

AIRTECH

HAND DRYER WASHER

Equipment installation manual



The content of this manual is written for standard equipment, but it is also applicable to related equipment.

1.	Preface	1
2.	Receiving notice	1
3.	Safety instructions	1
3-1	Marking description	1
3-2	Precautions during installation	2
3-3	Precautions when using	3
3-4	Precautions when abnormal	4
4.	Functions and specifications	5
4-1	Function	5
4-2	Specialty	5
4-3	Specification	6
5.	Installation method	8
5-1	Device installation	8
5-2	Power supply	8
5-3	Pipeline connection	8
6.	Operation method	9
6-1	Power transmission	9
6-2	Instructions	9
6-3	Sticker description	9
6-4	Precautions	10
7.	Simple troubleshooting	11
8.	Maintenance	11
9.	Contact information	13

1. *Preface*

Thank you for purchasing our company's HAND DRYER W/WASHER.

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





2. *Receiving notice*

- Please check carefully and confirm whether the product is damaged due to the shipping process.
- Please confirm whether the product is consistent with the content of the order.
- Our company's products are strictly controlled from production, inspection, packaging to shipment. If there is any problem with this product, please contact us within 3 days of arrival. If the product is improperly used or modified, it won't 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 correctly.
- Be sure to follow the precautions described here.
- The markings and descriptions are shown in the figure below.


Marking	Description
 Danger	If you do not comply, there is a high possibility of serious harm to life or body and mind.
 Cautions	If you do not comply, it may cause minor injuries or malfunction of the machine.
 Forbidden	Prohibited matters
 Follow	Indicates to matters that need to be enforced.

3-2 Precautions during installation

Danger

-  It is forbidden to install in an environment prone to fire or explosion.
 - This equipment is not explosion-proof.
 - It is forbidden to install in an environment prone to fire and full of explosive gas.
-  Wiring work should be performed by professionals.
 - There may be a risk of electric shock.
-  Install at a place where the base plate has sufficient strength.
 - Please install at a place that can bear the weight of the equipment.
-  Install the equipment before connecting the power line.
 - Avoid electric shock.
 - Be sure to ground it.

Cautions

-  Please do not use it in the following places to avoid malfunction of the machine.
 - Places with low or high temperatures.
 - Places with heavy moisture or moisture is prone to occur.
 - Places that are likely to cause dust accumulation.
 - An outdoor space that is exposed to wind and rain.
 - If you want to install in a special environment, please contact our company to discuss opinions.

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





| 3-3 Precautions when using

⚠ Danger

- ❗ Please cut off the power supply before checking.
 - Sudden operation of the equipment may cause electric shock.
- ❗ When replacing the pre-filter, please stop the fan first.
 - To prevent the fan from inhaling objects or causing personal injury.


⚠ Cautions

- ⊘ Be careful of electric shock.
 - Do not operate the device with wet hands, as this may cause electric shock.
- ⊘ Do not switch the power switch multiple times within one minute.
 - Switching the power repeatedly in short period of time may cause the fan 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 place heavy objects on the power cord or arbitrarily place it.
 - Damage to the power cord may cause accidents such as fire or electric shock.
-  Do not modify the equipment.
 - It may cause 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 clean the equipment to avoid the fading and peeling of the coating.
-  Please clean and replace the filter of this equipment regularly.
 - Please clean and replace the filter according to the operation method described later.

| 3–4 Precautions when abnormal

Danger

-  It is forbidden to disassemble and repair by yourself.
 - Improper handling may cause accidents such as electric shock and fire. Please hand over to our company for disassembly and repair.

Cautions

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

| 4-1 Functions

Make sure to read the details provided in this manual very carefully to ensure good utilization of this product. If some of the instructions are unclear, please feel free to contact our customer service department.

This Hand dryer-washer combo is dotted with a water valve for the washing process and a high-speed blower that sends out dust-free air through nozzles to facilitate the rapid drying process using HEPA filters.

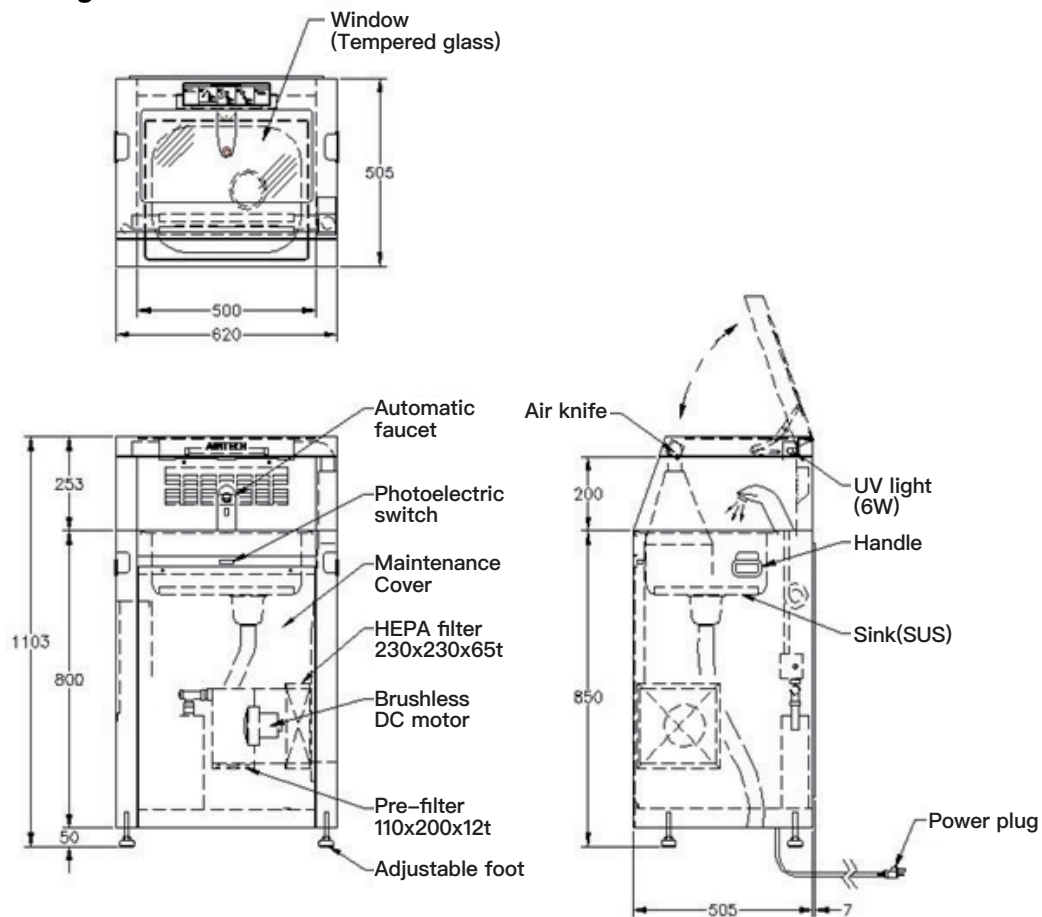
| 4-2 Specialty

- The blown air is a dust-free air filtered by HEPA filter.
- Equipped with a high-speed air jet, your hands can dry in a short period of time.
- The circulating air flow method is adopted to prevent dust from flowing out and does not pollute the surrounding environment.
- Fully automatic design, you can wash your hands and dry them without touching any parts of the equipment.
- Hand washing & drying are a two-in-one designed. It's small and does not take up space.
- Equipped with PLC programmable controller, the program can be modified, to meet various customers' needs.

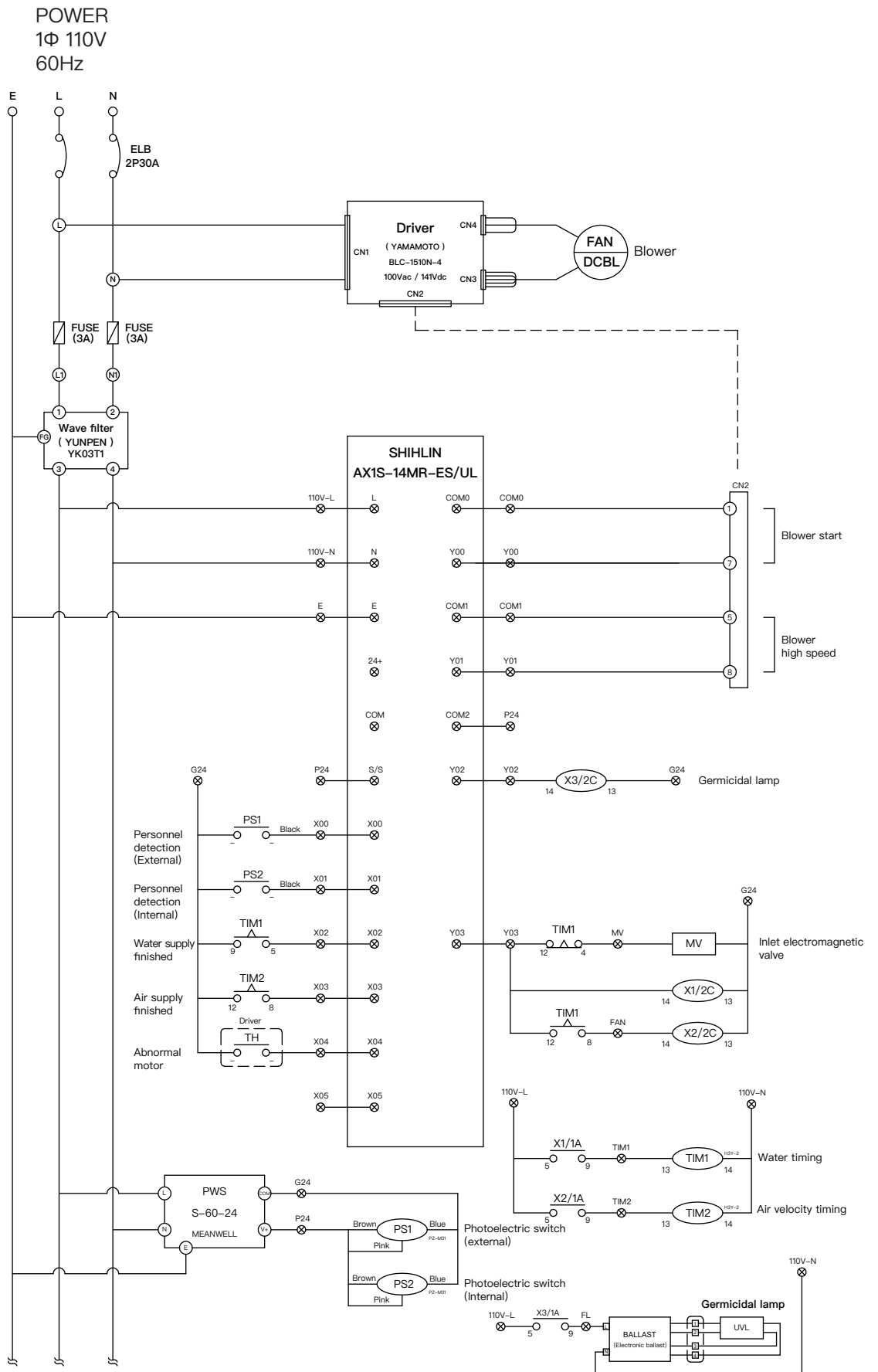
4-3 Specification

Specification		
Model	AHD-100DW-DC	
Construction	Main	Baking enamel steel plate
	Internal	Stainless (SUS 304)
	Electromagnetic valve	Queen,MD-15-DC24V
Electrical	AC 110V	
Frequency	60 Hz	
Dust Collection Elements	Main filter : HEPA FILTER	
	Pre-filter : Non-woven filter	
Operation Switch	PLC (programmable logic controller)	
Air Velocity	100 m/s	
Water Supply	Automatic faucet	
Connecting Pipeline	Water pipe : 1/2"NPT	
	Drain pipe : 1"PVC hose	
Dimension(WxDxH)(mm)	620x505x1103	
Power Consumption	900VA	
Operation	Hand washing by automatic water valve (sensor)	
	Blow dry by hand dryer	

Drawing



Circuit diagram



5. *Installation method*

| 5-1 Device installation

- After the installation position is determined, adjust the level with the adjuster (ADJUSTER) and fix it. If the floor is covered with soft carpet (such as PVC), please put the adjuster (ADJUSTER) seat on top of it.

| 5-2 Power supply

- For the connection of the power supply, please open the motor maintenance door at the bottom and use the power junction box to connect the power supply after confirming the correct power supply.

| 5-3 Pipeline connection

- Please select the appropriate diameter for piping according to the specifications.
Ordered and perform a leak test after connecting the water supply pipe.
- In order to ensure the normal operation of the electromagnetic valve, it is recommended to install a Y-type water filter on the water supply side to prevent foreign matter in the water from causing the electromagnetic valve diaphragm to fail to close and leak water.

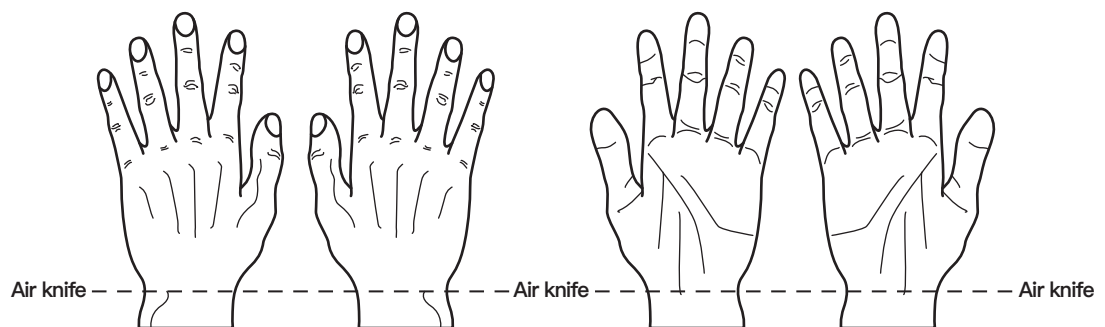
6. Operation method

6-1 Power transmission

- Press “On” for “BREAKER” on the control panel.

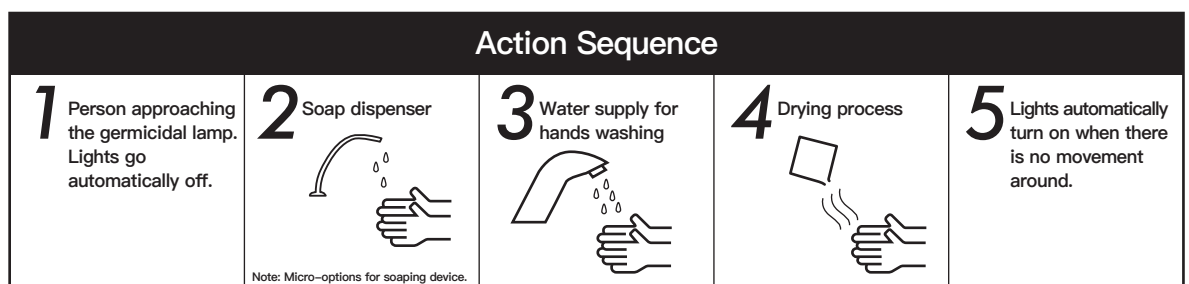
6-2 Instruction

- Hand washing and drying are continuous actions. Put your hand under the automatic water valve, and water will automatically flow out. After the set time stops, the drying action will follow.
- The drying process involves drying out the back of the hands first once the sensor is triggered, then repeat the process to dry the palm of your hands.



6-3 Sticker description

- The action of washing and drying hands



- Germicidal lamp warning



Danger

Do not look directly at the germicidal lamp.

| 6–4 Precautions

- Please use it within the recommended range of power supply 1Φ110V±10%, 60Hz.
- Do not allow conductors such as metal sheets to fall or remain in the electronic control circuit of the main switchboard to prevent short circuits.
- Any line connection and disassembly must be carried out in a power-off state to avoid danger.
- Avoid placing the device in the following locations:
The places exposed to direct sunlight, places with high temperature and high humidity, places with corrosive or explosive gas, places with vibration.

7. Operation method

- If any abnormality occur, please refer to the following table to carry out inspection.
- If the cause of the failure is unknown, or there is any problem, please contact our company.

Possible issues	Possible causes	Processing method
The blower does not work	The main power supply has not yet been supplied.	Insert the plug into the socket by leakage BREAKER.
	Loose terminals or poor connection.	Check the circuit Check the socket capacity
	CIRCUIT PROTECTOR trip. (Short circuit)	Check the circuit Check the socket capacity
The air velocity is too low after starting	The pre-filter is blocked.	Please clean or replace.
	The main filter is blocked.	Please replace it.
Burnt smell	The electrical parts short circuited.	Cut off the power and contact our company.
	Overload causing the wire to catch fire.	
Blower stop	The motor burned out.	Replace the motor.
Blower does not stop	SENSOR broken.	Clean the SENSOR surface.
The germicidal lamp does not light up	The light is broken.	Replace it.

8. Maintenance

- In order to maintain the product performance, please follow the procedures to implement maintenance and inspections, or arrange annual regular maintenance and inspections by our company's professionals (additional charges is required).



Cautions : Please cut off the power before checking processing

- Pre-filter

The pre-filter is installed under the equipment. Please remove the air seal first and then remove it from the back. Use compressed air, vacuum or water washing (no rubbing) to clean it by yourself. It is recommended to clean it 2 to 3 times a month. To remove the main filter, the blower must be stopped first to avoid inhalation of foreign objects or injury.

- **Main filter**

The update period can be based on the air velocity value detected by the anemometer (in this case, the air velocity value is halved) or the pressure difference measured by the differential pressure meter (the differential pressure value is doubled) to decide whether to replace the device. The detection cycle is about 2 to 4 times a year.

- **Germicidal lamp maintenance**

First, cutting off the power, then take out the germicidal lamp; when installing the lamp, do it in the reverse order.

- **Operation reset**

For the sake of safety, this product is equipped with an earth leakage circuit breaker, please check whether the circuit is abnormal, and perform operation reset after safe handling. When the circuit is restored, please close the leakage circuit breaker.

- **External maintenance**

Please use a soft fiber cloth (WIPER) to wipe, if the pollution is considerable, please use neutral lotion or damp water.

When using in a clean room, be sure to use a special clean room rag and pure water. When cleaning and wiping, do not use benzene or solvents to avoid damaging the paint.

- **SENSOR maintenance**

Breach of the SENSOR lens (LENZ) can cause malfunction, so please use a clean wipe (CLEAN WIPER) and a clean cotton swab for regular maintenance and cleaning. Do not use force when wiping, or it may be damaged. A minimum of 1–2 performance checks and tests per year are required (additional charge).

Consumable' s list

Product name	Specification	Recommended replace period
Pre-filter	300x600 x 1 piece	About 2 weeks
Main filter	915x762x50t x 1 piece	About 3 years

9. *Contact information*

If there are any questions to AIRTECH, please contact us through our website, or call the customer service line for professional service for you.

Contact address :

- HsinChu 1st factory: No.58-1, Guangfu Road., Hsinchu Industrial Park, Hsinchu County
- HsinChu 2nd factory: No.84, Guangfu North Road., Hsinchu Industrial Park, Hsinchu County
- www.air-tech.com.tw
- TEL:+886-3-6105668
- Fax:+886-3-5972734
- Email:info@air-tech.com.tw

Contact information

AIRTECH SYSTEM CO., LTD.

TEL | +886-3-610-5668

FAX | +886-3-597-2734

E-Mail | info@air-tech.com

Website | www.air-tech.com.tw

No.58-1, Guangfu Road, Hsinchu Industrial Park. Hsinchu County 303036, TAIWAN.