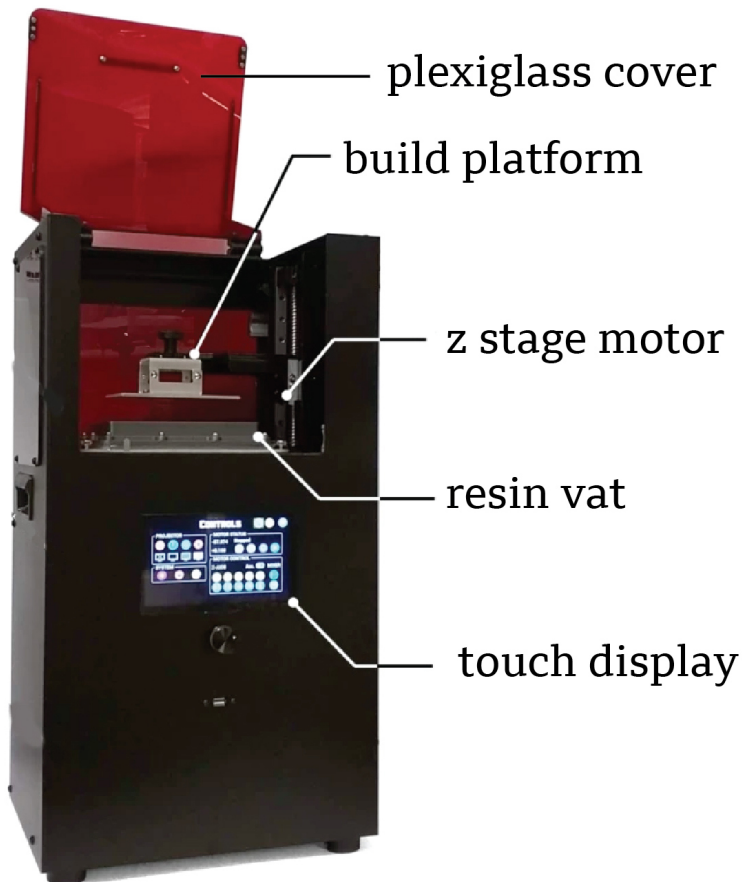


# Mono3 Printer

## Mono3 Printer



<b>Tool Type:</b> "3D Printer"	
<b>Location:</b> "Elings Hall 2436"	
<b>Supervisor</b>	<b>Tool Lead</b>
Juan Manuel Urueña	"WW Name"
jmuruena@ucsb.edu	"WW Email"
<b>Description:</b> "Mono3 3D Printer"	
<b>Manufacturer:</b> "monoPRINTER"	

## About

Mono3 is a resin printer that uses a385 or 405 nm LED projector to polymerize the resin. It uses a proprietary software called Monoware to slice your object and interface with the printer. On Monoware one can upload an STL file from any CAD software and adjust the settings so the software slices the part automatically.

## Detailed Specifications

- \* **Print thecknology:** DLP \* **Projected image:** 1280 x 800 px
  - \* **Pixel resolution (XY):** 30 - 70  $\mu\text{m}$
  - \* **Layer thickness:** 5 - 100  $\mu\text{m}$
  - \* **wavelength:** 385 or 405 nm
  - \* **Power:** 10 - 30  $\text{mW}/\text{cm}^2$
  - \* **Z-precision (motor-driven):** 5  $\mu\text{m}$
  - \* **Heated Platform:** Max 37  $^{\circ}\text{C}$
  - \* **Max build volume:** 134 X 76 X 125 mm (1.27 L)
  - \* **Connectivity:** Wireless connectivity by Raspberry pi & USB
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## Safety Concerns

Read the manufactures manual before first use. If the BIO X Cellink acts in a way that is not described by the manual, turn off the printer and contact CELLINK.

- Never place your finger near the machine until all parts have stopped moving. Moving parts can cause serious injury
  - Never clean or service the printer while it is on
  - The printer uses UV light for sterilization and curing. Never look directly at UV light nor expose skin. Serious injury may result from exposure
  - The printer has heated surfaces that can reach temperature up to 250 degrees Celsius. Never touch these surfaces when using the heating function. Allow things to cool before opening, touching the printer
  - Always ensure that equipment is correctly mounted before use. Improperly mounted print beds, printheads, cartridges, calbes liquid spouts and air spouts can be dangerous. If any equipment appears damaged, turn off the printer, unplug all connections and contact CELLINK.
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## Operating Procedures

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## Reference Documentation

mono3manual.pdf

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# Training Documentation

From:

<https://bpm-wiki.cnsi.ucsb.edu/> - NSF BioPACIFIC MIP Wiki

Permanent link:

[https://bpm-wiki.cnsi.ucsb.edu/doku.php?id=mono3\\_printer&rev=1623877601](https://bpm-wiki.cnsi.ucsb.edu/doku.php?id=mono3_printer&rev=1623877601)

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