MiiCRAFT 3D Printer

Utility User Manual

Version 1.0



REVISION HISTORY

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1. System Requirements for Using Utility

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	Advance Series/ Profession Series / Prime Series / Hyper Series
(Optional)	suggest to use with D-Link DWA-127 Wireless Networking Adapter.
	 Ultra Series suggest to use with EW-7811Un
	 Other brand and model of wireless network adapter may not
	compatible to our printer

2. Printing Work Flow

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



• Flow Chart: From STL file to print job file



Input: SLC file



Utility.exe

2.1Utility Operation Steps

2.1.1 Open Utility and Connect to printer

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



- 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]

2.1.2 Choose a Printer

- Select printer, also select building platform size.
- Set printer information whenever using this panel

🔴 4K 250 LK50H	DA1224BDAT9999 🖂 😂 💿
	Profession 250
Name:	4K 250
IP address:	
	01-



2.1.3 Open Utility and Connect to printer

- White frame is the largest printing boundary
- Blue frame is suggest printing boundary



2.1.4 Import file

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



- How to import .slc file (sliced file)
 - Tool bar, icon as picture on the right

AIZ 050 L IZ 50LL			T
V 4K 200 LKOOH	DA1224BDA199999		*5
	Profession 250		
Name:	4K 250		
IP address:	a x a		
Select File		Select slc file	
Input:			*
Output: C://20210107	-2_LK50HDA1224BDAT9999.3dp		
Estimated Time:			~
ayer Thickness(um): [
Generate Base from	Image		-
	Base Layer number: 1	*	
nexagon			
Convert File	1	t	K Z
Convert File	0% Convert		
Convert File Launch 3D Printer	0% Convert		100

2.1.5 Hot key

- 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
- Alf+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



2.1.6 Duplicate and Resize Model

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

Property import property import property import DR025-GG.stl 1 Differ scale in three axis Duplicate
property import property import DR025-GG.stl 1 Deplicate Duplicate Object X V Z Volume(m)
Duplicate Y Z Volume(ml) 0 0 0 1
Duplicate Duplicate Y Z Volume(ml) 0 0 118/4017 26:2993 0 0 118/4017 26:2993 0 118/4017 26:2993 10 118/4017 26:2993 10 118/4017 26:2993 10 118/4017 26:2993 10 118/4017 26:2993 10 118/4017 26:2993 10 118/4017 27:400 118/4017 27:400 28:400 29:400 20:400 <
Duplicate Duplicate Y Z Volume(ml) 118/017 25:2293 10:616332
Duplicate Duplicate Y Z Volume(ml) 0bject X Y Z Volume(ml) 118/4917 26/2893 0.616/392 C C C C
Duplicate Duplicate Y Z Volume(ml) Object X Y Z Volume(ml) 0 0 0
Y Z Volume(ml) Object X Y Z Volume(ml) 1 18.4017 06.16322 0.616322
Szemmi: 1 80/29 1 8491/ 1 26/2692 2 2
Sizermmi: 1 (8 UL29 11 18 49) / 1 26 2893 1 (1516392

 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

property import DR025-GG.stl 1				
Duplicate	a construction of the second se	Rotation: 0 Scale: 2	g 0 2	2 X 90 2
Object X Y Z Size(mm): 18.0129 18.4917 26.2893 caling Factor: 1 IF All	Volume(ml) 0.616392	I Floor	Åpply	Cancel

• Duplicate selected model

pro	perty impo	rt		
DR025-GG.stl 6				•
DR025-GG.stl 7				
OR025-GG.stl 8				
DR025-GG.stl 9				
DR025-GG.stl 10				
DR025-GG.stl 11				
DR025-GG.stl 12				
DR025-GG.stl 13				
DR025-GG.stl 14				-1
				_
	Duplicate			
Object X	Y	Z	Volu	ne(ml)
Size(mm): [18.0129]	18 4917	26 289	3 0 61	6393]

2.1.7 Generate Nameplate on print model

Nameplate is a serial number combines date, machine serial number and printing job number.



2.1.8 Undo and Redo

Tool bar, icon as picture



2.1.9 Auto arrangement

Tool bar, icon as picture on the right side, clicking icon will arrange models automatically.



2.1.10 Auto support

Tool bar, as picture on the right, build auto support for every model



2.1.11 Model arrangement

• 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.

property import DR025-GG.stl 6	۵ ۵
Duplicate	- + + + + + +
Object X Y Z Volume(ml) Size(mm): 18.0129 18.4917 26.2893 0.616392 Scaling Factor: 1 I All	
	ふ 派

- Select model, and click on tool bar
 - Drag and move the model
 - Or set X, Y, Z coordinate







Ľ,

- Select model, and click on tool bar
 - Set X, Y, Z axis rotation degree
 - Or use horizontal scroll bar



• Select model, and click on tool bar, put model upside down



- Select model, and click on tool bar, click on one side, face up
 - EX: <u>Select this side</u>





() の ()

ĩ,

Select model, and click on tool bar, click on one side, face down

EX: Select this side



• Select model, and click on tool bar, back to the default rotation.



2.1.12 Build supports

- Select one model (been high light), click the icon (green arrow) on the tool bar and support edit window will show.
 - Add support, click where you'd like to add support



	Support	?	×	
	View mode			
	Angle 45.0 Degree Skeleton		- 1	
	Revolve Point: Supporter Default			- Modify Supp
Add Support	Base Supporter			
	Ø * X	ł	¥	
Support List	Supporter List:	-2504		
	Support 1			
Remove All List				
	-			

Support setting

- (a) 3 kinds of basic support setting can be selected by user preference
 - LIGHT
 - MEDIUM
 - HEAVY

LIGHT • + X
A Shape: TOP_Cone 133%(auto) Radius(mm): 0.25
Contact(mm): 1 0 0.1
Mirror Supporter: X Y

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

- 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

ТОР	Shape: TOP_Cone 133%(auto)
-	Radius(mm): 0.25 b
Middle	Length(mm): 1
Bottom	Contact(mm): 0.1 c
	Mirror Supporter: X Y

- Middle support setting
 - (a) Middle support shape

	EDIT - + X &
	Shape: MID_Cone 133%(auto)
⁄liddle	
	0
	Mirror Supporter: 🗖 X 🔲 Y

Bottom support setting

- (a) Top support shape
- (b) Top support radius
- (c) Top support thickness

	EDIT - + × &
	Shape: BOTTOM_Circle a Radius(mm): 1.5 b Thickness(mm): 0.25 c
ottom	
	Mirror Supporter: 🔲 X 🔲 Y

• Mirror supporter: Build symmetrical supports according to X axis or Y axis.

LIGHT • + X & Shape: TOP_Cone 133%(auto) • Padius(mm): 0.25
Length(mm): 1 Contact(mm): 0.1
Mirror Supporter: 🗌 X 🔲 Y

- X type supporter:
 - First build at least two supports.
 - Click cross structure function
 - Click two supports which you like to have cross structure between
 - Click two supports again can cancel the cross structure





2.1.13 Build Base

- None: no base
- Defined: built-in base
- Shadow: shadow base

one	
one	-
afinad	
CITIEO	
hadow	

Defined Base:

	Base Supporter	Default
	a Type: <u>BASE_Rectange</u> b Object Size: C Thickness(mm): 0.5	ular • 100%

- (a) Base Type
 - (b) Base Size
 - (c) Base Thickness
- Shadow Base

Support	8 X
View mode Angle 45.0 Degree Skeleton Revolve Point: Supporter Default]
Base Supporter Shadow	
Offest(mm)	2.25 🚔 46 🜩
Thuckness(mm)	0.50 🚔 Generate

parameters



2.1.14 Build support – View mode

- Angle Indicator will help identify the bevel angle of object surface
 - Below a certain angle will become red in preview
 - These red area indicates area more flat and possibly hang in air, where need to build supports



- Revolve Point : Supporter
 - Select one support
 - Click Revolve point: supporter
 - Use fix support as view rotation center
 - See the 360 degree position of support

/iew mode			
□ Angle 45.0	Degree 🗆	Skeleton	
Revolve Point:	Supporter	Default	

Revolve Point: Default (Use platform as view rotation center)

iew mode			
□ Angle 45.0	🕂 Degree 🛛	Skeleton	
Revolve Point:	Supporter	Default	

2.1.15 Tool bar (default in left side)





2.1.16 Tool bar – Options setting

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

 Procedure Control Slice and Convert Form General Function Auto Setting Extra Setting 	 Directly save the slc file into below location every time .slc file location: C:/ Directly convert after slicing. Retain the .slc file *Default location of output(.3dp, .mii) is same as the slc file's. Directly launch to printer after convert finished Directly start to print Input resin name before converting. 	f	×
	OK	Cano	cel

E

Input resin name before converting

✓ Input resin name before converting.

If you enable this option, message will show after clicking the convert button.

		Resin Name	? ×
Convert File 0%	Convert	Please input resin name	or scan the barcode
		OK	Cancel

• Printer => General setting

Printer panel setting : Settings for hide some function panel.

	Printer
	Choose a printer
Options	Advance 255 🗸 🔂 💽
Options Procedure Control Slice and Convert Form General Function Auto Setting Extra Setting Reload Data whenever connecting to Printer Language: English OK	Advance 255 Advance 255 Name: Advance 255 IP address: Select File Input: C://20190917-5.slc Output: C://20190917-5_LK50HBA1731BBA T9999.3dp Estimated Time: 2H 35M 48S Layer Thickness(um): 100 Printing Setting Fast Image Base Layer Image Base Layer number: O% Convert Launch 3D Printer Launch to printing

Reload Data(Printer calibration data) whenever connecting to printer.

Reload Data whenever connecting to Printer

This option is set for old series of printer.

User interface language

Options		?	×
 Procedure Control Slice and Convert Form General Function Auto Setting Extra Setting 	Printer Form Searcher hides SelectFile hides Scenario Setting hides LaunchButton hides Reload Data whenever connecting to Printer Language: English English Deutsch español 日本語 Português 简体中文 繁體中文	✓	
	OK	Can	cel

- Relatively complete: English, Traditional Chinese, Simplified Chinese
- Other languages (Deutsch, Español, Japanese.....): incomplete
 If you want, you can help us to translate other languages ©
- Function => Auto setting:
 - Distance: The distance of supports and supports. The density of supports.
 - Angle: The model surface below a certain angle, will automatically build supports.

 Procedure Control Slice and Convert Form General 	AutoSupport Arguments: Distance: 3.00 🗣 mm Angle: 45.0 🗣	
✓ Function Auto Sotting		
Extra Setting		

• Function => Extra setting:

There is a SLC file included in the file exported by Materiallize. And password is necessary to extract the SLC file. Input the password and click OK button. If you want to reset the password, clicked Reset button.

Options	?	×
 Procedure Control Slice and Convert Form General Function Auto Setting Extra Setting 	Password for Materialize's ouput file	
	OK Ca	incel

Then you can import the file (*.zip, *.vbp) exported by Materialize by clicking the button below.

Input:	C:/Users/ching	.lin/Desktop/20240130.slc	
Output:	ng.lin/Desktop/	20240130_LM30LBA2231AMA	T0020.3dp
Estimat	ted Time:	2H 25M 52S	
Layer Thi	ickness(um):	12.5	

 \uparrow You can see this item in page 8.

This software will try to extract the SLC file with the password in the option.

2.1.17 Slicing

	0	T SLC	
-2	۰.	1.05	
10	-		
-13	3	25	
1	\sim	~	

- Click slicing icon, slice dialog will show.
- Choose printing setting(*.mps) you want.
- Type and thickness of slicing are based on values saved in mps file.
- Type 1 Uniform thickness:
 - (a) Open edit page of mps(see section of printing setting) and choose thickness
 - (b) Or choose thickness directly

Printing Setting(*.mps)	а
Normal	•
Thickness(um) 100 -	Slice

- Type 2 Variable thickness:
 - (a) You must change multiple thickness in edit page. (see section of printing setting)

Printing Setting(*.mps)	a
variable_thickness_test	- - 🔪 ×
ariable slicing with setting in mps file	Slice

Click slice button, and choose the file path you want to save.



2.1.18 Printer setting	
 In slicing stage and convert stage , you c 	can choose and edit printing setting(*.mps).
 In slicing stage and convert stage , you conver	can choose and edit printing setting(*.mps).
	hexagon Base Layer number: 1 Convert File O% Convert Launch 3D Printer Launch to printing

a. uting Setting(*.mps)	b c d
alpha_test	- 🔁 💌 🗙

(a) mps list

(b) Choose a folder you want to put mps files, software will add names of mps files to list(a).
 See more in next page.

- (c) Into edit page
- (d) Delete current mps file

- mps file management
 - 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
 - Put mps files into user assigned folder path, the mps list will show up in the printing setting list as below picture.

noose a primer		
•	Model 125 🔹 😰 💽	
	MiiCraft 125	
Name:	Model 125	
IP address:	6.9 E	
elect File		
Input: C://20190	0917-7.slc	
Output: C://20190	0917-7_LI90AA1622AJAT9999.mii	
stimated Time: 5H 5	51M 15S Layer Thickness(um): 100	
rinting Setting		
llow		
7 Generate Base fro	um Image	
O Generale Dase IIO		
ubic	👻 🦲 Base Layer number: 5 💌	
ubic Convert File	Base Layer number: 5 🔻	
ubic Convert File	▼ Base Layer number: 5 ▼ 0% Convert	
ubic Convert File aunch 3D Printer	Base Layer number: 5 🔻	
ubic Convert File aunch 3D Printer	Base Layer number: 5 •]

	Model 125	- M R
	Model 125	
	MiiCraft 125	
Name:	Model 125	
IP address:	16 KOR	
lect File		
Input: C://2019	0917-7.slc	
Output: C://2019		
imated Time: 5H .	Printing Setting Lis	st ness(um): 100
inting Setting		
ow		- 🦲 🗟 🗙
ow ormal		
ST M125 M150-BV0 M125 M150 DV0	121 IP Rigid for 405nm	yer number: 5 🔻
M125_M150-BVC	132 IF High-Ressain for 405nm	
	0%	Convert
unch 3D Printer		

• Edit Page

Curing Time(s): 5.0	0	Resi	с			Thickness(um): 50
Speed: Md	luaned •	Starting Height	mm): [0			<u> </u>
Speeu. no		Module	Action	Distance		Speed
Gap Adj(mm): 0.1	3]		
Base Layers: 1		Picker	ILayer Upward	6.00	37.50	
Base Curing(s): 50	00	Picker	• Down •	6.00	\$ 75.00	↑ ↑
Buffer Lavers: 10		Stay	•	0.00	5.00	t+
						Add New A
Power(%) : 10	0					
Print Delay(s): 1	(A) (F)					
	Image Calibration: 📝					
	w (dofault)					
Anti-aliasing: Ma	AN (UETAULI)					
Anti-aliasing: Ma Pixel Offset: 0 ((default)					
Anti-aliasing: Ma Pixel Offset: 0 (e Enhance: 0 •	(default)					
Anti-aliasing: Ma Pixel Offset: 0 (e Enhance: 0 dowr Exposure	(default) • (default) •					
Anti-aliasing: Mathematical Pixel Offset: 0 e Enhance: 0 utour Exposure s: s: 0	(default) • Soft Focus: 0 • 10 * Gap: 0 *					
Anti-aliasing: Mathematical Pixel Offset: 0 ge Enhance: 0 • ntour Exposure • • ls: 0 • Exp(%): in Shrinkage Compensation • • • y: 0.00 • •	(default) • Soft Focus: 0 10 * Gep: 0 on * Y(%): 0.00					

Icon list on the top



• (a) Switch to uniform/variable thickness.

This icon is missing means this mps is default mps file or this printer didn't support variable slicing. See more in page 36

- (b) New mps file
- (c) Duplicate mps file
- (d) Import mps file
- (e) Export mps file
- (f) Save current mps file
- (g) Save and exit edit page
- (h) Exit edit page

• Parameters on the left side

Curing lime(s):	5.00	
Speed :	Normal	. 1
Gap ∆dj(mm):	0.10	-
Base Layers:	1	
Base Curing(s):	50.00	
Buffer Layers:	10	
Power(%):	100	
Print Delay(s):	10	
) Anti-aliasing:	Image Calibration Max (default)	• 🗹
Pixel Offset:	0 (default)	•
Edge Enhance: 0	▼ Soft Focus: 0	•
Contour Exposure Pixels: 0 🗘 Exp(9	6): 100 🗘 Gap: 0	•
Resin Shrinkage Compen X(%): 0.00	sation • Y(%): 0.00	•

- (a) Curimg Time (s): The amount of time for UV curing(seconds) per layer.
- (b) Speed: Slow, Normal and Fast, means different peeling speed. Also user can select "advanced" to set user defined peeling mode.
- (c) Gap Adj (mm): Adjust thickness of the first layer.
- (d) Base Layers: Define number of base layers.
- (e) Base Curing (s): Curing time for base layers.
- (f) Buffer Layers: Set the Number of buffer layers.
- (g) Power (%): At 100% is the existing brightness of light engine. User can adjust the power in response to different resin character.
- (h) Print Delay (s): For first layer, picker stay for at least 1 sec. then cure.

- (i) Image Calibration: Make image calibration for this printer.
- (j) Anti-aliasing:



- (k) 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
- (I) Edge Enhance and Soft Edge:



- (m) 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
 - If user set contour pixel, one image will become 2 image, contour and inside.





- (n) Resin Shrinkage Compensation:
 - +0% to 9.9% \rightarrow Enlarge an image •
 - -0% to -9.9% \rightarrow Shrink an image
- (o) Flip image by X axis or Y axis
- What is Buffer layer?
 - Within buffer layer, the curing time is gradually change from base layer setting to layer setting.



• Advance Setting: Customize peeling mode

Choosing Advanced in speed field, red box on the right will show.

Curing Time(s): 3.00	1	B	Ceain :	<i></i>	-					Thickness(tas):	50	
Speed: Advanced	•	Starting Heij Advanced Set	ghtinný: Ting	0	-						it.	2
Gap Adj(mm): 0.13		Module	•	Action		0	Distance		Speed	1	<u>í.</u>	
Base Layers: 1	1	Picker	• [1	Layer Upward	•	6.00		1	37.50	0	t+	×
Base Curing(s): 50.00	1	Picker	*] [D	lowa	•	6.00		(2)	75.00	0	1+	×
Buffer Layers: 10	Å	Stay	•			0.00		38	5.00	0	1+	×
Power(%): 100		-								A66	New A	ction
Power(5): 100											. 464	Add New A

• Advanced Setting Region

Starting Height(r	a.			b c → + X	-
Advanced Setting		200			-
Module	Action	Distance	Speed		
Picker -	1Layer Upward 🔹	6.00	37.50	÷ (+ ×	
Picker -	Down	6.00	75.00	↑+ ×	→ Peeling mode
Stay -	•	0.00	5.00	÷ (+ ×	
				Add New Action	

(a) Height list, the height peeling mode is applied from.
 Peeling mode will change as starting height changed.

- (b) Add a height
- (c) Delete current height

For Example, there are three heights (0, 10, 15 mm) in the list.



• Range from 0 mm to 10 mm, platform moves based on peeling mode.

- Range from 10 mm to 15mm, platform moves based on peeling mode1.
- 15 mm above , platform moves base on peeling mode 2
- Correlation between slicing and printing setting(mps file)
 - Uniform slicing:

 \downarrow this icon is off, sole value is enough for curing time and thickness(red line).

-]	Resin:			Thicknes	s(um): 50
Curing Time(s):	5.00		Starting Height(mm):	0		11	• +
Speed:	Advanced	•	Advanced Setting			von	
Gap Adj(mm):	0.13		Module	Action	Distance] Speed	
70 909 99		Land -	Picker T	Laver II nward 🔹	6.00	37.50	

Variable Slicing

\downarrow this icon is on

🥌 📑 🛱 (≩ C+ ≧ 🥑 🤇	3					
Speed:	Advanced 👻	Resin: Starting Height(mm):	. [0	_			• + X
Gap Adj(mm):	0.13	Thickness(um)	: 50 🔹	Curing Time(s): 5.	00 💽		
Base Layers:	1	Advanced Setting Module	Action		Distance	Speed	

Thickness and Curing Time parameters moved to advance setting region, so speed always equals to Advanced. You need to set thickness and curing time in every height interval as peeling mode. For examples, you want to divide slicing into 3 height interval, 0mm, 10mm and 15mm respectively.



Set different Thickness and Curing Time parameters in three interval. Variable Slicing will be executed when you choose this mps file.

You still can set same value in thickness and curing time, this situation just like uniform slicing do.

Note: The printing settings supported by each series of Miicraft 3D Printer are as follows:

V : Active

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

2.1.19 Convert to print job file (*.mii, *.3dp)

Click the icon , the window below will show.

 Hyper125 LL70HCA2016AJA T0001 SD PRINTER H125 Name: Hyper125 IP address:	Choose a printer	
3D PRINTER H125 Name: Hyper125 IP address:	🔴 Ну	per125 LL70HCA2016AJA T0001 🔹 😰 💽
Name: Hyper125 IP address:		3D PRINTER H125
IP address:	Name:	Hyper125
Select File Input: D:/Cdesktop cat/3D model/test/20230512-1.sk Output: op cat/3D model/test/20230512-1_LL70HCA2016AJAT0001.3dp Estimated Time: OH 53M 31S Layer Thickness(um): 50 'rinting Setting(*.mps) Normal Generate Base from Image ubic Generate Base from Image ubic O% Convert aunch 3D Printer	IP address:	08 U
Input: D:/Cdesktop cat/3D model/test/20230512-1.skc	Select File	
Output: >p cat/3D model/test/20230512-1_LL70HCA2016AJAT0001.3dp Estimated Time: OH 53M 31S Layer Thickness(um): 50 'rinting Setting(*.mps) Iormal	Input: D:/C	desktop cat/3D model/test/20230512-1.slc
Estimated Time: OH 53M 31S Layer Thickness(um): 50 'rinting Setting(*.mps) Iormal Generate Base from Image ubic Generate Base from Image ubic Convert File O% Convert aunch 3D Printer	Output:)p ca	/3D model/test/20230512-1_LL70HCA2016AJAT0001.3dp
Layer Thickness(um): 50 Printing Setting(*.mps) Iormal Generate Base from Image ubic Base Layer number: 5 Convert File 0% Convert aunch 3D Printer	Estimated Ti	me: 0H 53M 31S
Printing Setting(*.mps) Normal	Layer Thicknes	s(um): 50
Iormal Generate Base from Image ubic Base Layer number: 5 Convert File O% Convert aunch 3D Printer	Printing Setting(*.mps)
Convert File Convert File Convert 3D Printer Convert	Normal	
ubic Base Layer number: 5 Convert File 0% Convert aunch 3D Printer	📝 Generate Bas	e from Image
Convert File 0% Convert .aunch 3D Printer	cubic	Base Layer number: 5
0% Convert	Convert File	
aunch 3D Printer		0% Convert
	Launch 3D Print	er
Launch to printing		Launch to printing

Choose	a printer		
•	3DP LM30LBA	A2231AMA T0020	
		Miicraft Alpha 150	
1	Name:	3DP	
IP ad	dress:	a 193	

- In this stage, you still can change platform size from printer list.
- To print(only online printer), please check the light is green. See more in step 5. •



- 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 closed.

-	C+	
	Step	2

 Input: D:/Cdesktop cat 	'3D model/test/20230512-1.slc	
Output: p cat/3D model/	test/20230512-1_LL70HCA2016AJAT00	01.3dp
•	—	
Estimated Time:	0H 53M 31S	1
I seems This has a sefermed.	50	

- (a) File path of slc file, default path is the latest slicing file.
- (b) Click this button and choose slc file path.
- (c) Output path of print job file
- (d) Click this button and change output path.
- (e) show thickness of slc file

 \downarrow If thickness of slice is variable

Estimated Time: b OH 40M 0S	
Layer Inickness(um):	
Printing Setting(*.mps)	

- (a) You still can change printing setting here. Output file will include these printing parameters.
- (b) If you change or edit mps file, estimated time of printing will change.

Step4

🔽 Generate Base from Image	с.	d
• cubic	-	Base Layer number: 5 🔻

- (a) If blend base with image you choose
- (b) Image list
- (c) Folder path of base image
 - X You can put image but must check resolution of image.
- (d) Number of layer blending with base image. (from layer 0)





 $\ensuremath{\uparrow}\xspace$ Default base image, shape of hole are cubic, diamond and hexagon respectively Step5

Click button to start of

Click button to start converting,

	0%	Convert
	L	
Convert File		

Click stop button if you want to cancel this converting process.

Step6

-	
I sunch to printing	
	Launch to printing

After converting finish, click launch button to invoke controller with browser.



Upload printing job file (*.mii; *.3dp) to printer.

2.1.20 Print Via Computer



2.1.20.1 Engineering mode (Computer)



	If Machine is Advance serie right projector to controlor Control the projector Projector Control	es, you can choose left or right projector to control	T1/T2/T3 : Use test pattern inside the projector, or select a pattern from menu
	ON	OFF	
	T1	Projector T2 T3	Tick this option to apply printer calibration function
	Please Select a Pa	ttern. 🗸	
	Uniformity/Distortion Mask Offset X:	0	Fix the left projector, and move right projector through X axis or Y axis
	Offset Y:	0 Set	Light(%): At 100% is the existing brightness of light
	18- <mark>112</mark>	Calibrate	engine. The suggest range is base on the printer's condition, user can only set the % within the
	Curing Time(s):	4 Test	suggest range.
(Close	Calibrate: Return to default setting of brightness
	Curing Time(s): Test print cu	uring time.	

Projector Control		Fix the left projector image, and	a move right
ON Left Projector Right Projector T1 T2	OFF T3	projector image through X axis.	
Please Select a Pattern.	•		
Offset X: 0		Eix the left projector image and	d movo right
Offset Y:	Set	nrojector image through V axis	a move right
Light(%): 100	Set		٦
18- <mark>1</mark> 12	Calibrate	Printer back side	Printer back side
Curing Time(s): 4	Test		
		Printer door side	Printer door side
	•	Offset Y : -9	Offset Y : 9
.20.2 Printing record a	nd update firmw	Printing History	
20.2 Printing record a	nd update firmw	vare Printing History Search	h interval
20.2 Printing record a	nd update firmw	Printing History /04/18 - 2019/05/18 Reload /04/18 - 2019/05/18 Reload /04/18 - 2019/05/18 Reload /104/18 - 2019/05/18 Reload /04/18 - 2019/05/18 Reload /04/18 - 2019/05/18 Reload /104/18 - 2019/05/18 Reload	h interval
20.2 Printing record a	nd update firmw	Vare Printing History Search 2019/05/18 Reload ayers: 101997 Ime: 288h-29m-45s Reload ayers: 101997 Ime: 288h-29m-45s Reload Ayers: 101997 Ime: 288h-29m-45s Reload Ayers: 101997 Ime: 288h-29m-45s Reload Ayers: 101997 Ime: 2019/05/18 Reload Ayers: 10197 Ime: 2019/05/18 Reload Ayers: 10197	h interval

2.1.20.3 Print via touch screen panel



To print:



- Select .3DP file from
 - machine (file saved in printer) or
 - USB (insert into printer)
- File input size limitation:
 - Upload file from Computer, file limitation 500MB
 - Upload file from USB, file limitation 1G

\leftarrow	Select a file
/storage/machine/	
<= Go to parent folder	
Test_Pattern_01.3dp	54.57 MB
Test_Pattern_02.3dp	136.61 KB

- .3DP file
 - Save as : Save printing setting as another .3DP file
 - Rename : Rename .3DP file
 - Delete : Delete .3DP file



Printing



2.1.20.4 Touch screen panel -Engineering mode

• Eng. Mode



Motor Control





- 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.
 - Use "Clean tank" function via touch panel, it project a complete patter, the residual will be transformed into a solid layer.
 - Using the scrape, scoop up one side of the layer. Then carefully lift to remove solid layer from the teflon module.

Setting

\leftarrow	Engineering Mode	
Motor Control Projector Clean Tank	WiFi Upgrade FW	
Record Camera Video to USB:	Setting	Save video or not Save in which device
OFF Time to StandBy Mode: Close		Enable Stand by mode or not Duration
Adjust window Position		Adjust panel's window position