Genmitsu MD13

Genmitsu MD13 Smoke Purifier User Manual

Model: MD13

1. INTRODUCTION

This manual provides essential information for the safe and effective operation and maintenance of your Genmitsu MD13 Smoke Purifier. The MD13 is designed to combat engraving fumes, providing a cleaner and safer working environment, especially when paired with enclosed machines like the Genmitsu L8. Please read this manual thoroughly before use and retain it for future reference.

Safety Information

- Always operate the unit in a well-ventilated area.
- Ensure the power supply matches the unit's requirements.
- Do not block the air intake or exhaust vents.
- Keep the unit away from water and flammable materials.
- Disconnect power before performing any maintenance or filter replacement.
- Do not attempt to modify the unit. Refer all servicing to qualified personnel.

2. PRODUCT OVERVIEW

The Genmitsu MD13 Smoke Purifier is an advanced fume extraction system featuring a multi-layer filtration process and user-friendly design elements for enhanced air quality in various workshop applications.

Key Features

- **Four-Layer Filtration System:** Includes a coarse cotton pre-filter, intermediate cartridge, high-efficiency coconut shell activated carbon, and a high-efficiency HEPA filter for 99.97% smoke elimination.
- **Integrated UV Function:** Absorbs and neutralizes smoke emissions, contributing to a healthier workspace.
- **LED Interface:** Provides easy monitoring of filter status, air quality, and UV function.
- **Stepless Airflow Adjustment:** A rotary knob allows for precise control over the air suction speed.
- **Enhanced Mobility:** Equipped with universal wheels for easy repositioning and dual handles for convenient

lifting.

Figure 2.1: Genmitsu MD13 Smoke Purifier unit with included accessories such as exhaust hose and clamps.

Figure 2.2: Illustration of the MD13's four-layer filtration system, showing the progression from coarse pre-filter to HEPA and activated carbon layers.
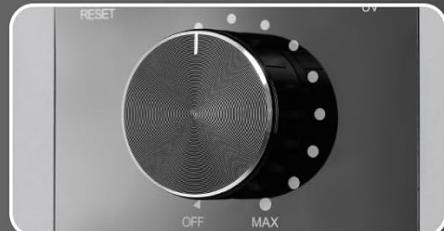
Figure 2.3: Details of the MD13's user-friendly design, including universal wheels for mobility, metal latches for secure closure, a knob for stepless airflow adjustment, and dual handles for easy transport.
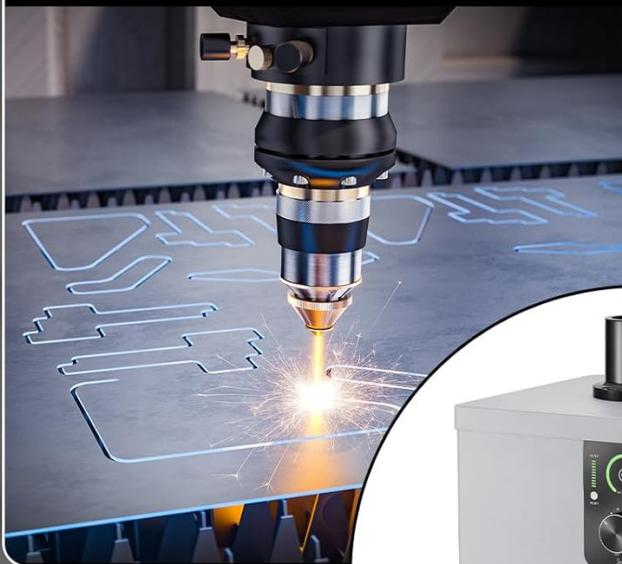
Figure 2.4: Examples of versatile applications for the MD13, including laser engraving, soldering, electronics manufacturing, and woodworking.

3. SETUP

3.1 Unpacking and Component Check

Carefully remove all components from the packaging. Verify that all items listed below are present and undamaged.

Figure 3.1: The Genmitsu MD13 Smoke Purifier and its included accessories: power cable, screwdriver, exhaust hose, and hose clamps.

3.2 Filter Installation

The filters are typically pre-installed. If not, or if you are replacing them, ensure they are inserted in the correct order as shown in Figure 2.2, with the coarse filter at the top and the HEPA filter at the bottom.

3.3 Exhaust Hose Connection

1. Attach one end of the exhaust hose to the outlet port on top of the MD13 unit. Secure it with a hose clamp.
2. Connect the other end of the exhaust hose to your fume-generating equipment (e.g., laser engraver, soldering station). Ensure a tight seal to prevent fume leakage.

Figure 3.2: The Genmitsu MD13 Smoke Purifier positioned under a workbench, with its exhaust hose connected to a Genmitsu L8 laser engraver.

3.4 Placement

Position the MD13 on a stable, level surface. Utilize the universal wheels for easy movement. Ensure adequate space around the unit for proper airflow and maintenance access.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

Connect the power cable to the unit and a suitable power outlet. Use the main power switch located on the unit to turn it on or off.

4.2 Control Panel Overview

Figure 4.1: The MD13 control panel, featuring an LED screen for monitoring, a UV function button, and a rotary knob for airflow speed adjustment.

- **LED Screen:** Displays real-time air quality and filter status.
- **UV Function Button:** Press to activate or deactivate the integrated UV light for enhanced fume neutralization. An indicator light will confirm its status.
- **Airflow Adjustment Knob:** Rotate clockwise to increase airflow speed (MAX) and counter-clockwise to decrease it (OFF).
- **Filter Reset Button:** Used to reset the filter life indicator after replacing a filter.

4.3 Adjusting Airflow

Turn the airflow adjustment knob to set the desired suction power. Start with a lower setting and increase as needed based on the amount of smoke or fumes generated by your application.

4.4 Using the UV Function

Press the UV button to activate the ultraviolet light. This function helps to further break down and neutralize harmful particles and odors. It is recommended to use the UV function during operations that produce significant fumes.

5. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your MD13 Smoke Purifier.

5.1 Filter Replacement

The MD13 features an indicator light for cartridge usage and an average cartridge life of up to 300 hours. However, actual filter life will vary significantly depending on the type and volume of smoke being filtered.

Figure 5.1: The average cartridge life for the MD13 is up to 300 hours, though this can vary based on usage.
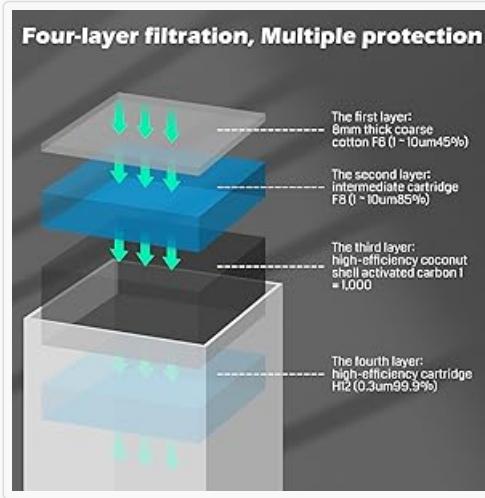

Figure 5.2: A replacement filter cartridge for the Genmitsu MD13 Smoke Purifier.

1. **Power Off:** Ensure the unit is turned off and unplugged from the power source.
2. **Open Latches:** Release the metal latches on the sides of the unit to open the top cover.
3. **Remove Old Filters:** Carefully lift out the used filter layers. Dispose of them according to local regulations.
4. **Install New Filters:** Place the new filters into the unit in the correct order (refer to Figure 2.2).
5. **Close Cover:** Securely close the top cover and fasten the metal latches.
6. **Reset Filter Indicator:** Plug in the unit and press the 'RESET' button on the control panel to reset the filter life indicator.

5.2 Cleaning the Exterior

Wipe the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.

6. TROUBLESHOOTING

If you encounter issues with your Genmitsu MD13, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Unit does not power on	No power supply; Power switch off; Faulty power cable	Check power connection; Ensure power switch is on; Try a different power outlet or cable

Problem	Possible Cause	Solution
Low airflow or poor fume extraction	Clogged filters; Airflow knob set too low; Blocked hose; Loose hose connection	Check and replace filters if necessary; Increase airflow speed; Inspect hose for blockages; Secure hose connections
Unusual noise during operation	Loose components; Obstruction in fan; Unit not on a level surface	Check for loose parts; Inspect fan for foreign objects (with power off); Ensure unit is on a stable surface
UV function not working	UV function not activated; UV lamp failure	Press the UV button; Contact support if the lamp does not illuminate

If the problem persists after attempting these solutions, please contact Genmitsu customer support for further assistance.

7. SPECIFICATIONS

Feature	Detail
Model Number	MD13
Manufacturer	Genmitsu
Product Dimensions (L x W x H)	30.1 x 30.5 x 43 cm (11.85 x 12.01 x 16.93 inches)
Weight	14.29 kg (31.5 lbs)
Power Source	AC/DC
Number of Items	1
Included Components	Smoke Gas Purifier
Batteries Required	No
Filtration System	4-layer (Coarse Cotton, Intermediate Cartridge, Activated Carbon, HEPA)
Fume Elimination Rate	99.97%
UV Function	Integrated
Airflow Adjustment	Stepless knob control

8. WARRANTY AND SUPPORT

For warranty information, technical support, or to purchase replacement parts and filters, please contact Genmitsu customer service. Refer to the official Genmitsu website or your purchase documentation for contact details.
Manufacturer: Genmitsu