

Kaltech

Photocatalytic

Sterilization/Deodorizer

Portable type Instruction Manual

KL-E01-W KL-E01-K

TURNED  $\gamma$  mini

Be sure to read this instruction manual  
before use.



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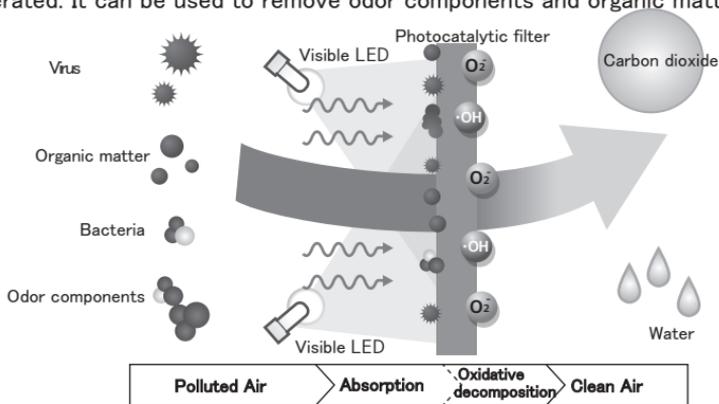
# 1. Introduction

This product is a portable type sterilization/deodorization device that utilizes photocatalytic technology.

Photocatalyst removes organic matter such as odors and viruses to provide a comfortable space.

What is "photocatalytic technology"?

When photocatalytic filter is irradiated with light, OH radicals with strong oxidizing power is generated. It can be used to remove odor components and organic matter.



## 2. Safety Precautions

Please make sure to read this "Safety Precautions" before use.

● Notification of this item



**Warning**

Contents that may cause fire, electric shock, or injury, and may result in death or serious injury.



**Attention**

Contents that may cause burns or other minor injuries, or damage to the product, fire, or electric shock.



Prohibited acts



Actions that must be performed



**Warning**

- Do not damage the AC adapter or power cord, or use a damaged power cord. Do not modify, forcibly bend, pull, or twist. Do not place heavy objects on it, do not let them pinch it.
- Do not plug or unplug the AC adapter with wet hands.
- No power strip
- Do not use the product if it is loosely plugged into an electrical outlet.
- Do not disassemble, modify, or repair the main unit or photocatalytic filter. Do not disassemble the photocatalytic filter when cleaning.
- Do not insert thin foreign objects (pins, wires, etc.) into the inlet or outlet.



## Warning



- Do not allow cigarette ashes, drinking water, or other liquids to get inside the inlet or outlet.  
※If liquid or foreign matter gets inside, turn off the power and contact the distributor where you purchased this product.
- Do not wipe with Oil, Alcohol, Benzene, thinner or No hairspray or insecticides.  
※If it adheres, wipe it off.
- Do not use this product outdoors.
- Do not place it in an unstable place.
- Do not give strong shocks or vibrations by stepping on or dropping the product.
- Do not use the stand for other models and not modify it.
- Use the screws provided to attach the stand and tighten all screws securely.
- Do not use within reach of infants, pets.



- Use the supplied AC adapter with a 100 VAC outlet.
- Insert the power plug firmly all the way to the back of the outlet.
- Remove dust and other debris from the connection to the AC adapter on a regular basis.
- Make sure to unplug the AC adapter before cleaning.
- When lightning strikes, turn off the power and unplug.
- If you smell a burning smell or hear an unusual noise during use, turn off the power and unplug the AC adapter from the outlet.
- When using a hanging hook, be sure to check if mounting point can withstand 1kg or more.



## Attention



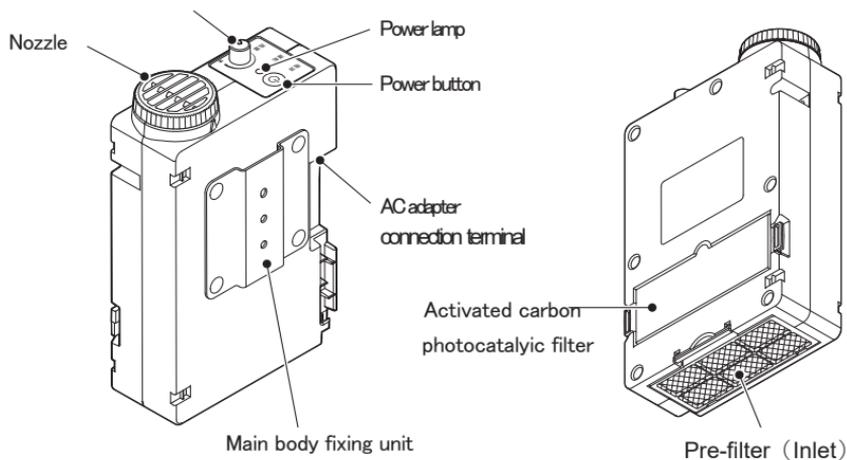
- Do not use in the following places.
  - Places where the air outlet may be blocked by curtains, laundry, etc.
  - Water or humid place
  - Areas where oil components, such as cooking oil are suspended.
  - Spray and chemical areas
  - Flammable/explosive/corrosive gases
  - Places exposed to direct sunlight or extreme high or low temperatures.
  - Areas with severe vibrations.
- Avoid getting liquid on the main unit.
- Do not hold only the front panel. When moving this product, hold the main unit.
- Do not place objects on this product. Also do not install heating or cooling equipment nearby or keep fire away from the product.
- Do not operate with the pre-filter removed.
- Do not use the product where it is exposed to water vapor generated from humidifiers or other devices. Also do not allow direct inhalation of water vapor.
- Do not install in areas exposed to the wind from air conditioners or heaters or near windows.
- Do not give strong impact by stepping on or dropping the product.
- If the unit becomes abnormally hot during use, turn off the power and do not touch the unit.
- Do not block the filter, air inlet or outlet when turning on the power or during operation.
- Do not use this product in areas where fuming insecticides or deodorizers are used. The chemical ingredients may remain inside the product and may be released from the product.
- Do not insert foreign objects or stuff things into the inlet, outlet, or photocatalytic filter inlet.



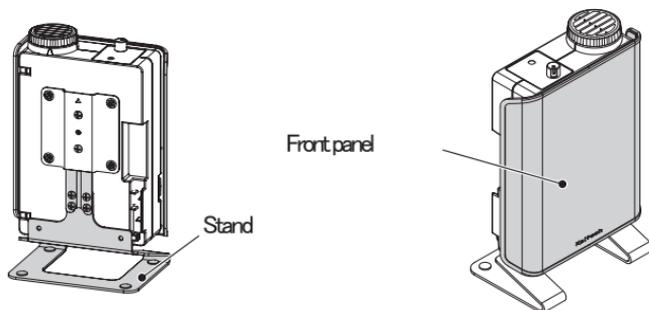
- Unplug the AC adapter from the power outlet when not in use for a long period of time.
- When used with combustion appliances, ventilate frequently. This product is not a substitute for ventilation.
- When disinfecting a room with chemicals such as fuming insecticides, turn off the power, move the main unit or cover it with a sheet to prevent chemicals from sticking to the product. After disinfecting the room with chemicals, be sure to ventilate the room well before operation.
- When disposing of this product, follow the instructions of the local government for proper disposal.
- Install in a sturdy, level, stable location.
- Clean the filter regularly when used in areas where oil components, such as cooking oil are suspended.
- When installing the main unit, be sure to use the provided stand or hanging hooks.

### 3. Name of each part

【Main body】 Air volume control knob



【Installation image】



### 4. Accessory

**A.** Stand : 1 pc  
(Installed on the Main unit)

**B.** Front panel: 1 pc  
(Installed on the Main unit)

**C.** Instruction manual: 1 pc  
(This book)

**D.** AC adapter: 1pc

**E.** Activated carbon photocatalyst filter : 1pc  
(Installed on the Main unit)

**F.** Hanging hook : 1pc



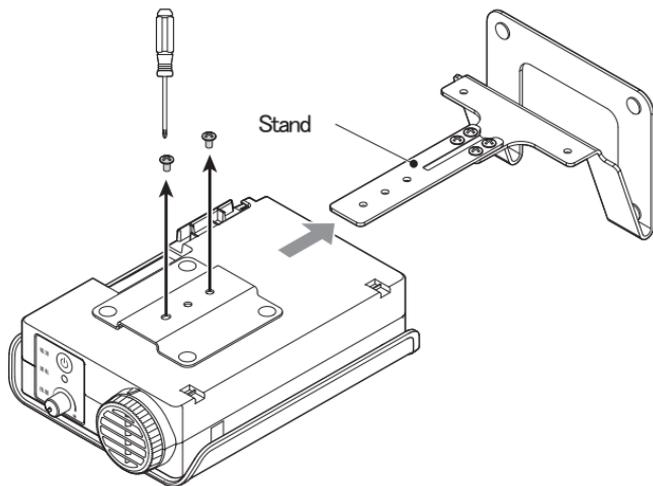
## 5. How to install the hanging hook/stand

### ● How to install the hanging hook

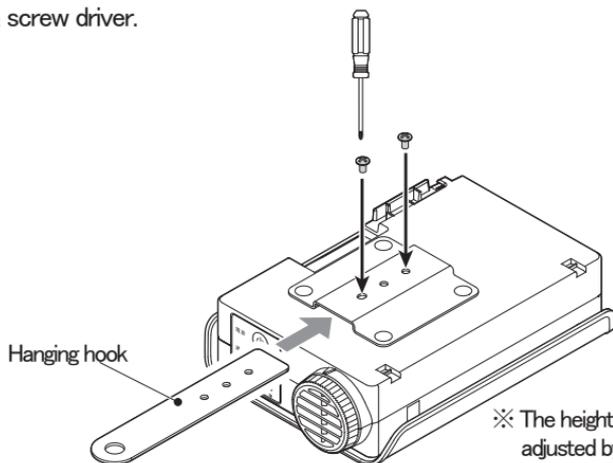
When opened, the stand is installed.

For hanging use, install the hanging hook according to the following procedure.

- 1 Loosen the two screws with a screw driver and remove the stand from the main unit.



- 2 Insert the hanging hook into the main body and secure the two screws with a screw driver.



※ The height of the hanging hook can be adjusted by changing the position where the screws are fixed.

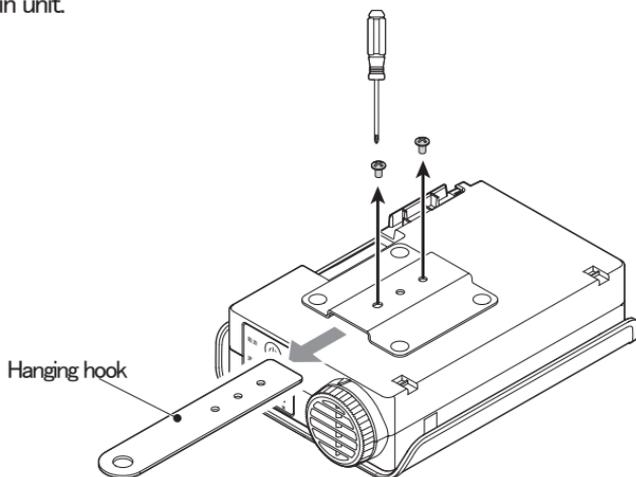
# How to install the hanging hook

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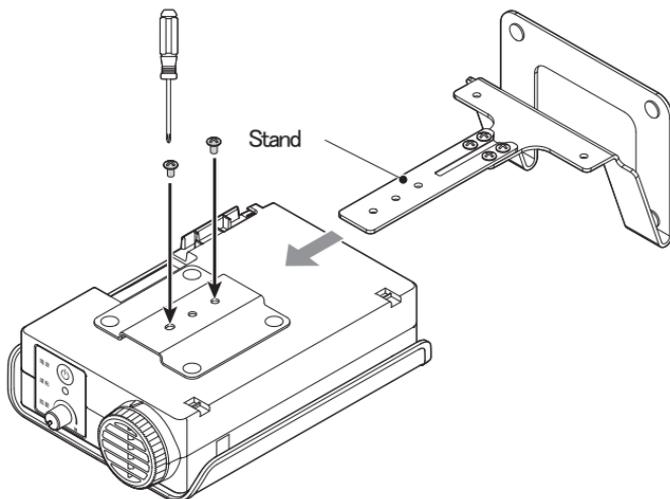
## ● How to install the hanging stand

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- 1** Loosen the two screws with a screw driver and remove the hanging hook from the main unit.

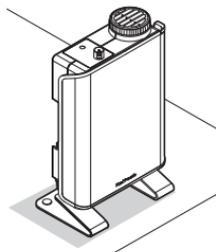


- Insert the stand into the main body and secure the two screws with a screw driver.

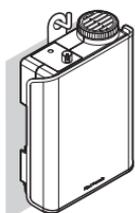


## 6. Installation

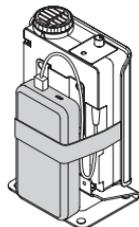
For hanging use, please use the hanging hook. Mobile battery is not included in this product.



When using a stand



When using hanging hook

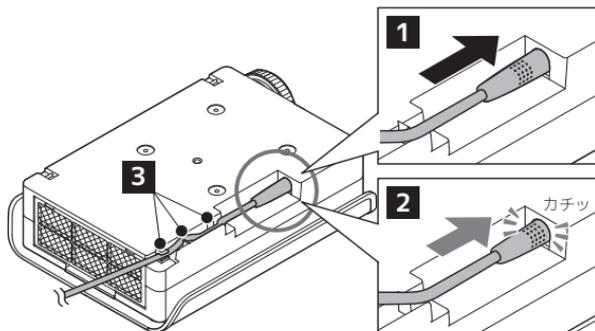


When using mobile battery

## 7. AC adapter connection

※ Do not connect the AC adapter to the power outlet yet.

- 1** Insert the AC adapter plug into the connection terminal on the main unit and push it firmly all the way in.
- 2** Be sure to insert until you hear “click” sound.
- 3** Secure the AC adapter plug through the groove.



## 8. How to work

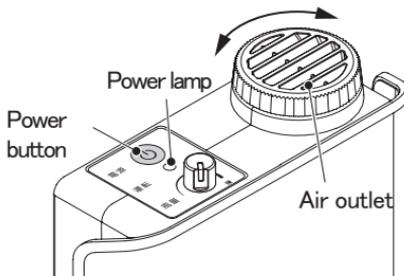
### <Caution>

- Make sure that the inlet and outlet ports of the main unit are not blocked before operation.

**1** After installing the main unit, connect the AC adapter to the power outlet.

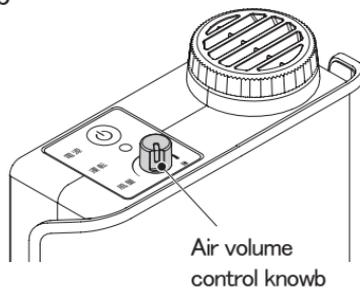
**2** Press the power button on the main unit

- The power indicator lights up blue and air blows out from the air outlet.
- The airflow direction can be changed by turning the air outlet.



**3** Adjust airflow with airflow adjustment knob

- Clockwise rotation increases airflow, and the fully clockwise position is "high".
- Conversely, when turned in a semi-clockwise direction, the airflow is "weak".
- Air volume can be adjusted from "high to low" with the air volume adjustment knob. Adjust the air volume according to the usage conditions.



**4** When finished using, press the power button.

- The power indicator goes out.

## 9. How to care

### <Caution>

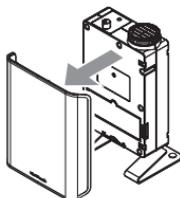
- Be sure to turn off the power before doing.

### ● Pre-filter cleaning

- Dust accumulation reduces the ability to blow air. Clean the unit regularly.

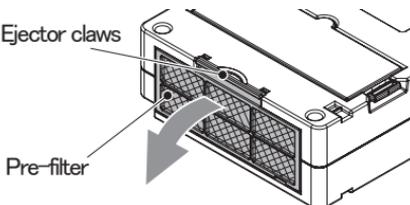
#### 1 Remove the front panel from the main unit.

- Remove the front panel by pulling it straight toward your side.



#### 2 Remove the pre-filter from the main unit. Ejector claws

- Press the claw for removal and pull it toward your side to remove.

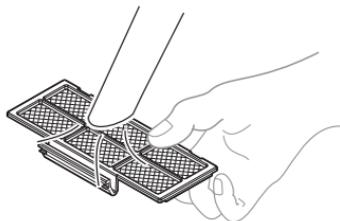


#### 3 Remove dust

- The pre-filter should be rinsed with water or wiped gently with a soft cloth.  
Do not rub the surface strongly.

### <Caution>

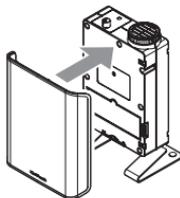
- When vacuuming up dust, do not press down too hard with the suction port of the vacuum cleaner. Also, do not scrub with abrash.
- Do not use chemical cleaning agents.



#### 4 Install the pre-filter

#### 5 Attach the front panel to the main unit

- Align the protrusion on the front panel with the hole on the main unit and attach.  
※The front panel is fixed by magnet.



# How to care

## ● Photocatalytic filter cleaning

This product is equipped with an activated carbon photocatalytic filter.

When used 8 to 10 hours per day, the power lamp will turn orange (a sign for cleaning) in about 3 months to let you know when it is time to clean the photocatalytic filter.

### ! Caution

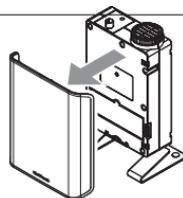
This product is a device that decomposes airborne bacteria and odor components. Therefore, in environments where strong odors are generated※1, sprays containing fluorocarbon resin or silicon※2 are used, the deodorizing and sterilizing effects will be reduced due to substances attached to the photocatalytic filter. In such cases, please clean the photocatalytic filter.

※1 Air fresheners, aromatic oils, tobacco, cooking, etc.

※2 Cosmetics, hair care products (hair spray, hair treatment, hair branch coat, etc.) antiperspirants, antistatic agents, waterproof sprays, glass cleaners, waxes, chemical cleaning agents, etc.

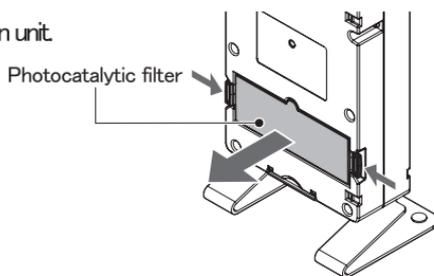
### 1 Remove the front panel from the main unit.

- Remove the front panel by pulling it straight toward you.



### 2 Remove the photocatalytic filter from the main unit.

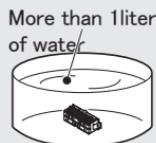
- Pinch the claws on both ends of the filter to remove it.



### 3 Soak and wash in at least 1 liter of water for **about 10 hours**.

#### <Caution>

- Use a container that is free of detergent, soap, chemicals, or oil on which to soak the photocatalytic filter.
- Do not scrub with a brush.
- The photocatalytic filter may discolor, but this does not affect performance.
- The frequency of cleaning the photocatalytic filter depends on the environment used. If the water becomes cloudy during cleaning, replace the water and continue washing the filter after soaking.
- Do not use detergents, or soap.
- Do not disassemble the photocatalytic filter.



## How to care

### 4 Dry fully naturally in the sun

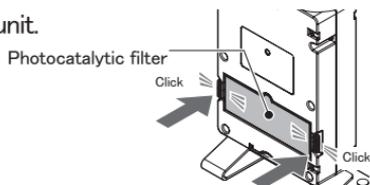
#### <Caution>

- If drying in the sun is not possible, dry the product in a well-lit place until the moisture is gone. If moisture remains, the photocatalytic may not be fully demonstrated.
- It is more effective if both sides of photocatalytic filter are exposed to sunlight.
- The photocatalytic filter may discolor, but this does not affect performance.



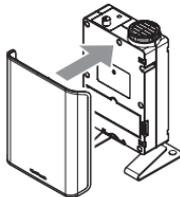
### 5 Attach the photocatalytic filter to the main unit.

- Pay attention to the orientation of the filter and push in the claws on both ends of the filter until you hear a "click".



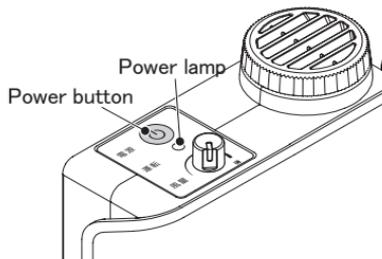
### 6 Attach the front panel to the main unit.

- Align the protrusion on the front panel with the hole on the main unit and attach.  
※The front panel is fixed by magnet.



### 7 Connect the AC adapter to the main unit and outlet, and press and hold the power button for at least 3 seconds to reset the wash sign.

- When the reset is complete, the power lamp will blink on and off.

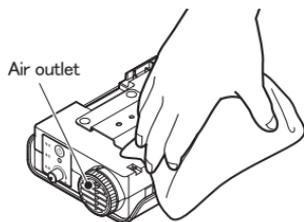


### ● Cleaning of main unit/outlet

Clean the air outlet regularly with a soft cloth. Dirt on the main unit should be wiped off with a soft dry cloth.

#### <Caution>

- Do not use water, detergents, or chemical cleaning agents.



## 10. When in trouble

In such a case	Please check
Power does not turn on	<ul style="list-style-type: none"><li>● Is the AC adapter firmly plugged into an outlet?</li><li>● Is the AC adapter plug firmly inserted into the AC adapter connection terminal on the main unit?</li></ul> <p>⇒ Connect correctly.</p> <p>⇒ Disconnect the AC adapter from the power outlet and plug it in again.</p> <p>If the problem persists, turn off the power, stop using the product, and contact the dealer you purchased the product.</p> <hr/>
When you feel that the airflow is too weak	<ul style="list-style-type: none"><li>● Check the airflow adjustment knob.</li><li>● Are the main unit inlet and outlet ports blocked?</li><li>● Is there dust in the pre-filter?</li><li>● Are the inlet and outlet ports dirty?</li></ul> <p>⇒ Check, clean and reinstall if necessary.</p> <p>⇒ If the problem persists, turn off the power, stop using the product, and contact the dealer you purchased the product.</p> <hr/>

# 11. Specifications

Name of product	TURNED  mini Photocatalytic sterilization/ deodorization portable type	
Model No.	KL-E01-W(White)/ KL-E01-K(Black)	
Sterilizing・deodorizing method	Activated carbon photocatalytic filter	
Applicable space <sup>※1</sup>	Max. approx 12 m <sup>2</sup> (90 min.)	
Dimensions (With stand)	Width 142mm x Depth 88mm x Height 219mm	
Weight Applicable space	Approx 700 g (including Main unit, Front panel, Stand)	
AC Adapter	Rated input : AC100V 50/60Hz Rated output : DC12V 1A	
Main unit	Input voltage : DC12V	
Operating temperature range	From 5°C to 35°C	
Air flow mode <sup>※2</sup>	High	Low
Power consumption (DC)	10W	6W
Standby power (DC)	Approx. 0.3W	
Accessory	Activated carbon photocatalytic filter : 1 pc (already installed)	
	AC adapter (code length 1.8m) : 1 pc.	
	Instruction manual : 1 copy	
	Front panel : 1 pc. (already installed)	
	Stand : 1 pc. (Already installed)	
	Hanging hook : 1 pc.	

※1 This is guideline for the floor area where odor can be reduced to a level that is not bothersome in 90 minutes according to our standard. (Depends on the usage environment.)

※2 The air volume can be adjusted from "high to low" with the air volume adjustment knob.

## ●Dimensions

