

## Sovol SV-SL1

# Sovol 3D SL1 Curing Machine User Manual

Model: SV-SL1

## 1. INTRODUCTION

The Sovol 3D SL1 Curing Machine is designed for post-processing resin 3D printed models. It utilizes 405nm UV light to thoroughly cure resin prints, enhancing their hardness and durability. This manual provides essential information for safe operation, setup, maintenance, and troubleshooting of your curing machine.

## 2. SAFETY INSTRUCTIONS

- **UV Light Exposure:** Avoid direct exposure to UV light. Although the machine has a see-through window, prolonged staring at the UV light is not recommended.
- **Ventilation:** Ensure adequate ventilation in the operating area, especially when curing models that may still have residual resin or fumes.
- **Resin Handling:** Always wear appropriate personal protective equipment (PPE) such as gloves and safety glasses when handling uncured resin or freshly printed models.
- **Power Supply:** Use only the provided power adapter. Do not operate the machine with damaged cables or plugs.
- **Placement:** Place the machine on a stable, level surface away from flammable materials and direct sunlight.
- **Children and Pets:** Keep the machine out of reach of children and pets.

## 3. PACKAGE CONTENTS

Verify that all components are present in the package:

- Sovol 3D SL1 Curing Machine Unit
- Light-Driven Turntable
- Power Adapter (12V DC, 2A)
- User Manual (this document)

## 4. PRODUCT FEATURES

- **Three 405nm LED Strips:** Features two LED strips on the box wall and an additional strip on the ceiling, totaling 14 UV LED lights for fast and even curing.
- **Light-Driven Turntable:** The turntable rotates by absorbing UV light, eliminating the need for batteries and ensuring 360-degree exposure.
- **Reflective Interior:** An internal reflective sheet focuses UV light for enhanced curing efficiency.
- **Intelligent Time Control:** Offers selectable curing times of 2, 4, or 6 minutes for convenience.
- **See-through Window:** Allows observation of the curing process while providing UV protection.

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14 405nm UV LED lights, drive the tray to rotate.  
Multi-angle LED lighting, for the best curing effect.

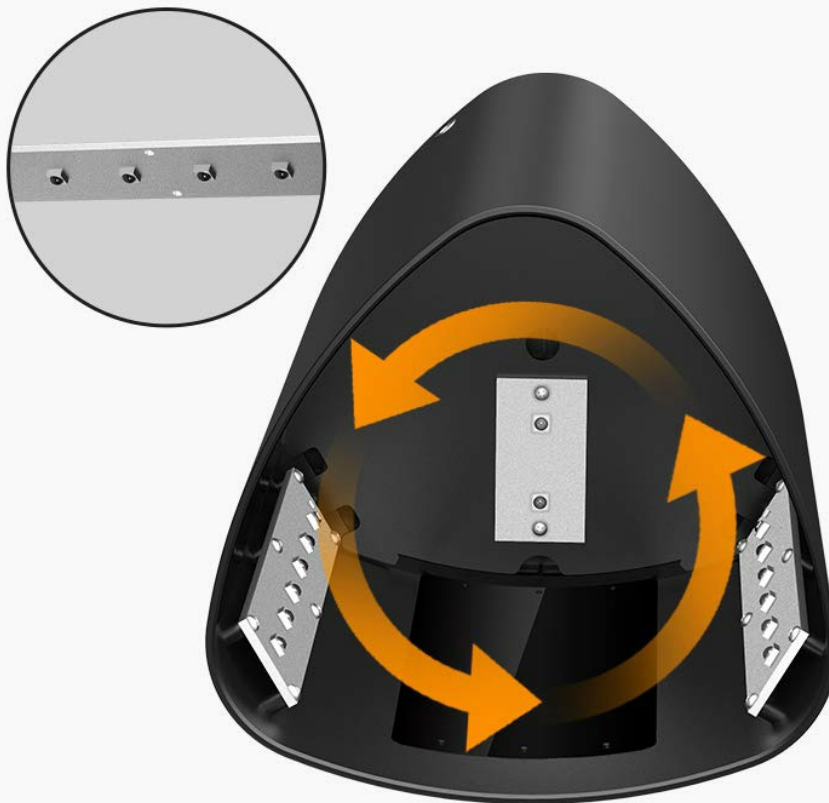


Image: Internal view showing the 14 405nm UV LED lights and multi-angle lighting design for comprehensive curing.

## Reflective sheet for better curing result



Image: Close-up of the reflective sheet inside the curing machine, designed to enhance UV light distribution for better curing results.

## UV Protection Design & Convenient See-through Window

Tri-prism design for covering a 360° illumination range. UV protection design



Image: The curing machine in operation, highlighting the UV protection design and the see-through window that allows observation of the 360-degree curing process.

### 5. SETUP

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1. **Unpack:** Carefully remove all components from the packaging.
2. **Placement:** Place the curing machine on a stable, flat surface.
3. **Install Turntable:** Position the light-driven turntable securely on the base inside the curing chamber.
4. **Connect Power:** Insert the barrel connector of the power adapter into the power jack at the back of the unit. Plug the power adapter into a suitable electrical outlet.



Image: Exploded view of the Sovol SL1 Curing Machine, labeling key components such as the handle, power switch, control panel, power jack, view window, UV light, and turntable.

## 6. OPERATING INSTRUCTIONS

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1. **Power On:** Flip the main power switch located at the back of the unit to the 'On' position.
2. **Place Model:** Carefully place your resin 3D printed model onto the center of the turntable inside the curing chamber. Ensure the model is clean and free of excess uncured resin.
3. **Close Door:** Ensure the curing chamber is properly closed.
4. **Select Curing Time:** Use the 'Time' button on the control panel to select the desired curing duration (2, 4, or 6 minutes). The selected time will be indicated by an illuminated LED.
5. **Start Curing:** Press the 'Start' button to begin the curing process. The UV lights will activate, and the turntable will start rotating.
6. **Monitor Progress:** You can observe the curing process through the see-through window.
7. **Stop Curing:** The machine will automatically stop after the selected time. To stop curing manually, press the 'Stop' button.
8. **Remove Model:** Once curing is complete, open the chamber and carefully remove the cured model.

# Inductive Control Interface



Image: Top view of the Sovol SL1 Curing Machine's inductive control interface, showing the On/Off switch, Start/Stop buttons, and time selection options (2min, 4min, 6min).

## 7. MAINTENANCE

- **Cleaning:** Regularly clean the interior and exterior of the machine with a soft, dry cloth. If resin spills occur, clean immediately with isopropyl alcohol (IPA) and a soft cloth. Ensure the machine is unplugged before cleaning.
- **Turntable:** Keep the turntable clean to ensure smooth rotation.
- **Storage:** When not in use, store the machine in a cool, dry place away from direct sunlight.

## 8. TROUBLESHOOTING

- **Machine Does Not Power On:**
  - Check if the power adapter is securely connected to both the machine and the electrical outlet.
  - Ensure the main power switch at the back of the unit is in the 'On' position.
  - Verify the electrical outlet is functional.
- **Turntable Does Not Rotate:**

- Ensure the turntable is correctly seated on its base.
  - Confirm that the UV lights are active, as the turntable is light-driven.
  - Gently nudge the turntable to initiate rotation if it's stuck.
- **Uneven Curing:**
    - Ensure the model is centered on the turntable.
    - Verify the turntable is rotating properly.
    - Increase the curing time if necessary.
    - Ensure the reflective interior is clean and intact.
- **Buttons Are Unresponsive:**
    - Ensure your finger makes full contact with the inductive button surface.
    - Try pressing firmly and directly on the button.

## 9. SPECIFICATIONS

Feature	Specification
Brand	Sovol
Model	SV-SL1
UV Light Wavelength	405nm
Number of UV LEDs	14
Curing Time Options	2 min, 4 min, 6 min
Power Input	12V DC, 2A
Product Dimensions	196mm (W) x 240mm (H) / 7.72in (W) x 9.45in (H)
Maximum Print Size for Curing	163mm (W) x 166mm (H) / 6.42in (W) x 6.54in (H)
Item Weight	1.52 kg
Material	Resin (for curing)

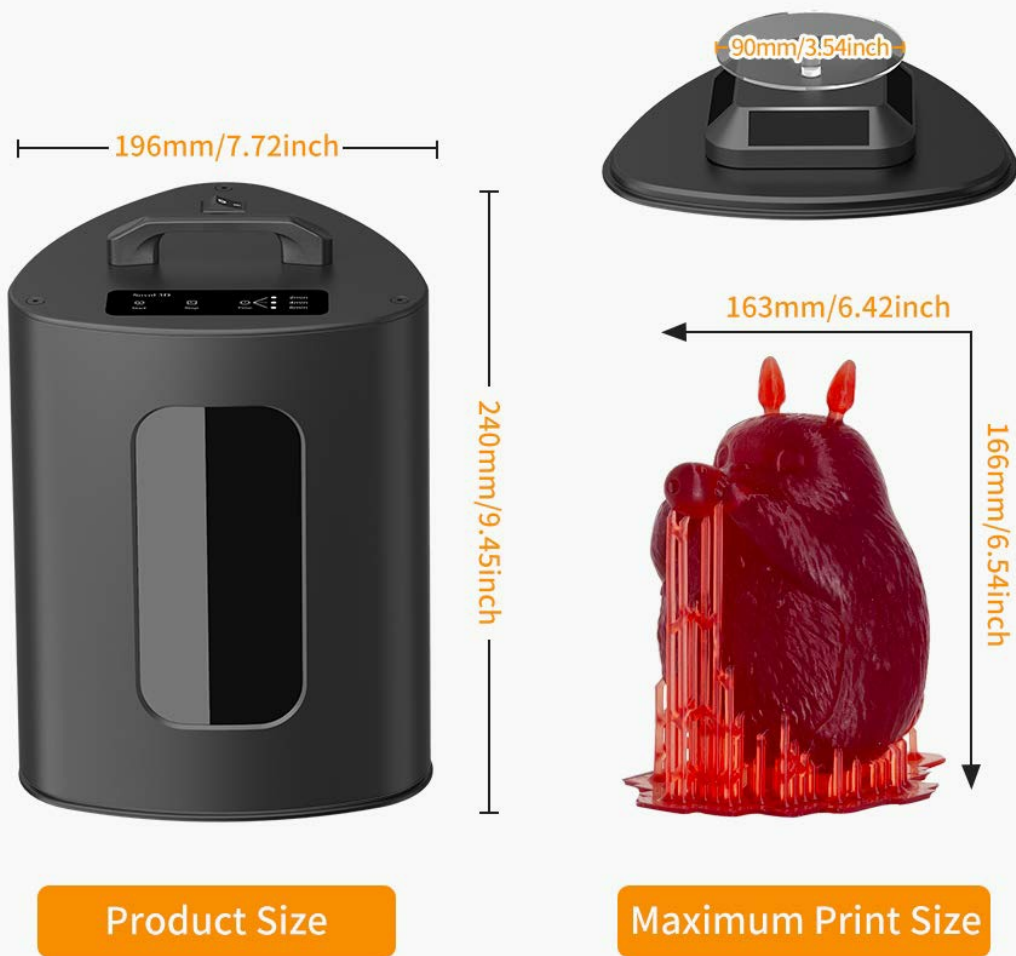


Image: Diagram illustrating the product dimensions of the Sovol SL1 Curing Machine (196mm width, 240mm height) and the maximum print size it can accommodate (163mm width, 166mm height).

## 10. WARRANTY AND SUPPORT

Sovol 3D provides support for its products. If you encounter any questions or issues with your Sovol 3D SL1 Curing Machine, please feel free to contact us. We are committed to assisting you in resolving any problems and providing professional technical support.

For warranty information and customer service, please refer to the contact details provided on the official Sovol 3D website or your purchase documentation.