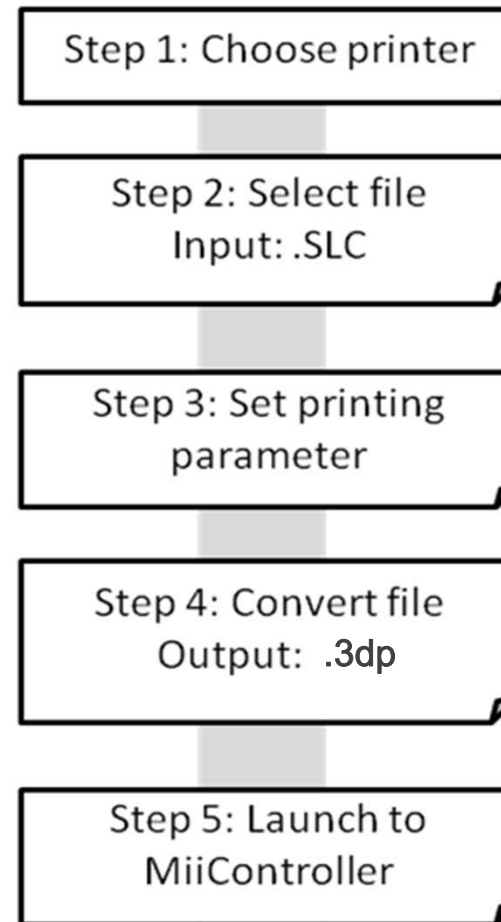
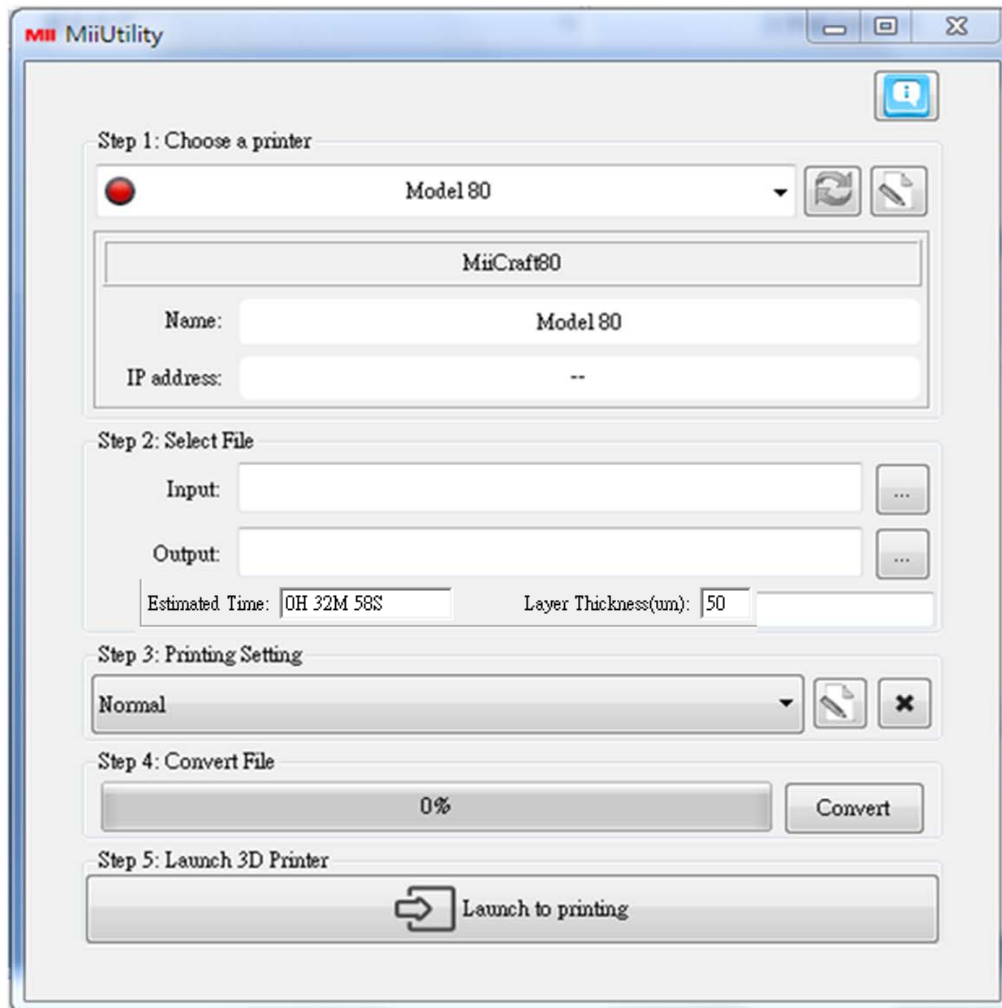
## Function => Auto setting:

- 1) Distance: The distance of supports and supports. The density of supports.
- 2) Angle: The model surface below a certain angle, will automatically build supports.



# Printer setting

## 1) Tool bar, icon as picture on the right

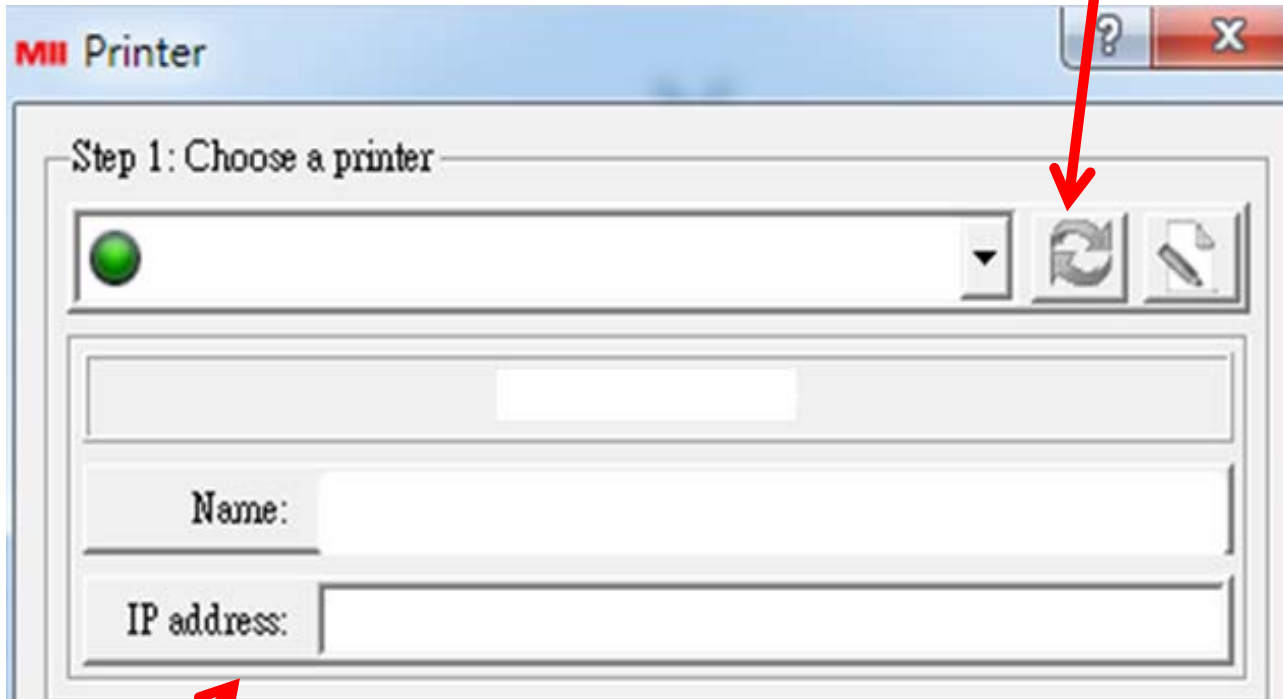


# Printer setting

## Step 1

- Online printer
- Offline printer

## Scan online printer



Printer IP

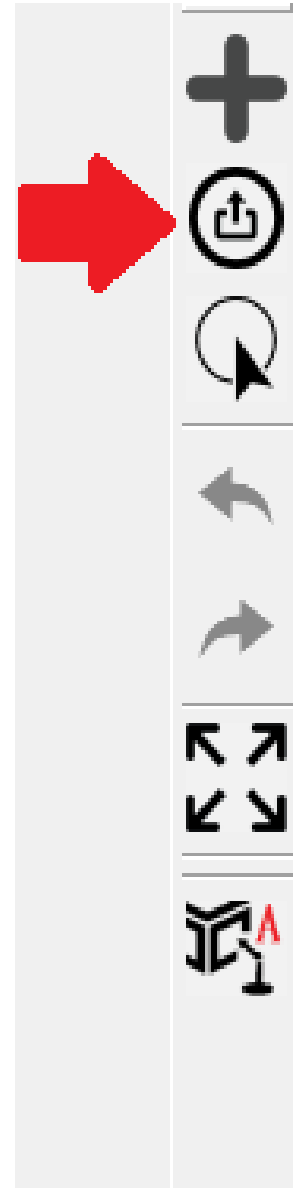
- To print (only online printer)
- To use printer calibrate information when converting files (Both online and offline printer)



Trouble shooting

If unable to connect computer and printer, please check computer's proxy setting, it has to be close.

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# Printer setting

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## Step 2

Step 2: Select File

Input:  ...

Output:  ...

Estimated Time: 6H 28M 12S Layer Thickness(um): 50

Default user edit .slc file

Output .3dp file

Estimated printing time

Step 3: Printing Setting

- 1) Select .mps file
- 2) Edit .mps file (printing parameter)

Step 4: Convert File


0%











Step 5: Launch 3D Printer







# Printing setting (.mps)

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Step 3: Printing Setting







**Curing Time(s):** 2.00

**Speed:** Normal

**Gap Adj(mm):** 0.00

**Base Layers:** 1

**Base Curing(s):** 5.00

**Buffer Layers:** 3

**Power(%):** 100

**Print Delay(s):** 1

**Image Calibration:** ☒

**Anti-aliasing:** Max (default)

**Image Pixel Offset:** 0 (default)

**Overlap(%):** 50 **Edge Enhance:** 0 **Blur:** 0

The amount of time for UV curing(seconds) per layer

Slow, Normal and Fast, means different peeling speed. Recoater mode including recoater back and forth. Also user can select "advanced" to set user defined peeling mode

Adjust thickness of the first layer

Define number of base layers

Curing time for base layers

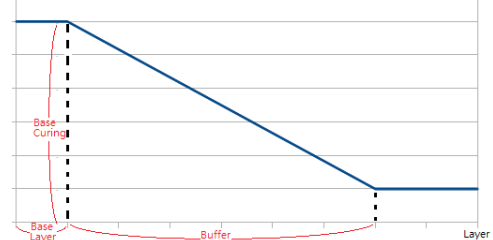
Set the Number of buffer layers

At 100% is the existing brightness of light engine. User can adjust the power in response to different resin character

For first layer, picker stay for at least 1 sec. then cure

Make image calibration for this printer




















What is Buffer layer?  
Within buffer layer, the curing time is gradually change from base layer setting to layer setting



# Printing setting (.mps)

 Active

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	Ultra series	Advance series	Profession series
Image Calibration			
Anti-aliasing			
Pixel offset			
Edge enhance			
Overlap (%)			
Blur			
Contour exposure			
Resin Shrinkage compensation			
Flip image			



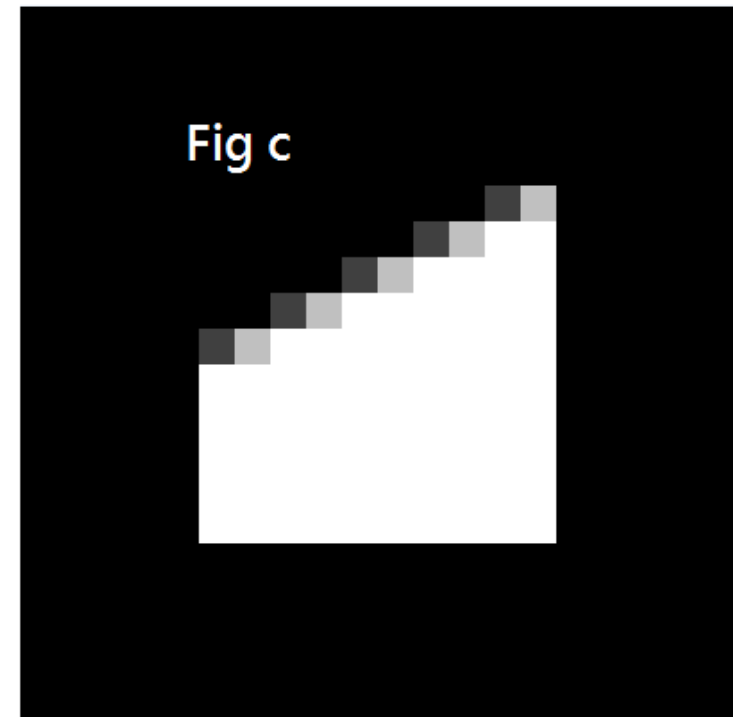
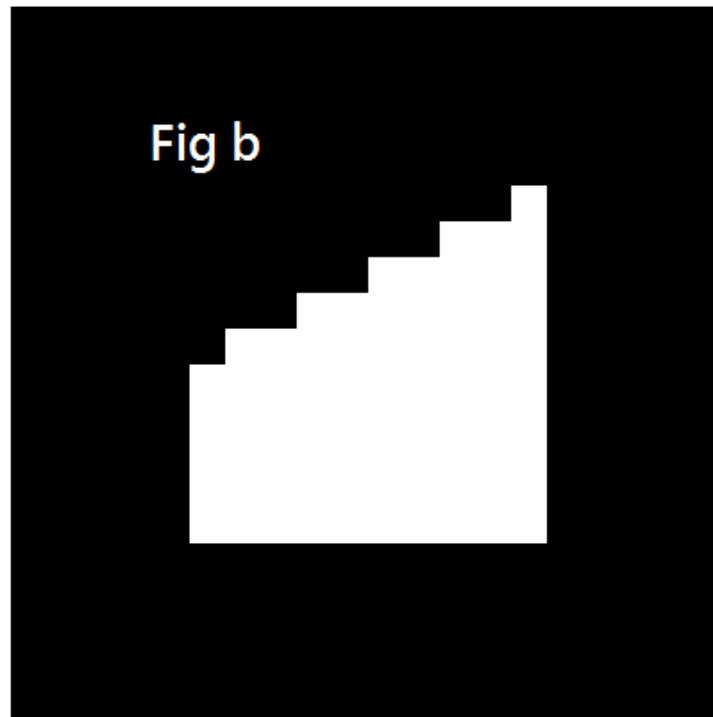
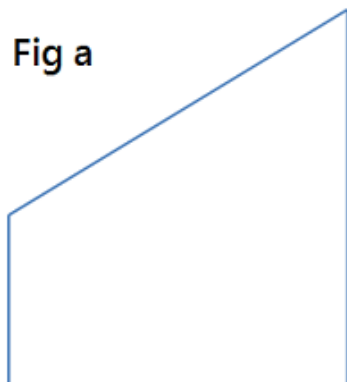
# Printing setting (.mps)

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Anti-aliasing:	Max (default)				
Image Pixel Offset:	0 (default)				
Overlap(%):	50	Edge Enhance:	0	Blur:	0

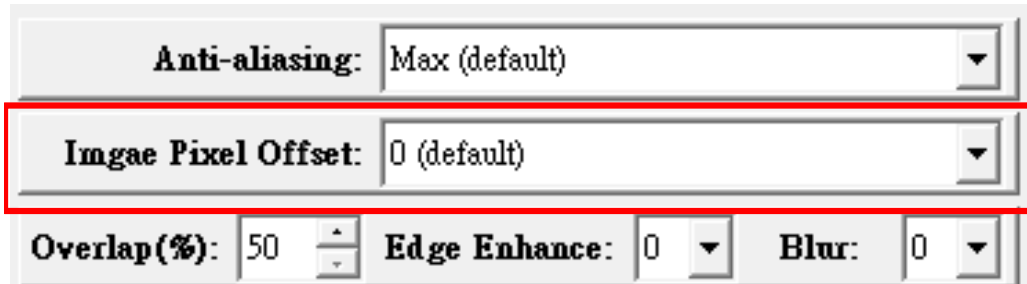
None Anti-aliasing

Max Anti-aliasing



# Printing setting (.mps)

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Anti-aliasing:	Max (default)
Image Pixel Offset:	0 (default)
Overlap(%):	50
Edge Enhance:	0
Blur:	0

Pixel offset : Can slightly adjust edge pixel (0.5 pixel = 1)

For example:

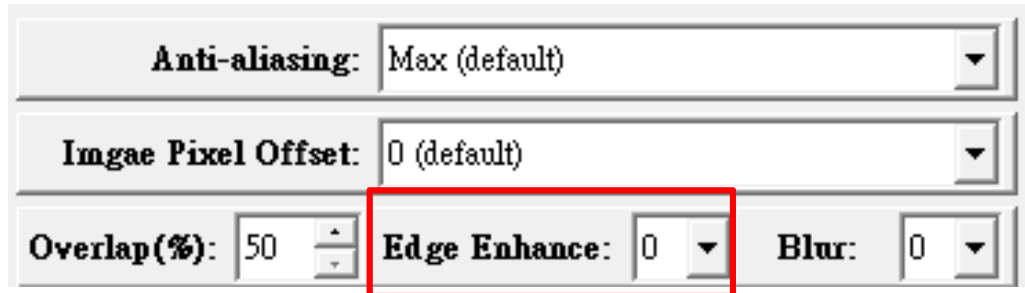
Select -2, erode 1 pixel on the edge

Select 2, add 1 pixel on the edge



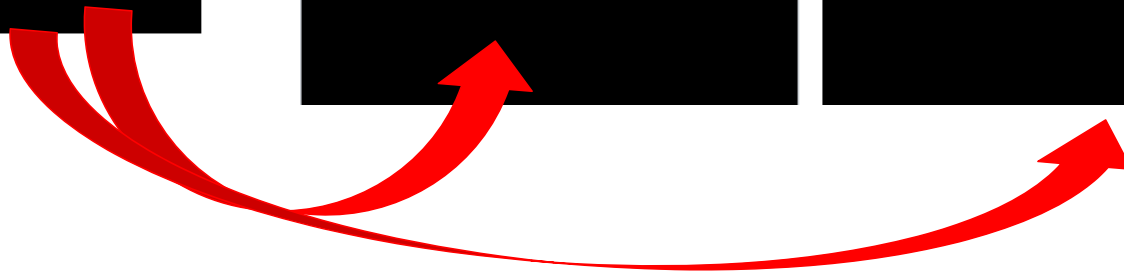
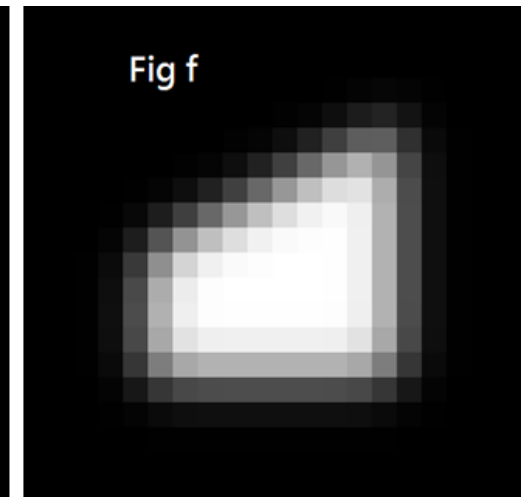
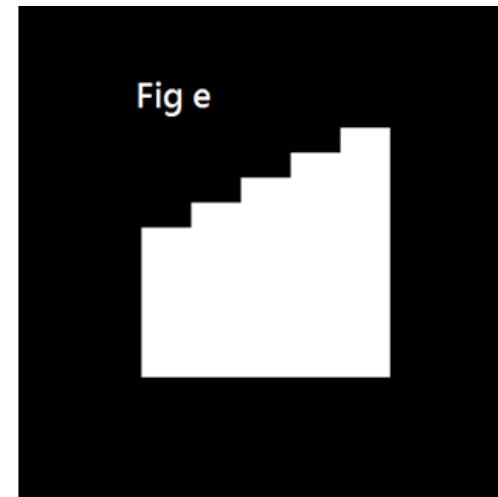
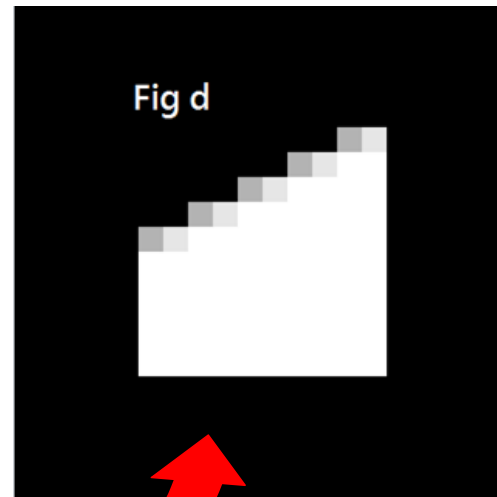
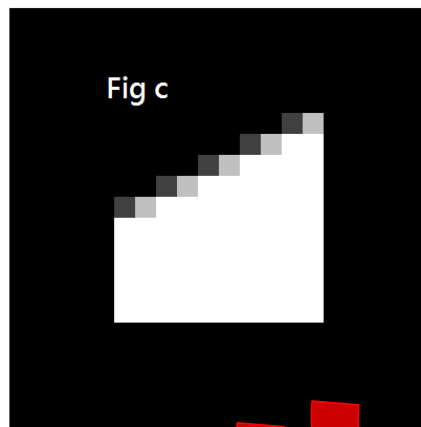
# Printing setting (.mps)

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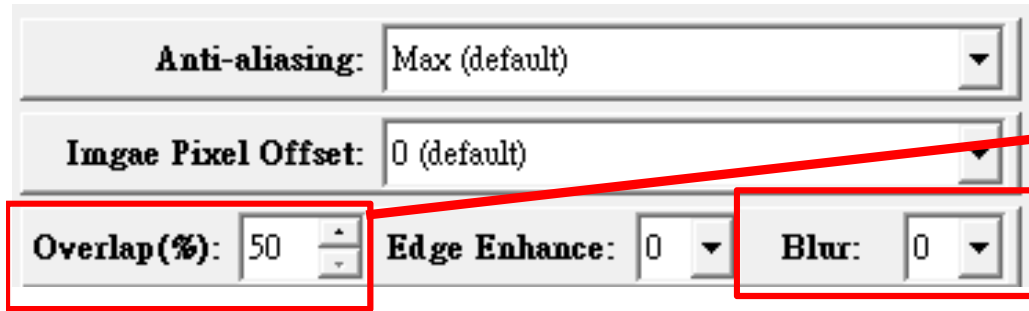
Edge Enhance level 3   Edge Enhance level 5

Blur



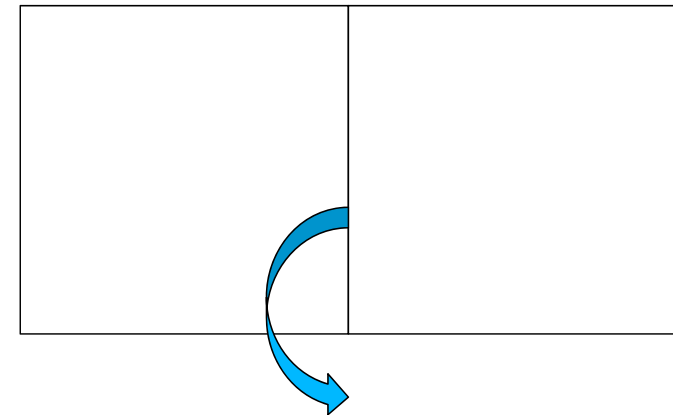
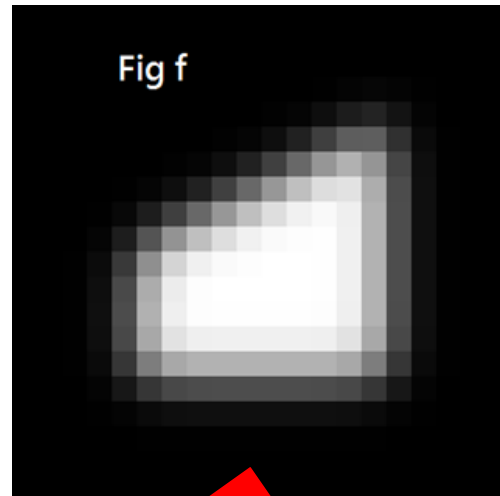
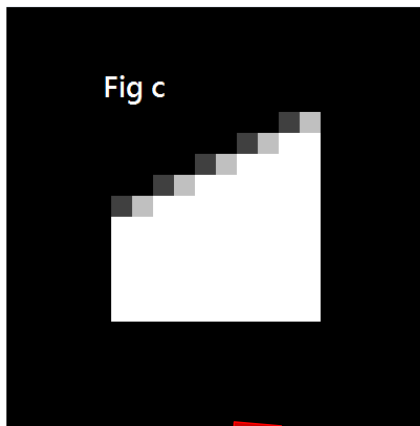
# Printing setting (.mps)

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Only apply to Advance series

Blur



Overlap of dual light engine

Overlap% : Two light engine power percentage. Suppose both light engine have same power, the percentage is 50%

# Printing setting (.mps)

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Contour Exposure

Pixels:  Exp(%):  Gap:

Contour Exposure : User set this function to exposure contour image first, then exposure inside image. Can prevent contour deform

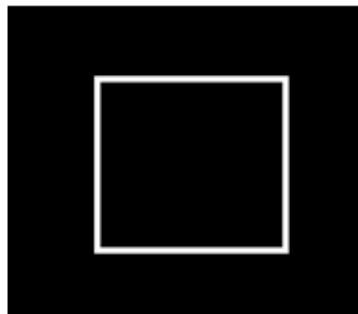
Pixels : Contour pixel

Exp (%) : Contour exposure time

The percentage is compare to curing time (Inside image exposure time is same as curing time)

For example:

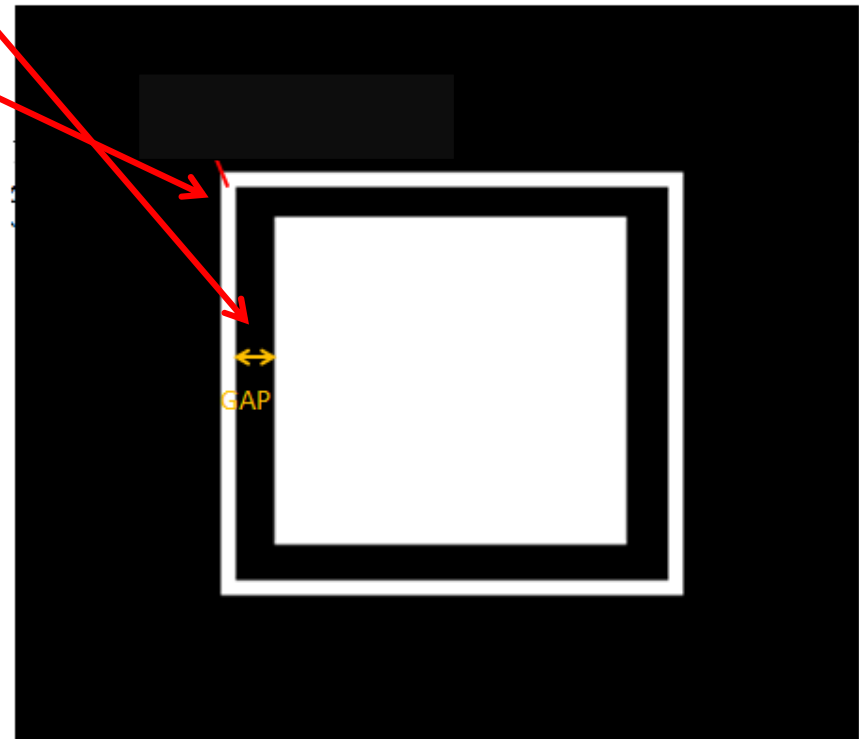
Square object



Contour image



Inside image



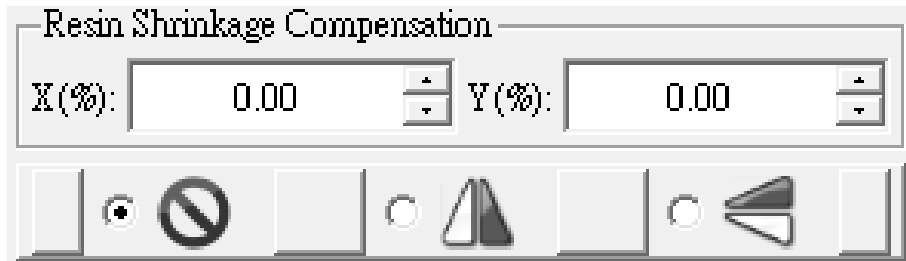
If user set contour pixel, one image will become 2 image, contour and inside





# Printing setting (.mps)

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+0% to 9.9% → Enlarge an image

-0% to -9.9% → Shrink an image

Flip image by X axis or Y axis



# Printing setting (.mps) –Advance setting

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Speed : select Advance

Enable Function: Customize peeling mode

Curing Time(s): 2.00

Speed: **Advanced**

Gap Adj(mm): 0.00

Base Layers: 1

Base Curing(s): 5.00

Buffer Layers: 3

Power(%): 100

Print Delay(s): 1

Image Calibration: ☒

Anti-aliasing: Max (default)

Image Pixel Offset: 0 (default)

Edge Enhance: 0

Contour Exposure

Pixels: 0 Exp(%): 200 Gap: 2

Starting Layer: 000000

Advanced Setting

Cartridge	Down	800	1600	1+	x
Stay		0	1000	1+	x
Picker	Up	600	3200	1+	x
Picker	1Layer	0	1600	1+	x
Stay		0	2000	1+	x
Cartridge	Up	805	1400	1+	x
Picker	Down	500	3200	1+	x
Picker	Down	100	6400	1+	x
Stay		0	2000	1+	x

Add New Action

# Printing setting (.mps) –Advance setting

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The advantage of advanced setting is you can decide peeling mode

Tilt mode : Set cartridge(tank) up and down for bigger area peeling

Direct mode : Only set picker's movement, cartridge stay, to let peeling speed faster

Sweep: Set recoater movement

Starting layer: from starting layer start to use advance setting peeling mode

Half step period (micro second)

Starting Layer: 000000

Advanced Setting

	Items	Movement	Step (25um/step)	Half step period (micro second)
1	Cartridge	Down	800	1600
2	Stay		0	1000
3	Picker	Up	600	3200
4	Picker	1Layer	0	1600
5	Stay		0	2000
...	Cartridge	Up	805	1400
	Picker	Down	500	3200
	Picker	Down	100	6400
	Stay		0	2000

Add New Action

# .mps file user management

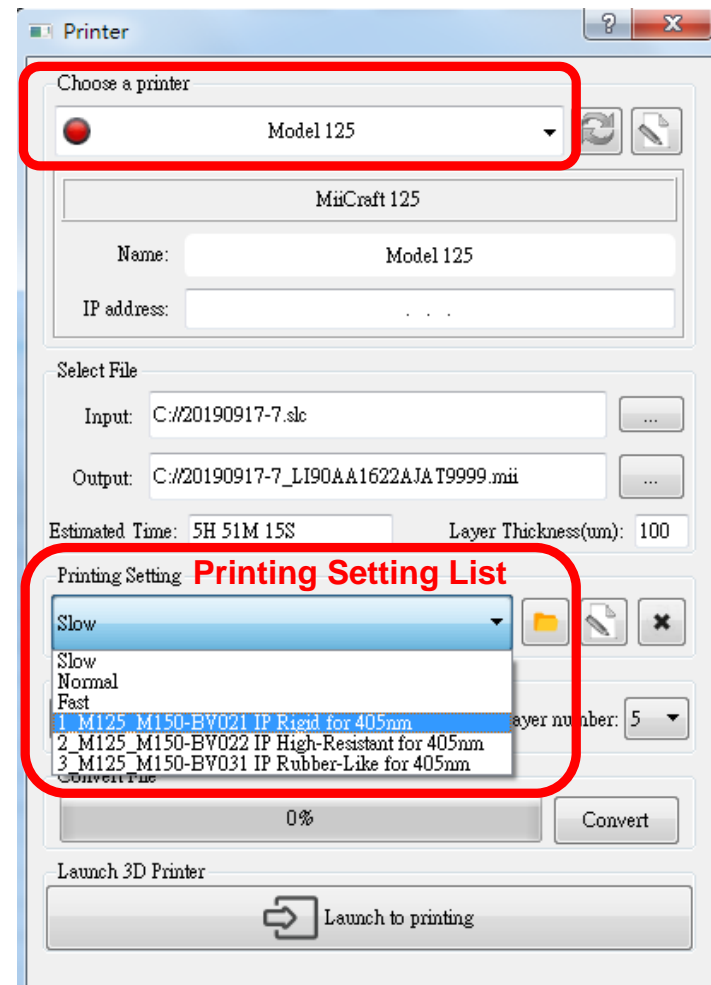
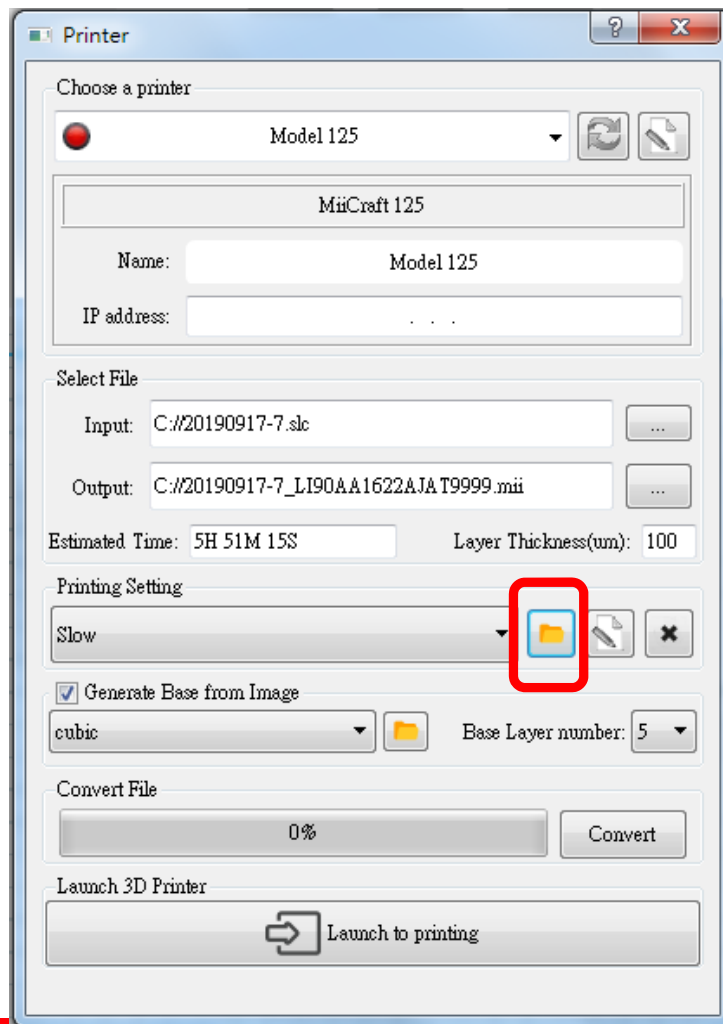
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## (1) Assign .mps user management file

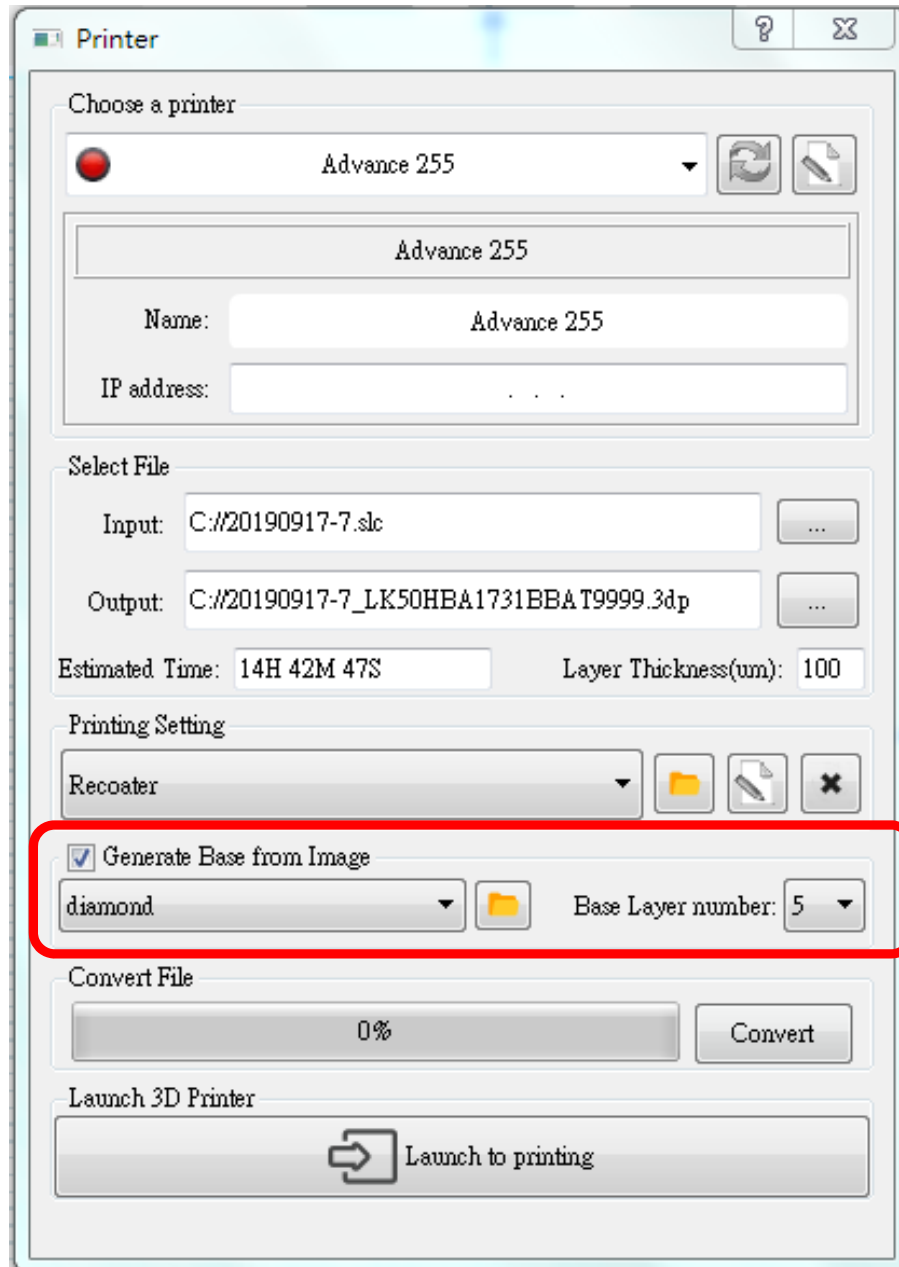
The printer you choose will affect the .mps you can see.

ex: Choose MiiCraft Profession Printer, can only select .mps file for MiiCraft Profession Printer

## (2) Put .mps into user assigned file, the .mps will show up in the printing setting list as below picture.



# Generate Base from Image



## Step 3: Printing setting

(1) Select image

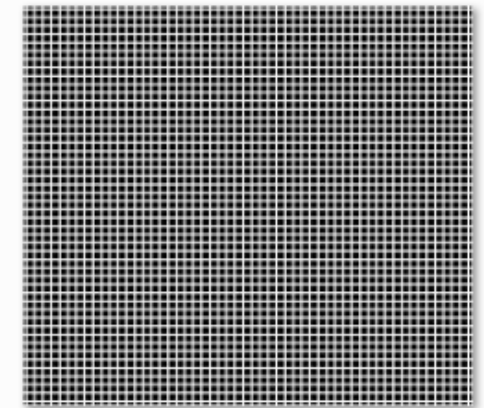
Cubic

Diamond

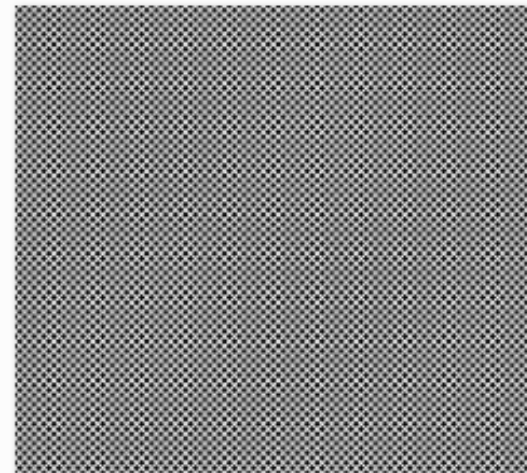
Hexagon

Or DIY image for Base

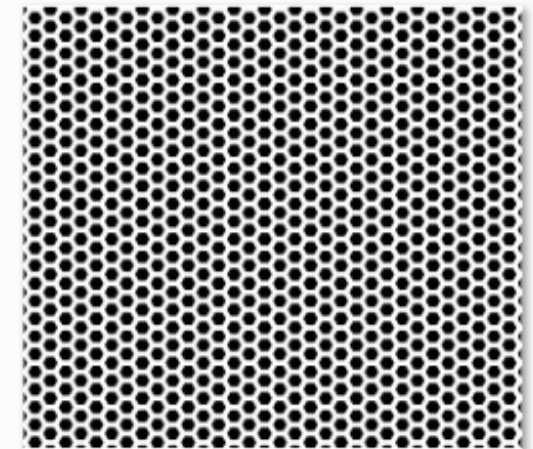
(2) Set Base layer thickness  
(for image base)



cubic.png



diamond.png

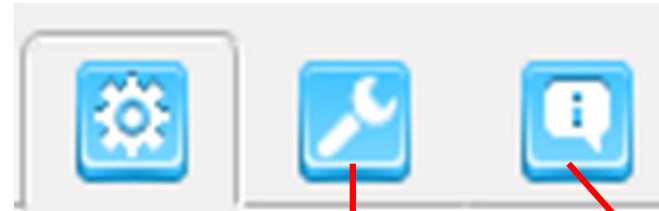


hexagon.png

# Print via Computer

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## Step 5: Launch to printer



Printing  
parameter

Engineering  
mode

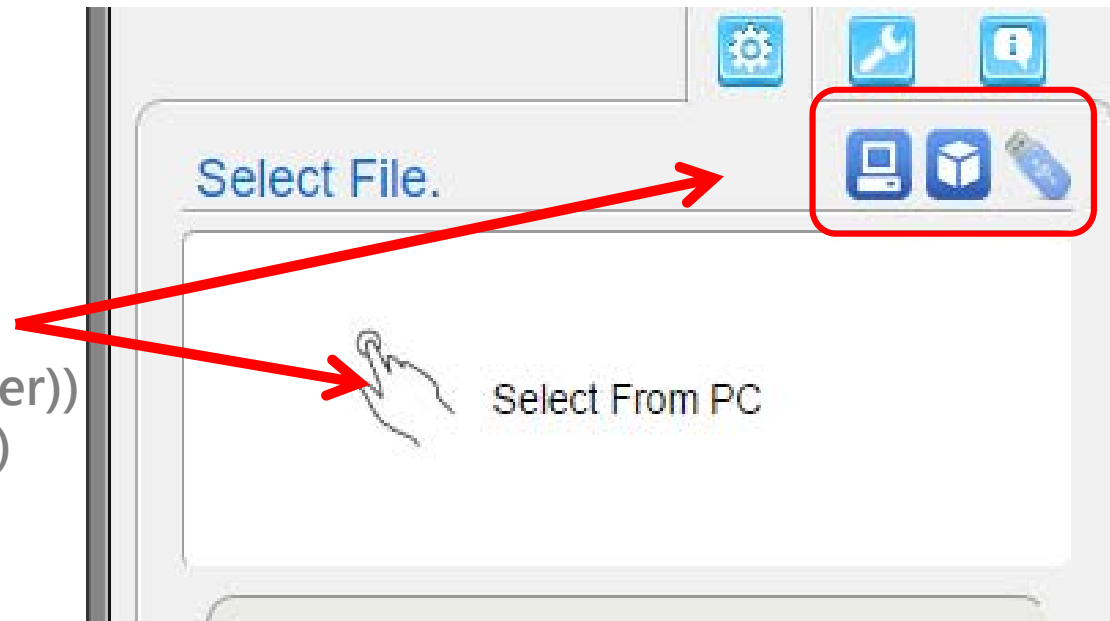
Printing history

## Select .3dp file

From PC

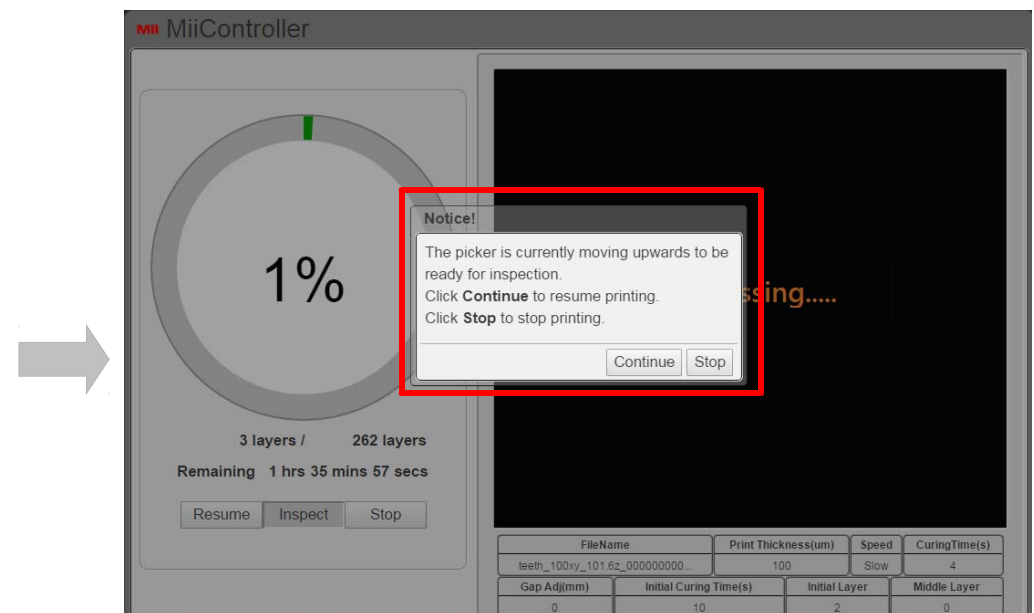
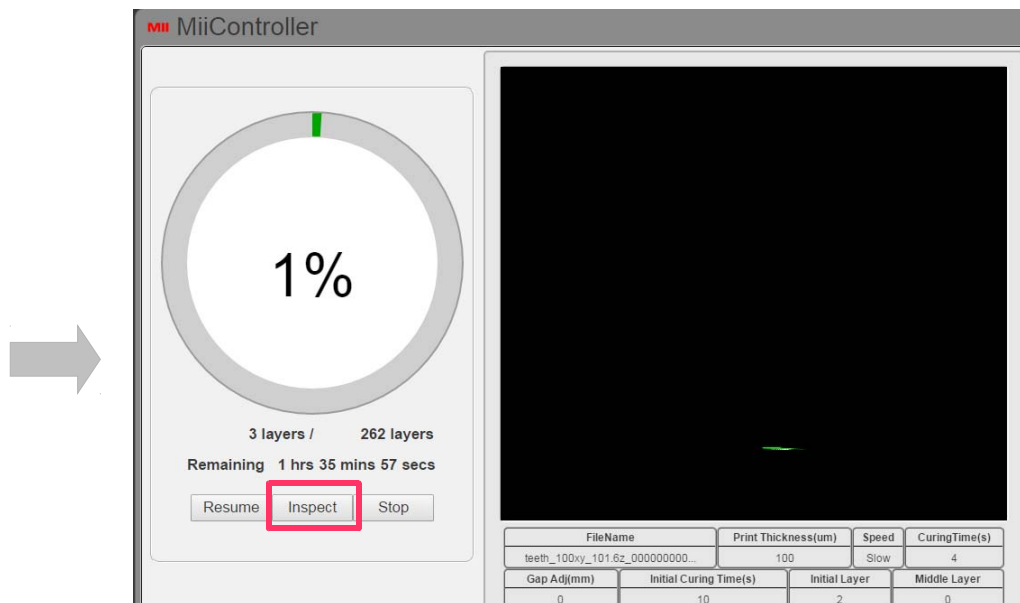
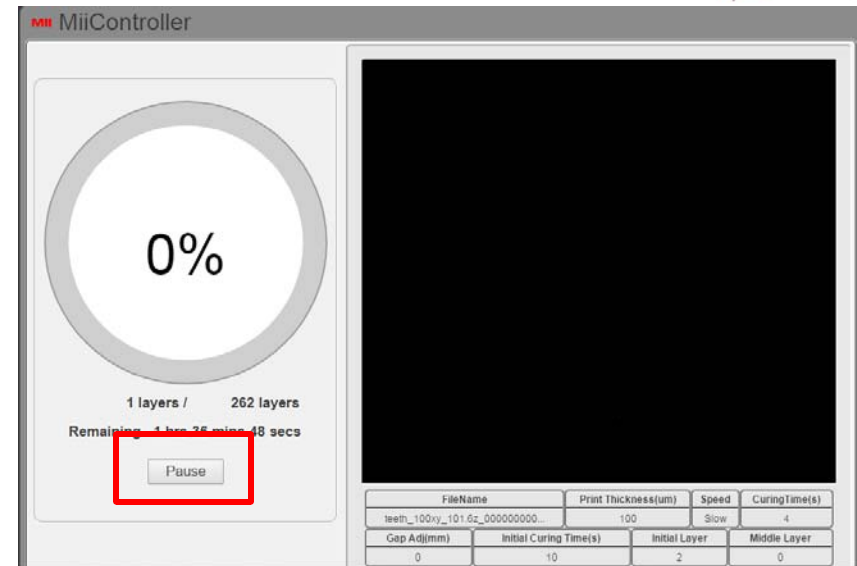
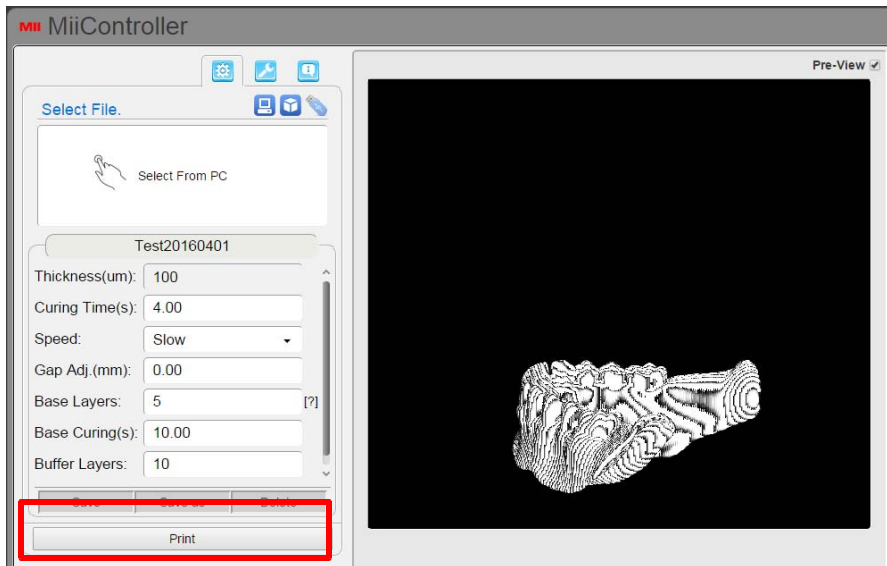
From machine ((file saved in printer))

From USB (USB insert into Printer)



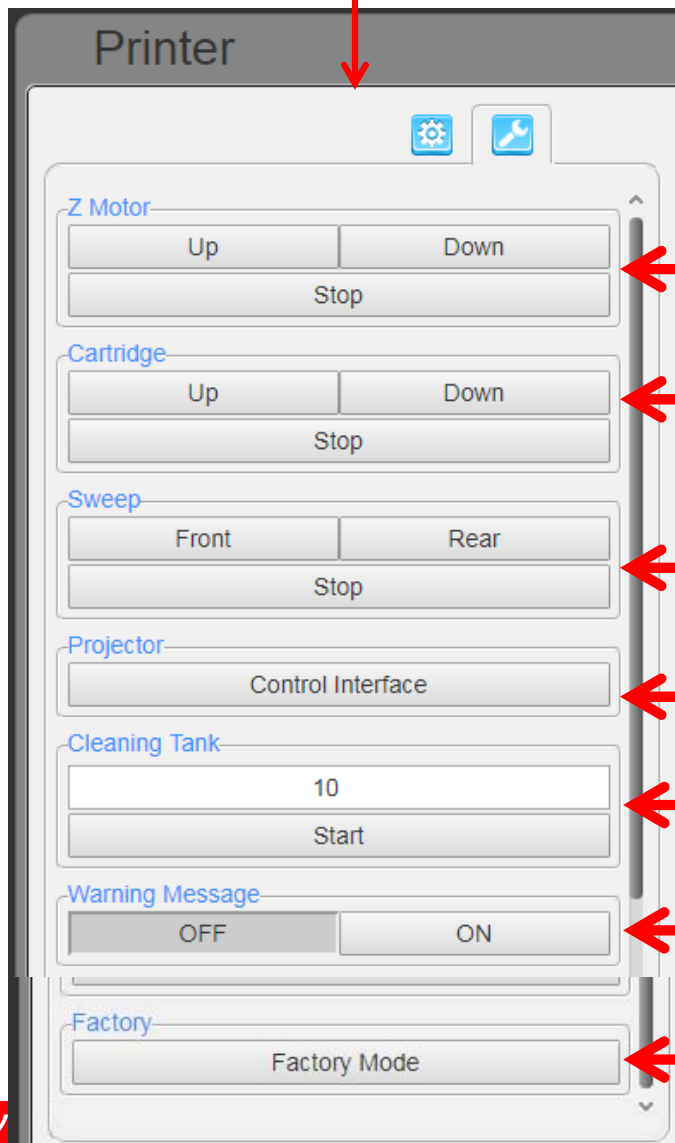
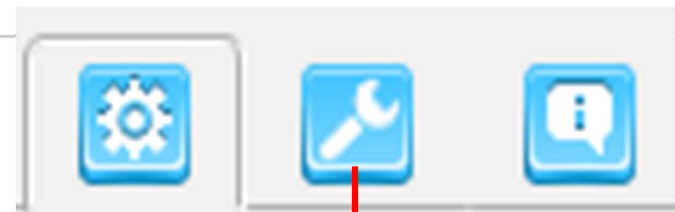
# Print via Computer

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# Engineering mode (Computer)

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Control Z-platform (Build platform)

Control teflon module

Control recoater blade

Introduce in the next page

Project a complete patten, the residual will be transformed into a solid layer

On/off of warning message shows before print

Key in password to use Factory mode  
(For distributor use)



# Engineering mode (Computer)

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The screenshot shows the 'Projector Control' window. At the top are 'ON' and 'OFF' buttons. Below are checkboxes for 'Left Projector' and 'Right Projector', both of which are checked. There are three buttons labeled 'T1', 'T2', and 'T3'. A dropdown menu is labeled 'Please Select a Pattern.'. Below that is a checked checkbox for 'Uniformity/Distortion Mask'. There are input fields for 'Offset X' and 'Offset Y', both set to '0', with a 'Set' button next to 'Offset Y'. Below these are 'Light(%)' and 'Curing Time(s)' sections. The 'Light(%)' section has an input field set to '100' with a 'Set' button, and a 'Calibrate' button. A red box highlights the text '18-112 suggest range' next to the 'Calibrate' button. The 'Curing Time(s)' section has an input field set to '4' with a 'Test' button. A 'Close' button is at the bottom right. Red arrows point from the text explanations on the right to the corresponding controls in the interface.

Control the projector

If Machine is Advance series, you can choose left or right projector to control.

T1/T2/T3 : Use test pattern inside the projector, or select a pattern from menu

Tick this option to apply printer calibration function

Fix the left projector, and move right projector through X axis or Y axis.

Light(%): At 100% is the existing brightness of light engine. The suggest range is base on the printer' s condition, user can only set the % within the suggest range.

Calibrate: Return to default setting of brightness

Curing Time(s): Test print curing time.

# Engineering mode (Computer)

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Projector Control

ON OFF

☒ Left Projector ☒ Right Projector

T1 T2 T3

Please Select a Pattern. ▼

☒ Uniformity/Distortion Mask

Offset X: 0

Offset Y: 0 Set

Light(%): 100 Set

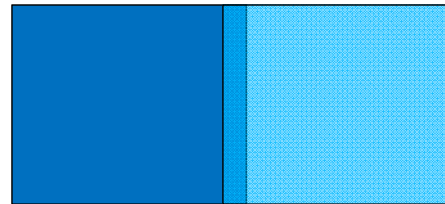
18-112 Calibrate

suggest range

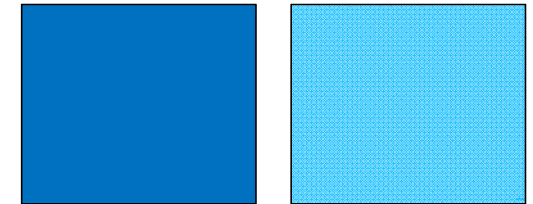
Curing Time(s): 4 Test

Close

Fix the left projector image, and move right projector image through X axis.



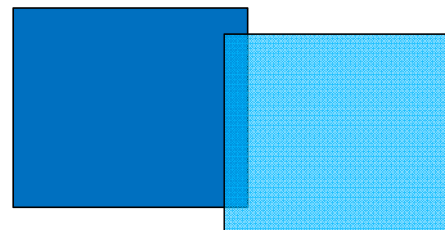
Offset X : -9



Offset X : 9

Fix the left projector image, and move right projector image through Y axis.

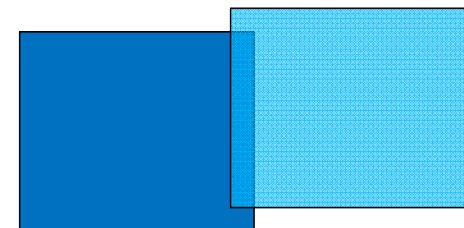
Printer back side



Printer door side

Offset Y : -9

Printer back side



Printer door side

Offset Y : 9

# Printing record and update firmware

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Printing history

Printer

Printer.

Advance 205

Name:

SN:

FW:

Interval:  ~

Total Printed Layers : 101997

Total Printed Time : 288h-29m-45s

File Name		Print Thickness(um)	Curing Time(s)	
DUAL_RUNIN		50	1.50	
Gap Adj.(mm)	Base Curing Time(s)	Base Layers	Buffer Layers	
0.000	5.00	1	3	
Speed	Print Delay(s)	Start Time	Power Ratio	
file	1	2019/05/17 19:55:10	1.00(L:810,R:761)	
End Time		Total Layer		
2019/05/18 05:19:38		3788		

File Name		Print Thickness(um)	Curing Time(s)	
DUAL_RUNIN		50	1.50	
Gap Adj.(mm)	Base Curing Time(s)	Base Layers	Buffer Layers	
0.000	5.00	1	3	
Speed	Print Delay(s)	Start Time	Power Ratio	
file	1	2019/05/17 09:17:02	1.00(L:810,R:767)	
Stop Time		Total Layer		
2019/05/17 17:37:22		3392(3788)		

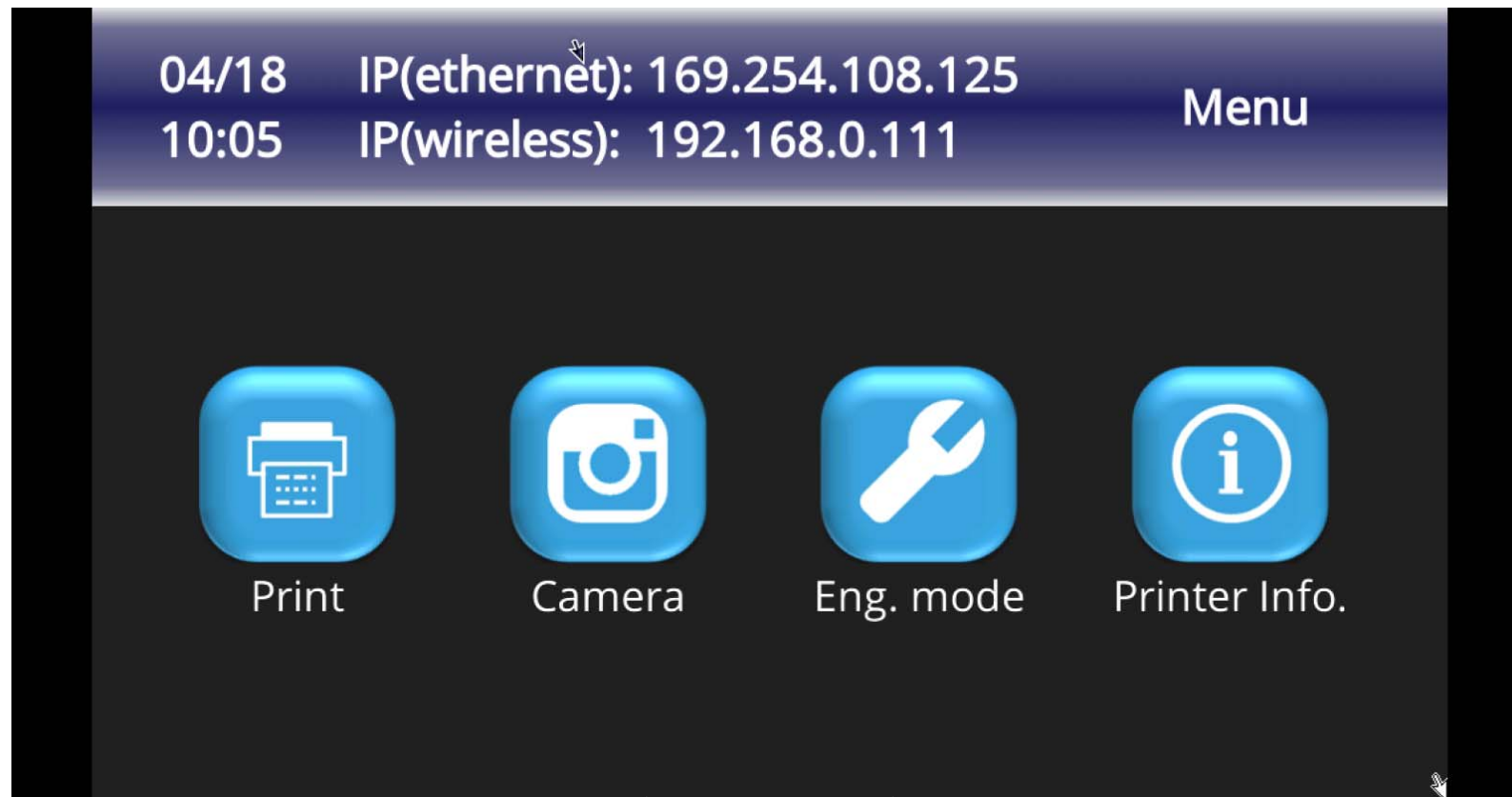
Search interval

Record

Upload the latest  
Firmware package  
to upgrade printer  
firmware

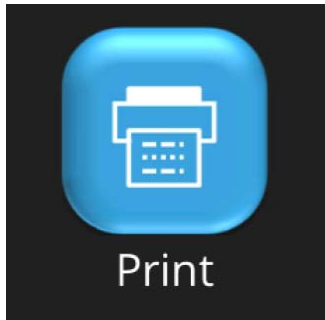
# Print via touch screen panel

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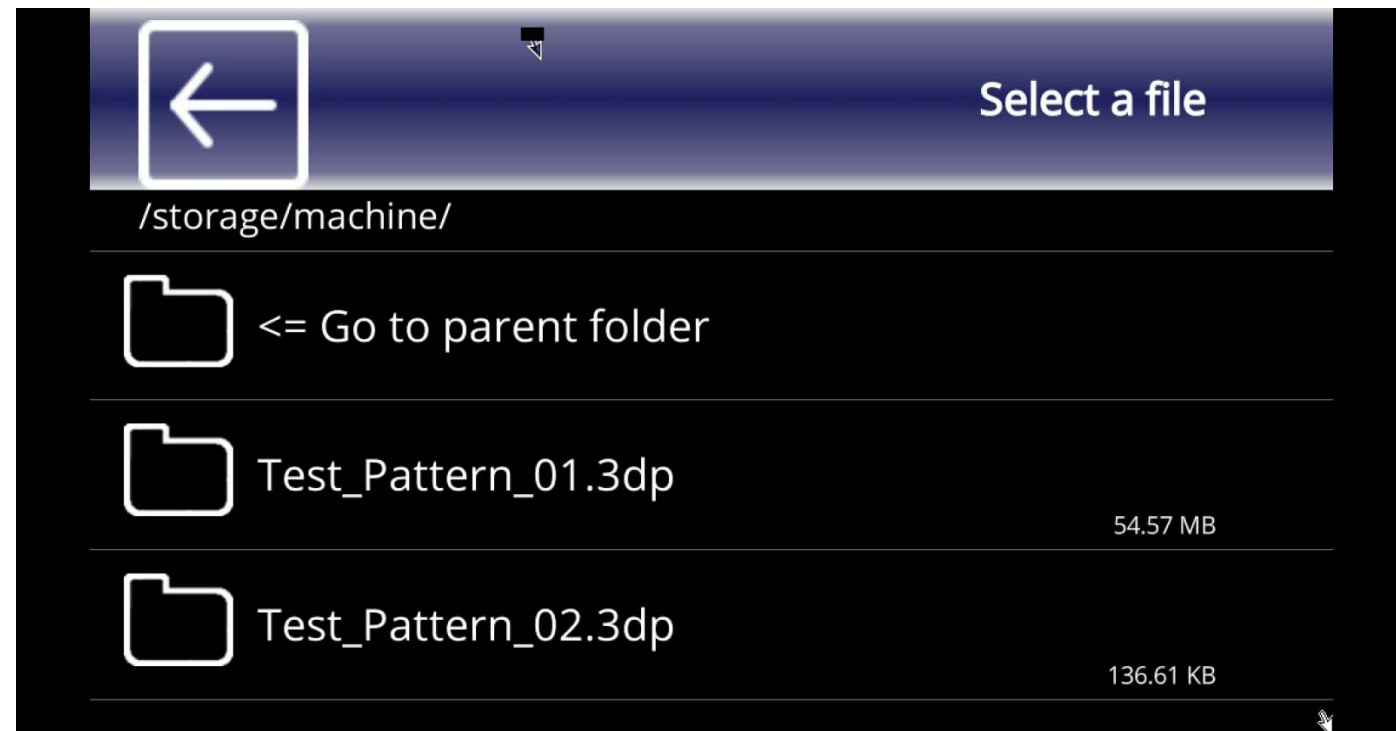


# Print via touch screen panel

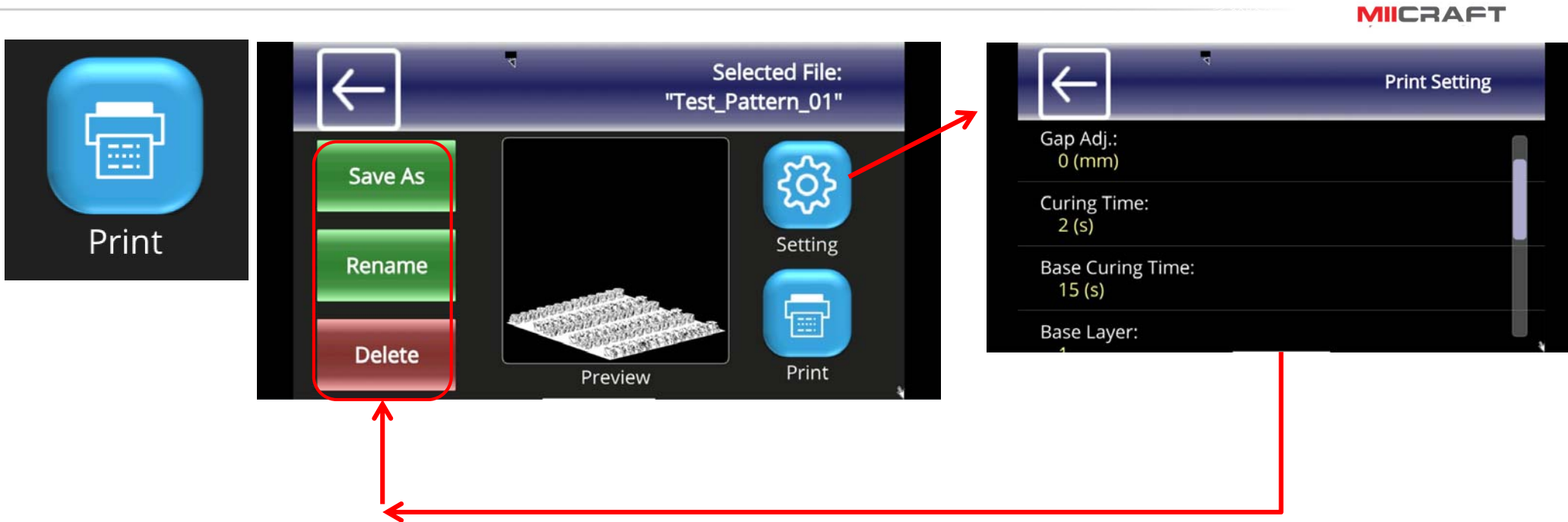
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To print:  
Select .3DP file from  
(1) machine (file saved in printer) or  
(2) USB (insert into printer)



# Print via touch screen panel

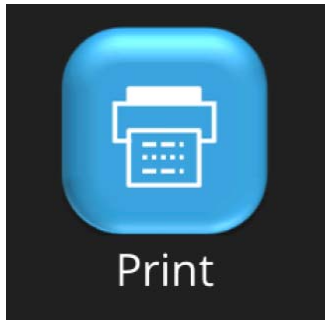


.3DP file

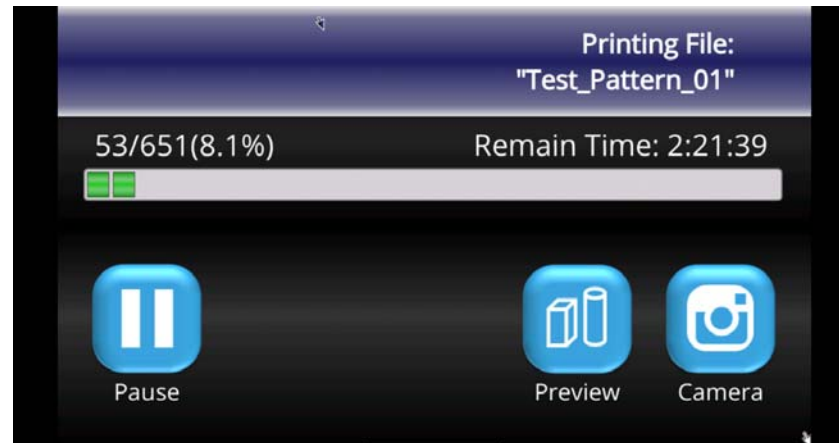
- (1) Save as : Save printing setting as another .3DP file
- (2) Rename : Rename .3DP file
- (3) Delete : Delete .3DP file

# Print via touch screen panel

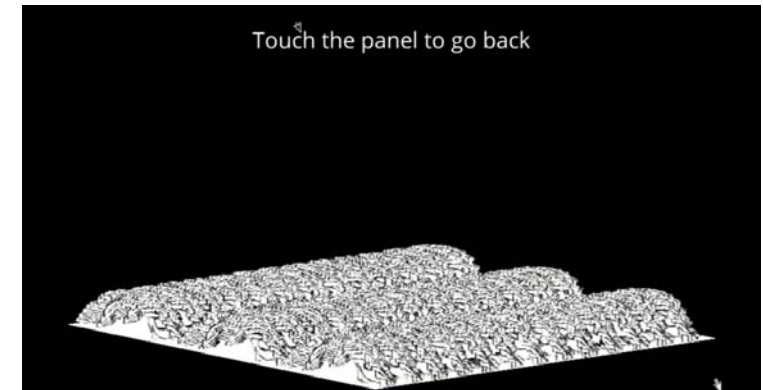
MIICRAFT



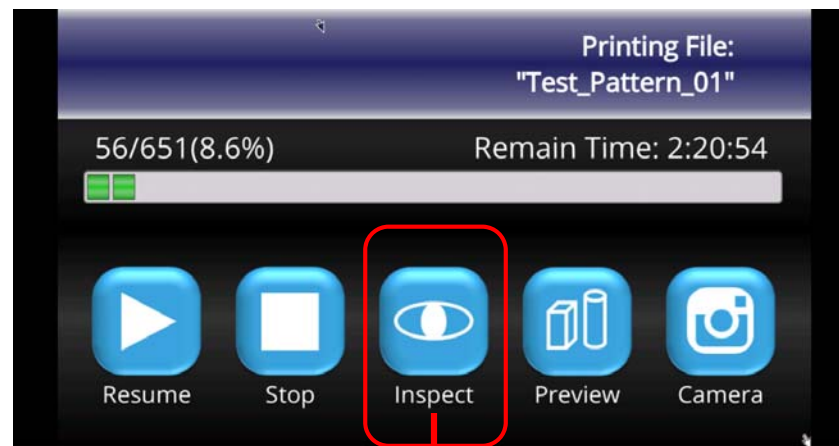
## Printing



## Preview



## Pause

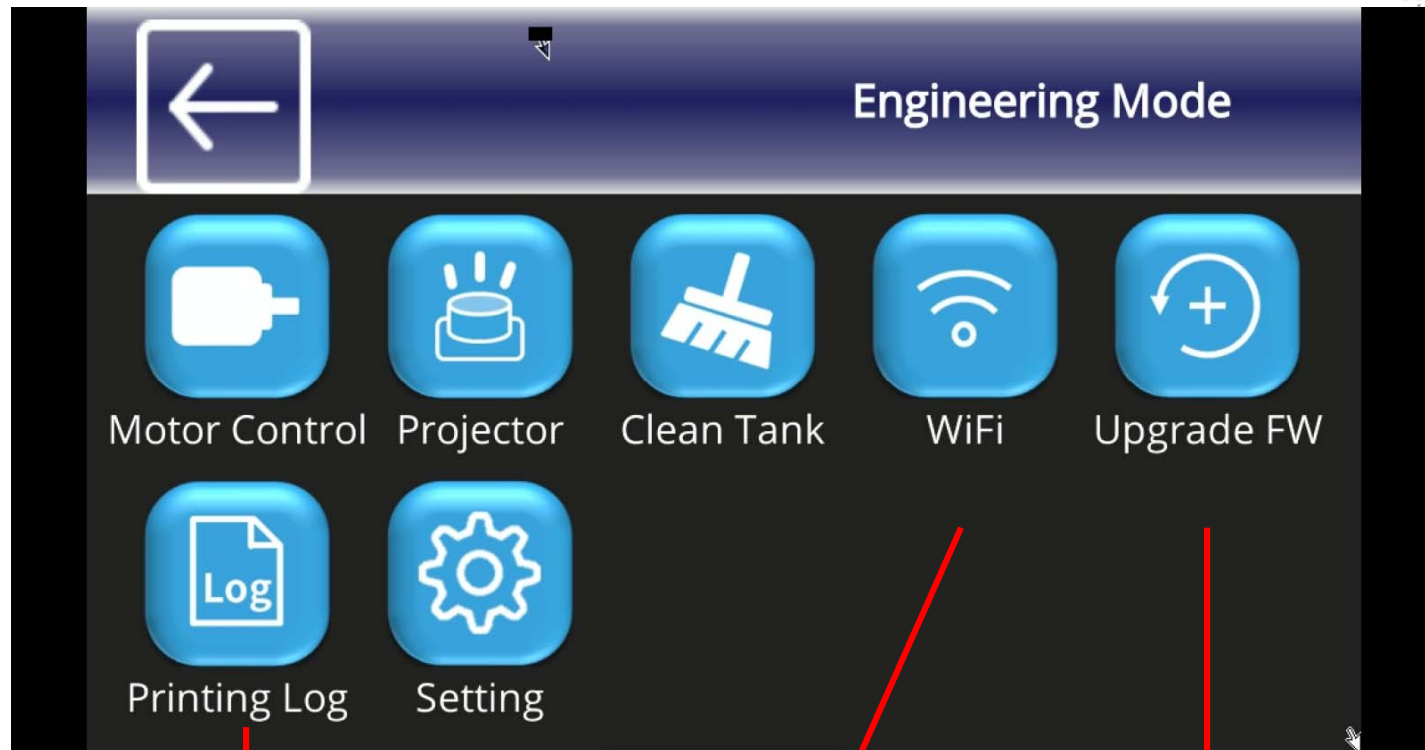
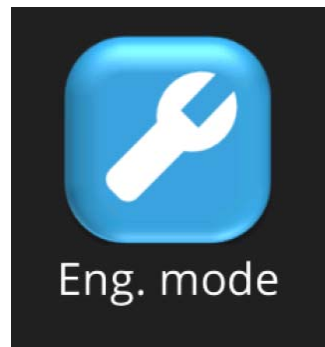


Let build platform  
moving upwards for  
inspect



# Touch screen panel -Engineering mode

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Printing record

Search WiFi  
Printer connect to Wifi

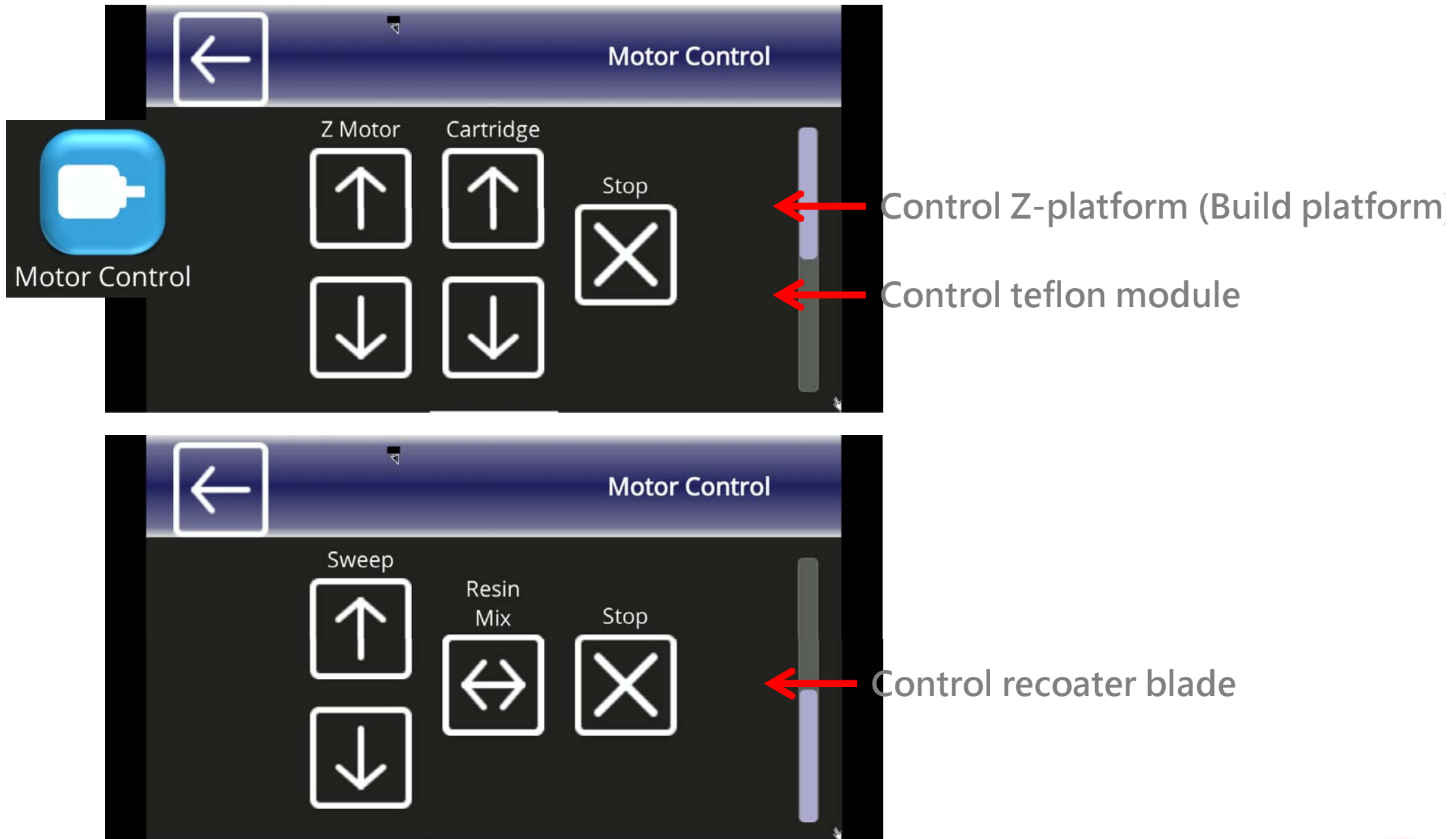
Upload the latest  
Firmware package  
to upgrade printer  
firmware





# Touch screen panel -Engineering mode

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# Touch screen panel -Engineering mode

**Projector**

Control the projector

Tick this option to apply printer calibration function

**Projector Control**

LED:

Uniformity Distortion Mask:

Pattern: **No Pattern**

Power Ratio : **100%** Power Limit 13%~100%

**Calibrate**

Select a pattern to project

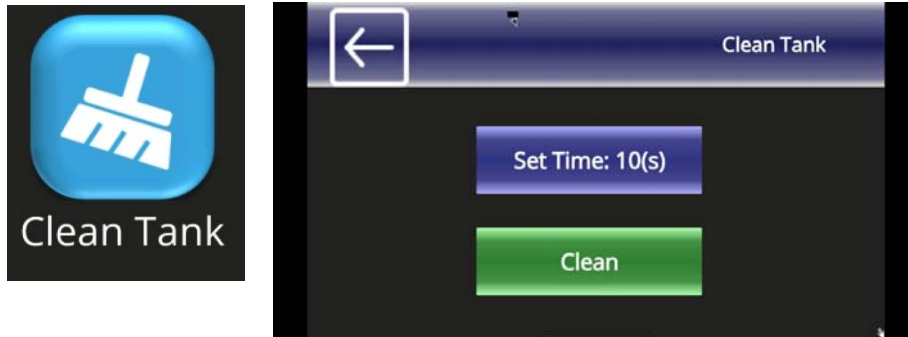
Light(%): At 100% is the existing brightness of light engine. The suggest range is base on the printer' s condition, user can only set the % within the suggest range.

Reset to default setting of brightness

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# Touch screen panel -Engineering mode

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When printing failure happen, there may have some printing residual left and stick on teflon module.

Before to start another printing job, be sure to clean the printed residual out of teflon module.

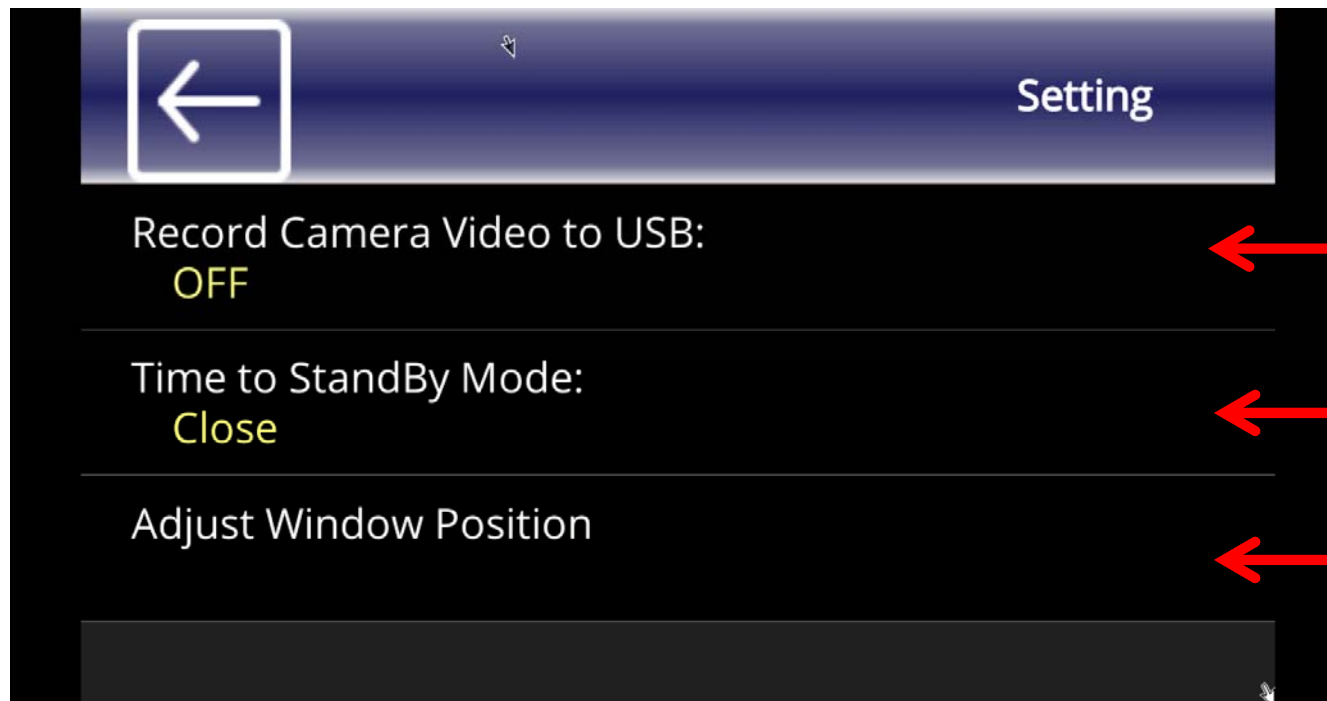
(1)Use “Clean tank” function via touch panel, it project a complete patter, the residual will be transformed into a solid layer.

(2)Using the scrape, scoop up one side of the layer. Then carefully lift to remove solid layer from the teflon module.



# Touch screen panel -Engineering mode

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Save video or not  
Save in which device

Enable Stand by mode or not  
Duration

Adjust panel' s window  
position



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*Thank you*