

TRIDENT

PLUS-2 AirDome™ Purifier

USER MANUAL



Developed & assembled in Singapore by Plasma Science in collaboration with the Agency for Science, Technology and Research (A*STAR) Institute of Materials Research and Engineering.



**Safe, Clean
Air Guaranteed**



**Eliminates All
Airborne Viruses**

(Including SARS-CoV-2),
bacteria, mold, VOCs and
pm2.5 pollutants



**Complete
Protection**

Purify and cleanse
the air around you



**Cutting-Edge
Technology**

Built with tech developed
in conjunction with A*STAR



**Quick &
Efficient**

Fastest virus disinfection
rate in the industry

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REPAIR ADVICE

Please read this user manual to operate this product properly and safely.

1. Only Plasma Science technicians who have undergone the required training are able to fix the air purifier.
2. Please inform Plasma Science Pte Ltd when the air purifier is malfunctioning and do not attempt to fix it. Unplug the wire, switch off the power and leave the rest to our technicians.

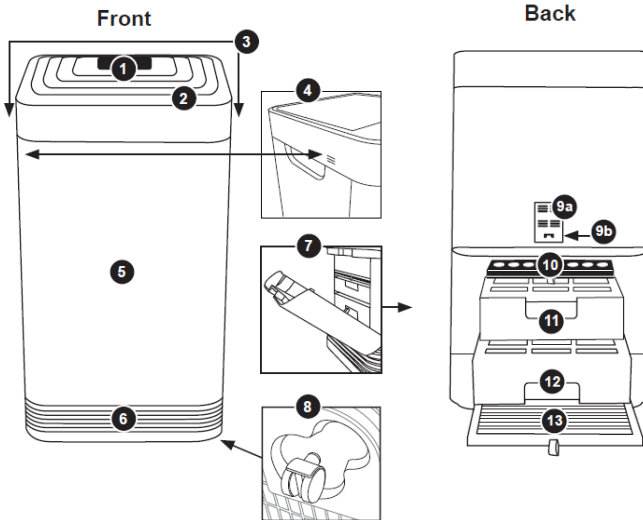
STATEMENT ON ENVIRONMENT IMPACT

1. All packaging materials are recyclable and environmentally friendly. To preserve a healthy environment, kindly dispose of these packaging materials in an eco-friendly manner.
2. Please keep packaging materials away from children as playing with plastic films and cartons can result in a room-breathing mishap.
3. Please help safeguard the environment by recycling or disposing of waste properly.

PARAMETER INFORMATION

Rated Voltage	220V
Rated Frequency	50Hz
Rated Power	20 – 130W max
PM CADR	1000m ³ /h
Filters Lifespan	10 years
Coverage Area	63 – 145m ² (680 – 1500 sqft)
Nett / Gross Weight	12.5kg / 16kg
Noise Level	<30Db(A) – 63 Db(A)

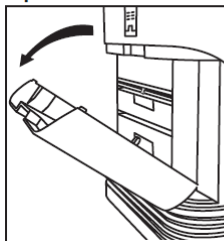
PRODUCT PARTS



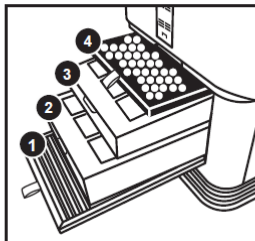
1. Air Outlet Vent	8. Wheels
2. Front Display Touchpad Panel	9. Sensor Cover, PM2.5 Sensor
3. Handles	10. Ozone Emission Removal Filter
4. TVOC Sensor	11. Bio-CAGE™ Filter 2
5. Base	12. Bio-CAGE™ Filter 1
6. Air Inlet Vent	13. Stainless Steel Pre-Filter
7. Filter Slot Cover	

ASSEMBLY

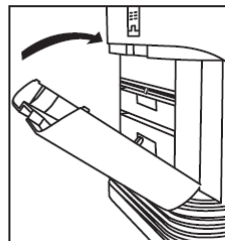
Open



Access to Filters



Close



PROPRIETARY AIRDOME™ TECHNOLOGY

With proprietary cold plasma activator and patent-pending Bio-CAGE™ (Calibrated Advanced Graphene Electrostatic) Filters, Trident keeps your air SAFE and CLEAN. Here's how Trident's Triple Action AirDome™ technology works:

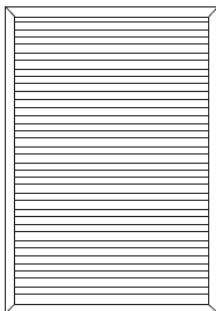
ACTIVATE & HUNT

The Trident Air Activator (5) simulates the sun's process of diffusing positive and negative oxygen ions while producing no heat, light, or other unwelcome byproducts. Sanitises surfaces and the air effectively. 99.99% of the airborne viruses, germs, VOCs, and allergens are hunted and killed by the ions that are released into the environment.

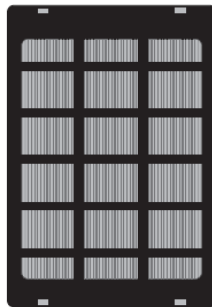


5. Activator

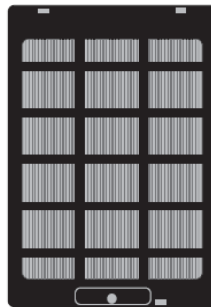
CIRCULATE & CAPTURE



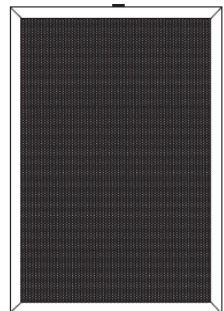
1. Pre-Filter



2. Bio-CAGE™ Filter 1



3. Bio-CAGE™ Filter 2



4. Ozone Emission Removal Filter

Larger particles from PM5.0, pollutants, and allergens such as pollen, pet hair, and dander are captured by the stainless steel pre-filter. Unlike plastic filters, these durable pre-filters are washable and reusable for up to 10 years. By using less energy and having higher Clean Air Delivery Rate (CADR), Trident's Bio-CAGE™ (Calibrated Advanced Graphene Electrostatic) filters can clean and disinfect an area up to five times faster than conventional mechanical filters.

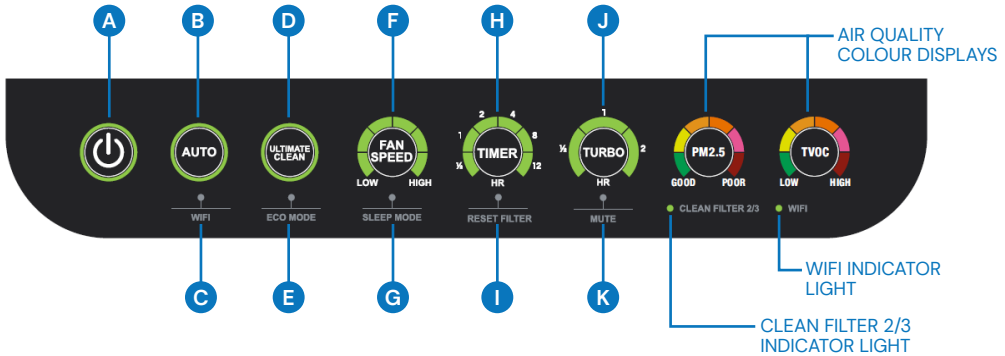
Bio-CAGE™ filters effectively eradicate smoke and odour with its strong 99.9% absorption rate of tiny and aerosol particles of 0.1-micron size. They capture any airborne particles and pathogens, resulting in the removal of 99.99% particle pollutants, viruses, bacteria, and moulds. They work by creating a potent 4–8KV voltage charge that rapidly kills bacteria and viruses by obliterating their proteins and cells. Bio-CAGE™ filters are washable and reusable up to 10 years. Ozone Emission Removal filters eliminate harmful ozone gas from the environment to less than 1 part per billion (ppb).

ELIMINATE HAZE, ALLERGENS, BACTERIA & VIRUSES

The revolutionary triple-action AirDome™ technology is developed in collaboration with a group of passionate scientists from A*STAR and engineers to inhibit virus and bacteria transmission within 30 minutes of usage and achieves up to 99.99% disinfection.

Applications: Suitable for use at places such as homes, workplaces, schools, hospitals, restaurants, daycare facilities, and clinics.

INSTRUCTIONS FOR USE



OPERATING BUTTONS

A. Power ON/OFF

1. Plug your PLUS-2 into an outlet. The **POWER** button will be lit red for standby mode.
2. Press **POWER**. The PLUS-2 will turn on and the **POWER** button will be lit green.
 - Each bar around PM2.5 and TVOC will illuminate, this is measuring current air quality while the fan is on.
3. Press **POWER** again to turn the PLUS-2 off.
 - When you select a different mode other than the default AUTO before turning off, the PLUS-2 will run the previously selected mode when it is powered back on.

B. AUTO

Allows your PLUS-2 to adjust the fan speed automatically (No time limit, cannot run with Fan Speed and Ultimate Clean).

1. Press **AUTO**. The **AUTO** light will be lit.
2. Press **AUTO** again to turn off function.

C. WIFI

Allows you to connect the PLUS-2 to your Wi-Fi network.

1. Press and hold **AUTO** to initiate Wi-Fi pairing function. See page 9 for details.

D. ULTIMATE CLEAN

Allows your PLUS-2 to automatically adjust to the highest fan speed based on your air quality. (No time limit, cannot run with Auto).

1. Press **ULTIMATE CLEAN**. The **ULTIMATE CLEAN** light will be lit green.
2. Press **ULTIMATE CLEAN** again to turn it off.

E. ECO MODE

Allows you to save energy by keeping the PLUS-2 fan off until it's needed. The POWER button will be lit yellow.

1. Press and hold **ULTIMATE CLEAN** for 2 seconds to activate. The Power icon backlight will be yellow while **ECO MODE** is on.
2. Press and hold **ULTIMATE CLEAN** for 2 seconds again to deactivate **ECO MODE**.

F. FAN SPEED

Allows you to adjust the PLUS-2 fan speed to 6 different speeds (LOW to HIGH). (Cannot run with Auto and Turbo).

1. Press **FAN SPEED** to adjust.
2. To go back to the lowest fan speed, press **FAN SPEED** until the first green bar is lit.

G. SLEEP MODE

Allows your PLUS-2 fan to still be active while the LED lights are turned off. Adjust the fan speed to your preference prior to turning on sleep mode.

1. Manually set **FAN SPEED** to desired setting.
2. Press and hold **FAN SPEED** for 2 seconds again to activate **SLEEP MODE**.
3. To turn off **SLEEP MODE**, press any button.

NOTE: ULTIMATE CLEAN and TURBO will work while the PLUS-2 is in SLEEP MODE.

H. TIMER

Allows you to choose the PLUS-2's duration of operation from ½ hour, 1, 2, 4, 8, or 12 hours by setting a countdown timer to shut off the PLUS-2 or end the current function.

1. Press **TIMER**. The bar next to ½ hour will be lit. After pressing timer six times, all bars will be lit.
2. Press **TIMER** once more to turn the **TIMER** off.

I. RESET FILTER

The **CLEAN FILTER 2/3** light will illuminate indicating that the PLUS-2's Bio-CAGE™ Filters 1 and 2 need to be cleaned. To reset the indicator light after cleaning the filters,

1. Press and hold **TIMER** for 2 seconds, until 2 beeps are heard and the **CLEAN FILTER 2/3 lights** turn off.

COLOURS OF CLEAN FILTER 2/3 light:

- After about 3 months the **CLEAN FILTER 2/3 light** will turn **Yellow** alerting you that the Bio-CAGE™ Filters 1 and 2 **SHOULD BE CLEANED** to maintain optimal performance.
- After about 6 months the **CLEAN FILTER 2/3 light** will turn **Orange** indicating that the Bio-CAGE™ Filters 1 and 2 **SHOULD BE CLEANED**.
- After 12 months the **CLEAN FILTER 2/3 light** will turn **Red** indicating that the Bio-CAGE™ Filters 1 and 2 **MUST BE CLEANED**.
 - After the filters are cleaned and the indicator is reset, the first green bar around AIR will be lit.

J. TURBO

Allows you to operate the PLUS-2 at the highest fan speed 6 to clean the air for a selected duration of time from ½ hour, 1, or 2 hours. To add more time press **Timer**. (Cannot run with Fan Speed).

1. Press **TURBO** to select and set the duration of operation to ½ hour, 1, or 2 hours. When the selected time has finished, **TURBO** will shut off automatically.
2. To exit **TURBO** mode, press **TURBO** until no bars are lit.

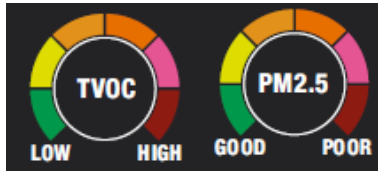
K. MUTE

Press and hold **TURBO** for 2 seconds until 2 beeps are heard. Repeat to unmute.

AIR QUALITY COLOUR DISPLAY

Trident PLUS-2 will display the PM 2.5 and TVOC (Total Volatile Organic Compound) quality based on the particulate matter (PM) in the air from low to high as represented below. If the PM level in the air exceeds the upper limit of the range, a warning is triggered with a beeping sound and a flashing LED. To turn off this warning, press AUTO and Fan Speed at the same time. Press the same buttons to turn the warning feature back on.

Trident uses TVOC sensor that has high sensitivity not only to air contaminants which are emitted by cigarette smoke, but also to low concentrations of odorous gases such as ammonia and H2S generated from waste materials in office and home environments. The sensor also has high sensitivity to low concentrations of VOCs such as toluene emitted from wood finishing and construction products.



Particulate Matter (PM) with a diameter of 2.5 microns or less					
0~5	5~10	10~20	20~30	30~50	Over 50

Fan Speeds					
1	2	3	4	5	6

(Low Fan Speed) (High Fan Speed)

WI-FI CONNECTION

DOWNLOAD APP AND REGISTRATION

1. To download the "Smart Life" app, scan the QR code below. Alternatively, you may also search for "Smart Life" in the Google Play or iOS App Store.
2. Launch the App and select "Register" to create an account with "Smart Life" using your phone number or email address to log in.
3. Press and hold on the AUTO button to activate the WiFi on PLUS-2.
4. Do ensure that your phone's WiFi is connected to 2.4GHz, instead of 5.0GHz, prior to "add device".
5. On the app, click "add device" or press "+" in the top right corner of the homepage. There are two ways to access the "add device" page: manually adding WiFi or automatically search for devices.

When adding a device manually, select any product from the product ring to enter a new homepage and make sure the indicator light flashes quickly.

Ensure that both your phone and smart gadget are powered on and linked to your WiFi. If the WiFi indicator on PLUS-2 does not flash, please press and hold the button again for at least 3 seconds until the indicator light begins to flash rapidly, indicating PLUS-2 is ready for configuration.

Once connectivity is successful, you may control your Trident PLUS-2 via mobile data anywhere you are.



CLEANING & MAINTENANCE

AIR INLET GRILLE AND OUTLET FAN LOUVER CLEANING

1. To get rid of dust and debris, use a soft brush. Or use a slightly damp cloth to clean the louvers.
2. Avoid using any abrasives or cleaning pads on any sections of the equipment and, if necessary, use a paper or cloth that has been mildly moistened to remove big deposits.

VOLATILE ORGANIC COMPOUND (VOC) SENSOR CLEANING

1. Above the air inlet grille, on the machine's middle right side, is where you'll find the VOC sensor.
2. To preserve precise VOC identification, wipe away dust and debris from the VOC sensor using a soft cloth.
3. Avoid tampering with the opening, or spraying water near the grille aperture above the VOC sensor as this could void the sensor's warranty.

PM2.5 SENSOR CLEANING

1. Remove the PM2.5 Sensor cover.
2. Clean the lens, air intake, and air output with a damp cotton swab.
3. To get rid of any remaining water stains on the dust sensor, use a dry cotton swab.
4. Clean the PM2.5 sensor whenever readings is erratic.

CLEANING OF STAINLESS-STEEL PRE-FILTER

1. Depending on the environment in which it is used, the filter needs to be cleaned at least once every four months. It captures big particles >5 microns onwards, and pet dander, hair, tiny insects etc.
2. Use a vacuum cleaner to get rid of any dust or fluff.
3. Apply mild detergent and wash with a shower head.
4. Rinse the filter well to get rid of any remaining soap.
5. Air-dry or use hair dryer to dry the filters.

CLEANING OF BIO-CAGE™ FILTERS

1. Remove Bio-CAGE™ filters.
2. Spray mild detergent onto the plates and leave it for 2-3 minutes.
3. Alternately, place it in water with mild detergent and let it soak for 5 minutes.
4. Then use a shower head to spray clean.
5. Let the sun dry the filter or use a hair dryer to blow off remaining water.

CLEANING OF OZONE EMISSION REMOVAL FILTER

1. To get rid of dust and fluff, use a vacuum cleaner or soft brush to brush off dust.
2. DO NOT wash with water.

WHOLE MACHINE CLEANING

1. Clean with a damp sponge or cloth.
2. DO NOT immerse the whole set into water.

COMMON TROUBLESHOOTING METHODS

MALFUNCTION	POSSIBILITY	METHOD
Touch panel does not respond when pressed.	Voltage fluctuation could be the result of prolonged use.	It is advised to turn off the power source and wait five seconds before turning it back on.
The effects of purification and dust removal are not immediately apparent, and the air quality does not significantly improve.	<p>The device is without a filter.</p> <p>The equipment is situated in a constrained space or there are obstructions around, which reduces the effect of purification.</p> <p>The filter is very filthy.</p>	<p>Set up the filter.</p> <p>Remove the obstruction or find another location.</p> <p>Filter cleaning.</p>
Unacceptably loud running noise	<p>Whether the installation is inadequately sturdy.</p> <p>Some objects may have dropped into the fan area.</p> <p>Wheel balance is off.</p>	<p>Message the after-sales service department.</p> <p>Debris removal.</p> <p>Moving it around and checking the wheels.</p>
The filter won't fit.	The filter is fitted in reverse.	Align the bottom slot of the filter with the proper adjustment.
The device is not turning on.	Filter cover is open or improperly placed filter.	Put the cover and filter back on. If problem persists, contact customer service
Anomalies in fan motors.	Plugging / motor overheat protection, machine prompts, and does not work.	Unplug, give it time to cool, and then reconnect. If the problem persists, contact customer service.

TRIDENT

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Please refer to our website for latest updates and instruction manual editions.

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