

# DIY Resin VAT Heater with PID Control

Version 1.0 (Prototype)

Developed by:

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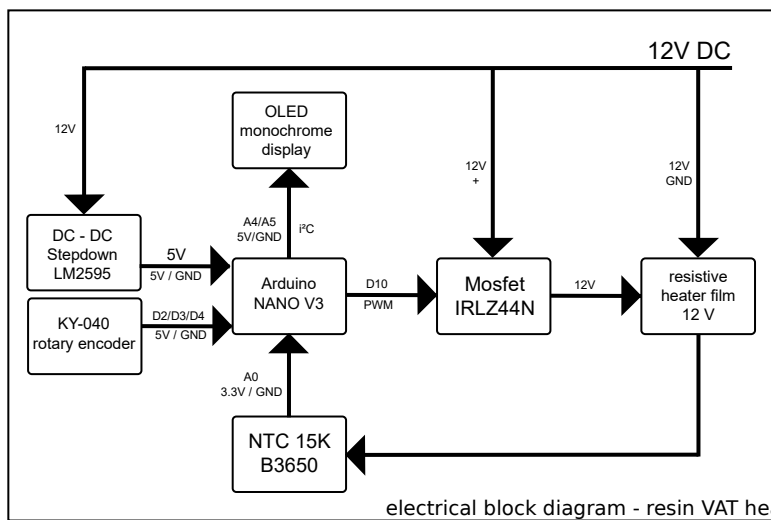
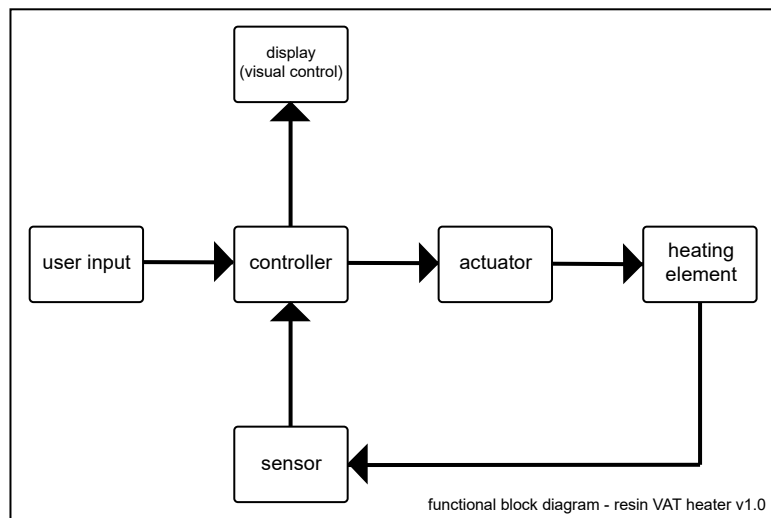
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Short Description:

This development describes an electrically controlled heating solution for resin VATs of resin 3D printers using an NTC thermistor, a heating foil (12V or 24V), and an Arduino controller.

The goal is to bring the resin to a constant, optimized temperature before and during the printing process and to maintain it there. The system uses common and commercially available components (as of 2025), and the design is designed so that it can be assembled with minimal resources.

The special feature is the combination of PID control, OLED display and encoder input - with inexpensive, commercially available heating elements and sensors.



Created by Chris-DIY - not to scale