SainSmart Space PI

Creality Space PI Filament Dryer Box User Manual

Model: Space PI

INTRODUCTION

The Creality Space PI Filament Dryer Box is designed to enhance 3D printing quality by effectively removing moisture from various filament types. This device features a built-in fan, a 3.7-inch touch screen, and 360° PTC heating technology to ensure optimal drying conditions for your 3D printing filaments.

Proper filament drying prevents common printing issues such as stringing, clogging, poor adhesion, and layer shifting, leading to improved print reliability and quality.

PRODUCT FEATURES

- **PTC 360° Hot-air Heating System:** Ensures quick and even heating with a built-in fan for 360° circulation of hot air, effectively drying moisture-laden filaments.

- **Advanced PTC Heating Technology:** Utilizes an 80W PTC heater for uniform drying, offering a durable, energy-efficient, and eco-friendly solution.

- **3.7-inch LCD Touch Screen:** Provides easy operation and real-time monitoring of temperature, humidity, and drying countdown.

- **Smart Time Control:** Customizable 48-hour timer function for thorough drying. Includes a power-off memory function to retain settings after power interruptions.

- **Versatile Filament Compatibility:** Supports up to 12 types of filaments, including PLA, PETG, ABS, Nylon, PLA-CF, PA-CF, ASA. Adjustable temperature range from 45°C to 70°C. Compatible with 1.75mm, 2.85mm, and 3mm diameter filaments.

PACKAGE CONTENTS

- Creality Space PI Filament Dryer
- Power Adapter
- User Manual (this document)

SETUP INSTRUCTIONS

1. **Unpack the Dryer:** Carefully remove the Creality Space PI Filament Dryer from its packaging. Inspect for any damage.
2. **Placement:** Place the dryer on a stable, flat surface near your 3D printer, ensuring adequate ventilation around the unit.
3. **Power Connection:** Connect the provided power adapter to the dryer's power input port and then plug it into a suitable power outlet.
4. **Loading Filament:**
   - Open the lid of the dryer.
   - Place your filament spool(s) onto the rollers inside the dryer. The dryer can accommodate two standard spools.
   - If printing directly from the dryer, feed the filament through one of the PTFE tube openings located at the top front of the unit. Ensure the silicone plug is properly seated when not in use to maintain a sealed environment.
   - Close the lid securely.

Image: The Creality Space PI Filament Dryer Box with a filament spool loaded, showing the main unit and display.

OPERATING INSTRUCTIONS

1. **Power On:** Flip the power switch located at the rear of the unit to the 'ON' position. The LCD touch screen will illuminate.

2. **Using the Touch Screen:** The 3.7-inch LCD touch screen displays real-time temperature, humidity, and drying countdown.

Image: The LCD touch screen showing drying countdown, real-time temperature, and real-time humidity.

3. **Selecting Filament Type and Settings:**
   - The dryer offers one-key preset temperature settings for 12 different filament types.
   - You can also manually adjust the temperature between 45°C and 70°C and the drying time from 0 to 48 hours using the on-screen controls.
   - Refer to the recommended settings table below for common filament types:

One-key Set for Filaments

Preset temperature settings for 12 different types of consumables, Supports high-speed consumable printing. Of course, you can also freely adjust the temperature and drying time between 45°C and 70°C, 0-48h.

Recommended drying temperature for filaments

PLA	TPU	PP	ABS	ASA	PETG	PC	PA	PET	PLA-CF	PETG-CF	PA-CF
50°C	55°C	55°C	65°C	65°C	60°C	65°C	65°C	60°C	50°C	60°C	65°C
4-8h	4-8h	4-8h	8-12h	8-12h	4-8h	8-12h	≥12h	4-8h	4-8h	4-8h	≥12h

Image: Recommended drying temperatures and times for different filament types.

Recommended Drying Settings

Filament Type	Temperature	Drying Time
PLA	50°C	4-8h
TPU	55°C	4-8h
PP	55°C	4-8h
ABS	65°C	8-12h
ASA	65°C	8-12h
PETG	60°C	4-8h
PC	65°C	8-12h
PA	65°C	>12h
PET	60°C	4-8h
PLA-CF	50°C	4-8h

Filament Type	Temperature	Drying Time
PETG-CF	60°C	4-8h
PA-CF	65°C	>12h

4. **Start Drying:** Once settings are configured, initiate the drying process. The dryer will begin heating and circulating air.

5. **Power-off Memory Function:** In case of a power outage, the dryer will remember your last material and temperature settings, allowing for quick resumption of drying once power is restored.

Image: Depiction of the 360° hot-air heating system circulating air around the filament spool.

Image: The power-off memory function retaining settings after a power cycle.

MAINTENANCE

- **Cleaning:** Ensure the device is powered off and unplugged before cleaning. Use a soft, dry cloth to wipe the exterior. Avoid using abrasive cleaners or solvents.
- **Desiccant:** The dryer may contain desiccant packets. While the device actively heats, these packets primarily help maintain dryness when the unit is off. Replace desiccant packets periodically if they become saturated.
- **Storage:** When not in use for extended periods, store the dryer in a cool, dry place.

TROUBLESHOOTING

Problem: Filament is still wet after drying.

Solution: Ensure the drying temperature and time are appropriate for the filament type. Some highly hygroscopic filaments (e.g., Nylon, PC) may require longer drying times (e.g., >12 hours) or higher temperatures. Verify the lid is securely closed and the silicone plugs for the filament outlets are in place when not actively feeding filament to prevent moisture re-entry.

Problem: Dryer is not heating.

Solution: Check if the power cable is securely connected and the power switch is in the 'ON' position. Ensure the power outlet is functional. If the issue persists, contact customer support.

Problem: Filament jams when feeding through the outlet.

Solution: Ensure the filament is properly aligned with the PTFE tube opening. Some users have reported that the rubber grommet on the top may not secure the PTFE tubing sufficiently. Consider printing or acquiring a more secure PTFE quick plug and port if this becomes a recurring issue.

Image: Visual comparison demonstrating the improved print quality achieved with dried filament.

SPECIFICATIONS

Feature	Detail
Model	Space PI
Product Dimensions	7.87"D x 11.81"W x 3.93"H (20 x 30 x 10 cm)
Item Weight	3.7 Pounds (1.68 kg)
Heating Technology	PTC 360° Hot-air Heating
Heater Power	80W
Temperature Range	45°C - 70°C

Feature	Detail
Timer Function	0-48 hours
Display	3.7-inch LCD Touch Screen
Filament Diameter Compatibility	1.75mm, 2.85mm, 3mm
Material	ABS
Color	Grey
Manufacturer	SainSmart

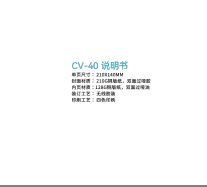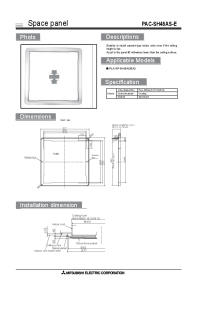

Image: The dryer demonstrating compatibility with multiple filament diameters (1.75mm and 2.85mm).

WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official SainSmart website. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.

If you encounter any issues or require technical assistance, please contact SainSmart customer support through their official website or the contact information provided in your product documentation.
Manufacturer: SainSmart

Related Documents - Space PI

CREALITY ENDER-3 V2 3D PRINTER USER MANUAL	[Creality Ender-3 V2 3D Printer User Manual](#) Comprehensive user manual for the Creality Ender-3 V2 3D Printer by SainSmart. Covers assembly, operation, preparation, printing with slicers, maintenance, and troubleshooting. Includes detailed specifications and safety guidelines.
ENDER-3 3D PRINTER USER MANUAL	[SainSmart Ender-3 3D Printer User Manual](#) User manual for the SainSmart Ender-3 3D Printer, providing assembly instructions, setup guides, software installation, troubleshooting, and support information.
CREALITY 太空盒耗材干燥盒系列使用说明书 Creality Space Pi Filament Dryer User Manual	[Creality Space Pi Filament Dryer User Manual V5.0](#) Comprehensive user manual for the Creality Space Pi Filament Dryer (V5.0). Includes product introduction, package contents, technical specifications, operation guide, recommended drying settings for various filaments, PTFE tube usage, safety instructions, and company contact details.
CV-40 说明书	[Creality Falcon A1 Laser Engraver User Manual](#) Comprehensive user manual for the Creality Falcon A1 laser engraver, covering installation, operation, safety, specifications, maintenance, and troubleshooting. Includes details on Falcon Design Space software and community resources.
Space panel	[Mitsubishi Electric PAC-SH48AS-E Space Panel: Installation Guide & Specifications](#) Mitsubishi Electric PAC-SH48AS-E Space Panel installation guide. Learn how to install this accessory for cassette-type indoor units, including dimensions, specifications, and step-by-step instructions.

[Hertz Space Series Car Audio Speakers](#)
Detailed product information and specifications for the Hertz Space series of car audio speakers, including tweeters and woofers. Features include advanced materials, design innovations, and performance characteristics.