

User Manual



Model: FE1BD-ESD Fume Extractor

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1. Product Overview

This product conforms to applicable CE requirements and the purifying effect has been confirmed by the American PONY international professional testing agency.



This product is suitable for applications where fumes are produced such as smoke, peculiar smells, dust, poisonous and harmful gas, soldering, laser marking & carving, printing, and medical care, etc. With the triple-filter design and powerful suction, the absorbing efficiency and filtration ratio can reach 99.97%. The purified air can be discharged directly indoors.

2. Unpacking Inspection

Please check carefully to ensure that the following listed parts are included. If there are any missing or damaged items, please contact the customer service department.

Name of Parts	Qty	Specification	Remarks
Motor	1		Installed
Power Line	1	1.5M	
Duct	1	75mm dia*1.4m	
User Manual	1		
Pre-Filter	5		1 of 5 is installed
Medium filter	1		Installed
Carbon Filter	1		Installed



3. Check Before Using



Before switching on the power for the first time, please ensure that the following conditions exist, so as to guarantee safe operation.

1. The machine should be intact;
2. The power switch should be in the OFF position;
3. The filter element(s) should be evenly placed;
4. The cover and box body should be installed securely;
5. The speed-regulating button is adjusted to "OFF" Status;

4. Symbols

This manual utilizes certain symbols throughout which represent the following:

	ATTENTION - CAUTION
	FIRE HAZARD

	ELECTRICAL HAZARD
	INJURY HAZARD

5. Safety Precautions



Before use, please read and follow the safety precautions below to prevent fire and personal injury.



This product is prohibited to be used in a high temperature environment (above 80°C) or in a flammable, explosive or greasy environment.



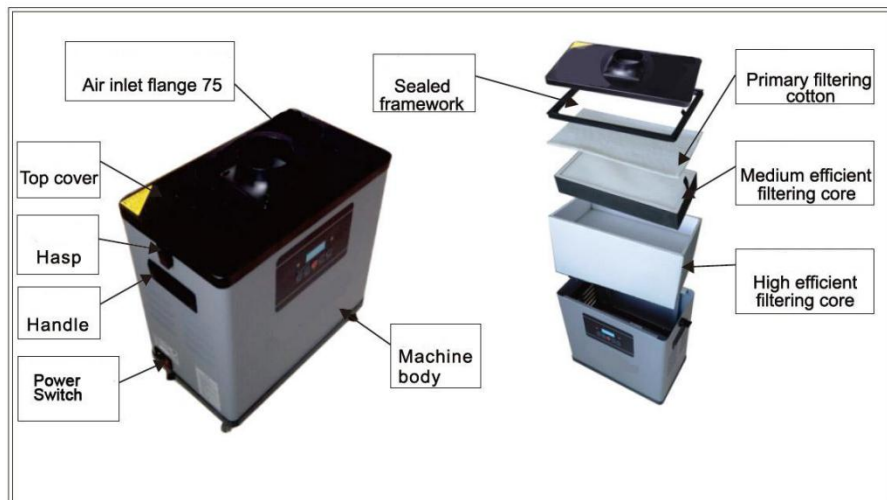
Supply wire must be grounded during operation.
Internal electric voltage of the product is as high as 310V.



Do not remove or install filter elements while the machine is operating. Hands or other objects should not touch the rotating impeller.

Dis-assembly of the product for inspection or maintenance must be performed by professionals.

6. Unit Components



7. Specifications

Model: FE1BD-ESD Fume Extractor

Surface Resistance	$10^6 \sim 10^{11} \Omega$
Air Inlet Interface	$\Phi 75\text{mm Flange}$
Input Voltage	AC220V
Maximum Power	210W
Filtering Efficiency	$0.3\mu\text{m}$ 99.97%
Noise	$< 55\text{dB}$
Length of Ducts	1.4M
Systemic Flow	$330\text{m}^3/\text{h}$
Dimensions of Main Unit	L425xW250xH410mm
Weight	14.0kg

8. Installation & Use instructions

8.1 Filtering Core Installation

Open the top cover and correctly install the high-efficient filtering core, medium-efficient filtering core, primary-efficient cotton filtering with top cover and press for buckle hasps at the two sides.

8.2 Suction Duct Hose Installation

1. Remove the hose from the package, and attach it to the duct flange on the cover of the machine.
2. Turn the tube, aim exhaust fume collecting hood with the smoke outlet. Adjust the suction distance based on the application.



When adjusting the direction of suction duct hose, try to maintain a broad loop or bend radius of the hose, otherwise it will affect the suction force. The suction inlet shall directly face the working point. Keep the distance within 150mm.



Try to avoid areas with excessive air flow, otherwise suction force will be affected or diminish completely.

8.3 Machine Operating Instructions

Plug in and check if the power plug is properly fit into the socket. Turn on the power switch (Picture 1).



Picture 1

Adjust the speed-adjusting knob to start the machine according to different needs on the air flow (Picture 2).

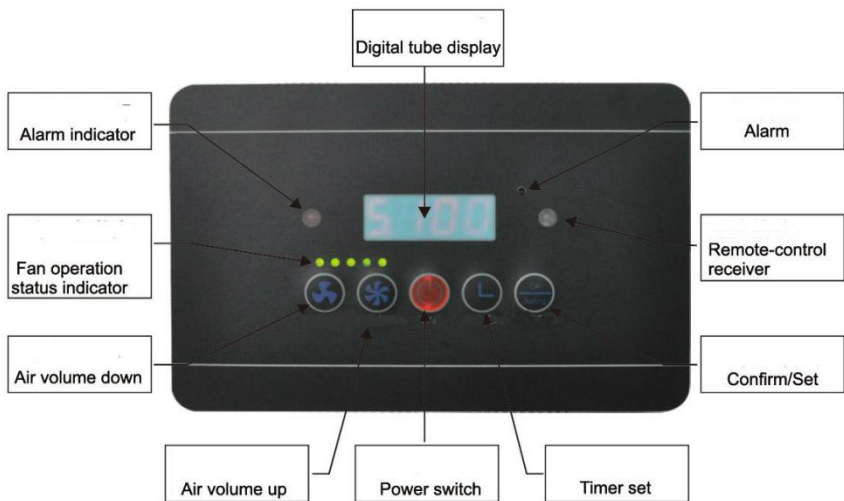


Before starting the machine, the speed-adjusting knob should be adjusted to the OFF position.

The air flow should be set according to the actual demand. It should not be set too high or too low.

Excessive air flow increases the power consumption as well as the noise level.

Picture 2

**Illustration of Control Panel**

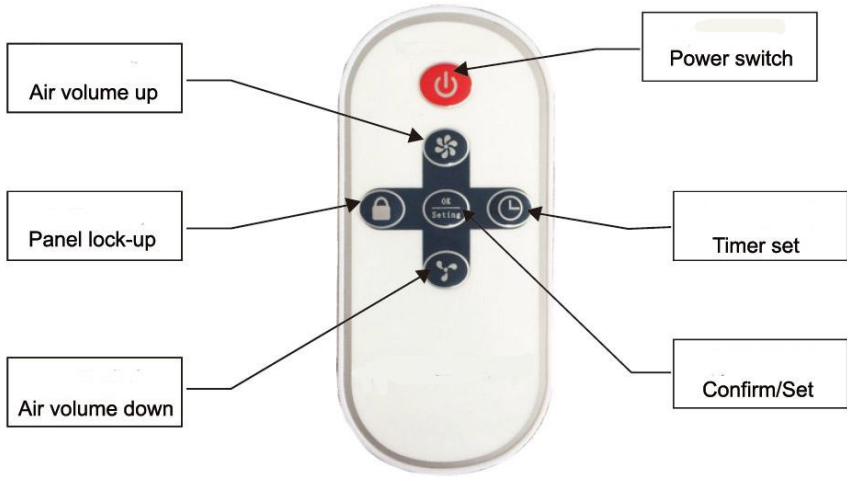


Illustration of Remote Control

8.4 Operator Interface Button Functions

Power Switch button

Pressing the power switch on the remote control or the machine control panel should cause the machine to start running and the orange light on the machine control panel should turn ON. Pressing the power button on the remote or the machine control panel again should cause the machine to stop running and the orange indicator light on the machine control panel should turn OFF.



In the event that the machine takes a long time to shutdown, please turn OFF the machine main power switch and unplug the power plug.

Air Volume Up Button

Press this button when the machine is running, the number on digital tube display increases in multiples of 10, the maximum number is 100 which means the machine is running in full speed.

Air Volume Down Button

Press this button when the machine is running, the number on digital display decreases in multiples of 10.

Confirm/Set Button

If the machine is in alarm status and buzzer sounds, press the Confirm/Set button to turn OFF the alarm. If the machine is not in alarm status, press the Confirm/Set button to check the total working hours of the machine.

Panel Lock-up

Press this button on the remote when the machine is working, all function keys on the machine control panel will be locked. Press again or reboot the machine to unlock.

9. Troubleshooting



Make sure the power is switched off and unplugged before inspecting or repairing the machine!

Problem 1: The machine still works, but the air flow is very weak and suction power is greatly reduced.

Cause: Air Inlet is blocked or foreign body exists inside the duct. The filter becomes saturated and hence gets blocked and gives an alarm.

Solution: Turn off the power and open the top cover. Check if there is any foreign body blocked in the air inlet. Then check if the air vent is blocked or not. If the suction power of the empty-loaded machine is normal, it means the filter needs to be replaced.

Problem 2: The machine shuts down automatically after it is just started. Even if you restart the machine, the same problem happens again.

Cause: The air flow through the machine is obstructed. As a result, the starting current of the fan becomes very high, hence the machine shuts down automatically for self protection.

Solution: Turn off the power and open the top cover. Check if there is any foreign body blocked in the air inlet. Then turn the speed-adjusting knob to the lowest level and restart the machine. The machine should function normally.

Problem 3: Power switch is ON, but machine does not run and the power indicator does not light up.

Cause: The fuse might be bad.

Solution: The fuse needs to be replaced by performing the following steps:

Operation steps to replace the fuse:



1. Turn off the power and pry up the fuse groove with a screwdriver;



2.



3. Remove the damaged fuse with a screwdriver



4. Prepare the spare fuse;



5. Install it



6. Finished

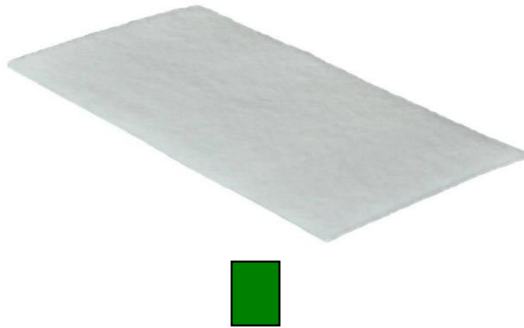
If the problem remains after these inspections and maintenance are performed, please contact customer service.

10. Filter Use & Maintenance

This product uses disposable filtering elements. When these elements have been use to a certain extent, they need to be cleaned or replaced in order to guarantee the good purifying effect of the machine.

Air Flow Direction

1.Pre-filter



Use method: Place the Pre-filter on top of Middle Filter. The front side (rough side) is facing upwards (air inlet direction). When the accumulated dust on the Pre-filter is over 70% and cannot be cleaned any more, please replace the Pre-filter with a new one.

2. Medium HEPA Filter

Air Flow Direction

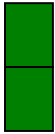




Use method: With the handle side facing up, put the Middle Filter inside the Main Filter. The medium filter shall be immediately cleaned off when the accumulated dust on the Middle Filter evidently affects the suction power. When it cannot be cleaned any more, please replace the Middle Filter with a new one.

3. Main Filter

Air Flow Direction



Use method: With the handle side facing up, place the Main Filter at the bottom inside the machine. When it cannot effectively eliminate the peculiar smell in the smoke, please replace it with a new one.

11. Important Use Considerations



The power source for this machine must fall within the specified nominal voltage scope (subject to the power identification on the machine body).



It is strictly forbidden to use this machine with excessive high or

low voltage, if the ambient voltage is unstable, please turn off the machine, unplug the power plug and use it again once the power has stabilized.



While using the machine, the ambient temperature range of the gas and the dust which is sucked into the air inlet should be within the range of atmospheric temperature to a maximum of 60 °C.



Never use the machine when the temperature is higher or lower than this temperature range.



When using the machine, the humidity of the gas and the dust sucked into the air inlet should be between the range of 40%-80%. If the humidity is excessively high, the filter element will become ineffective rapidly and the internal circuit will be damaged. Never use the machine when the humidity is higher than 80%.



If the machine has a primary cotton filter, , then this filter must be properly installed before machine use. The primary cotton filter is considered a disposable consumable item and should be replaced once it becomes clogged. (DO NOT WASH AND REUSE). Please replace the primary cotton filter with an OEM part regularly. Never use the machine without the primary cotton filter or with a poorly performing primary cotton filter.



It is strictly forbidden to use this machine without a filter element because the fumes or the dust particles sucked in the machine directly will cause damage to the air blower and the control system. Any fault caused by machine use under the previously stated conditions shall be serviced at the user's own cost.



Do not continue to use the machine when the filter element or the cotton filter is clogged. This will greatly shorten the service life of the machine and will damage the machine. Please clean and maintain the machine regularly and replace the filter element regularly to ensure the proper operation of the machine.



In the event that your machine filter element becomes clogged, the suction force is lowered or the filter element for foreign odor removal fails to remove the odor, it is not permitted to use this machine by reducing the machine's number of layers of the filter elements or without utilizing the primary filter element or cotton filter. Please replace the filter element and primary cotton filter with OEM filters.



Never open the machine for maintenance by yourself, the warranty sticker on the machine is the only voucher you have to enjoy after-sales service so please don't tear it up or damage it.

The warranty will not cover any losses or damage that may be incurred by the user if the previously stated instructions are not followed.