

# raycop Lite MANUAL

RE-100

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Secure, Safety Design	
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Knowing each part of RAYCOP	

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### Thank you for purchasing RAYCOP.

- Please carefully read [Safety Instructions] (P.2) and [How to Use RAYCOP] (P.6) before using, for the safety and proper use.
- The exterior and specifications of RAYCOP is subject to change for quality improvement without prior notice.

### **REFERENCES**

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# **BEFORE USE**

## SAFETY INSTRUCTIONS

The following instructions are designed for the safety and proper use of RAYCOP to prevent potential damage and loss.



### Warning

Injuries and death may occur if proper use is not followed.



### Caution

Property damage or loss may occur if proper use is not followed.



Strictly prohibited actions.

**Prohibited** 



Strongly recommended actions.

Strongly recommended

### 

### The Power cord

Prohibited

Do not use the product if the power cord is damaged or the power outlet is loose.

▶ This may result in a fire or electric shock.



#### Do not forcibly fold the power cord, or place heavy materials on the power cord.

▶ A damaged power cord may result in a fire or electric shock.



#### Do not use water directly on the product or volatile liquids such as benzene, thinner and alcohol.

▶ This may cause malfunction and result in a fire or electric shock.



Do not touch the power plug pins when plugging the power plug in or out of the outlet.

▶ This may result in a fire or electric shock.



Do not plug the power cord with multiple appliances.

▶ This may result in a fire or electric shock.



#### Each country may use differently-shaped power plugs and outlet.

▶ If used with other power voltage, this may cause damage or a fire. (If you use a transformer purchased overseas, it is not covered by our warranty.)



# plugged into the outlet.

▶ Dust clinging on exposed power plugs may cause humidity, resulting in a fire or electric

Make sure the power plug pins are tightly



# recommended

### Stop operation instantly if the power cord is damaged.

▶ It must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid any hazards.

### The UV Lamp

#### Do not touch the UV lamp during operation or after use.

▶ It is hot and can burn your skin.

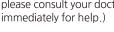




#### Use the product in a proper way. (e.g. While turning the product upside down, forcibly turn on the UV lamp.)



▶ This may cause inflammation, skin diseases or harm the eyes or skin. (If you experience any abnormal symptoms, please consult your doctor





#### Do not directly project the ultraviolet rays into the eyes or onto the skin of humans or animals.



▶ This may cause inflammation, skin diseases or harm the eyes or skin. (If you experience any abnormal symptoms, please consult your doctor immediately for help )



### **How to Use**



### **Prohibited**

#### Do not allow children and infants to use the product.

► They might get hurt.

### How to Use

Prohibited	Do not use the product to pick up volatile liquids such as water, benzene, thinner, or sharp materials such as blades, pins, hot ashes and toner powder.  This may cause fire or electric shock by malfunction or harm beds or beddings.
0	Do not lean against the product or be careful not to expose the product to a strong impact by dropping whilst in operation or moving the product.
Prohibited	▶ If the product is broken or dropped, damage may occur. (If an accident occurs, the manufacturer is not responsible for any possible damage and loss.)

### **Consumable Parts**

Prohibited	Use only manufacturer authorized parts.  ▶ Unauthorized parts may result in reduced performance and cause electric shock or malfunction.
Prohibited	Do not disassemble the product except when replacing parts.  ▶ This may cause electric shock or malfunction.

### Care

Prohibited	Do not remodel the product.  ▶ This may cause electric shock or malfunction.			
Prohibited	Do not use the product if the surface is damaged.			

# **⚠** Caution

### The Power Cord

Prohibited	Before moving the product, make sure the power cord is unplugged from the outlet.  ▶ Overheating of the UV lamp or the product may result in malfunction or a fire.		
Prohibited	Plug must be removed from the socket-outlet before cleaning or maintaining the appliance.  Dust clinging on exposed power plugs may cause humidity, resulting in a fire or electric shock.		
Prohibited	Do not pull RAYCOP by its cord from the power outlet.  Directly pulling the power cord may harm surrounding objects.		

### The UV Lamp

•
Strongly
recommended

#### Keep the lamp protective tube clean.

- ▶ If the lamp protective tube is dusty, the transmission rate of ultraviolet rays could be lowered.
- ▶ If you experience any abnormal symptoms such as skin redness or swelling or blisters and develop skin disease, please consult your doctor immediately for help.

### **How to Use**

Prohibited	Do not use the product outdoors. For household use only.  This may cause malfunction or damage.
Prohibited	Do not repeatedly change the operation mode.  ▶ This may shorten the lifespan of the product.
Prohibited	Do not leave the product in the same place in operation mode.  This may cause discoloration in the surface.

#### Do not use the product with the inlet or outlet clogged by dust. ▶ This may overheat the product and result in **Prohibited** malfunction or fire. Do not use the product on embroidered or uneven fabrics, anti-dust mite textile, leather materials or electric pads. ▶ This may harm the product or fabrics. **Prohibited** (If an accident occurs using the product, the manufacturer is not responsible for any damages.) Do not use or leave the product near heating devices such as stoves or heaters, Prohibited and inflammable materials such as ignitable sprays. Use the product only for fabric materials such as mattresses, bed covers, blankets, pillows, cushions, carpets and sofas. ▶ If used for other materials than fabric materials Strongly above, a risk of damage to the product or recommended fabrics may occur. (If an accident occurs, the manufacturer is not responsible for any potential damage occurring.) Ensure the dustbox filter and dust box are installed correctly into the product. Strongly ▶ Foreign substances such as dust in the motor recommended may cause damage or fire. If there are any abnormal noises, smells or

fumes expelled from the product, stop operation instantly and contact an

authorized service center.

Strongly recommended

# **SAFETY DESIGN FOR HUMAN**

### UVC(Ultraviolet ray C wave) Lamp Safety Sensors (P.5)

As a safety feature, the lamp automatically turns off, if the product is lifted away from the surface. If you put the product on the surface again, the lamp will automatically switch back on.

### **Run Time Control System**

After 29 minutes, an alarm begins to sound and the oppower button lamp flashes to warn you that RAYCOP will automatically switch OFF after 30 minutes.

### Lock / Unlock System (P.6)

RAYCOP has a child protection system to prevent unsupervised operation.

### **Motor Overheat Protection Operation (P.13)**

After you use the product for more than 30 minutes continuously in a single use or the filters are completely filled by house dust which blocks air circulation, RAYCOP will automatically turn off.

# FREQUENTLY ASKED QUESTIONS

Powder type dust is found on the dust box filter. What is this?

The dust is the result of dust mites, and their wastes and human skin debris.

When is it more effective to use RAYCOP, before going to bed or after getting up?

RAYCOP can be used for both before going to bed and after getting up. However, it is more effective to use RAYCOP to clean your bed before sleep, because house dust in your bed would disturb your good night sleep.

Does the blanket cover need to **be removed?** 

You can use RAYCOP with a blanket cover remaining. Because dust mites and their waste are extremely small, RAYCOP can pick them up through the fabrics of the blanket cover.

I am not sure if the UV lamp is flashing on, should I turn the product upside down to check?

The lamp light can be checked through the UV lamp window on the front of the product.

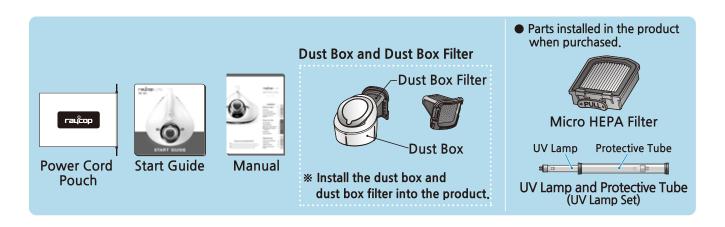
The ultraviolet ray is not emitted through the window. Directly projecting the ultraviolet rays into eyes or onto human or animal skin may cause harm.

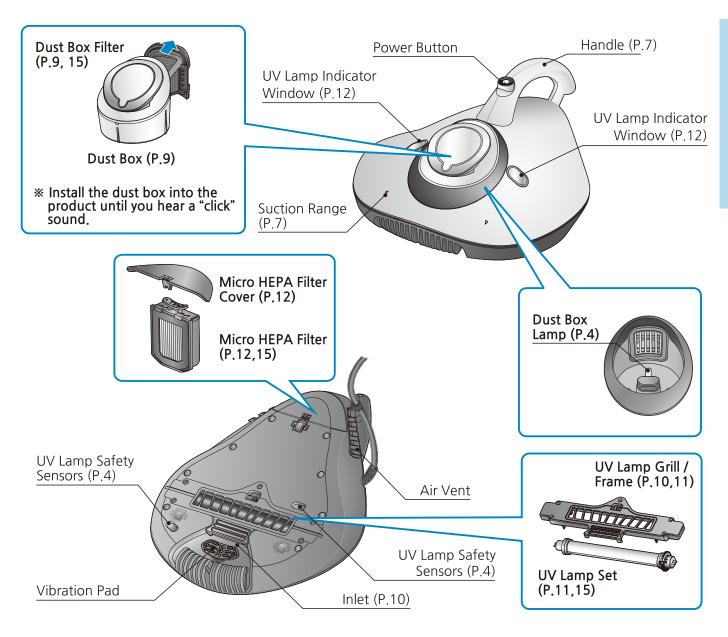
Can RAYCOP **be used overseas** if used with a transformer?

The use of a transformer may result in damage or fire. Manufacturer is not responsible for any possible damage.

# KNOWING EACH PART OF RAYCOP Check your parts

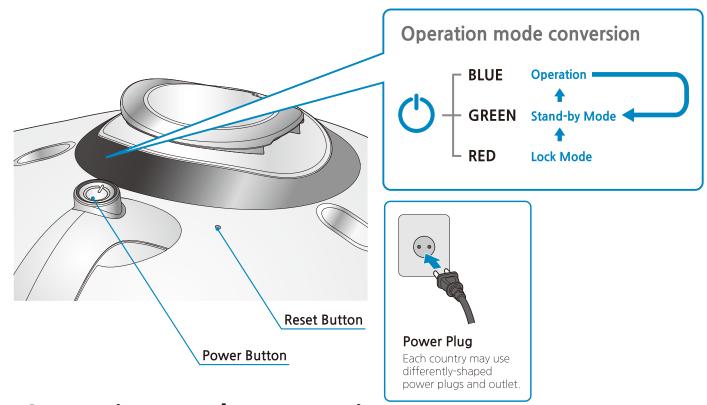
Please purchase only manufacturer-authorized parts from the authorized resellers.





# **HOW TO USE**

# **BASIC OPERATION**



# ■Operation mode conversion

- 1 Plug the power plug into the outlet. The power button (🖒) flashes in red with a "beep" sound and the lock mode is applied.
- 2 To apply the stand-by mode ( GREEN), push the power button (for about three seconds) until you hear a "beep" sound.
- 3 Push the power button to apply the operation mode ( $\bigcirc$ BLUE).

### How to stop

Push the power button in the operation mode to apply the stand-by mode.

\* When the product remains idle for more than one minute, the lock mode is automatically applied. Follow **No.2** above to release the lock mode.

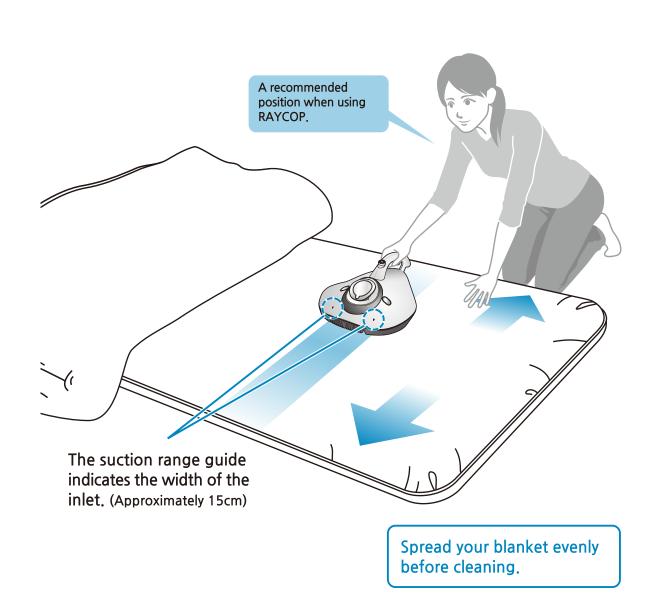


When finishing cleaning, apply the stand-by mode and unplug the power plug from the outlet.

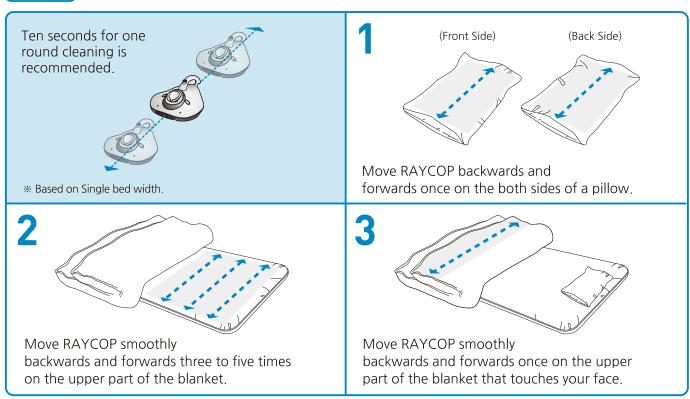
★ See P.12 for the use of the Micro HEPA Filter reset button.

### **HOW TO CLEAN EFFECTIVELY**

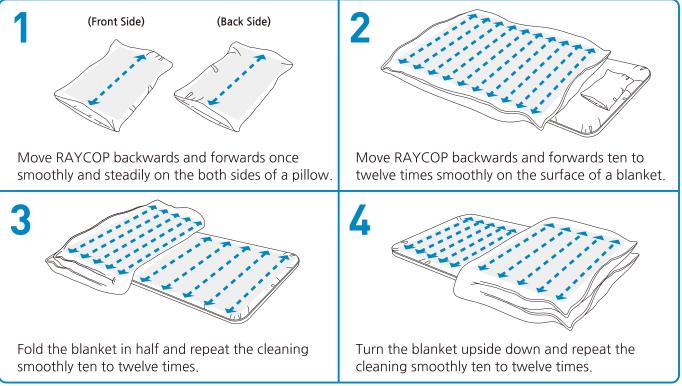
After applying the operation mode, hold the handle to move RAYCOP forwards and backwards(not pushing the blanket) and slide RAYCOP smoothly and steadily. (10 seconds for one round cleaning)











# **HOW TO CARE**

# ■ How to clean the body

Unplug the power plug from the outlet and wipe the surface with a dry fabric.

# ■How to clean the dust box filter and dust box

Dust accumulated on the dust box filter may reduce the suction power. After use, please follow below steps.

For optimized performance, it is recommended to clean after every use.

Marning When you clean the dust box, ensure RAYCOP is unplugged from the power outlet.



Pull out the dust box as shown in the image.



Place the dust box with the dust box filter into water and pull out the filter in water to rinse to prevent dust from being scattered.



Remove dust on the surface using water to clean the dust box filter and dust box.

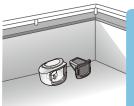


If dust is accumulated on the dust box filter, suction power performance will be weakened.

Dust can be effectively removed if you place the dust box in water diluted with detergent in small quantities (Ratio - water 9 : detergent 1) for five minutes and then rinse it with a smooth brush.



L Dry the dust box filter and dust box completely in the shade.

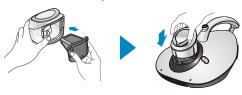


#### 

Do not dry the dust box filter using a washing machine or a hot air blower, which may cause deformation.

Push back the filter to the end until you hear a "click" sound, and reposition the dust box back in the product.

\* Install the dust box into the product until you hear a "click" sound.



The dust box filter is consumable. If you use the filter everyday for 10 minutes, the replacement period is approximately 5~6 months. If the filter is torn or clogged by foreign materials, please purchase only manufacturer-authorized parts from the authorized resellers.

# **HOW TO CARE**

# ■ How to clean the inlet

Dust or hair in the inlet may result in reduced performance.

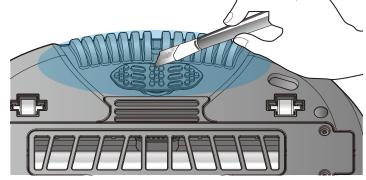
Clearly remove foreign materials blocking the inlet using a soft brush or fabric

### 

Before cleaning, ensure that RAYCOP is unplugged from the power outlet.

#### 

A blocked inlet may cause abnormal sounds or overheating, which may result in malfunction or fire.



\*\* The brush shown in the image is not included in the product. Please prepare a small brush by yourself.

# ■How to clean the UV Lamp

Foreign substances clinging onto the lamp may reduce performance. Please clean the lamp on a regular basis.

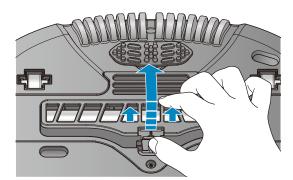
### 

Before cleaning, ensure that RAYCOP is unplugged from the power outlet.

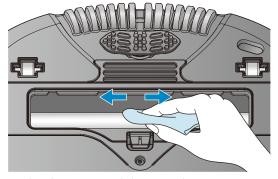
### Caution

When cleaning, please make sure the UV lamp protective tube (P.15) is not broken.

Push the hook to remove the UV lamp grill in the direction of the arrow.



Use dry fabrics or cleaning towels to clean the surroundings of the UV lamp protective tube.



\*\* The cleaning towel shown in the image is not included in the product. Please prepare a towel by yourself.

\*The silver bead in the lamp is a part of the lamp. Therefore, the rolling bead sound may occur and is not abnormal.

# **HOW TO REPLACE PARTS**

# ■ How to replace the UV lamp

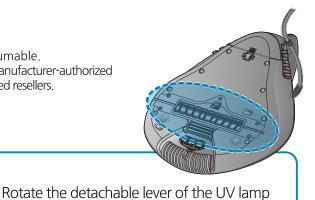
The UV lamp is consumable. Please purchase and replace the UV lamp if it does not turn on.

### **⚠** Warning

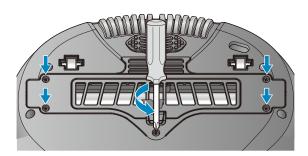
When you replace the UV lamp, ensure RAYCOP is unplugged from the power outlet.

### Caution

The UV lamp is consumable.
Please purchase only manufacturer-authorized parts from the authorized resellers.

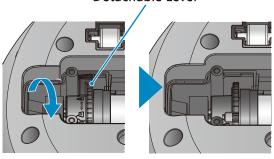


Use a screwdriver to unscrew five locking screws. Disassemble the UV lamp grill and frame.

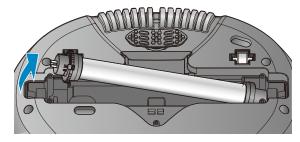


to unlock.

Detachable Lever

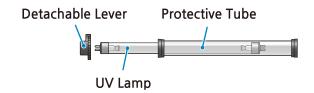


Pull out the UV lamp set from the detachable lever side.



### 

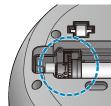
When disassembling tightly hold the protective tube to prevent dropping the UV lamp.



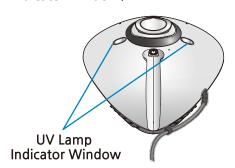
Align the detachable lever to a new UV lamp set in the opposite order and correctly put the rubber in place.
Rotate by 90 degrees to correctly install until you hear a "click" sound and a green indicator shows up







After plugging the power cord into the outlet, check if the UV lamp operates normally in the operation mode through the lamp indicator window.



# ■ How to replace the micro HEPA filter

If you use the filter everyday for 10 minutes, the replacement period is approximately one year. But RAYCOP will alarm you, when needed. An alarm goes off five times when in operation and a red color indicator on the power button will begin to flash. Please make sure the micro HEPA filter is replaced in the order as below.

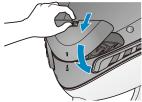
### **⚠** Warning

When you replace the micro HEPA filter, ensure RAYCOP is unplugged from the power outlet.



The micro HEPA filter is consumable.
Please purchase only manufacturer-authorized parts from the authorized resellers.

Push down the hook to remove the micro HEPA filter cover.



Replace the micro HEPA filter with a new one in the opposite order.



After applying the lock mode, use sharp materials such as a ball point pen to press the reset button for more than one second until you hear a "beep" sound.

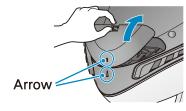


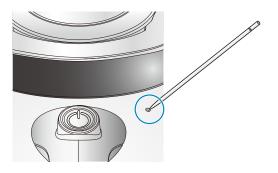
Do not push the reset button before the micro HEPA filter replacement alarm begins to sound.

2 Disassemble the micro HEPA filter.



Align the direction of the arrow and close the cover.





# REFERENCES

### **MALFUNCTION SELF-DIAGNOSIS**

Before contacting customer service, please check the following.

If you experience problems such as:

### You need to check the following:

RAYCOP is not working.

- Check if  $\bigcirc$  lights up in red. If  $\bigcirc$  is off, make sure the power cord is completely plugged into the outlet.
- Check to make sure the power rating.
- Check to ensure the outlet works normally by plugging the power plug of other electronic appliances into the outlet.

The suction is not working.

- The product is protected from the motor overheat. Operation may stop temporarily in these situations.
  - 1. The filters are completely filled by dust which block air circulation.
  - 2. The inlet is clogged.
  - 3. After you use the product for more than 30 minutes continuously, RAYCOP will automatically shut off.
    - ▶ It is a safety mechanism to prevent overheating, if this happens, unplug RAYCOP and clean the dust box filter, and the clogged inlet then wait for two hours before using it again.
  - 4. If the filters are completely filled by dust.
    - ▶ Dust can be effectively removed as you place the dust box in water diluted with detergent in small quantities (Ratio water 9 : detergent 1) for five minutes and then rinse it with a smooth brush. If suction power does not improve, please purchase a new dust box filter.
  - 5. The dust box filter is consumable. If you use the filter everyday for 10 minutes the replacement period is approximately 5~6 months. If the filter is torn or clogged by foreign materials, please purchase only manufacturer-authorized parts from the authorized resellers.
- After 30 minutes, operation will be automatically stopped by the run time control function.

The suction power looks weak.

 RAYCOP is designed to eliminate house dusts in your beddings in an optimized way. Therefore, please do not concern. If you need an assistance, please contact the authorized resellers.

The suction power becomes weaker and RAYCOP produces abnormal sounds.

 Check to see if the inlet is clogged, the air vent is blocked the dust box filter, the dust box filter is full of house dust or dirt or whether the micro HEPA filter is contaminated. (P.9. 12)

# If you experience problems such as:

### You need to check the following:

UV lamp turned off during use.

- If the color of the cleaning surface is dark such as black or dark blue, the lamp may not work, because of Infra-red safety sensors.
- The UV lamp function will not operate if the product is lifted more than a certain distance from the surface because the sensors will automatically switch off the lamp.
   Check whether the product is close enough to the cleaning surface.
- If the sensors on the bottom of the product are contaminated by house dust or foreign substances, the UV lamp may not operate. Remove dust and foreign substances. (P. 5)

There are abnormal noises as if a bead is rolling in the UV lamp.

The silver bead in the lamp is a part of the lamp.
 Therefore, the rolling bead sound may occur and is not abnormal.

**Others** 

- The warm air expelled from the air vent through cooling motor is normal.
- There may be abnormal smells from the vent, but this case is normal in the below situation.
  - Approximately three months after purchase there may be smells like rubber.
  - If the micro HEPA filter is completely clogged by excessive dust, there may be abnormal smells. In this case, replace the filter earlier than the original replacement period. (P. 12)
- If you use the product for a long time, there may be discoloration on the surface of the UV lamp. This is due to the ultraviolet rays of the lamp, which is normal tear and wear.

# **SPECIFICATIONS**

Model	RE-100	Weight	1.95Kg (Excluding power cord)
Rated Power Consumption	330W	Exterior Measurement	300 x 352 x 150.5 mm
UV Lamp	6W	Dust Collection Capacity	Approximately 0.3L
UV Wavelength	253.7nm	Vibrating Pad	3,300/min

# **ADDITIONAL PRODUCTS**

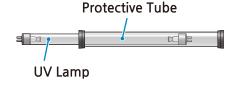
Please purchase only manufacturer-authorized parts from the authorized resellers.

# **Consumable parts**



### **Dust Box Filter** (3EA)

If you use the filter everyday for 10 minutes, the replacement period is approximately 5~6 months. If the filter is torn or clogged by foreign materials, please replace the filter.



### **UV Lamp Set**

The UV lamp is consumable. Please purchase and replace the UV lamp if it does not turn on.



### Micro HEPA Filter (2EA)

If you use the filter everyday for 10 minutes, the replacement period is approximately one year. RAYCOP will alarm you when needed.



### **Dust Box** (1EA)

If the dust box is broken or you need an extra, please purchase and replace the dust box.

# **Optional Accessories**



#### Cradle

Product No: RE-CRA01EWH (WHITE)

RE-CRA01EBL (PASTEL BLUE)
RE-CRA01EPK (BABY PINK)
RE-CRA01EYL (HONEY YELLOW)



The cradle that is required to purchase additionally can store RAYCOP neatly.

# WARRANTY AND CUSTOMER SERVICE

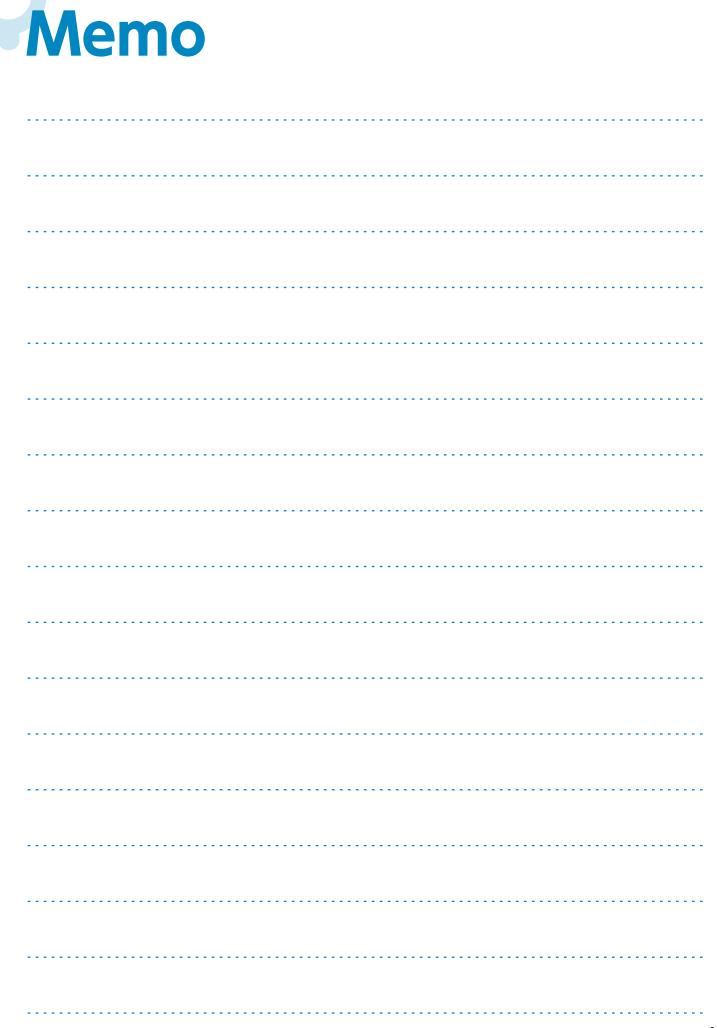
### Free warranty service

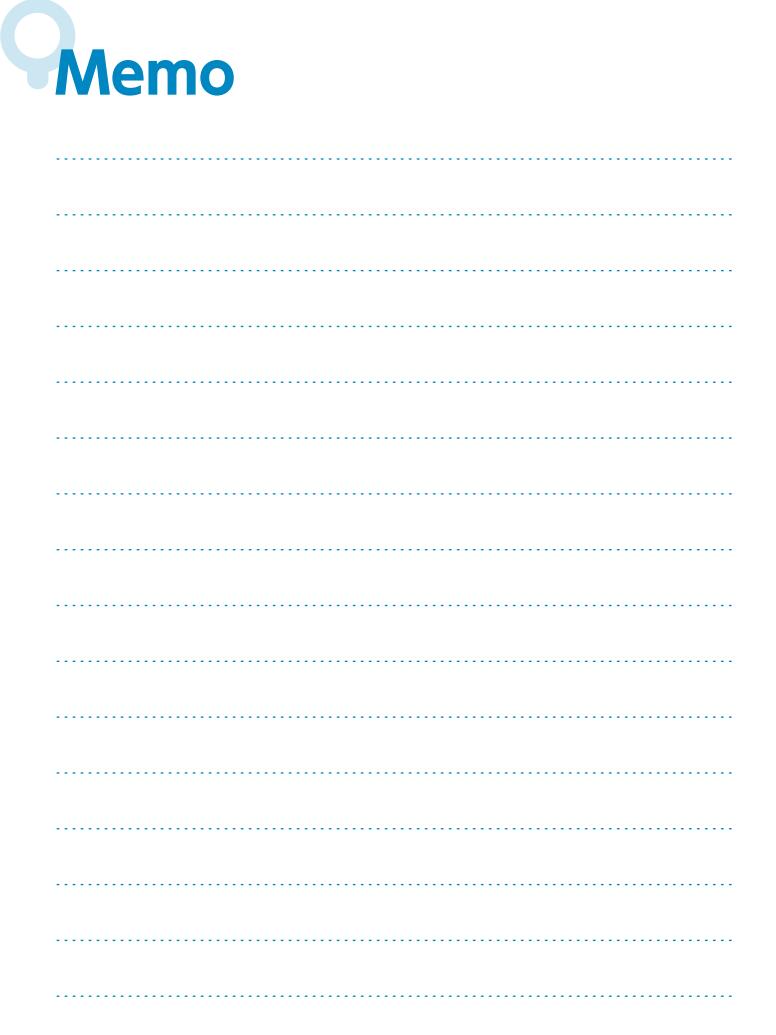
This product is covered by a one year limited warranty if there is any malfunction of the product caused by manufacturing defect. Please retain your original receipt and warranty as a proof of purchase for receiving customer service.

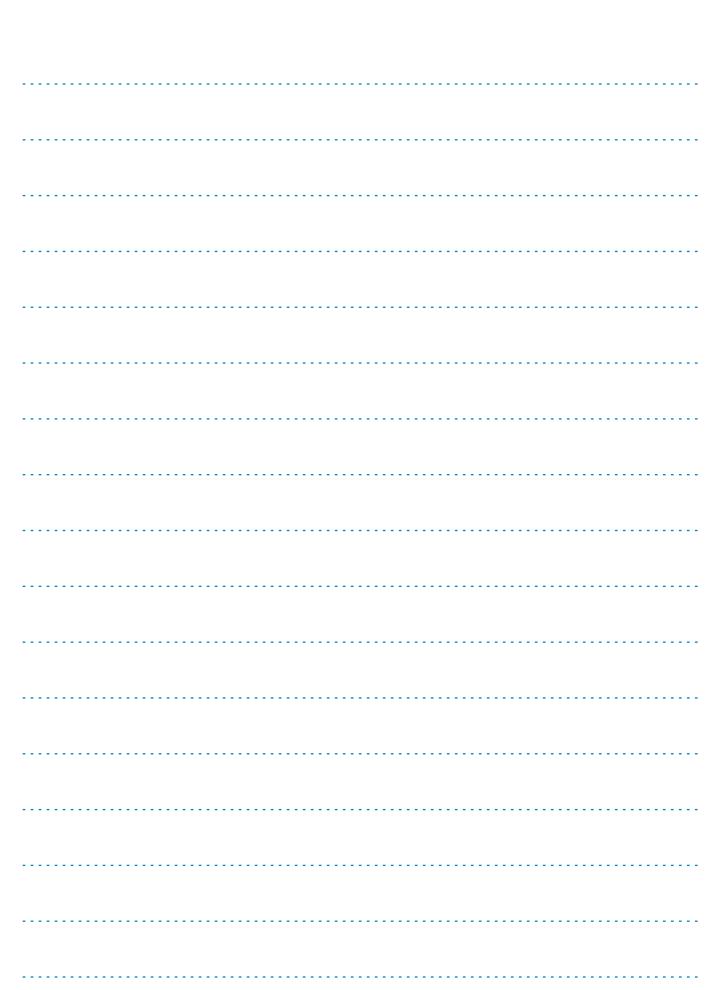
### Paid warranty service

Free warranty service is not covered even if the date of purchase is within 12 months in the following cases:

- 1. The product malfunction occurs because a user pours liquids into the product or uses the product to pick up foreign substances.
- 2. If the product is broken because a user carelessly drops the product or subjects it to an external impact.
- 3. If the product is damaged or deformed because of the use of volatile liquids such as thinner, benzene.
- 4. The product malfunction occurs because of the use of unauthorized parts or consumable parts.
- 5. The product malfunction occurs because the product is used with a wrong power voltage.
- 6. If the parts of the product are lost or broken due to intentional disassembly.
- 7. The product malfunction occurs because the repair and remodeling of the product are not carried out by trained individuals from an authorized customer service center.
- 8. The product malfunction occurs because of natural disasters.
- 9. The product failure occurs because a customer does not follow [Safety Instructions]
- 10. If the product is used without the dust box filter or micro HEPA filter.
- 11. The product failure occurs because of the wrong usage or improper maintenance.
- Please replace RAYCOP parts on your own. If you have any difficulties, you can receive technical support at a cost.
- After one year warranty coverage, product repair can be carried out after examination upon the request of a customer. In this case, please understand the examination can also be delivered at a cost.
- Raycop Japan retains performance parts (for maintaining the product performance) of the product for 6 years after the cessation of manufacturing.









For warranty service, please contact the authorized RAYCOP resellers in your country.