Sovol SH01 / Tri-Color Silk PLA

Sovol SH01 Filament Dryer and Tri-Color Silk PLA Filament User Manual

Introduction

This manual provides detailed instructions for the setup, operation, and maintenance of your Sovol SH01 Filament Dryer and Sovol Tri-Color Silk PLA Filament. Adhering to these guidelines will help ensure optimal performance and longevity of your products, leading to successful 3D printing outcomes.

Product Overview

Sovol SH01 Filament Dryer

The Sovol SH01 Filament Dryer is designed to maintain optimal filament conditions by actively drying and storing your 3D printing filaments. It features a built-in fan for even heating, a display for real-time temperature and humidity, and a robust sealing mechanism for effective moisture control.

Image: Sovol SH01 Filament Dryer showcasing its large capacity, temperature and humidity display, excellent sealing function, and built-in fan.

Key features include:

- **Large Capacity:** Accommodates various filament spool sizes.
- **Temperature & Humidity Display:** Provides real-time environmental data inside the dryer.
- **Excellent Sealing Function:** Minimizes moisture re-entry.
- **Built-in Fan:** Ensures uniform heat distribution for efficient drying.

Sovol Tri-Color Silk PLA Filament

The Sovol Tri-Color Silk PLA Filament is a unique 3D printing material that co-extrudes three distinct colors (Gold, Silver, Bronze) along its length. This allows for dynamic color shifts in printed objects, even small ones, by simply rotating the print orientation. It is manufactured from imported PLA raw material, designed for smooth printing with minimal issues.

Image: A spool of Sovol Tri-Color Silk PLA Filament alongside three small vases demonstrating the gold, silver, and bronze color transitions.

Key characteristics include:

- **Tri-Color Co-extrusion:** Gold, Silver, and Bronze colors are present throughout the filament.
- **Imported PLA Raw Material:** Ensures quality and a pearlescent, shiny surface finish.
- **Easy to Print:** Designed for smooth extrusion with a diameter tolerance of +/- 0.03mm, reducing issues like jamming, bubbles, and tangles.
- **Eco Packaging:** Utilizes paper spools and boxes, vacuum-packed with desiccant.

Setup Instructions

Sovol SH01 Filament Dryer Setup

1. **Placement:** Place the filament dryer on a stable, level surface near your 3D printer.
2. **Loading Filament:** Open the dryer lid. Place your filament spool(s) inside the dryer. The SH01 can accommodate one large spool or two smaller spools.
3. **Desiccant Placement:** For enhanced drying and storage, place up to four small bags of desiccant (not

included, typically found in filament packaging) inside the dryer, as shown in the diagram.

Image: Internal view of the Sovol SH01 Filament Dryer, indicating the area for desiccant packs to be placed for long-term storage.

4. **Filament Routing:** Route the filament through the designated outlet hole on the dryer lid. Ensure the filament passes through the PTFE seal for smooth feeding and to maintain the internal environment.

Image: The Sovol SH01 Filament Dryer showing filament being fed out through the PTFE sealed outlet, ready for connection to a 3D printer.

5. **Power Connection:** Connect the power adapter to the dryer and plug it into a suitable power outlet.

Sovol Tri-Color Silk PLA Filament Preparation

Before printing, ensure the filament is properly dried using the SH01 Filament Dryer. Once dried, load the filament into your 3D printer according to your printer's specific instructions. The filament is designed for universal compatibility with most FDM 3D printers.

Image: Sovol Tri-Color Silk PLA Filament spool mounted on a 3D printer, with the filament feeding smoothly into the extruder, illustrating the "No Jam and Less Tangled" feature.

Operating Instructions

Sovol SH01 Filament Dryer Operation

Follow these steps to operate the filament dryer:

1. **Power On:** Press the power button () to turn on the device. The display will show the current temperature and humidity.
2. **Set Temperature:** Press the 'M' button to enter temperature setting mode. Use the up (▲) and down (▼) buttons to adjust the temperature between 40-50°C. Recommended temperatures for common filaments are:

- PLA/Wood: 40-50℃
- PETG/TPU/PVE: 45-50℃
- ABS/PC: 50℃

3. **Set Drying Time:** Press the 'M' button again to enter drying time setting mode. Use the up (▲) and down (▼) buttons to set the drying time between 6-12 hours.
4. **Start Drying:** Press the 'M' button once more to confirm settings and enter working mode. The display will show "WORK" and the drying process will begin.

Image: Close-up of the Sovol SH01 Filament Dryer's control panel, illustrating the steps for powering on, setting temperature, setting drying time, and entering working mode.

5. **Filament Feeding during Printing:** The dryer can be used to feed filament directly to your 3D printer while drying.
    - **Bowden Extruder:** For printers with a Bowden extruder, route the filament from the dryer to the Bowden tube.
    - **Direct Drive Extruder:** For printers with a direct drive extruder, route the filament directly from the dryer to the extruder.

Image: Diagrams illustrating the recommended filament port and direction for 3D printers equipped with either a Bowden or Direct Drive extruder, when used with the SH01 dryer.

Sovol Tri-Color Silk PLA Filament Printing Guidelines

For optimal results with Sovol Tri-Color Silk PLA Filament, consider the following general printing parameters. Always refer to your 3D printer's specific recommendations and perform calibration prints.

- **Nozzle Temperature:** 200-220℃
- **Bed Temperature:** 45-60℃
- **Printing Speed:** 40-70mm/s
- **Retraction (Bowden):** 4-6mm
- **Retraction (Direct Drive):** 0.5-1mm

The unique tri-color effect can be influenced by the orientation of your print. Experiment with different rotations of your model on the build plate to achieve varied color transitions.

Maintenance

Sovol SH01 Filament Dryer Maintenance

- **Cleaning:** Periodically wipe the exterior of the dryer with a soft, dry cloth. Ensure the device is unplugged before cleaning. Do not use abrasive cleaners or immerse the unit in water.
- **Desiccant Replacement:** If using desiccant packs, monitor their condition and replace them when they are saturated (indicated by color change, if applicable).
- **Long-term Storage:** When not in use, ensure the dryer lid is securely closed to maintain the internal environment, especially if desiccant is present.

Sovol Tri-Color Silk PLA Filament Storage

- **Post-Printing Storage:** After printing, secure the end of the filament in the winding hole on the spool to prevent tangling.

Image: Close-up of the Sovol PLA filament spool, highlighting the winding hole designed to secure the filament end and

prevent tangles during storage.

- **Moisture Protection:** Store unused filament in its original vacuum-sealed bag with desiccant, or within the Sovol SH01 Filament Dryer, to protect it from moisture absorption.

Troubleshooting

This section addresses common issues related to filament quality and printing. The Sovol SH01 Filament Dryer and Tri-Color Silk PLA Filament are designed to minimize these problems.

Issue	Possible Cause	Solution
Nozzle Clogging	Moisture in filament, incorrect printing temperature, dust.	Ensure filament is dry using the SH01 dryer. Verify nozzle temperature is within 200-220°C. Clean the nozzle.
Print Warping/Poor Adhesion	Moisture in filament, incorrect bed temperature, uncalibrated bed.	Dry filament with SH01. Set bed temperature to 45-60°C. Ensure proper first layer adhesion and bed leveling.
Filament Tangling	Improper storage, loose filament end.	Always secure the filament end in the spool's winding hole after use. Store spools neatly.
Inconsistent Extrusion/Bubbles	Moisture in filament.	Dry filament thoroughly using the SH01 dryer.

Image: A 3D printer actively printing a vase, demonstrating smooth operation without nozzle clogging or warping, attributed to superior filament adhesion.

Specifications

Sovol SH01 Filament Dryer

- **Brand:** Sovol
- **Model:** SH01
- **Item Weight:** Approximately 2.2 pounds (1 kg)
- **Material:** Plastic
- **Temperature Range:** 40-50°C (Adjustable)
- **Drying Time:** 6-12 hours (Adjustable)
- **Display:** Real-time temperature and humidity

Sovol Tri-Color Silk PLA Filament

- **Brand:** Sovol
- **Material Type:** Polylactic Acid (PLA)
- **Color:** Tri-color (Gold, Silver, Bronze)
- **Item Weight:** 1 Kilogram (2.2 pounds)
- **Item Diameter:** 1.75mm
- **Diameter Tolerance:** +/- 0.03mm
- **Recommended Nozzle Temp:** 200-220°C
- **Recommended Bed Temp:** 45-60°C
- **Recommended Printing Speed:** 40-70mm/s

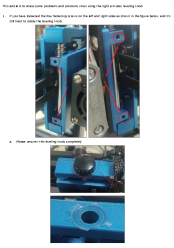
Warranty and Support

Sovol offers a **Life-time Guarantee** for the Tri-Color Silk PLA filament. If the filament does not perform as expected, please contact Sovol customer support for assistance. For any questions or support regarding either the SH01 Filament Dryer or the Tri-Color Silk PLA Filament, please refer to the official Sovol website or contact their customer service department.

You can visit the Sovol Store for more information:Sovol Store on Amazon

Related Documents - SH01 / Tri-Color Silk PLA

	Sovol SV06 Plus 3D Printer Leveling Guide and Printing Tips A comprehensive guide to leveling the Sovol SV06 Plus 3D printer, including detailed steps, Z-axis offset adjustments, auto leveling procedures, and essential printing tips for high-temperature filaments and retraction settings.
	Sovol SV08 3D Printer User Manual Comprehensive user manual for the Sovol SV08 3D printer, covering setup, operation, maintenance, and troubleshooting. Learn how to get the most out of your Sovol SV08.
	SOVOL SV02 3D Printer User Guide and Assembly Instructions Comprehensive guidebook for assembling, setting up, and operating the SOVOL SV02 3D printer. Includes sections on components, installation, software, printing, and after-sales service.
	Sovol SV08 3D Printer User Manual: Setup, Assembly, and Operation Guide Comprehensive user manual for the Sovol SV08 3D printer. Learn about assembly, setup, calibration, printing, WiFi connection, Obico integration, and mainboard details.

	Sovol SV07 Plus User Manual: Setup, Operation, and Troubleshooting Comprehensive user manual for the Sovol SV07 Plus 3D printer, covering assembly, setup, operation, maintenance, and troubleshooting for optimal printing performance.
	Sovol SV04 Extruder Leveling Knob Troubleshooting Guide A comprehensive guide to troubleshooting and resolving issues with the extruder leveling knob on the Sovol SV04 IDEX 3D printer, covering common problems like stiffness and incorrect slider plate adjustment.