

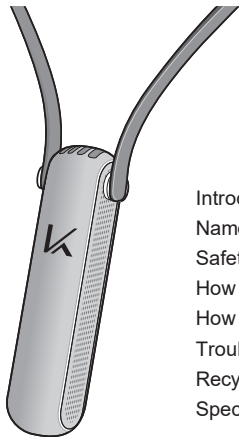
Kaltech

Personal Air Purifier Pendant Type

KL-P02EX

KL-P02UX

## User's manual



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## READ and SAVE THESE INSTRUCTIONS

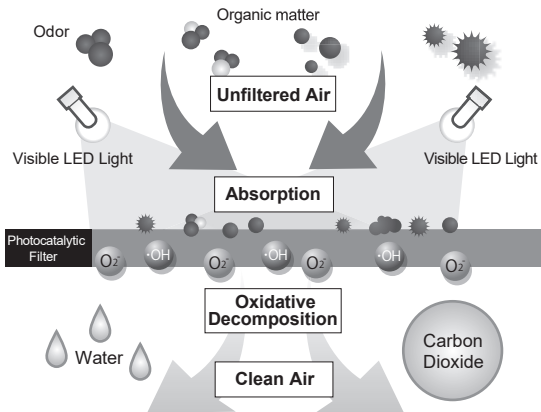
Thank you for purchasing photocatalyst Air Purifier  
Pendant Type "KL-P02EX / KL-P02UX".

Please read this user's manual before you start using this appliance.

# Introduction

This product is an Air Purifier for personal space that utilizes Kaltech's proprietary photocatalyst technology. It reduces a variety of odor and blows out clean air. To ensure that clean air accumulates around the face, the product is designed to blow out the equivalent amount of air to a person breathes per minute (approximately 7 liters).

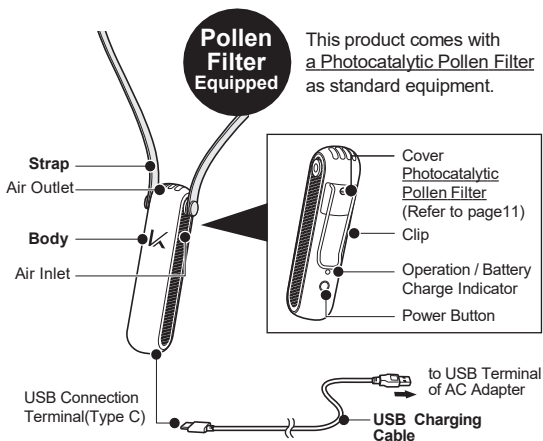
## ? What is "Photocatalytic Technology"?



When the photocatalytic filter is irradiated with light, OH radicals, which have strong oxidizing power, are generated. This strong oxidizing ability of the photocatalyst can be used to reduce bad odors and organic substances in the air into water and carbon dioxide.

\* Does not reduce all kinds of odors.

# Name of Each Parts



\*When using an AC Adapter, use the one with a voltage of DC5V, a current of 1A.

## Package Contents



Body x1



Photocatalytic Pollen Filter x1  
(Preinstalled)



USB Charging Cable x1



Strap x1



User's Manual x1  
(This book)

## Safety Precautions

Please follow the user's manual's instructions.

Before using this product, be sure to read this "Safety Precautions" section. The following information is provided to ensure the correct and safe use of this product. Safety precautions are listed in the next 2 pages. Refer to pages 4 and 5. Please read carefully before use.

### ● Note of these items



#### WARNING

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



#### CAUTION

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



Actions prohibited



Actions that must be taken



#### WARNING



- Do not use the air purifier in any way other than as described in this manual.
- Do not use the USB charging cable when it is damaged or loosely plugged in. Do not damage, alter, forcibly bend, pull or twist the USB cable. Do not place any heavy objects on or between the cable. Do not use the cable while it is bundled.
- Do not plug in or out the USB charging cable by a wet hand.
- Never place the cord near any heat source.
- When charging the air purifier, keep it near the outlet connected to the AC adapter.
- Do not cover the cord with a rug, carpet, or other covering. Do not place the cord under furniture or appliances.
- Keep the cord out of areas where people walk often to avoid tripping over.
- Do not alter or repair the body. Do not change the battery.
- Do not put any foreign matters (pins and wires) in the air inlet and outlet.
- Do not put cigarette ashes or liquid, such as beverages inside the product body through the air inlet or outlet. This product is not waterproof or dustproof.  
\*In case of contamination of liquid or foreign substances, turn the power off and contact your distributor.
- Never place in water or liquid. Never pour water or liquid on it.
- Do not wipe the product with oils, alcohols, benzene or a thinner. Do not spray the product with a hair spray or insecticide.  
\* If the matters mentioned above have attached the product, wipe them off.
- Do not place the product inside or near cooking appliances such as microwave ovens, induction cookers, or high pressure vessels such as pressure cookers.
- Do not put the product in fire, or heat the product.
- Do not place or charge the product in locations, near fire or heating units, under direct sunlight, extremely high temperatures places such as inside a vehicle under blazing sun, low temperature places such as refrigerators or wetted and moistened places like bathrooms.
- Do not give the product strong impact such as stomping, dropping, throwing, hammering, nailing or biting it. Do not forcibly tug the charging cable while charging.



● The product may affect the performance of a medical equipments such as heart pacers. A person with a heart pacer or other medical equipments must not use the product.

- Do not use it in where salt damage occurs and where corrosive gas is generated.
- Do not use air purifier outdoors.
- Do not operate while charging battery. Make sure to turn off the product.



- Power off and unplug the USB charging cable if it thunders during charging.
- Be sure to stop operation and unplug when cleaning.
- If you notice troubles such as burning odor, unusual noise, overheating, discoloration, deformation or liquid leaking, turn the power off and unplug the USB cable, then contact your distributor.  
Please note that the temperature may rise during charging.
- If product inside substances or the charging battery liquid leaks out from the product adheres to skin or clothes, immediately rinse off with clean water. If the liquid gets into ones eyes, do not rub and rinse with clean water, and immediately see for medical advice. It may cause sight blindness.
- Stop charging if the product is not fully charged after the prescribed charging time. If any trouble occurs to your skin due to contact with product parts such as metal parts or straps, immediately stop using and seek medical advice.



## CAUTION



- Do not use the product at the following places where:
  - Oil particles, such as cooking oils, are suspended in the air;
  - Sprays or chemicals are used;
  - Flammable / explosive / corrosive gases are present;
  - Sand or dust may come into the product;
  - The electronics components of the product are influenced, such as airplanes;
  - Severe vibration occurs or unstable places such as wobbly tables;
- Do not touch the body if the body has become hot during use.
- Do not close the air inlet and outlet when powering on or operating the product.
- Do not put the product in a bag together with metallic products (keys and hairpins).
- Do not use the product in a place where a smoke-generating insecticide or an air refresher is used. If used, the ingredients of those agents may remain inside.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children being supervised not to play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.



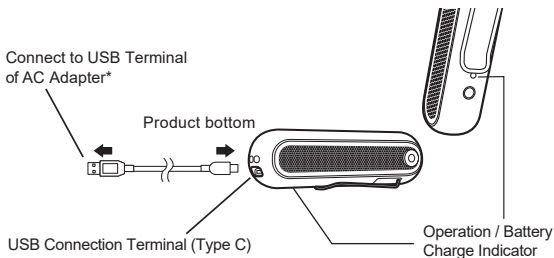
- The product contains a lithium-ion battery. Discard this product in the right way according to "Recycle Lithium-ion Batteries" (Refer to page 13).
- The product cannot be used as a ventilator.  
Ventilate the room frequently where a burning appliance is used.
- Use an included USB cable. Do not use the included USB cable for other devices.
- When using an AC adapter, use one with a voltage of DC5V, a current of 1A.

# How to Use

## ● Charging the battery

**Be sure to charge before using for the first time.**

Before use, charge the battery of the product. The charging status can be checked by the operation / battery charge indicator of the body. The indicator blinks yellow when the battery level is low. The indicator turns on during charging and turns off when the charging is completed.



Status	Charge indicator
Charging continued	Turns on (red)
Charging completed	Turns off
Low battery level	Blinks (yellow)

Do not operate while charging battery. Make sure to turn off the product.

\* When using an AC adapter, use the one with a voltage of DC5V, a current of 1A.

## ● How to power on / off

### Powering on

Press the power button on the back of the body until the operation / battery charge indicator turns green. The product starts operating when the indicator turns on. The indicator will turn off in approximately 5 seconds, the product will keep operating.



### Powering off

Continue pressing the power button to stop operation (powering off). The operation / battery charge indicator turns green for a second then turns off when product is powered off.

#### <CAUTION>

At the beginning of use, the product may have the odor due to the product materials. However, the odor will be reduced with use, and there are no safety concerns.

This appliance is a device that collects odor components. Depending on the environment you use the product, such as, places where strong odors occur\*1 or where sprays containing fluor resin and silicon\*2 are used, substances adhered to the photocatalyst filter may reduce its effectiveness.

In such cases, please clean the photocatalytic filter.

\*1 : Air fresheners, aromatic oils, tobacco, cooking, etc.

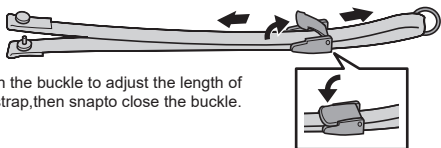
\*2 : Cosmetics, hair care products (hairspray, hair treatment, hair-bristle coat, etc.), antiperspirants, anti-static agents, waterproof spray, glass cleaner, waxes, chemical fertilizers, etc.

## How to Use (continued)

### ● Fixing and adjusting the strap

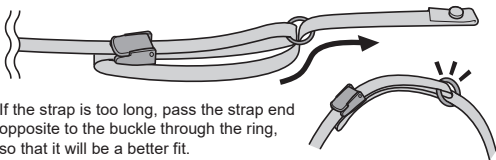
Adjust the length of the strap to set the air outlet of the product approximately 8 in/20 cm apart from the user's face.

1



Open the buckle to adjust the length of the strap, then snap to close the buckle.

2



If the strap is too long, pass the strap end opposite to the buckle through the ring, so that it will be a better fit.

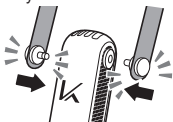


Approx.  
8in / 20cm



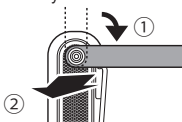
## How to fix

Snap the buttons of the strap into the body.



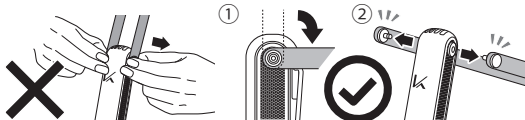
## How to remove

Turn the position vertically (side ways) to the body to remove the strap.



### <CAUTION>

- Be sure to follow the procedure when you take off the strap and do not forcefully pull the strap. The strap may be damaged.



You can easily take off the strap by turning it vertically.

### <CAUTION>

- Please unclasp one side when you wear the strap around your neck.



### <CAUTION>

- It is dangerous to pull the strap or having the body of the product or strap catch on the door.
- Do not pull the strap or pull it into the door.
- Do not use damaged straps.
- Do not swing the product around with the strap.
- Please be careful to avoid accidents such as straps wrapping around the neck, especially when children are using the product.

## How to Use (continued)

### ● Examples of Use

The product can be used at various places where the air may be polluted.



Commuting on trains



At office desktops



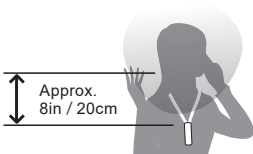
When sharing a ride



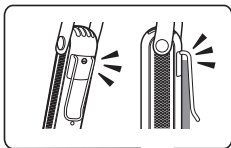
At cafes, on your free time

\*The effect may reduce depending on surrounding environment, such as the wind.

### Hang the strap around your neck

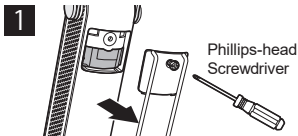


The product can be attached on the chest pocket or placket of your cloths with the clip.

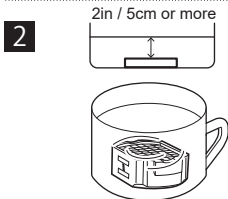


# How to Care and Maintain

## ● Photocatalytic filter (Once per 2-3 months\*)



Loosen the screw on the back of the body with a Phillips-head screwdriver to open the cover and remove the photocatalytic filter. The screw is unremovable from the cover.

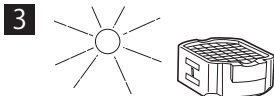


Soak in hot water at 176°F to 212°F / 80°C to 100°C over 15 minutes.

### <CAUTION>

- When removing the photocatalytic filter from the water, it may still be hot. Be careful not to get burned when using hot water.
- Do not scrub the filter with a brush.

Do not use detergent or soap!  
Do not disassemble  
the Photocatalytic filter!



Dry the filter under the sun completely until all water evaporates.

*\* If drying under the sun is not possible, dry in a well-lit area thoroughly until there is no moisture. If moisture remains on the surface, the photocatalytic effect may not be fully demonstrated.*

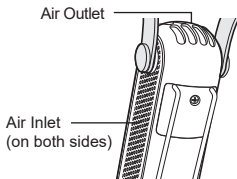
## How to Care and Maintain (continued)

- 4** Attach the photocatalytic filter to the body and put on the cover.

### <CAUTION>

- When using a container to soak the filter, make sure that it does not have detergent, soap, chemicals, and oil adhere to it.
- The discoloration of the photocatalytic filter may occur, but this will not affect its efficiency.

### ● Body / Air Inlet / Air Outlet



Clean the air inlet regularly with soft cloth. Wipe the stain on the body with dry soft cloth. The stain on the body can be removed with an eraser.

Wipe the surface of the air inlet lightly without pressing it.

### <CAUTION>

- Do not use water, detergent, or chemical absorbents.

# Trouble Shooting

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In such cases	Measures
The product does not operate.	<ul style="list-style-type: none"><li>● Is the battery charged? ⇒ Charge the battery. (Refer to page 6)</li><li>● Has the product not been used for a long time? ⇒ Try reconnecting the USB cable a couple of times. (Refer to page 6)</li></ul>
The battery does not charge	<ul style="list-style-type: none"><li>● Is a proper AC adapter used? ⇒ Use a DC5V,1A AC adapter. (Refer to page 6)</li><li>● Does the operation / battery charge indicator turn on? ⇒ The indicator turns on red during charging. Confirm that the operation / battery charge indicator turns on by reconnecting the USB cable.(Refer to page 6)</li></ul>

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## Recycle Lithium-ion Batteries

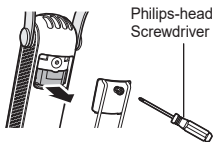
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- This symbol means that this product shall not be disposed of with normal household waste. The lithium-ion battery contained in the product is a valuable material and should be recycled. In the case of discarding the air purifier, follow the rules of segregating wastes in the area.

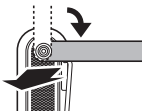


## Recycle Lithium-ion Batteries (continued)

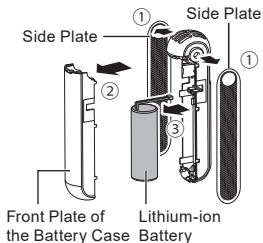
The lithium-ion battery contained in the product is a valuable material and should be recycled. Take the battery to a nearby store cooperating the recycling of rechargeable batteries. In the case of discarding the battery, follow the rules of segregating wastes in the area.



- 1** Loosen the screw on the back of the body with a Phillips-head screwdriver to open the cover and remove the photocatalyst filter. The screw is unremovable from the cover.



- 2** Turn the position vertically (side ways) to the body to remove the strap.



- 3** Remove the lithium-ion battery as follows.
  - 1) Remove the side plates on both sides of the body.
  - 2) Remove the front plate of the battery case.
  - 3) Release the connector of the lithium-ion battery and remove the battery.



- 4** Tape the connector of the lithium-ion battery to insulate it.

\* Do not remove the battery for any purpose other than recycling.

# Specifications

<b>Product Name</b>	Personal Air Purifier Pendant Type
<b>Model Number</b>	KL-P02EX / KL-P02UX
<b>External Dimensions</b>	Body : 1.26in / 32 mm in diameter, 4.53in / 115 mm high
<b>Weight</b>	Approx. 0.18lb / 82 g (body only)
<b>Power input terminal *1</b>	USB (Type-C) terminal (for charging)
<b>Rated Voltage</b>	DC5V
<b>Power source</b>	Rechargeable lithium-ion battery (2200mAh)
<b>Charging time *2</b>	Approx. 5 hours
<b>Operating time *2</b>	Approx. 10 hours (fully charged)
<b>Operating temperature range</b>	32°F to below 104°F / 0°C to below 40°C 41°F to below 95°F / 5°C to below 35°C while charging
<b>Input Current</b>	0.6A
<b>Drip-proof and water-proof performance</b>	Unsupported
<b>Accessory</b>	Photocatalytic pollen filter x 1 (Preinstalled) Strap x 1 USB charging cable (Type C) x 1 User's manual x 1

\*1 : Use a DC5V 1A AC adapter. USB PD(Power Delivery) is unsupported.

Please note : Depending on the AC adapter used, charging may not be possible.

\*2 : The charging time and continuous use time of rechargeable batteries depends on the operating environment and battery condition.

Repeated use of rechargeable batteries will gradually shorten the time they can be used.

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**Kaltech**

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