Sindoh 3D1AQ

Sindoh 3DWOX 1 3D Printer Instruction Manual

Model: 3D1AQ

1. INTRODUCTION

The Sindoh 3DWOX 1 is an advanced 3D printer designed for ease of use and reliable performance. It supports open-source filaments and features a heated metal flex bed, HEPA filter, intelligent bed leveling assistance, and a built-in camera for monitoring. This manual provides essential information for setting up, operating, and maintaining your 3DWOX 1 printer.

2. SAFETY INFORMATION

- **High Temperature:** The print nozzle and heated bed reach high temperatures during operation. Avoid touching these components to prevent burns.
- **Moving Parts:** The printer contains moving parts that can cause injury. Keep hands, fingers, and other body parts away from the print head and bed during operation.
- **Ventilation:** Operate the printer in a well-ventilated area. Although the 3DWOX 1 includes a HEPA filter, proper ventilation is always recommended when 3D printing.
- **Power Supply:** Use only the provided power cable and ensure the printer is connected to a grounded outlet. Disconnect power before performing any maintenance or moving the printer.

3. WHAT'S IN THE BOX

Upon unboxing your Sindoh 3DWOX 1, verify that all the following items are included:

- 1 PLA White Filament with Cartridge
- USB Cable
- Network Cable
- USB drive (containing software and digital manuals)

4. PRODUCT OVERVIEW

The Sindoh 3DWOX 1 is designed for user-friendly 3D printing with several key features:

- **Open Source Filament Mode:** Allows the use of third-party filaments (PLA, ABS, ASA, PETG, PA, etc.). Note that flexible materials are not supported.

- **Filament Auto-Loading:** Simplifies filament changes by automatically loading and unloading Sindoh brand filaments. Semi-auto loading/unloading is available for open-source filaments.

- **Flexible Metal Bed Plate:** Provides excellent adhesion during printing and allows for easy removal of finished prints by flexing the plate.

- **HEPA Filter:** Effectively captures very fine particles and reduces odors produced during the printing process.

- **Intelligent Bed Leveling Assistance:** Guides the user through the bed leveling process for optimal print quality.

- **Built-in Camera:** Allows for remote monitoring of print progress via PC, smartphone, or tablet.

- **Quiet Operation:** Operates at a low noise level (45dB for PLA, 40dB for ABS), comparable to a library environment.

Figure 4.1: Front view of the Sindoh 3DWOX 1 3D Printer.

Figure 4.2: The Sindoh 3DWOX 1 with the front door open, revealing the internal components and filament compartment.

Figure 4.3: Rear view of the Sindoh 3DWOX 1, highlighting the power input and network ports.

Figure 4.4: A close-up view of the built-in camera, positioned to monitor the print bed.

Figure 4.5: Dimensional overview of the Sindoh 3DWOX 1 3D Printer (W x D x H: 421 x 433 x 439 mm).

5. SETUP

Follow these steps for initial setup of your 3DWOX 1 printer:

1. **Unpack:** Carefully remove the printer and all accessories from the packaging. Retain packaging for future transport or service.

2. **Placement:** Place the printer on a stable, level surface in a well-ventilated area, away from direct sunlight and heat sources.

3. **Power Connection:** Connect the power cable to the printer and then to a grounded electrical outlet. Do not power on yet.

4. **Network Connection (Optional):** Connect the network cable for Ethernet connectivity, or prepare for Wi-Fi setup during initial power-on.

5. **Initial Power-On:** Press the power button. Follow the on-screen instructions on the 5-inch full-color touch screen for initial setup, including language selection, network configuration, and bed leveling assistance.

6. **Software Installation:** Install the 3DWOX Desktop slicing software from the included USB drive onto your computer. This software is required to prepare 3D models for printing.

6. OPERATION

6.1. Filament Loading

The 3DWOX 1 offers convenient filament loading:

- **Sindoh Filament:** Insert the Sindoh filament cartridge into the designated slot. The printer will automatically detect the filament type and load it.

- **Open Source Filament:** For third-party filaments, select 'Open Source Filament' mode on the touchscreen. Follow the semi-auto loading instructions, which will guide you through feeding the filament into the print head.

6.2. Intelligent Bed Leveling Assist

The printer features an intelligent bed leveling system to ensure optimal first layer adhesion:

- The system automatically checks the horizontal state of the print bed.

- The touchscreen will display instructions, indicating which screw wheels to turn and in which direction to achieve a level bed.

6.3. Printing

To initiate a print:

1. **Prepare Model:** Use the 3DWOX Desktop slicing software to convert your 3D model (STL, PLY, OBJ, G-code, AMF files are supported) into a printable G-code file.

2. **Transfer File:** Transfer the G-code file to the printer via USB (using the included USB drive) or Wi-Fi/Ethernet connection.

3. **Start Print:** Select the desired file on the printer's touchscreen and start the print.

6.4. Auto Nozzle Cleaning

The 3DWOX 1 includes an auto nozzle cleaning function:

- To maintain optimal nozzle condition, the printer automatically wipes the tip of the nozzle at every output.
- It also periodically injects filament into the cleaning case to minimize the possibility of blockage.

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Video 6.1: An official video demonstrating the key features of the Sindoh 3DWOX 1, including filament auto-loading, intelligent bed leveling assist, and auto nozzle cleaning.

7. MAINTENANCE

Regular maintenance ensures the longevity and performance of your 3DWOX 1 printer:

- **Nozzle Cleaning:** The printer has an auto-cleaning function. However, if print quality degrades, manual cleaning or nozzle replacement may be necessary. Refer to the detailed instructions in the digital manual on the USB drive.
- **Print Bed Care:** Keep the flexible metal bed plate clean. Avoid using abrasive tools that could damage the surface.
- **HEPA Filter Replacement:** The HEPA filter should be replaced periodically to maintain air filtration efficiency. Consult the digital manual for replacement intervals and procedures.
- **General Cleaning:** Regularly wipe down the exterior and interior of the printer with a soft, dry cloth to remove dust and debris.

8. TROUBLESHOOTING

If you encounter issues with your 3DWOX 1, consider the following common troubleshooting steps:

- **Print Quality Issues:** Check bed leveling, ensure the nozzle is clean, and verify filament quality. Print quality can degrade over time, sometimes requiring nozzle replacement.
- **Filament Not Extruding:** Check for filament clogs in the nozzle or extruder. Ensure filament is loaded correctly.
- **Bed Adhesion Problems:** Re-level the print bed using the intelligent bed leveling assist. Ensure the bed is clean and free of oils or debris.
- **Connectivity Issues:** Verify Wi-Fi or Ethernet connection settings. For USB, ensure the correct USB drive is used as specified in the manual.
- **Error Messages:** Refer to the digital manual for specific error code explanations and solutions.

For more detailed troubleshooting, consult the comprehensive manual provided on the USB drive or visit the official Sindoh 3DWOX website.

9. SPECIFICATIONS

Feature	Specification
Model Number	3D1AQ
Maximum Build Size (W x D x H)	210 x 200 x 195 mm (8.2" x 7.9" x 7.7")
Layer Thickness	0.05 ~ 0.40 mm
Print Head	Single Nozzle

Nozzle Diameter	0.40 mm
Filament Diameter	1.75 mm
Supported Filaments	Sindoh PLA, ABS; Open Source PLA, ABS, ASA, PETG, PA (Flexible Materials not supported)
Print Bed Material	Flexible Metal Bed
Bed Leveling	Semi-Auto Assisted
Slicing Software	3DWOX Desktop
Supported File Types	STL, PLY, OBJ, G-code (RepRap), AMF
Connectivity	USB 2.0 Device / 2.0 Host, Ethernet (1G), Wi-Fi
Display	5-inch Full Color Touch Screen
Monitoring	Built-in Camera (Web Monitoring via PC, Smartphone, Tablet)
Filter	HEPA Filter
Noise Level	PLA: 45dB(A), ABS: 40dB(A)
Printer Size (W x D x H)	421 x 433 x 439 mm
Item Weight	43.4 pounds
Material	Metal
Certifications	CE, UL (for US purchases from authorized sellers)

10. WARRANTY AND SUPPORT

The Sindoh 3DWOX 1 printer comes with the following warranty:

- **Product:** Up to 1 year from the product purchase date.
- **Parts (Nozzle, Bed):** 90 days from the product purchase date.

To ensure warranty coverage and access support, you must register your product on the official Sindoh 3DWOX website. For detailed warranty terms, support resources, and contact information, please visit the official Sindoh 3DWOX website (search for "3DWOX" online to find the official site).