

AIRTECH

CLEAN BENCH

USER MANUAL



This manual is for standard product reference only.

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1. Preface

Thank you for purchasing our CLEAN BENCH.

- Please read the instruction manual carefully and use the product correctly. Improper operation will cause serious accidents.
- Please be sure to designate the operation and management personnel of this equipment. If an abnormal accident occurs, please report to the management personnel immediately.
- Do not remove the specification label on the device.
- This manual is written for standard equipment, but special specifications can also be used as a reference.





2. Receiving instructions

- Please check carefully and confirm whether the product is damaged during the shipping.
- Please confirm whether the product and the order content are consistent.
- The company's products are strictly controlled from production, inspection, packaging to shipment. If there is any problem with the product, please contact us within 3 days of arrival. If the product is improperly used or modified, it will not be covered by our warranty.

3. Safety instructions





| 3-1 Marking description

- Please read the "Safety Instructions" carefully before using the product and use the product properly.
- Please follow the precautions described here.
- The label and description are shown in the figure below.


Label	Description
 Danger	It will harm to life and body if do not comply with
 Caution	It will cause malfunction if do not comply with
 Prohibition	Prohibition
 Conformation	Conformation

3-2 Precautions during installation

Danger

-  It is forbidden to install in an environment where easily catch fire and explosion
 - This equipment is not explosion-proof.
 - It is forbidden to install in an environment where easily catch fire and full of explosive gas.
-  Wiring work is performed by professionals
 - There may be a risk of electric shock.
-  Install in a place where the base plate is strong enough
 - Please install it in a location that can bear the weight of this equipment.
-  Install the equipment before connecting the power line
 - To avoid electric shock accidents.
 - Be sure it's grounded.

Note

-  Do not use in the following places to avoid machine failure
 - Places with low or high temperatures.
 - Places with heavy moisture or moisture easily.
 - Places likely to cause dust accumulation.
 - The outdoor place.
 - If you want to install in a special environment, please contact our company to discuss opinions.

- ❗ Install the device in a stable location
 - If the equipment is installed in an unstable location and tilted, it may cause problems in the operation of the blower.
- ❗ Do not block the return air outlet
 - Blocking will reduce the return air volume, resulting in reduced equipment performance.
- ❗ Plan maintenance of working area
 - The filter must be replaced regularly, and maintenance work such as the blower and electrical wiring must be maintained.
- ❗ Confirm voltage specifications
 - Please confirm whether the input power is the same as the equipment specifications to avoid the danger of fire and combustion of parts.

| 3-3 Precautions when using

⚠ Danger

- ❗ Please cut off the power before checking
 - Sudden operation of the equipment may cause electric shock accidents.
- ❗ When replacing the primary filter, please stop the blower first
 - Prevent the blower from inhaling foreign objects or causing personal injury.

⚠ Note

- ⊘ Caution electric shock
 - Do not operate the device with wet hands, as this may cause electric shock.
- ⊘ Do not switch the switch multiple times in one minute
 - Switching the power switch repeatedly for a short time may cause the blower or electric control parts to burn out.
- ⊘ Do not touch the electronic control parts
 - Do not touch the electronic control parts inside the device. If you have to, please cut off the power first.

- ⊘ Do not damage the power cord
 - Do not put heavy objects on the power cord or place them randomly.
 - Damage to the power cord may cause accidents such as fire or electric shock.
- ⊘ Do not modify the equipment
 - It may cause accidents such as electric shock, fire, and equipment performance degradation.
- ⊘ It is forbidden to use volatile oil or thinner to clean the equipment
 - Do not use volatile oil or thinner to wipe the equipment to avoid the fading and peeling of the coating.
- ⓘ Please clean and replace the filter of this equipment regularly
 - Please follow the operation method described later to clean and replace.

| 3-4 Precautions when abnormal

⚠ Danger

- ⊘ Prohibit self-disassembly and repair
 - Improper handling may cause electric shock, fire and other accidents. Please hand over to our company for disassembly and repair.

⚠ Note

- ⊘ Do not use when abnormal
 - Operating under abnormal conditions may cause electric shock or fire accidents.
 - In the event of an abnormality, please stop the operation immediately, cut off the main power supply and contact our customer service staff.

4. *Features and specifications*

- This product has the following functions, please use it as a reference.

| 4-1 Function

- Use low noise fan production.
- The air flow mode can choose horizontal or vertical air flow.

| 4-2 Filter efficiency

- This equipment is equipped with air supply unit, which can remove particles above 0.3 μ m and efficiency above 99.99%. The cleanliness of the blowing outlet is CLASS 1,000 (US. Fed. Std. 209d.), and it has the characteristics of low noise and low power consumption.

| 4-3 Main filter

- The main filter (MAIN FILTER) adopts HEPA FILTER 0.3 μ m high-efficiency filter with efficiency above 99.99% or ULPA FILTER 0.1 μ m high-efficiency filter with efficiency above 99.999%. The outer frame is made of aluminum material.

| 4-4 Pre-filter

- The pre-filter (PRE-FILTER) can remove coarse particles to extend the life of the main filter (MAIN FILTER). Using nylon (POLYESTER) non-woven fabric net, its collection efficiency is about 30-35% under the weight method (AFI method).

5. *Installation method*

5-1 Voltage specification

- For voltage specifications, please connect to an appropriate power source according to the specifications of the equipment.

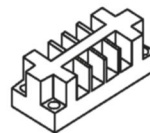
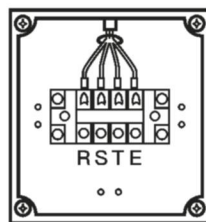
5-2 Power connection

- If the power supply is AC 110V 1 Φ or 220V1 Φ , a 5M power cord plug is attached.
Please confirm the socket voltage and plug the power plug into the power supply.



5-3 Three-phase power connection

- If the power supply is AC 220V 3 Φ , the body of the device is a terminal type, so please confirm the wire number RST (red, white, and black, and then wire). After connecting the power, please make sure the rotation direction of the blower is correct, otherwise, when the fan is reversed, the air volume will decrease.



5-4 Fixed equipment

- After the installation location is determined, level the entire equipment and secure.

6. *Operation method*

- Please supply power according to the installation regulations.
- Press the blower switch to ON, and the blower motor starts to run and supply air.
Please start the work on the workbench after 1–2 minutes after the blower blows the air.
- Please press the lighting switch (LIGHT) to ON, and the fluorescent lamp will start lighting.

7. *Simple troubleshooting*

	Condition	Cause	Treatment / Repair
Blower	The blower does not start.	<ul style="list-style-type: none">• Power—power is not delivered.• FAN SWITCH is in the "OFF" position.• Break type wiring loose.	<ul style="list-style-type: none">• Insert the plug, or open the primary side relay BREAKER.• Check the wiring of the fan switch by pressing the "ON" position.
	Will start but the wind speed is slow.	<ul style="list-style-type: none">• The pre-filter (PRE-FILTER) is blocked.• The high efficiency filter (HEPA FILTER) is blocked.	<ul style="list-style-type: none">• Clean or replace the pre-filter (PRE-FILTER).• Replace the high efficiency filter (HEPA FILTER).
Lighting lamp	The lamp will not light up.	<ul style="list-style-type: none">• The lamp is damaged.• Broken or loose wire.	<ul style="list-style-type: none">• Replace the lamp.• Check wiring.

8-1 Main filter

- As the dust accumulates, the air is difficult to pass, and the wind speed and air volume decrease. If there is a differential pressure gauge, the pointer points to the right. It is recommended to replace the filter when the pressure value is changed. Generally, use an anemometer to measure the wind speed and wind speed. If it is below 0.2m/sec, please replace the MAIN FILTER (HEPA FILTER).

8-2 Pre-filter

- PRE-FILTER will accumulate a large amount of dust. Please remove it and dry it in a cycle of about seven to fifteen days, or clean it with a vacuum cleaner.

8-3 Fan

- Although there is no special need for maintenance, it is recommended to arrange annual regular inspections. The company will send professionals to do related maintenance and inspections (additional charges are required).

Consumables table

Product name	Specifications	Recommended replacement time
Pre-filter	Nylon mesh or non-woven filter	Approximately 2 weeks
Main filter	High efficiency filter x 1 pc	About 3 years

9. *Contact method*

If you have any questions about AIRTECH equipment, please contact us through our website or call the customer service. We'll server you as soon as possible.

Address :

- Plant 1 : No.58-1, Guangfu Rd., Hsinchu Industrial Park, Hsinchu County 303-51, Taiwan
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