EPAX 3D

EPAX 3D

X133 13.3inch * 400mm

X156 15.6inch * 400mm

X10 10.1inch * 250mm

E10

E6

X1 5.5inch *155mm

EPAX LCD Resin 3D Printer User Manual

Read the User Manual before operating the product

It is strongly recommended that you watch our tutorial videos before operating your printer for the first time.

For additional instructions, videos, and resources, please visit **www.epax3d.com** and visit the Support section.

<u>Table of Contents</u>

Section I. Technical Specifications
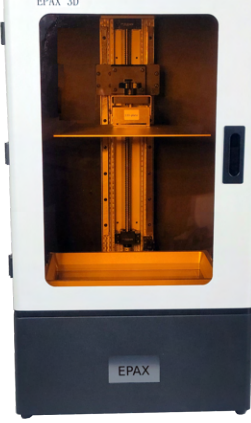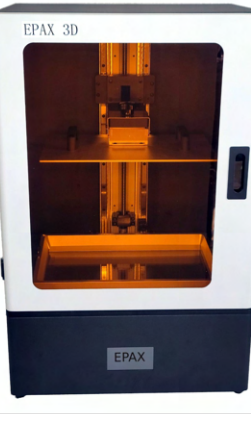
E6/E10 SERIES

E6 - 6" Mono screen

E10 - 8.9" Mono screen

E10 - 10.1″ Mono screen

EPAX 3D

Model Name	EPAX E6 UV LCD 3D Printer	EPAX E10 4K UV LCD 3D PRINTER	EPAX E10 5K UV LCD 3D PRINTER
Build Volume (L*W*H)	128mm*81mm*155mm	192mm*120mm*250mm	221.4mm*129.6mm*250mm
Printing Technology	Monochrome LCD	Monochrome LCD	Monochrome LCD
Material	Resin	Resin	Resin
Resolution	2560*1620 (2K)	3840*2400 (4K)	4920*2880 (5K)
Layer Thickness	0.02 ~ 0.1 mm	0.02 ~ 0.1 mm	0.02~0.1mm
Connectivity	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet
Wi-Fi	No	No	No
Product Size (W*D*H)	9 x 8 x 15 inches	13 x 12.25 x 21.25 inches	13 x 12.25 x 21.25 inches
Product Weight	20lbs	40lbs	40lbs
Platform	Molded Body with Soft Aluminum Face	Molded Body with Soft Aluminum Face	Molded Body with Soft Aluminum Face
Preferred Slicer	ChiTuBox	ChiTuBox	ChiTuBox
Light Source	Parallel Light Matrix	Parallel Light Matrix	Parallel Light Matrix
Film	nFEP Film	nFEP Film	nFEP Film
Touch Screen	3.5 inch Color TFT	3.5 inch Color TFT	3.5 inch Color TFT
File Type	.ctb	.ctb	.ctb
Max Resin Volume	300mL (With Platform)	700mL (With Platform)	700mL (With Platform)

X1 Series

EPAX 3D

X1-N 5.5" Color Screen

X1-N-DJ 5.5" Color Screen W/ Parallel Light

X1K 6" Mono Screen W/ Parallel Light

Model Name	EPAX X1-N UV LCD 3D Printer	EPAX X1-N-DJ UV LCD 3D Printer	EPAX X1K 6" UV LCD 3D Printer	EPAX X1-4K UV LCD 3D Printer
Build Volume (L*W*H)	115mm*65mm*155mm	115mm*65mm*155mm	130.56mm * 82.62mm * 155mm	120.96mm*68.04mm*155mm
Printing Technology	Color LCD	Color LCD	Monochrome LCD	Monochrome LCD
Material	Resin	Resin	Resin	Resin
Resolution	1440*2560 (2K)	1440*2560 (2K)	1620*2560 (2K)	2160*3840 (4K)
Layer Thickness	0.02 ~ 0.1 mm	0.02 ~ 0.1 mm	0.02~0.1mm	0.02~0.1mm
Connectivity	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet
Wi-Fi	No	No	No	No
Product Size (W*D*H)	9.5 x 10 x 17 Inches	9.5 x 10 x 17 Inches	9.5 x 10 x 17 Inches	9.5 x 10 x 17 Inches
Product Weight	25lbs	25lbs	25lbs	25lbs
Platform/Vat	Soft Aluminum Angled Platform and Vat	Soft Aluminum Angled Platform and Vat	Soft Aluminum Angled Platform and Vat	Soft Aluminum Angled Platform and Vat
Preferred Slicer	ChiTuBox	ChiTuBox	ChiTuBox	ChiTuBox
Light Source	40W 5 x 10 LED Array	Parallel Light Matrix	Parallel Light Matrix	Parallel Light Matrix
Film	nFEP Film	nFEP Film	nFEP Film	nFEP Film
Touch Screen	3.5 inch Color TFT	3.5 inch Color TFT	3.5 inch Color TFT	3.5 inch Color TFT
File Type	.ctb	.ctb	.ctb	.ctb
Max Resin Volume	300mL (With Platform)	300mL (With Platform)	300mL (With Platform)	300mL (With Platform)

X10 series and X133/X156


X10 8.9" 4K Mono screen

X10 10.1" 5K Mono screen or 2K Color screen

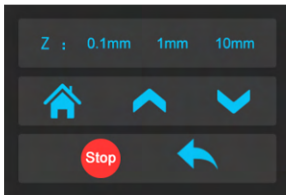X133 13.3" Mono screen

X156 15.6" Color screen

EPAX 3D

Model Name	EPAX X10 4K UV LCD 3D Printer	EPAX X10 5K UV LCD 3D Printer	EPAX X133 UV LCD 3D Printer	EPAX X156 UV LCD 3D Printer
Build Volume (L*W*H)	192mm*120mm*250mm	221.4mm*129.6mm*250mm	292mm * 165mm * 400mm	345mm * 194mm * 400mm
Printing Technology	Monochrome LCD	Color or Mono LCD	Monochrome LCD	Color LCD
Material	Resin	Resin	Resin	Resin
Resolution	3840*2400 (4K)	1440*2560 (2K Color) or 4920*2880 (5K Mono)	3840x2160 (4K)	3840x2160 (4K)
Layer Thickness	0.02 ~ 0.1 mm	0.02 ~ 0.1 mm	0.05~0.1mm	0.05~0.1mm
Connectivity	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet	USB Flash Drive, Ethernet
Wi-Fi	No	No	No	No
Product Size (W*D*H)	14.5 x 15 x 21 Inches	14.5 x 15 x 21 Inches	18 x 15 x 31 Inches	20 x 17 x 31 Inches
Product Weight	50lbs	50lbs	115lbs	125lbs
Platform	Soft Aluminum Angled Platform and Vat	Soft Aluminum Angled Platform and Vat	Hard Aluminum Angled Platform and Vat	Hard Aluminum Angled Platform and Vat
Preferred Slicer	ChiTuBox	ChiTuBox	ChiTuBox	ChiTuBox
Light Source	Parallel Light Matrix	Parallel Light Matrix (5K only)	LED Matrix	LED Matrix
Film	nFEP Film	nFEP Film	nFEP Film	nFEP Film
Touch Screen	3.5 inch Color TFT	3.5 inch Color TFT	4.9 inch Color TFT	4.9 inch Color TFT
File Type	.ctb	.cbddlp (2K only) .ctb(5K only)	.ctb .cbddlp	.ctb .cbddlp
Max Resin Volume	900mL (With Platform)	900mL (With Platform)	1700mL (With Platform)	2300mL (With Platform)

Section II. Touchscreen Menus

New UI

Main Menu

Tool   System   Print
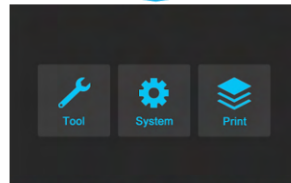
Tool Page - Contains manual z-axis controls, exposure tests, and a cleaning feature. You may also reset the Z=0 (logical zero) position here

System Page - Contains useful information about the product, contact info, network info, and a touchscreen calibration feature

Print Page - Select files from your USB Drive to print. This is where you can perform firmware updates as well.

Manual   Exposure   Set Z=0
Stop   Clean   Back

Information   Network   Service
Language   Calibration   Back

Document_A   Document_A
Chitu system
demo.ctb

Z : 0.1mm 1mm 10mm
Stop
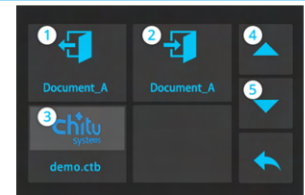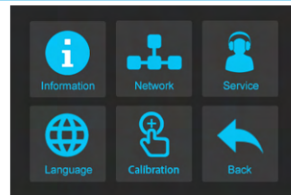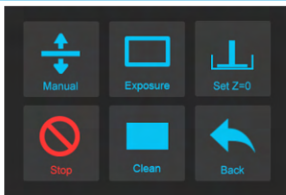
Manual page allows you to manually move the z-axis and send the printer to the home (physical zero) position

1⃝ ChiTu L H2 Series
2⃝ ID : XXXXXXXXXXXXXXXXX
3⃝ : XXXXXXXXXXXXXX
4⃝
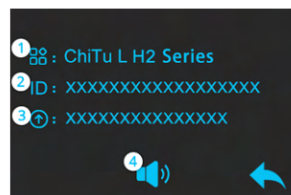
The information screen can tell you which firmware you are running and what resolution your screen is at.

Once you've selected a file you can choose to print or delete the file from the USB.

1⃝ demo.ctb
Chitu systems

Please set the exposure time of the image:
200 S
Next

Exposure/Clean - Set the amount of time you want the screen to run with these features.

Once you've begun printing you will see a layer preview here. You can pause or stop the print at any time.

35%
demo.ctb
:03h32 :00h42 :121/525

Exposuring...   Exposuring...

Exposure test is for making sure the screen is working as intended.
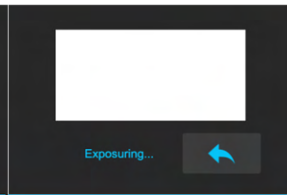
Clean feature allows you to check the screen for dead pixels and clean the vat

You may also edit your bottom layer count, and exposure settings mid-print if needed.

Bottom Layer Count :	5
Bottom Exposure time (s) :	35.000
Exposure time (s) :	2.750
Light--off Delay (s) :	0.000

Section III. EPAX Resins

EPAX Resins

EPAX developed the resins below for our customers. They have been printed continuously in our factory for our printer R&D and testing needs.

Resin Name	General Purpose Rapid Resin	Hard Resin	Hard and Tough Resin	Porcelain-like Resin	Dental Model Resin	Water Washable Resin	Jewelry Castable Resin
Description	• Everyday all purpose resin with good hardness. • Fast curing speed. • Low cost.	• Designed for large printers. • Can sustain long time background exposure. • High hardness and scratch resistant. • Great for miniature printing.	• High Toughness • High Hardness • Impact Resistant • High Mechanical Properties	• Very low shrinkage rate and very high hardness. • Suitable for dental model printing and any similar needs where low shrinkage rate and high hardness are required.	• Very low shrinkage rate and very good hardness level. • Suitable for making dental models.	• Clean with room temperature water. • low-odor.	Wax based resin Designed for Jewelry Casting
Print Technology	LCD 405nm	LCD 405nm	LCD 405nm	LCD 405nm	LCD 405nm	LCD 405nm	LCD 405nm
Colors Available	Black, Grey, Clear, White, Skin	Black, Grey, Clear, White, Skin	Black, Grey, Clear, White	White	Orange	Black, Grey, Clear, White, Skin	Green
Suggested Exposure Time (0.05mm layer height)	Color Screen: Normal Exposure Time: 8s Bottom Exposure Time: 40s Mono Screen: Normal Exposure Time: 2s	Color Screen: Normal Exposure Time: 10s Bottom Exposure Time: 50s Mono Screen:	Color Screen: Normal Exposure Time: 10s Bottom Exposure Time: 50s Mono Screen:	Color Screen: Normal Exposure Time: 10s Bottom Exposure Time: 50s Mono Screen:	Color Screen: Normal Exposure Time: 10s Bottom Exposure Time: 50s Mono Screen:	Color Screen: Normal Exposure Time: 8s Bottom Exposure Time: 40s Mono Screen:	Color Screen: Normal Exposure Time: 16s Bottom Exposure Time: 80s Mono Screen:
Applications	Miniature, sculpture, prototype, education	Miniature, sculpture, prototype, education	Miniature, sculpture, prototype, education	Sculpture, dental, Education	Dental	Miniature, sculpture, prototype, education	Jewelry
Cost	Low	Medium	Medium to High	Medium to High	Medium to High	High	Very High
Printers recommended for the resin	Suitable for EPAX X1, X10 and any 10.1" or smaller LCD printers on market. Not recommended for larger printers like X133	Suitable for all LCD printers large or small, color or mono, including EPAX X1, X10, X133 and X156.	Suitable for all LCD printers large or small, including EPAX X1, X10, X133 and X156.	EPAX X1, X10 and any 10.1" or smaller LCD printers on market. Not recommended for larger printers like X133 and	EPAX X1, X10 and any similar LCD printers on market. Not recommended for larger printers like X133 and	EPAX X1, X10 and any similar LCD printers on market.	EPAX X1, X10 and any 10.1" or smaller LCD printers on market. Not recommended for larger printer like X133

Section IV. Slicing Software - ChiTuBox

Installation

For the latest slicer download, please visit: **https://www.chitubox.com/download.html**

Slicer Settings

You can find the most up-to-date resin settings for EPAX and eSUN resins here:

https://epax3d.com/pages/resin-settings

For additional machine settings and print settings. you may also visit:

https://epax3d.com/pages/slicer-settings-chitubox

The latest version of ChiTuBox also has settings preloaded for most models. See below for where to find the printers.
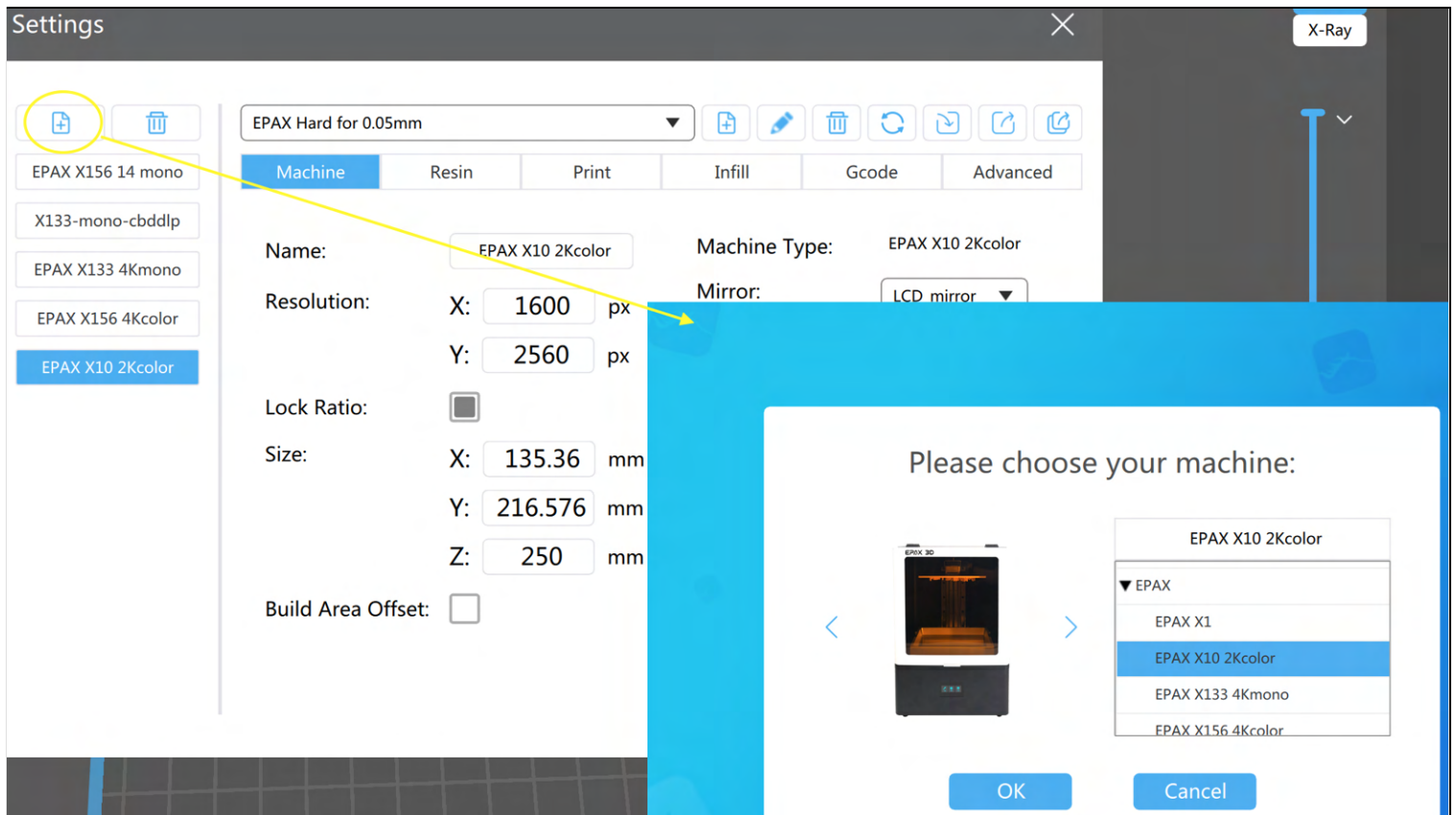
The settings include the Machine Settings (machine volume size, resolution, etc.) as well as basic Print Settings (print layer height, bottom layers, bottom exposure time and regular exposure time, etc.) for our resins under average printing conditions. **If your model does not show up in ChiTuBox's presets, or the predefined profile does not match your machine, you can create a generic profile and enter the values yourself.** See below for where to find the generic profile.
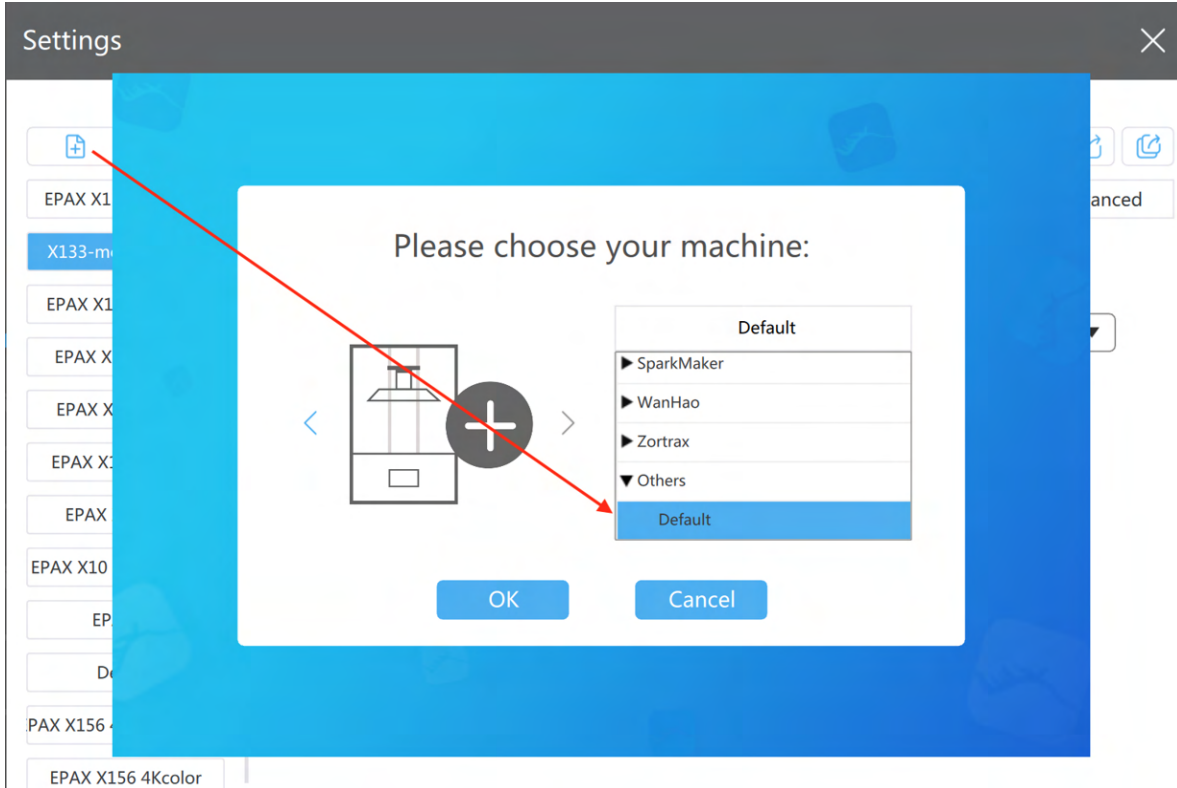
If you are using a resin that is not EPAX or eSUN, we recommend talking to the resin manufacturer about settings. We can try to get you a starting point, but we do not test many other resins on our machines.

For assistance at any time please visit our Facebook group. Many of our users are very active and give advice on the page, including slicer settings for specific resins. Request to join at the link below:

https://www.facebook.com/groups/epax3d

We also answer questions during our business hours Monday through Friday, 9am to 5pm EST USA.

Print Settings

The correct Print Settings are critical for successful and detailed prints, but there is an acceptable range for most types of resin. Some resins are also impacted by the temperature in the printing environment and you will need to adjust your settings accordingly. Generally resins prefer warm temperatures, and many do well between 25°C and 30°C (~77°F and 85°F) .

- **Layer Height:** 0.05mm is recommended (range: 0.02- 0.1mm (0.05-0.1mm on X156/X133)). The thicker the layer height, the longer the exposure time per layer needed.

- **Exposure Time**: Varies depending on resin. Usually between 6-15s on a color screen and 1.5-3s on a mono screen.

- **Bottom Exposure Time:** Varies depending on resin. Usually between 35-60s on a color screen and 20-35 on a mono screen.
  - The longer the bottom exposure time, the better the bottom layer will stick to the plate. Longer exposure times decrease the lifespan of your film and LCD screen because it essentially bakes them.
  - X156 bottom exposure can go as high as 90s for large/heavier prints.

- **Bottom Layer Count:** 4 - 8, depending on the model.

- **Light Delay:** Not needed so it can be set to 0

- **Lift Distance/Bottom Lift Distance:** Varies depending on printer. Preset fairly conservatively on ChiTuBox

- **Lifting Speed/Bottom Lift Speed:** 40-60 mm/min is optimal to work on all of our printers and print jobs

- **Retract Speed:** 150mm/min is optimal to work on all of our printers and print jobs

There are some major differences in settings depending on the size of the printer and which type of LCD screen it is using (Color vs Mono):

Normal Exposure Time - The General rule of thumb is that mono screens require approximately ⅓ to ¼ of color screens' values. The exact time will vary based on the resin being used.

Bottom Exposure Time - Another general rule is that the mono screen value is usually about ½ of color screens. Again exact time will vary based on resin being used.

Bottom Lift Distance - Larger printers require higher lifting distances

Lifting Distance - Larger printers requires higher lifting distances

Some settings can be adjusted to increase the speed of a print. These settings require experimentation on the end user to adjust to reliable settings and also have consequences if not carefully monitored:

Layer Height - Increasing the layer height will lower the overall amount of time needed to print. The consequence will be some increased exposure times. For example at 0.1mm vs 0.05mm, you would essentially cut the print time in half. How much to increase exposure time depends on the resin. Printing at 0.1mm instead of 0.05 does not mean to double the exposure time.

Lifting Speed - Increasing this will speed up how fast the build plate lifts the print off of the film.

WARNING: Going too fast could result in failed prints or torn film meaning wasted resin and potential damage to the screen/machine. Do not increase too much. This is a setting that you progressively increase the more comfortable you feel with the print job being able to handle the speed.

Retract Speed - Increasing this will speed up the build plate lowering back down after lifting.

WARNING: Going too fast could result in prints prematurely lowering before resin fills in gaps in the vat. This will result in missing layers and potentially broken or failed prints. This is a setting that you progressively increase the more comfortable you feel with the print job being able to handle the speed.

Lifting Distance/ Bottom Lift Distance: The Larger the printer means that values increase. The preset values we have on our website, and in ChiTuBox can be decreased depending on the print job and layer height to save a little extra time. It won't save much though, and can be a bit harder to get right.

WARNING: Lowering too far can result in the print not fully peeling off of the film. Can result in missing layers, failed prints, and broken nFEP in special cases.

Slicer Operations

There are many useful operations in the ChiTuBox slicer. If you need additional assistance, remember that our Facebook group is a great resource. You can also email EPAX directly and we will be glad to help. Here is more information about the options in your slicer.

1. Supports

Many complex designs/models will need additional supports while printing. (All supports will need to connect with the foundation or stable part of the print for success. You can always remove them from your final product.) The Supports menu is located on the top right beside the Settings icon. The types of support that can be configured are Light, Medium, and Heavy. Each choice has default settings that can be adjusted via the top, middle, bottom, and raft areas. Learning how to use supports properly stems from experience.

- Light: Small Contact area. Best for small prints and in detailed areas.
- Medium: Larger contact area, and stronger than light supports.
- Heavy: Largest contact area and are the strongest support settings.
- Raft: Base the support sits on. Best used for prints where no part of it is touching the build platform i.e. the print is suspended. Can be edited for stronger adhesion to the build platform.
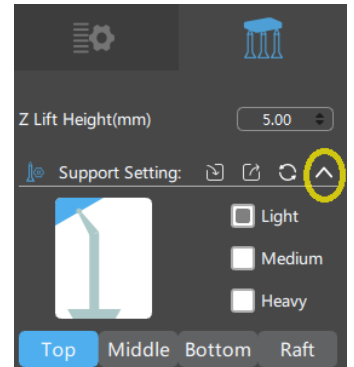
2. Hollowing
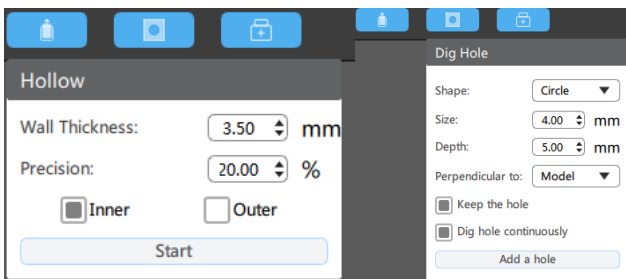
If you would like to save on resin, or your printing a very large and heavy piece, you may want to consider hollowing the print. When using the hollowing feature, make sure to create vent holes near the bottom of the print (closest to the build plate) and drainage holes near the top of the print (closest to vat). Ventilation holes are necessary to avoid a vacuum effect causing failed prints or torn nFEP film. Drainage holes are necessary to drain out liquid resin that could be present in the print. Liquid resin inside will eventually cause damage to the outer areas of the print.

3. **Slicing and Saving the files**

Once you are done setting up the file and getting the settings correct in your slicer, you should now Slice the file. Slicing the file will create a .ctb or .cbddlp file, which you can then save to the USB stick and it is ready for printing. This is the process that creates the individual layers on a print. If you attempt to slice a file that is already sliced, you may end up with a non-working file. Note that most of our printers use the .ctb file format exclusively. If you are unsure of which file format you should use, please refer to the tables in Section I.

Here are some tips:

- Make sure not to remove the USB until your file is completely exported. If ejected before being 100% saved, your model will be incomplete when printed.
- We have test prints available on our website if you would like to run one before trying your own models. **https://epax3d.com/pages/slicer-settings-chitubox**

4. **Ethernet/Network Printing**

If you find that utilizing the USB stick to print is too inconvenient, you may also opt to remotely send prints via the network feature. To set this up, connect
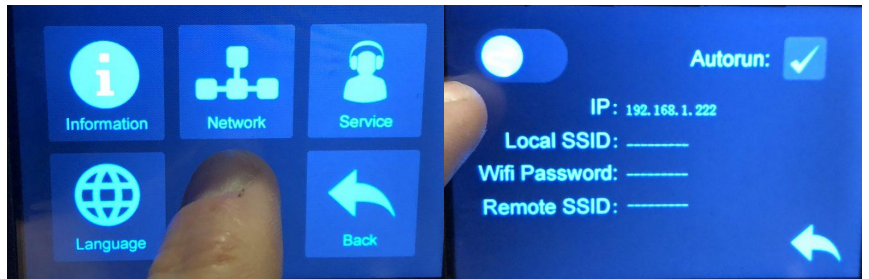
your printer with an ethernet cable to your wireless router. Now go to network and toggle on ethernet. Wi-Fi shows up as an option, but there is no Wi-Fi adapter in the printer. An IP address will then fill in and a green LED should now be illuminated where the cable is plugged in. Plug in the USB as you will need the storage for the prints to be received by the printer.

Load the latest version of ChiTuBox, and slice a file. You will be presented with the option to save or send the file to the network. Select "Network Sending," and you should see all of the EPAX printers that are connected to your network. If this is your first time, you may need to select the refresh icon.
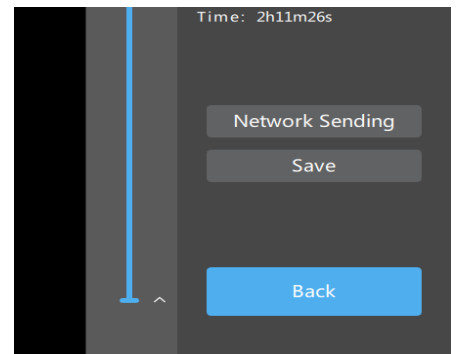
* Note that you can click on the pencil icon and rename what each IP address is called.
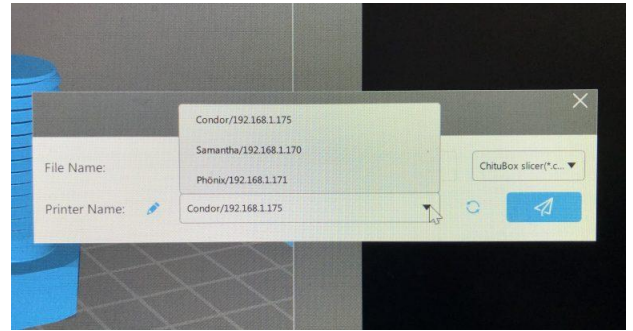
Now press the send button. You should see it showing the progress where it says "Send file to the printer…"

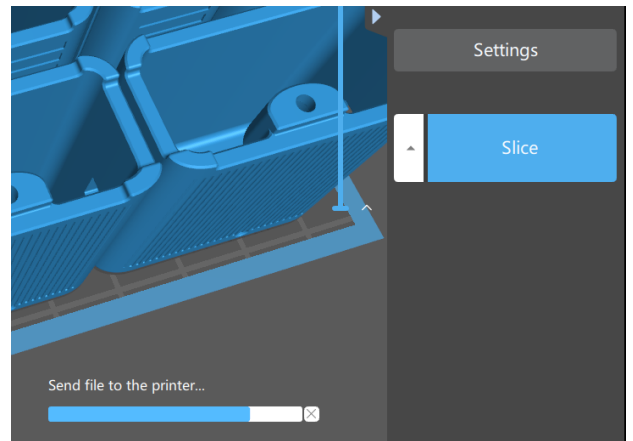When the sending is complete, it will ask if you would like to print the file. If you select "OK" it will start printing. If you hit "Cancel" it will not print. However the file will still be on the printer's USB memory card, where you will be able to manually start from the printer's touch screen.

Note Sending a print via network requires a good amount of bandwidth to be available. We recommend not sending a .cbddlp file over the network as they are very large in comparison to the .ctb file format which is more compressed. If you find that you are running into issues where the network is timing out quite a bit, you may not have enough bandwidth to support network sending.

Section V.   The Printing Process

Make sure your machine is placed on a stable, flat surface.

1.   Install the Build Platform and Resin Vat

Insert the build platform into the Z-axis build arm. Make sure you slide the platform plate onto the arm. You should have a black knob screw to secure the build platform onto the arm. It is very important that you have slid the platform into the correct position fully, and secured it well.
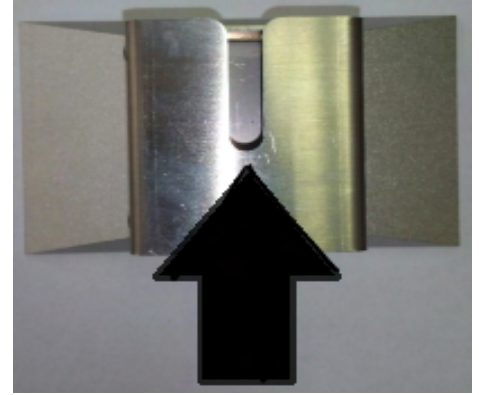
Turn on the printer and complete an "Auto Home". Go to Tools > Manual > Home icon.

Once homed, you may use the touch screen arrows to raise the platform to the middle of the Z-axis. Now you may insert the resin vat into the platform. On X series the vat slides in, and on the E series the vat is slotted in from above. Make sure the vat is placed in the correct direction. X series vats will have a drainage groove in the front right of the vat, and E series vats will have slots for a handle in the front. Secure the vat using the provided screws or knobs, and then you are ready to add resin into the vat.

NOTE: Our printers are pre-leveled from the factory. You do not need to relevel the platform!
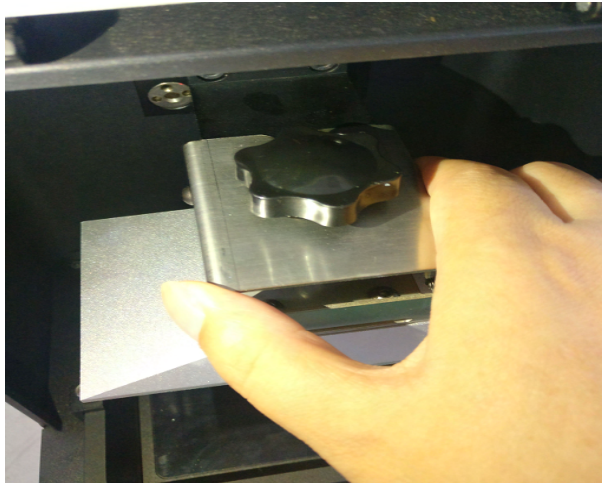
2.   Load Resin

Each resin vat has a maximum capacity with and without the build plate. You may refer to tables in section 1 for the max capacity of the vat with the platform in it. It is highly recommended to only fill to about ⅓ of this capacity when first starting the print so that you do not risk resin overflow. Unless you are utilizing the full build volume, you will rarely ever need to fill the vat to max capacity.
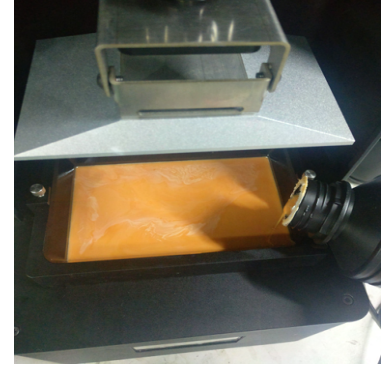
!EXTREME CAUTION! Always wear gloves, goggles, and a mask for your protection. If liquid resin gets on your skin, immediately wash the afflicted area with soap and hot water.

3.   Starting the print

Insert the USB into the printer. Select a file with the correct format. You may download a test file for your model from our website or slice your own. Press the play button to start the print. During the printing process, you must close the top cover to avoid light affecting the curing process and seal in the fumes generated by the warming resin.

It is recommended to print a test file as the first file printed with your new printer. The file was already tested and works. Doing so will establish a good baseline for future support needs and if you need to make adjustments to your slicer settings.

If you find that you are running low on resin in the vat during a print, don't worry. Press Pause, wait for the build plate to rise up, then pour in more resin slowly and onto the angled platform so that the resin drips into the vat.

WARNING: Pouring room temp. resin directly into resin warmed by printing may induce a temp. shock to the resin. This could cause some roughness, or failures in layers of the print.

For the first print, it is a good idea to check on the print after around 30 minutes to confirm that the first layers stuck to the build platform. If it looks good, then resume printing.

- If the print does not stick to the build platform, then you need to modify your design by adding more support, changing orientation, or adjusting the first several layers' exposure time. Typically the first several layers require at least 35 seconds each more depending on resin and room temperature.

5. Post-Processing

When the printing is done, wait until no more residual resin drips from the platform and wear gloves before removing it. You can wipe off any residual resin as well. Twist the knob screw counterclockwise and take off the build platform.

An effective way to remove a print is to use the metal spatula to dig between the base and the platform, and then use the plastic spatula as a wedge to release the print. Soak the print in at least 91% IPA (Isopropyl alcohol) for about 5-10 minutes. This helps to clean off residual liquid resin on the print. Substitute water if you are using a Water Washable resin.
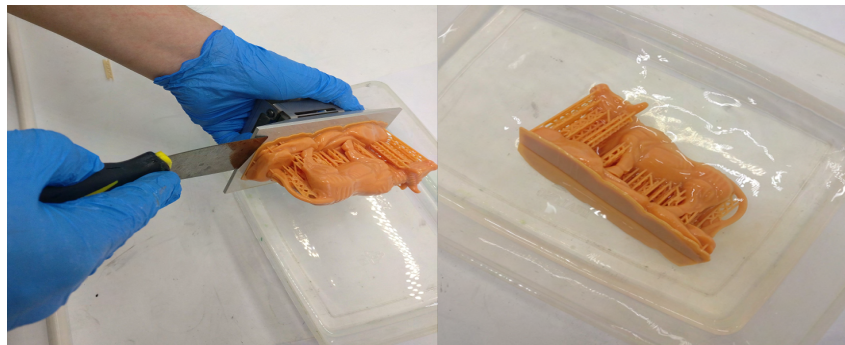
After your model is clean, put it in a cool, dry, well-ventilated area until it dries. Please make sure to still be wearing gloves during this time. To cure it, you may use a UV light machine for a few minutes or expose it directly to sunlight. If using sunlight, we recommend submerging the print in water (unless using WW resin) and putting it in direct sunlight for a few hours.

Section VI. Troubleshooting

There are many resources available online to help you troubleshoot problems. You can find a list of error codes and tips here: **https://epax3d.com/pages/troubleshooting**

You can also join our Facebook Group to get help from other users, especially if you need help tuning slicer settings. Since we don't typically test third party resins, we can only give a general idea of where to start. There are many users who have used a variety of resins and can help the best when it comes to dialing in settings. Each particular model might need special support thickness and positions. These are the experience related questions which we rely on our community to help each other. Most of them are just fine tuning your slicer settings for the particular scenario. Please don't hesitate to ask any questions you may have in our facebook group: **www.facebook.com/groups/epax3d**

If you need additional support you may contact us via Facebook messenger (You can use the chat window on epax3d.com page) or email us directly at **support@epax3d.com**. We provide technical support Monday-Friday 9am to 5pm EST. Any questions related to your order may be directed to our sales team at **sales@epax3d.com**.

Section VII. Warnings

1.	When you find that a print has failed or there is solid residue in the resin vat, **you must filter the resin in order to protect the LCD.** Clean the resin in the resin vat by filtering out the solid residue using one of the provided filters or a paint filter which can be found online or at your local hardware store. If ignored, when the build plate dips into the vat, the force of the plate may crush residues, puncture the film and damage the LCD. This is a costly mistake.

2.	 If there is residual resin in the resin vat or on the build plate's outer surface, please clean with a soft tissue soaked in IPA to avoid it dropping into the machine and curing inside.

3.	**Always wear gloves, a respirator mask and protective goggles when handling liquid resin or a print before the post-processing. Only touch the print without gloves after it's been fully cleaned and cured!**

4.	**Print in a well-ventilated area. It is strongly recommended to use a vent fan drawing air around the printer to outside the building. Resin fumes can cause lung irritation!**

It is strongly recommended that you watch our tutorial videos before operating your printer for the first time.

- For printer instructions, videos, firmware updates, and more please visit **www.epax3d.com.**

- You can also search "EPAX 3D" on Youtube.

- Customer Support Email: **support@epax3d.com**

- For printer replacement parts, supplies and a variety of resin options, visit **www.epax3d.com.**

Join us on our Facebook group for active discussions and knowledge-sharing:

https://www.facebook.com/groups/epax3d/

Warranty Information

Our printers have a 1-year warranty that begins from the date you receive your printer.

Please note: The LCD screen, film, pre-cut tape, filters and resin are consumable technology which are NOT covered by this warranty. The warranty is also NOT valid for international (non-USA) orders due to high shipping costs.   If you are outside of the USA, please consider purchasing from our distributors with warranty.

All other components of the printer are covered by the warranty. In the event of a defect, we will ship you replacement parts free of charge. It does not void the warranty if you open your printer and perform maintenance. Our printers were designed to be user-friendly both inside and out.

Warranty does not cover user related damages and tears, due to accidents, normal wear and tear, improper care and mis-use.

If you need parts for repair or to perform maintenance on your printer for you, we are happy to send them. We will provide parts and labor, but you must cover the round trip shipping costs and any price of parts not under warranty. You may use your preferred carrier.

Returns and Refunds

If for some reason you decide our printer is not for you, simply contact us within 30 days from the date of your purchase. You must cover the return shipping back to the warehouse, but you will receive a full refund if the printer is unopened when returned to us.

For opened/used printers there is a 15% restocking fee and if any parts/accessories are missing you will not be refunded for those items.