



# **USER MANUAL**

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## REPAIR ADVICE

- 1. Please read this user manual to operate this product properly and safely.
- 2. Only Plasma Science technicians who have undergone the required training are able to fix the air purifier.
- Please inform Plasma Science Pte Ltd when the air purifier is malfunctioning and do not attempt to fix it. Unplug the wire and switch off the power and leave the rest to our technicians.

## STATEMENT OF ENVIRONMENT IMPACT

- All the 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.

# TECHNICAL SPECIFICATIONS

Rated Voltage	220V
Rated Frequency	50Hz
Rated Power	60W
Smoke CADR	400 m3/h
Formaldehyde CADR	300 m3/h
Estimated Lifespan	10 Years
Coverage Area	Up to 74sqm

# **CUSTOMER SERVICE**

Email: sales@tridentair.sg Phone: +65 94573681

Operating hours: Monday - Friday 9:00am - 5:00pm

Website: www.tridentair.sq

Company: PLASMA SCIENCE PTE LTD

Address: 7 Yishun Industrial Street 1 #03-49 North Spring Bizhub, Singapore 768162

# WARRANTY

NOTE: Please keep e-receipt as proof of purchase.

Standard Warranty Period: 2 years against manufacturer's defects, unless otherwise stated.

Standard warranty is on-site service for first 30 days, and thereafter, CARRY-IN service to Trident Customer Service Centre:

7 Yishun Industrial Street 1 #03-49 North Spring Bizhub Singapore 768162

For pick-up & delivery and on-Site service, additional charges apply. Please contact our customer hotline to arrange an appointment.

# **PACKING LIST**

Item Description	Quantity
Trident Air MINI-2	1 PC
Pre-Filter Aluminum Mesh	2 PCs
High Efficiency CAGE Filter	2 PCs
Ozone Emission Removal Filter	2 PCs
CAGE-360 Filter	1 PCs
Cold Plasma Ion Activator	1 PC

# PRODUCT & ACCESSORIES





Diagram 2

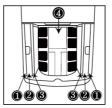


Diagram 1 Diagram 3

# Diagram 1

- 1. Air Outlet Louvers
- 2. Control Panel
- 3. PM2.5 Indicator
- 4. VOC Indicator
- 5. VOC Sensor Cover
- 6. PM2.5 Sensor Cover
- 7. Air Inlet
- 8. Wheels

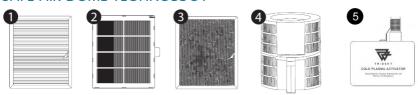
# Diagram 2

9. Filter Cover (back)

### Diagram 3:

- 1. Stainless Steel Mesh filters
- 2. Calibrated Advanced Graphene Electrostatic (CAGE) filters
- 3. Ozone Emission Removal filters
- 4. CAGE-360 filter
- 5. Trident Cold Plasma Activator is located behind CAGE-360 filter.

## SAFE AIR DOME TECHNOLOGY



# **Trident's Triple Action HUNT-CATCH-KILL Overview:**

With proprietary cold plasma activator and patent-pending CAGE filters, Trident keeps your air SAFE and CLEAN.

#### HUNT

The Trident Cold Plasma Activator (5) simulates the sun's process of diffusing positive and negative oxygen ions while producing no heat, light, or other unwelcome byproducts. Sanitizing 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

#### **CATCH**

Larger particles from PM5.0, pollutants, and allergens such as pollen, pet hair, and dander are captured by the stainless steel mesh pre-filter (1). 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 CAGE (Calibrated Advanced Graphene Electrostatic) filters (2) can clean and disinfect an area up to five times faster than conventional mechanical filters.

CAGE filters effectively eradicate smoke and odor with its strong 99.9% absorption rate of tiny and aerosol particles of 0.1-micron size. The CAGE plates also create potent 4–8KV voltage charge that rapidly kills bacteria and viruses by obliterating their proteins and cells. These CAGE filters are washable and reusable up to 10 years.

Ozone Emission Removal filters (3) eliminate harmful ozone gas from the environment to less than 1 part per billion (ppb).

CAGE-360 filter **(4)** captures any remaining airborne particles and pathogens, resulting in the removal of 99.99% particle pollutants as small as 0.1 microns, virus, bacteria, and molds. CAGE-360 filter is washable and reusable up to 10 years.

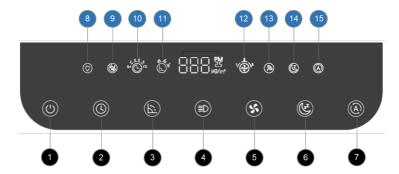
#### KILL

The revolutionary triple action *Safe Air Dome* Technology is developed in collaboration with a group of passionate scientists 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



- ON/OFF: The power button icon turns red whenever the wall socket connected to Trident is turned on.
   Pressing the power button will turn the power on or off accordingly. All keys will illuminate in white when the machine is turned on.
- TIMER / FILTER RESET: Quickly pressing the timing icon, shifts the timer from 2, 4, 6, 8, 12 Hours.
   Display icon 10 will appear as appropriate. Long press this button for 3 secs to reset the "wash filter" reminder.
- FAN LOUVER ANGLE / WIFI: Shifts angle of louvers at 30, 60, and 90 degrees, as shown on the display
  icon 11. Long press button to enter WIFI-enabled configuration mode, and phone app will be able to
  search for device to add.
- 4. LIGHTS ON/OFF: Press the button to turn on and off the sensor lights and control panel lights.
- 5. FAN SPEED: Press the button quickly to switch to speeds 1–2–3 and simultaneously display icon 12.
- 6. SLEEP: Press this button to enter sleep mode, where the lights are turned off and fan is reduced to low speed.
- AUTO: Press this button to enter into Al-mode where fan speed increases according to the air quality detected by both built-in PM2.5 and TVOC sensors.
- 8. LIGHTS ON/OFF DISPLAY
- 9. FILTER WASH REMINDER DISPLAY
- 10. TIMER DISPLAY
- 11. FAN LOUVER ANGLE DISPLAY
- 12. FAN SPEED DISPLAY
- 13. WIFI DISPLAY
- 14. SLEEP MODE DISPLAY
- 15. AUTO MODE DISPLAY

# AIR QUALITY COLOUR DISPLAY

According to the current *PM2.5 condition*, the machine **PM2.5 indicator light** above the front panel changes colour:



The current PM2.5 value will simultaneously be displayed in the display window on the control panel.

According to the present state of *gaseous pollutants*, the **VOC (Volatile Organic Compound) indicator light** beneath the machine's front panel changes color:



# WI-FI CONNECTION

#### DOWNLOAD APP AND REGISTRATION

- 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 Fan Louver Angle button to activate the WiFi on MINI-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 MINI-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 MINI-2 is ready for configuration.



## SAFETY PRECAUTIONS

#### **ABOUT POWER**

- 1. Only make use of three-pin sockets that adhere to the nameplate's standard voltage.
- 2. If the power cord, plug, or power socket is damaged, do not use this product.
- You must hold the plug when unplugging the electricity rather than pulling the cord to prevent electric shock or fire from a short circuit.
- 4. Regularly remove any dust from the power plug.
- 5. The manufacturer or trained maintenance employees must replace the power cord if it is damaged.

#### WHEN IN USE

- 1. Never operate the machine without filters in place.
- 2. Avoid sticking your fingers or other objects inside the air intake or outlet.
- 3. Avoid obstructing the air intake or outlet.
- Avoid touching or putting anything near a heat source (such as heating stove and other places that may be exposed to flammable gas).
- You should disconnect the power cord from the wall socket right away if there is any smoke, stench, or other malfunctions.

#### SERVICE RESTRICTIONS

- To prevent electric shock, fire, and other harm, never use equipment in a space filled with flammable gases such as hydrogen, natural gas, propane, etc.
- To prevent electric shock, fire, or other damage, do not use it in unstable locations such as easydumping, hot, humid, or wet locations such as bathrooms.

#### **ABOUT MOVING**

- When moving the machine, ensure that it is unplugged.
- 2. To prevent the machine from falling and injuring people, grab the handle on the side of the machine while moving; do not hold the front panel.

#### NOTICE FOR CLEANING

- 1. Never wash the Ozone Emission Removal filters with water.
- Use caution when cleaning the equipment because harsh detergents that are corrosive will scratch the surface.
- 3. Always use soft cloths to wipe machine surfaces; otherwise, they risk being fractured or damaged.
- Avoid using alcohol or other organic solvents to clean the device because doing so could harm it or result in electric shock, fire, etc.
- 5. Please unplug the machine from the electrical outlet while cleaning or not using the machine, as doing so could result in an electric shock or a fire from a short circuit.

# 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**

Above the air inlet grille, on the machine's middle right side, is where you'll find the VOC sensor.

- To preserve precise VOC identification, wipe away dust and debris from the VOC sensor using a soft cloth.
- 2. 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 MESH PRE-FILTERS

Depending on the environment in which it is used, the aluminum mesh 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.

- 1. Use a vacuum cleaner to get rid of any dust or fluff.
- 2. Apply mild detergent and wash with a shower head.
- 3. Rinse the filter well to get rid of any remaining soap.
- 4. Air-dry or use hair dryer to dry the filters.

#### CLEANING OF CAGE FILTERS

- 1. Remove 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.

#### **CLEANING OF COLD PLASMA ACTIVATOR**

- 1. Remove stainless steel mesh from the tube and rinse with water.
- 2. Clean dust off the quartz tube.
- 3. Install mesh back onto glass tube when dry.

#### WHOLE MACHINE CLEANING

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

Stainless steel mesh and quartz tube

TRIDENT

COLD PLASMA ACTIVATOR

Developed by Plasma Science Pis Ltd

Product of Bingapore

# **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.	The device is without a filter.  The equipment is situated in a constrained space or there are obstructions around, which reduces the effect of purification.	Set up the filter.  Remove the obstruction or find another location.
	The filter is very filthy.	Filter cleaning.
Unacceptably loud running noise	Whether the installation is inadequately sturdy.	Message the after-sales service department.
	Some objects may have dropped into the fan area.  Wheel balance is off	Debris removal.  Moving it around and checking the
	White suitable is on.	wheels.
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. Speak to the customer service department.
Anomalies in fan motors.	Motor turns 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.

www.tridentair.sg

TRIDENT



# TRIDENT BLISS

#### **KEY FEATURES:**

- · Fastest Air & Surface Sanitization
- · Washable Filters with No Costly Replacements
- · Smart Auto Mode with WIFI Control
- Super Low Energy Consumption · Smart PM2.5 Air Quality Sensor
- · Lightweight, Portable.

### TECHNICAL SPECIFICATIONS:

Dimensions: 220x220x320mm Coverage: Up to 30sqm CADR: 160m3/h Power: 10-30W Speed: 1, 2, 3, AUTO

WIFI: Enabled Noise: 18Db(A) - 40 Db(A)



# TRIDENT SQUARE

#### **KEY FEATURES:**

- · Fastest Air & Surface Sanitization
- · Washable Filters with No Costly
- Smart Auto Mode with WIFI Control
- Super Low Energy Consumption
- Dual Air Quality Sensors PM2.5 & TVOC
- · Wall Mountable

#### TECHNICAL SPECIFICATIONS:

Dimensions: 480x480x180mm Coverage: Up to 40sqm CADR: 300m3/h Power: 14-58W

Speed: 1, 2, 3, 4, 5, 6, AUTO WIFI: Enabled Noise: 20Db(A) - 50 Db(A)



# **BACKED BY** SCIENCE. **LOVED BY** PEOPLE.

Scientifically Proven To Eliminate Viruses, Bacteria, VOCs, Allergens, Odours And Dust With Up To 99.99% Efficacy.



# TRIDENT PLUS

#### **KEY FEATURES:**

- Replacements
- Super Low Energy Consumption
   Dual Air Quality Sensors PM2.5 & TVOC

#### **TECHNICAL SPECIFICATIONS:**

CADR: 1000m3/h

Speed: 1, 2, 3, 4, AUTO WIFI: Enabled

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





Destroys all airborne viruses (including Sar-Cov-2), bacteria, mold. VOCs and pm2.5 pollutants







stest virus disinfecti rate in the industry