



EHU EXHAUST HEPA UNIT

Operating Instructions

*The picture is only for reference, and the physical product shall prevail.

Foreword

- Thank you for selecting the products of Mayair Technology (China) Co., Ltd.
- This product may effectively remove harmful substances from the air, and provide you with healthy and comfortable indoor air.
- In order to ensure the most effective running of this product, please read the Operating Instructions carefully and keep the Operating Instructions at a place easy to reach, for the sake of reference anytime during the use of the product.
- In order to ensure the safe and reliable running of this product, professional personnel having accepted and passed training shall be specified as the operation manager of this product. If you have any doubt or suggestion on the utilization method, maintenance and repair, and troubleshooting of this product, please report to the manager or contact the Company immediately. We will provide you with high-quality services wholeheartedly.

CONTENTS

Safety Precautions	3	2. Selection of Installation Site	12
I. Application Occasion	5	3. Schematic Diagram of Installation	13
II. Product Characteristics	5	4. Pipeline Installation	13
III. Product Model and Parameters	6	5. Notices for Installation	14
1. Outline Dimension	6	V. Maintenance and Care	15
2. Parameters	7	1. Filter Gauze Replacement Cycle	15
3. Optional Accessories of the Product	8	2. Filter Gauze Replacement Steps	15
4. Product Structure	8	Environmental Protection List	16
5. Panel Introduction	9	Packing List	18
IV. Installation	12	Service Description	19
1. Unpacking and Inspection	12		

Safety Precautions

In order to avoid possible injuries or property damages to yourself or others, please surely pay attention to the following safety matters.

● Ignoring or misunderstanding these marks will lead to the following two circumstances:



Warning: This mark indicates "possibly inducing heavy injury or death of personnel".



Notice: This mark indicates "possibly inducing personal injuries or other property damages".

● The classification of content that must be observed is distinguished and described with marks as follows:



Forbidden: This mark indicates forbidden matters.



Instructions: This mark indicates mandatory matters.



Warning



It is strictly forbidden to collect liquid particles and filter flammable and explosive gases with this product.

Coolant, fat, working fluid, wet or oily dust particles, etc. can cause short circuit, fire disaster or electric shock accident.



The equipment is strictly kept from water.

Or it will cause short circuit, internal damage of electrical appliance, fire disaster or electric shock accident.



No repair and maintenance with electricity, and surely power off before operation.

Don't start the product suddenly, which will cause electric shock or casualties.



Never power on the equipment before the completion of installation.

Electric shock accident will induce equipment damage or personnel casualties.

Misoperation of electric wiring will induce equipment damage or personnel casualties.



Hole-opening is strictly forbidden to the equipment.

Avoid internal damages of electrical appliance of this product, and fire disaster or electric shock accident.



Never dismantle or modify the electrostatic filter without approval.

Non-approved dismantlement or modification will induce the machine failure or fire disaster.



Input power supply must be consistent with the voltage and frequency indicated on the name plate.

Inconsistent input power supply will induce the damage of electrical appliance, and cause fire disaster.

All wiring shall be confirmed to meet local rules and regulations.



Notice



EHU is not designed to use outdoor.

The product shall be installed in a structure resisting wind and rain, such as indoor.



This machine must be maintained by trained and qualified maintenance technicians.

It is recommended to contact the Company's after-sales personnel to do the repair work.



Ensure the easy dismantlement or turn-around of air exhaust pipeline during the installation.

The equipment shall be installed against wall to save floor space, but the filter of the equipment shall be replaced from the back side, so it's better to use an air exhaust pipe of a hose, ensuring that the back cover may be removed by rotating by 90° to replace or repair the filter.

I. Application Occasion:

Exhaust HEPA Unit (EHU) is installed in the existing wards without air exhaust. A part of indoor circulation may effectively adsorb indoor bacterial particles, and a small part of external air exhaust may achieve indoor negative pressure and make the exhausted air sterile. The exhausted air passes through the primary and efficient filters to filter out the viruses and bacteria attached to the dust.

II. Product Characteristics:

◆ Fully-sealed metal shell

The shell of the machine is made of quality metal, has good dampproof, corrosion-proof, anti-rust and fireproof performance, and adopts fully-sealed box structure.

◆ Ultra-big blowing rate

Imported EBM double air-inlet fans at the intake, and advanced hydrodynamics analysis and design technique

◆ Ultra-low noise

Quality motor is adopted to greatly reduce the noises during the running of the machine.

◆ Comfortable ventilation

It can replace the indoor air reasonably, and provide healthier air in the living environment.

◆ Convenient installation and maintenance

There are four universal truckles at the bottom of the box, which can be installed conveniently and quickly; and its simple structure greatly lowers the expenses of future maintenance.

◆ Blowing rate adjustment

3 levels of blowing rate are provided for users' free choice.

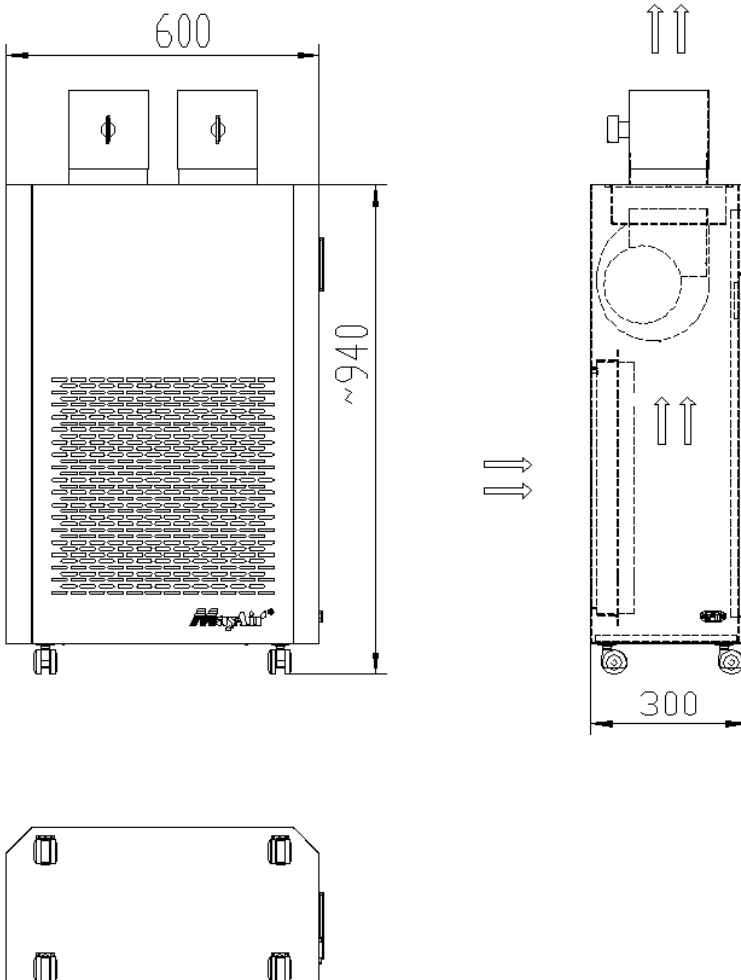
◆ Low power consumption: The power consumption of each set is less than 150W;

◆ The preset filter gauze, which shall be cleaned and dried by air before being used, can effectively protect the efficient filter;

◆ Composite filter gauze and UV lamp may be selected.

III. Product Outline and Parameters:

1. Outline Dimension of the Equipment:



EHU Outline Dimension Drawing

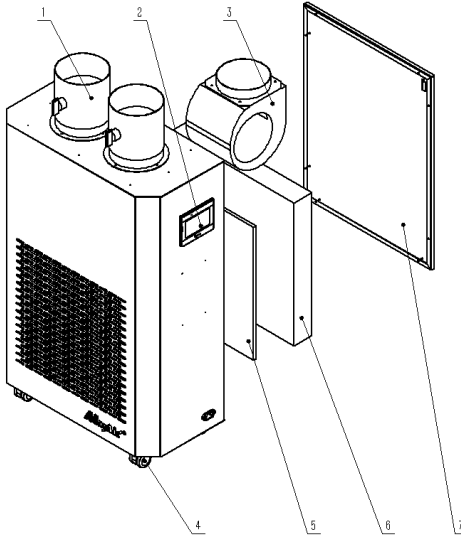
2. Parameters:

Parameters	EHU (standard configuration)		
	Low	Medium	High
Gear	Low	Medium	High
Power supply	AC120V 60HZ 1P		
Power (W)	21	70	142
Blowing rate (m3/h)	200	400	600
Noise (dB(A))	40	53	61
Aerosol removal efficiency	99.91%	99.95%	99.6%
Particles CADR(m3/h)	150	262	336
Negative pressure (Pa)(1/4 air exhaust)	50	98	123
Outline dimension of whole machine (mm)	1045(H)×600(W)×300(D)		
Box material	Spray-painted cold-reduced sheet		
Size of primary filter (mm)	450×450×10		
Size of sterilizing HEPA filter (mm)	482×482×70		
Size of air outlet (mm)	Φ150		
Size of air exhaust port (mm)	Φ150		
Applicable area (m3)	40 (1/4 air exhaust) ~100 (full air exhaust)		
Net weight of the equipment (Kg)	32		

3. Optional Accessories of the Product:

UV lamp, PM2.5, differential pressure meter, composite filter, touch screen

4. Product Structure:

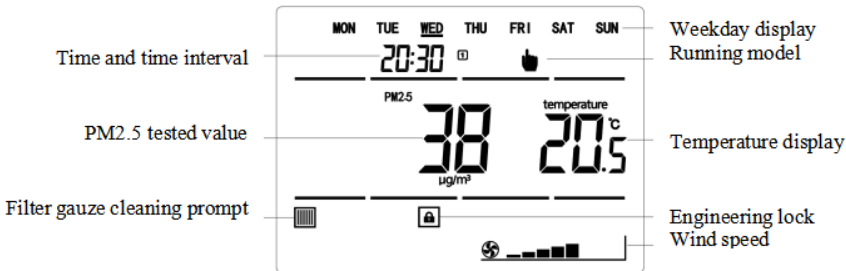


- 1. Blowing rate control valve
- 2. Controller
- 3. Fan
- 4. Truckle
- 5. Primary filter
- 6. Sterilizing filter
- 7. Door plank for examination and repair


5. Panel Introduction and Operation Description:




- Switch EHU,
- Adjusting gear,
- Display the service life of filter gauze,
- Timing/segmental timing switchgear




- i. **Controller Boot-up/ Shut-down:** After the power supply is connected correctly according to wiring diagram, the controller will be defaulted to enter the boot-up state, and LCD will display the time. After the power key is pressed, the controller will be started, and LCD will display interior temperature, and other information. After the power key is pressed again under the boot-up state, the controller will enter the shutdown state.
- ii. **Time Setting:** Under the boot-up state, press the menu key for more than 2 seconds to enter the Time Setting state. Firstly, modify the weekday, which will flicker; press the menu key repeatedly to switch between weekday, hour and minute. Under the Time Setting state, use the upward key or downward key to modify corresponding numerical values. After completion of time modification, press the Confirmation Key to save the current time and exit from the setting state.
- iii. **Work Mode Selection:** Under the boot-up state, press the mode key . The work mode can be switched among Manual Mode , Timing Mode , Auto Mode and Sleep Mode .
- iv. **Timing Mode Application:** Firstly, switch the work mode to timing mode, and press the menu key to enter the timing mode setting state. It's defaulted to firstly modify the set value of timing interval of Monday. Press the menu key again to choose to modify the hour, minute and wind speed of time interval 1 to time interval 6, and use the upward key or downward key





▼ to modify the corresponding set values; after completion of setting, press the Confirmation Key  to enter the setting of 6 time intervals of Tuesday, and then after the whole setting of all the 7 days according to the same method, exit from the setting state automatically. Here, the fan will change the wind speed automatically according to set values. The default values of the time intervals under the timing mode are as shown below:


Time interval	Time	Wind speed
Time interval 1	05:00	Low speed
Time interval 2	07:00	Low speed
Time interval 3	11:00	Low speed
Time interval 4	13:00	Low speed
Time interval 5	17:00	Low speed
Time interval 6	22:00	Low speed



- v. **Manual Mode Application:** Firstly, switch the work mode to manual mode, press the upward key ▲ or the downward key ▼ to enter the manual wind speed selection state, and here, the wind speed mark will flicker. Press the upward key ▲ or downward key ▼ repeatedly to select the wind speed of the fan to be Stop, Low Speed, Middle Speed, or High Speed. After the desired wind speed is selected, press the Confirmation Key  to save the current setting and exit from the setting state. Here, the fan will run continuously at the selected wind speed.
- vi. **Sleep Mode Application:** Firstly, switch the work mode to sleep mode, under which, the fan will run continuously at the lowest speed.
- vii. **Filter Gauze Cleaning Prompt Function:** Under boot-up state, press the Filter Gauze Key ▼ for more than 2 seconds to enter the interface of viewing the use days of filter gauze. In this interface, press the Filter Gauze key ▼ once again for more than 2 seconds to clear the use time of filter gauze, and start timing over again.

After the accumulative running time of this machine exceeds the preset value of filter gauze, the LCD will display the filter gauze replacement prompt mark  to remind the users to replace or clean up the filter gauze. After replacement or cleaning of the filter gauze, the users may enter the interface of

viewing the use days of filter gauze to clear the prompt mark and restart the timing.

viii. **Engineering Lock Key Setting:** Under non-setting state, press the Confirmation Key  and the Menu Key  simultaneously for more than 2 seconds to start the Engineering Lock, and after that, all keys will become ineffective; under Engineering Lock Boot-up state, press the Confirmation Key  and Menu Key  simultaneously for more than 2 seconds to close the Engineering Lock, and all keys will become normal again.

ix. **Fault Prompt:** If the fan is abnormal in running, the mark  will flicker to remind examination and repair.

x. **Restore Factory Setting:** Under boot-up state, press the upward key  and downward key  simultaneously for more than 2 seconds to restore the parameters setting of the product to the factory default setting. After that, the machine will be shut down automatically, and can be used normally after boot-up.

Automatic Save: If not press operation in 30 seconds under any setting state, the machine will automatically exit from the setting state and save the set values.

IV. Installation:

1. Unpacking and Inspection

After receiving the equipment, users shall check all external packaging and packed objects to see whether they are damaged. Any damage occurring during transportation shall be reported to the logistics service provider, one inspection report shall be printed out, and the users and logistics service provider shall claim for compensation according to receiving clauses.

2. Selection of Installation Site

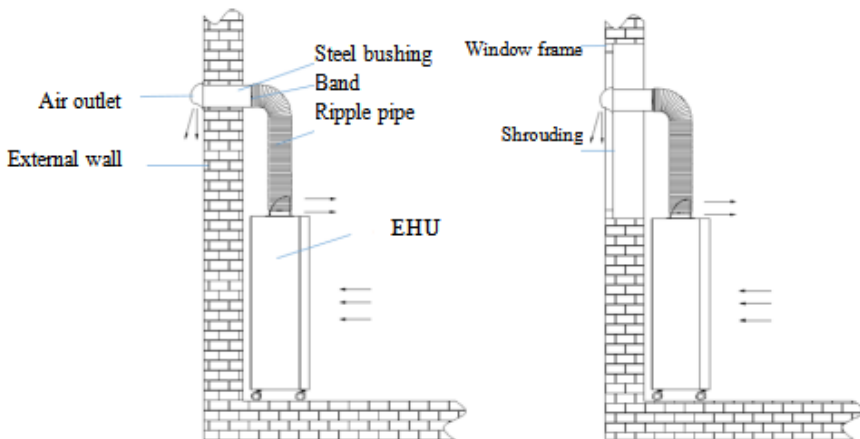
EHU is generally floor-mounted, and the following shall be paid attention to in

the selection of installation site:

- The product shall be installed against wall.
- The installation site selected to ensure the use of the shortest wind pipe in order to reduce pipeline resistance.
- The plug and socket selected, if required, shall meet installation standards.
- The equipment shall be available to translate or rotate for the sake of daily maintenance.
- This machine, its air inlet and air supply/ exhaust port shall be installed away from high-temperature or direct-heated place, big-humidity place, and place with much fume.

Please don't install this product in any place where it's easy to produce acids, alkali, organic solvents, coatings, other harmful gases with corrosive ingredients, dust, and oil mist, such as machinery and chemical factories, etc.

3. Schematic Diagram of Installation



4. Pipeline Installation

- Connect the EHU with the pipeline to the air outlet, and fix the pipeline

and the air outlet of the main engine with a throat hoop.

- Avoid the excessive bending, multiple bending of pipelines, and reduction of connecting pipeline diameter in the pipeline installation project.
- Wrap the connecting part of pipeline and interface with aluminum adhesive tape to prevent leaking.
- Connect the air exhaust port to the air exhaust pipe. Composite hose, if adopted, must be fixed with pipe hoop or bolts.

5. Notices for the Use of Installation:

- Don't install the product in any place directly against fire source or open fire.
- Don't install the filter in a place where the surrounding environmental temperature is higher than 45°C, since high temperature will deform the filter or burn out the motor.
- Don't install the product in any place where flammable gases possibly leak.
- Don't install the product in any place with much fume, since the filter attached with oil won't work.
- Don't install the product in a very humid place, or it will cause electric shock or product electrical failures.
- Don't install the product in any place where it's easy to produce acids, alkali, organic solvents, coatings, other harmful gases with corrosive ingredients, such as machinery and chemical factories, etc.
- Install the product in a place where is sufficiently strong and stable.
- Air exhaust port shall be installed in a place where the exhausted air won't flow back directly.
- Pipeline of adaptable model shall be selected.
- Don't install, dismantle or modify the product at random.

- Wrap the connecting part of pipeline and interface with aluminum adhesive tape to prevent air leakage.
- Make an insulation layer between pipeline and wall if a metal pipeline passes through the metal plate or metal mesh of wooden buildings.
- Turn off the operating switch surely before maintenance and care.
- After long-term use of the pipeline EHU, the filter will be blocked by dust or dirty matters, causing poor ventilation effect. Please clean up and replace the filter according to the degree of bilge and dust attached to it regularly, especially when there are many particle pollutants, and the attachment of particles to the filter gauze will lower the ventilation effect, so it's necessary to clean up and replace it in time.
- Don't use volatile oil or metal brush to clean the filter.
- Primary nylon mesh filter shall be water-washed, dried by air, and then installed in the EHU.
- EHU shall not be water-washed.

V. Maintenance and Care:



Note

Before repair and maintenance, surely confirm that EHU is powered off; during repair and maintenance, please wear protective gloves to protect you from being scratched.

1. Replacement Cycle of Filter Gauze

- Maintenance and Care of Primary Filter Gauze:
Primary filter gauze shall be washed with clear water once every around 3 months, and then dried by air, and installed.
- Replacement Cycle of MayAir Sterilizing Filter (or Composite Filter):
It shall be replaced after every 3000h use.

2. Filter Gauze Replacement Steps

- Pull off the power plug;

- Remove the screws fixing the back cover with a screwdriver and keep them well;
- Remove the back cover, loosen the nuts on the internal press cake, and rotate the press cake by 90°;
- Remove the sterilizing filter and primary filter in turn;
- Primary filter may be reused after being cleaned with clear water and dried by air; sterilizing filter shall be replaced;
- After filter replacement, tighten the nuts on the press cake, and rotate the press cake back by 90°;
- Fix the screws for back cover onto the box;

Environmental Protection Description

According to the *Administrative Measures for the Control of Pollution in Electronic Information Products*, the following lists the name and content of the toxic and harmful substances or elements possibly contained in this product.

Part name	Harmful substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr(VI))	Polybrominated biphenyl (PBB)	Polybrominated diphenyl ethers (PBDE)
Primary filter gauze	○	○	○	○	○	○
Sterilizing filter	○	○	○	○	○	○
Fan	○	○	○	○	○	○
Controller	○	○	○	○	○	○
Safety interlocking switch	○	○	○	○	○	○
Electric circuit board	○	○	○	○	○	○
External framework	○	○	○	○	○	○

This table is prepared in accordance with the regulations of SJ/T11364.

○ indicates that the content of this harmful substance in all homogeneous materials of this part is below the limit regulated in GB/T26572.

× indicates that the content of this harmful substance in at least one homogeneous material of this part exceeds the limit regulated in GB/T26572.

Remark: In the above x part, partial harmful substances contained exceed the limits because that the present technical level in the industry is limited, and they cannot be replaced or reduced temporarily.



This mark is applicable to the electronic information products sold in the People's Republic of China, and the figure in the center of the mark refers to the years of environmental-protection service period in condition of normal use. Within the environmental-protection service period, please use this product according to the Operating Instructions.

Not all the above parts will possibly be contained in different models. Please give priority to the actual model.

Prompt description in the *Administrative Regulations on the Recycling and Disposal of Waste Electrical and Electronic Products*

In order to better care for and protect the earth, you shall please comply with the national relevant laws and regulations on the recycling and disposal of waste electrical and electronic products when you do not need this product any longer, or the service life of this product is terminated. You shall submit this product for recycling and disposal to a manufactory which is recognized by the country and has the qualification for recycling and disposal.



Packing List

No.	Material name	Material specification	Unit	Quantity
1	Whole machine (including primary and sterilizing filters)		Set	1
6	Service Manual		Book	1
7	Certificate of Conformity		PCS	1
8	Quality Assurance Card		PCS	1

X. Service Description

Respected users:

Thank you very much for selecting the product of MayAir Technology (China) Co., Ltd. We hope this product meets your requirements. If you have any doubt or demand about the repair, maintenance and troubleshooting of this product, please contact the Company. We will provide you with high-quality services wholeheartedly according to concrete circumstances.

The quality assurance period for this product is one year (except for users' retrofitting).

Service Record

Product name		S/N	
No.	Maintenance Service Content	Date	Remark

Contact Methods

Y2004073101/0A

Company Name: MayAir Technology (China) Co., Ltd.

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