ANYCUBIC Photon Mono M7 PRO

ANYCUBIC Photon Mono M7 PRO and Purifier 2.0 User Manual

Model: Photon Mono M7 PRO | Brand: ANYCUBIC

1. Introduction

This manual provides essential instructions for the safe and efficient operation, setup, and maintenance of your ANYCUBIC Photon Mono M7 PRO resin 3D printer and the accompanying Purifier 2.0. Please read this manual thoroughly before using the product to ensure optimal performance and longevity.

2. Safety Information

Resin 3D printing involves materials and processes that require careful handling. Always adhere to the following safety guidelines:

- Wear appropriate personal protective equipment (PPE), including gloves and safety glasses, when handling resin.
- Operate the printer in a well-ventilated area. The Purifier 2.0 assists with ventilation, but additional airflow is recommended.
- Keep resin away from direct sunlight and heat sources. Store it in a cool, dark place.
- Avoid skin contact with uncured resin. In case of contact, wash thoroughly with soap and water.
- Do not dispose of liquid resin down drains. Cure residual resin under UV light before disposing of it as solid waste.
- Keep the printer and resin out of reach of children and pets.
- Ensure the power supply is correctly connected and grounded.

3. Package Contents

Verify that all components are present in your package:

- ANYCUBIC Photon Mono M7 PRO 3D Printer
- ANYCUBIC Purifier 2.0
- Power Adapter and Cable

- Resin Vat
- Build Plate
- USB Drive
- Tool Kit (e.g., scraper, Allen wrenches)
- User Manual (this document)

Image: The ANYCUBIC Photon Mono M7 PRO 3D printer shown alongside the Purifier 2.0 ventilation unit.

4. Setup

4.1 Unpacking and Placement

1. Carefully remove all components from the packaging.
2. Place the printer on a stable, level surface in a well-ventilated area, away from direct sunlight.
3. Remove any protective films or packaging materials from the printer.

4.2 Purifier 2.0 Connection

The Purifier 2.0 is designed to reduce odors and VOCs during printing. Connect it as follows:

1. Identify the ventilation port on your Photon Mono M7 PRO.
2. Connect the Purifier 2.0's flexible hose to the printer's ventilation port.

3. Extend the exhaust hose from the Purifier 2.0 to an external environment, such as a window, to vent gases effectively.

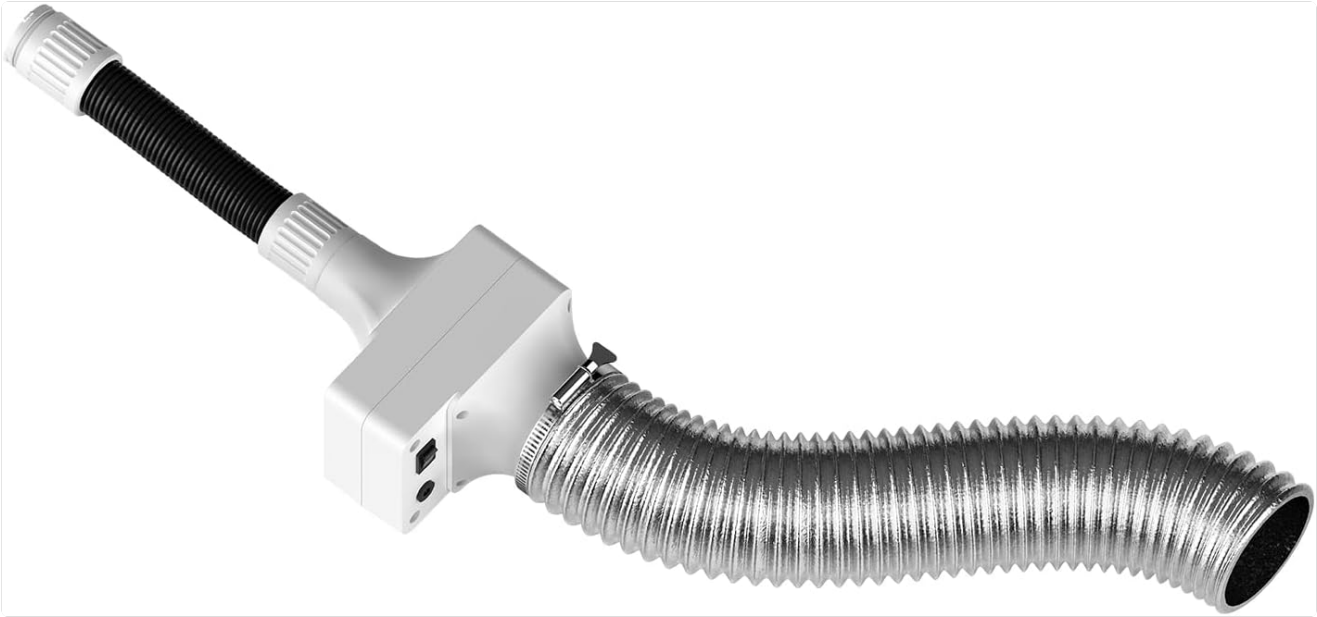


Image: The ANYCUBIC Purifier 2.0 unit, showing its main body and attached flexible hoses for ventilation.

Image: The ANYCUBIC Photon Mono M7 PRO printer with the Purifier 2.0 connected and its exhaust hose directed out of a window, illustrating proper ventilation setup.

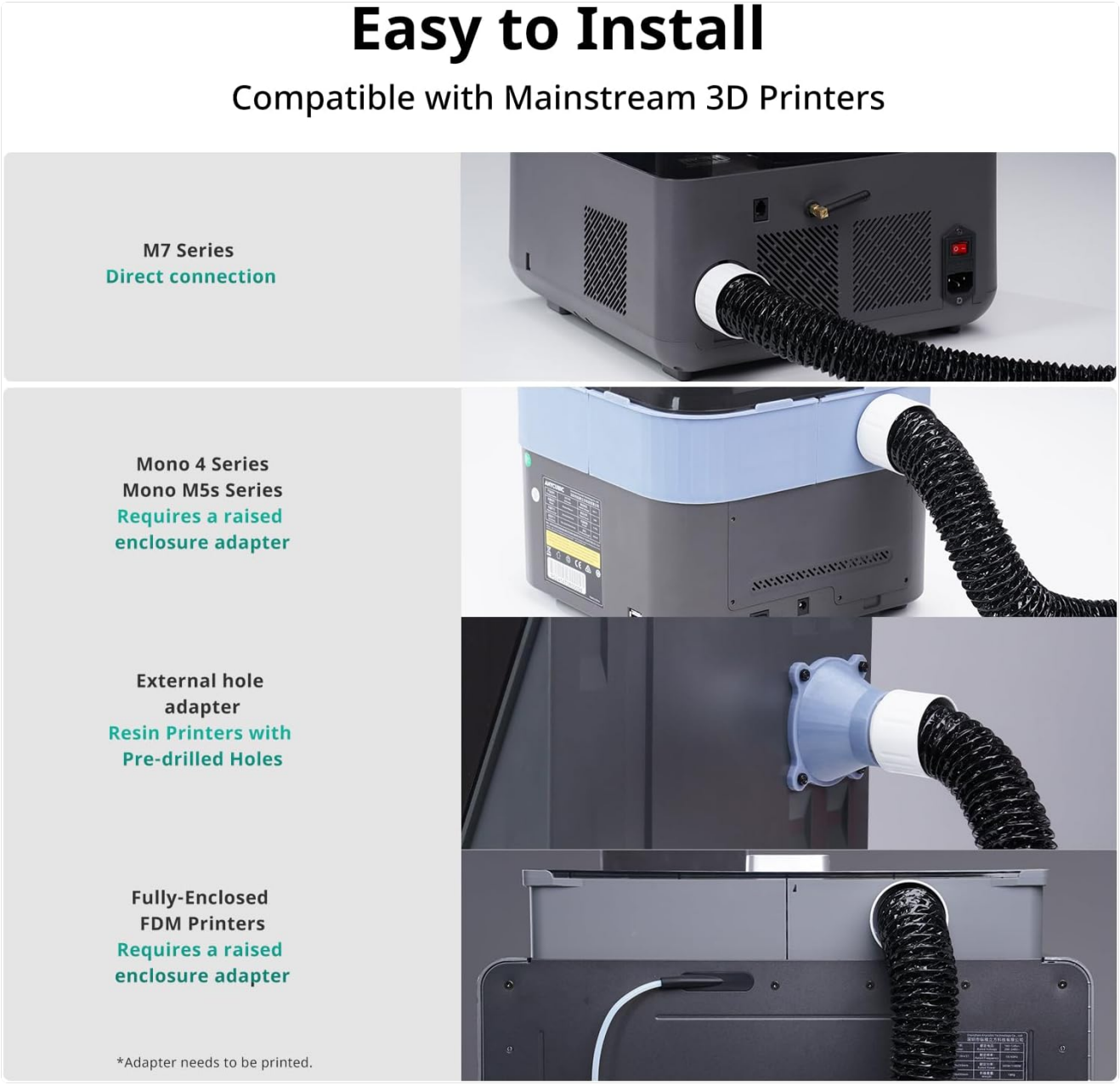


Image: A diagram illustrating the compatibility and installation methods of the Purifier 2.0 with different ANYCUBIC printer series, including direct connection for M7 series and adapter requirements for others.

4.3 Initial Power-On and Leveling

1. Connect the power adapter to the printer and plug it into a power outlet.
2. Turn on the printer using the power switch.
3. Follow the on-screen instructions for initial setup, including build plate leveling. Refer to the quick start guide for detailed leveling procedures.

5. Operating Instructions

5.1 Preparing Your Model for Printing

1. Install a compatible slicing software (e.g., Anycubic Photon Workshop) on your computer.
2. Import your 3D model (STL, OBJ format) into the slicing software.
3. Adjust print settings such as layer height, exposure time, and support structures. The Photon Mono M7 PRO supports high-speed printing up to 170mm/h with high-speed resin and 130mm/h with standard resin.
4. Slice the model and save the generated file to a USB drive.

Image: A visual comparison demonstrating the ANYCUBIC Photon Mono M7 PRO's printing speed of up to 170mm/h, significantly faster than other printers shown at 150mm/h.

5.2 Starting a Print

1. Ensure the resin vat is clean and securely installed.
2. Pour resin into the vat, ensuring it is below the maximum fill line.
3. Insert the USB drive with your sliced model into the printer's USB port.
4. On the printer's touchscreen, select your model file and initiate the print.
5. The Purifier 2.0 will activate automatically or can be manually started to manage fumes.

5.3 Advanced Features

- **14K High-Precision LCD:** The 14K monochrome LCD screen (13312*5120 resolution, 16.8 × 24.8 µm XY resolution) allows for printing intricate details, including holes as small as 0.3 mm in diameter.
- **COB LighTurbo 3.0:** This advanced light source system, combined with Fresnel lenses and front-facing reflectors, achieves a light angle within 3° and light uniformity exceeding 90%. It includes a light-off compensation algorithm to enhance printing success rates.
- **Circulation Heating:** The printer features a circulation heating system designed to maintain an optimal

printing temperature, which is crucial for consistent resin performance and print quality.

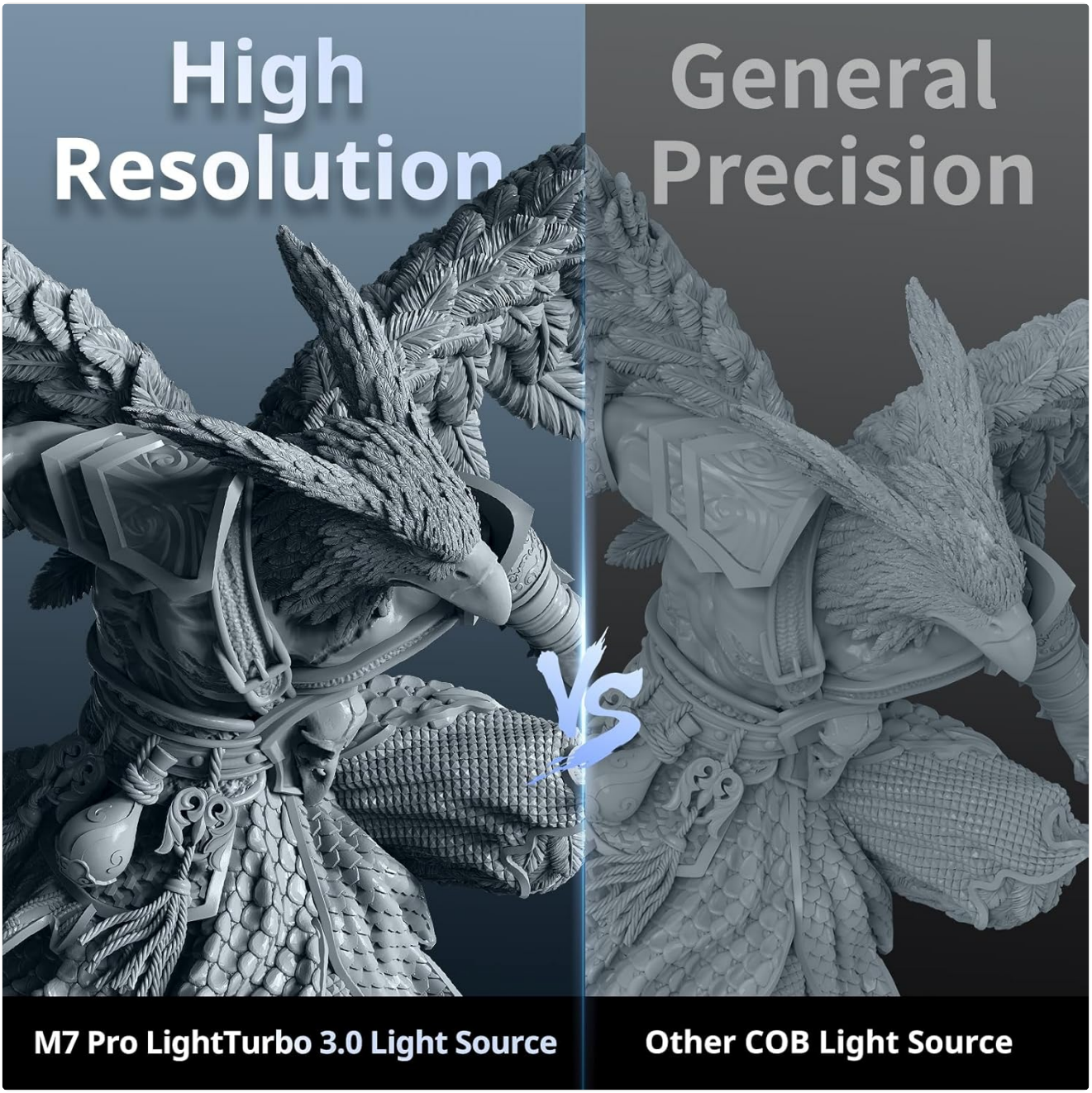


Image: A side-by-side comparison of a highly detailed 3D print achieved with the M7 Pro LightTurbo 3.0 Light Source versus a print with general precision from another COB light source, highlighting the superior resolution.

	Photon Mono M7 Pro VS	Others
Light Source	**LighTurbo 3.0**	Other COB Light Source
Minimum Forming Diameter	**0.15mm**	＞0.15mm
Minimum Precision Light Angle	**⩽3°**	⩾5°
Light Uniformity	**⩾90%**	⩽80%
Light-off Compensation	**Dynamic Light-off**	×

Image: A table comparing key specifications of the Photon Mono M7 Pro (LightTurbo 3.0, 0.15mm minimum forming diameter, ≤3° minimum precision light angle, ≥90% light uniformity, Dynamic Light-off Compensation) against other printers.

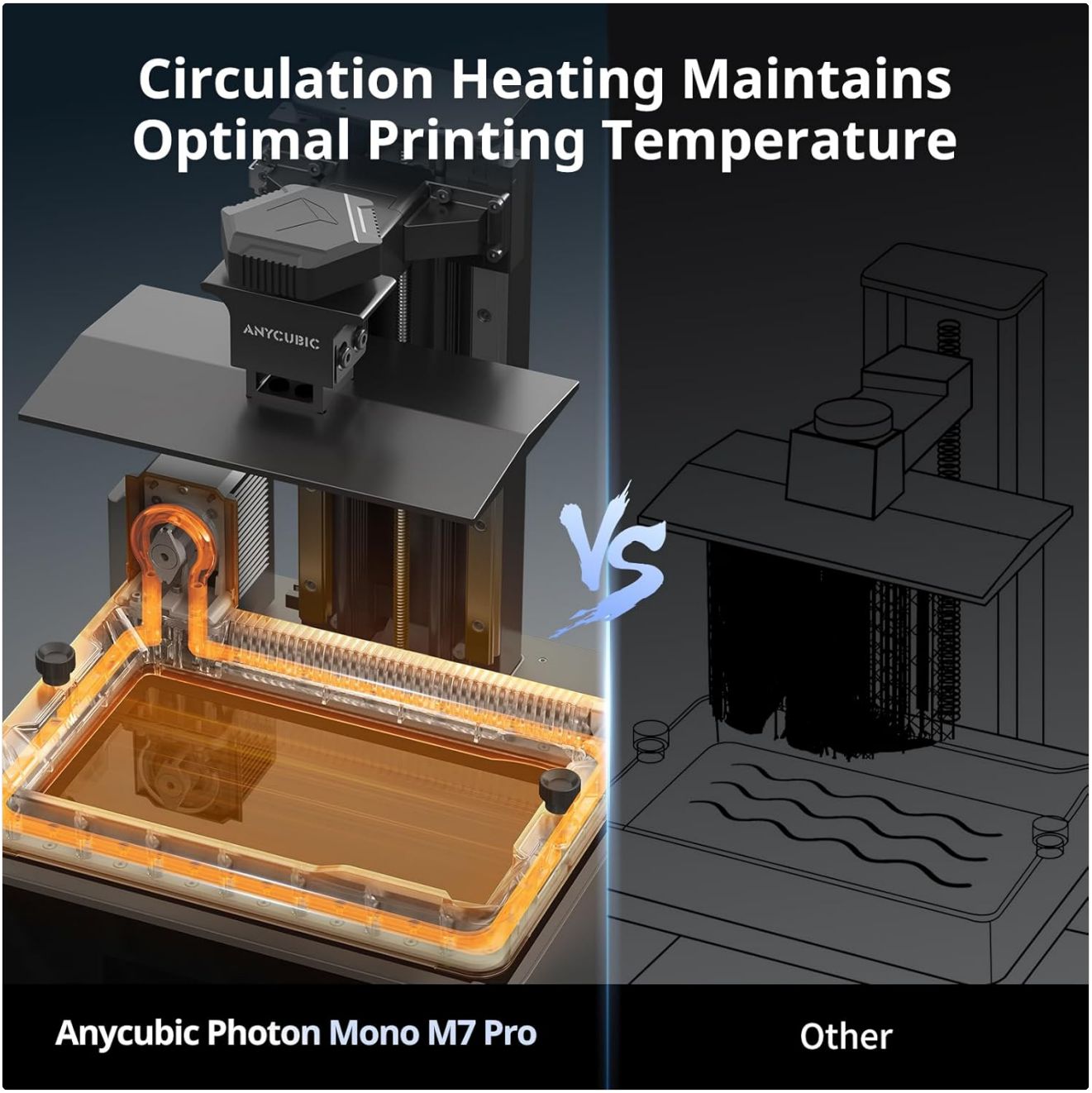


Image: A diagram illustrating the internal circulation heating system of the Anycubic Photon Mono M7 Pro, designed to maintain optimal printing temperature, contrasted with a standard resin printer without this feature.

6. Maintenance

6.1 Cleaning the Printer

- After each print, carefully remove the build plate and clean off any residual resin.
- Use isopropyl alcohol (IPA) and a soft cloth to clean the build plate and printer surfaces.
- Inspect the FEP film in the resin vat for damage or cured resin particles. Replace the FEP film if necessary.
- Never use sharp objects to scrape the FEP film or LCD screen.

6.2 Resin Handling and Storage

- Filter unused resin from the vat back into its original bottle using a mesh filter.
- Store resin bottles in a cool, dark, and dry place, away from direct sunlight.
- Ensure resin bottles are tightly sealed to prevent contamination and premature curing.

6.3 Purifier 2.0 Maintenance

- Regularly check the filter in the Purifier 2.0 and replace it as recommended by the manufacturer to maintain optimal performance.
- Keep the hoses clear of obstructions.

7. Troubleshooting

This section addresses common issues you might encounter. For more complex problems, please contact customer support.

7.1 Print Failures

- **Model not sticking to build plate:** Re-level the build plate, increase bottom exposure time, or ensure the room temperature is adequate.
- **Partial prints or layers missing:** Check for insufficient supports, incorrect exposure settings, or resin contamination.
- **Deformed prints:** Verify print orientation, support placement, and ensure the FEP film is not damaged.

7.2 Printer Not Responding

- Ensure the power cable is securely connected and the power switch is on.
- Restart the printer.
- Check the USB drive for corruption or incompatible file formats.

7.3 Purifier Not Working

- Verify the power connection to the Purifier 2.0.
- Check if the filter is clogged and needs replacement.
- Ensure hoses are not kinked or blocked.

8. Specifications

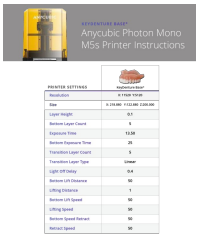
Feature	Specification
Brand	ANYCUBIC
Model	Photon Mono M7 PRO
Compatible Devices	Laptop, Personal Computer, Smartphone
Supported File Format	STL, OBJ
Operating System	Windows, macOS, Linux
Compatible Material	Resin
LCD Screen Resolution	14K (13312*5120)
XY Resolution	16.8 × 24.8 μm
Max Printing Speed (High-speed resin)	170mm/h (0.1mm layer thickness)
Max Printing Speed (Standard resin)	130mm/h

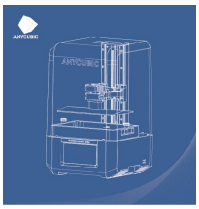
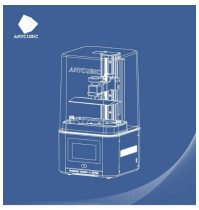
Feature	Specification
Light Source	COB LighTurbo 3.0
Light Uniformity	>90%
Minimum Forming Diameter	0.15mm
Purifier Airflow Capacity	49.86 CFM (Peak)

9. Warranty and Support

ANYCUBIC products come with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official ANYCUBIC website. For technical support, troubleshooting assistance, or spare parts, please contact ANYCUBIC customer service through their official channels.

Related Documents - Photon Mono M7 PRO

	Anycubic Photon Workshop User Manual Comprehensive user manual for the Anycubic Photon Workshop software, covering installation, settings, model editing, slicing, support generation, and export options for 3D printing. Includes detailed explanations of features like model import, machine configuration, resin settings, view transformations, model manipulation, repair, hollow, punch hole, cut, text overlay, face modeling, support generation, and file export.
	Anycubic Photon Mono 4K User Manual: Setup, Operation, and Maintenance Guide Comprehensive user manual for the Anycubic Photon Mono 4K 3D printer. This guide covers safety instructions, technical specifications, packing list, product overview, menu navigation, assembly, leveling, first print setup, slicing software, and troubleshooting FAQs.
	Anycubic Photon Mono M5s Printer Instructions for KeyDenture Base Detailed instructions and printer settings for using the Anycubic Photon Mono M5s 3D printer with KeyDenture Base resin.

	[Anycubic Photon Mono M5s User Manual: Setup, Operation, and Maintenance Guide] Comprehensive guide for the Anycubic Photon Mono M5s LCD 3D printer. Learn about setup, safety, technical specifications, recommended print parameters, file preparation (USB & Cloud), printing tests, maintenance, and troubleshooting.
	[Anycubic Photon Mono 4 Ultra - Instrukcja Obsługi] Kompleksowa instrukcja obsługi drukarki 3D Anycubic Photon Mono 4 Ultra, zawierająca informacje o instalacji, obsłudze, konserwacji i rozwiązywaniu problemów.
	[Anycubic Photon Mono 4K User Manual] Comprehensive user manual for the Anycubic Photon Mono 4K 3D printer, covering technical specifications, packing list, product overview, menu directory, assembly and leveling instructions, first print instructions, slicing software overview, and FAQ with machine maintenance.