



OWNER'S MANUAL

AIR PURIFIER

Read before using product (safety instruction), use properly.
About ensuring users safety and property.
Product warranty card is enclosed with the user manual.
After careful read through the user manual, do keep it in a handy place.

PS-T450 Series



MFL66979805

www.lg.com

The advantages are

Congratulations on your purchase and welcome to the LG Family.

By following the use and care instructions in this manual, your air purifier will provide you with many years of reliable service.

3-dimensional sterilization system

- Bio-enzyme deodorization filter completely removes those factors which could cause the sick house syndrome such as VOCs, harmful chemical element and its smell.
- Sterilized by HEPA filter Inside, once again sterilized by NPI(Nano Plasma Ion) outside. Only LG air purifier can sterilize perfectly both inside and outside.

Easy to use HEPA filter system.

- This is the virus-resistant filter which effectively removes fine particles from the indoor air as well as the virus and bacteria.

Powerful allergy filter

- The allergy filter could absorb and decompose allergic ingredients, having the allergy preventive effect also removing the odor and anti-bacteria effect.

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Safety Precautions

The precautions related with the safety shown below are to prevent unexpected hazard and damage through safe and accurate operation of the product.

Warning / Caution



This symbol will alert you to any product detail or operation that could lead to a safety hazard if the instructions in the manual are not followed properly.



WARNING

If not followed, it can cause death or major injury to the user.



CAUTIONS

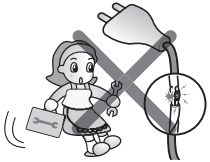
This symbol will alert you to the possibility of improper use that may result in damage. Read instructions to avoid damage or injury.

Safety Precautions

Warning

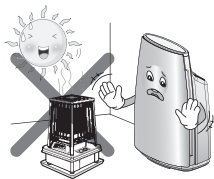
Do not arbitrarily change or extend the power line.

This will be the cause of fire and electric shock.



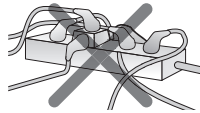
Carry out the installation by avoiding direct sunlight, heating appliance, and dampness.

These will be the cause of the electric shock, fire, and failure.



When using the multi-outlet, do not use several appliances at the same time.

Excessive use of electric power will be the cause of fire and electric shock.



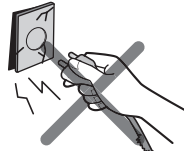
Do not apply any impact on the front panel.

It can cause injury, product damage or electric shock.



When the outlet is damaged or loosened, do not use it.

It will be the cause of fire and electric shock.



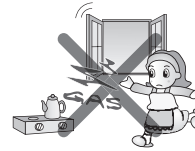
Do not turn off the product by unplugging the power.

It can cause electric shock or problem to the product.



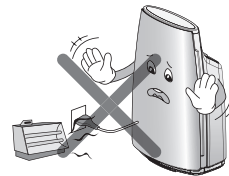
When gas is leaked, perform the ventilation by opening the window before operating the air purifier or remote controller.

Otherwise, it will be the cause of the explosion, fire, and burn.



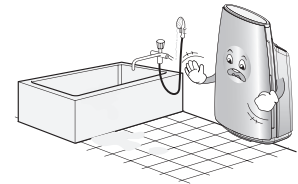
Do not place fire source near to the product.

This will be the cause of fire.



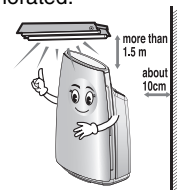
Do not use the product at the location where moisture or floating particles are prevailed such as toilet or bathroom, laundry, etc.

This will be the cause of fire and electric shock.



Provide distance of more than 1.5 m from lighting appliance and more than around 10 cm from the wall.

This will be the cause of the product discoloration and the cleaning capability may be deteriorated.

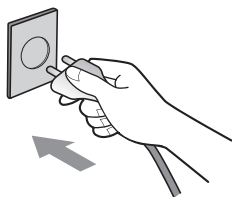


Safety Precautions

Warning

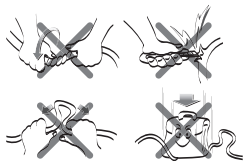
Insert securely the power plug up to the end of its plug so that it will not be shaken.

If connection is unstable, it will be the cause of fire.



The power cord shall not be damaged, processed, excessively bent, twisted, pulled, inserted into the gap, or heated.

These will be the cause of fire and electric shock due to the damage of the cord.



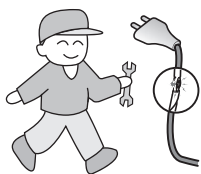
Do not touch the power plug with wet hand.

This will be the cause of electric shock and injury.



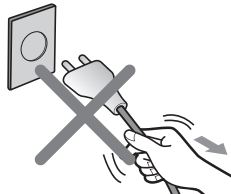
If power cord is damaged, it shall be repaired by service engineer to prevent the hazard.

Otherwise, it will be the cause of fire, electric shock, and product failure.



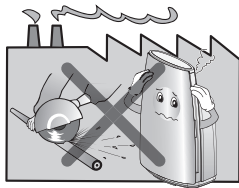
Do not remove the plug by pulling its power cord section.

This will be the cause of fire and electric shock.



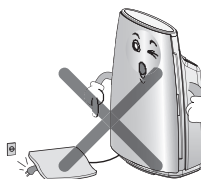
Do not install the product at the location where excessive industrial oil smoke or metallic dust is prevailed.

This will be the cause of fire and product failure.



Do not place rug etc. on the power cord.

If heavy object is placed on the rug because the cord is invisible, it will be the cause of fire and electric shock.



If the product is flooded, always entrust it to the customer care center.

There is the hazard of electric shock or fire.



Do not place obstacles at the air suction port or discharge port of the product.

This will be the cause of the product failure.



Do not allow children to climb up the product or arbitrarily touch it.

This will be the cause of failure, injury.



Safety Precautions

⚠ Warning

Do not sprinkle insecticide or spray to the product.

This will be the cause of fire and product failure.



When closing the front panel, be careful not to insert any part of the body such as hand etc.

This will be the hazard of product damage or injury.



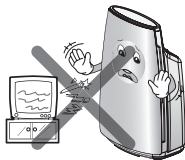
Do not move the product while it is under operation.

This can be the cause of fire and electric shock or partial damage of the product can be occurred.



When installing near to TV or audio, provide more than 1 m of distance with them.

TV or audio may have malfunction.



Do not allow water to be infiltrated into the product.

This will be the cause of fire and electric shock.



Do not install at transportation machinery (vehicle/ship/aircraft etc.).

This will be the cause of failure.



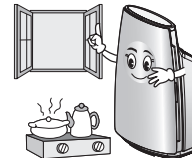
Do not put coffee, flower vase, or various drinks on the top section of the product.

This will be the cause of fire and electric shock.



When using the product in a closed room with combustion appliance, perform occasional ventilation.

Some of harmful materials such as carbon dioxide may not be eliminated.



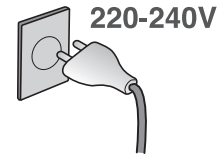
If abnormal noise, odor or smoke is coming out from the product, pull out the power plug and contact the customer care center.

This will be the cause of fire and electric shock.



Do not use other than AC 220V~240V.

This will be the cause of fire and electric shock.



Safety Precautions

⚠ Caution

In kitchen, do not use the product as ventilation fan or hood for range.

The life will be shortened.



Do not place any obstacles around the air inlet or outlet of the product.

This can cause product failure.



Do not use the product to remove toxic gas such as carbon monoxide.

It can cause product failure.



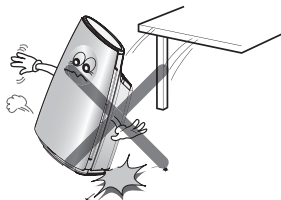
Do not use the product for special application/location such as preservation of animal/plant, precision machinery, artifact etc.

This can cause property damage.



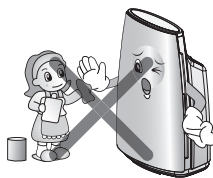
Install the product at the flat location and do not throw it down or give impact.

This will be the cause of fire and product damage.



Do not clean the product with strong detergent such as solvent but use smooth cloth.

It can cause fire and product deformation.



Do not give impact to the front panel.

This will be the cause of injury & product damage or electric shock.



Do not store or use combustible gas or flammable material near the product.

It can cause fire or product failure.



Do not move the product by grabbing the front panel of the product.

The product may partially be damaged.



When not using the product for an extended period of time, pull out the power plug.

It can cause product failure or fire.



Safety Precautions

⚠ Caution

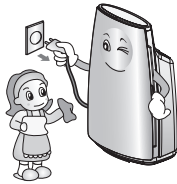
Be sure to insert all the filters before the use and perform regular cleaning of the pre-filter.

Otherwise, it will be the cause of product failure.



Pull out the power cord to make the fan stopping the rotation before starting the cleaning & maintenance work.

Otherwise, it will be the cause of electric shock or injury.



If the power cord is damaged, request for repair to the service technician to prevent any risk.

If not, it can cause fire, electric shock or product failure.



Do not use the product for ventilation etc.

It can reduce the life of the product.



Do not touch the power plug with wet hand.

This will be the cause of electric shock and injury.



When operating the product, do not open the front panel.

If opening the front panel, the operation will be stopped.



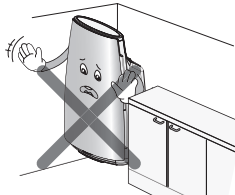
Do not input inflammables into the product.

This will be the cause of fire and product failure.



Always install the product on leveled surface.

If the installation surface is not leveled, the water can overflow from the vibration of the product.



Do not use the product by laying it down.

This will be the hazard of product damage or injury.



Installation

Places to Install

Mainframe

- Places with handy power connections
- Places with no obstacle to clog air inlet
- Places with horizontal surface and rich air circulation

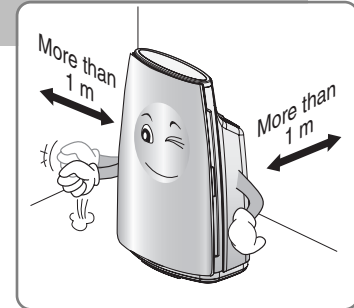
⚠ Warning

Install the air purifier on moving objects (car or ship etc) may cause the product defect, therefore do not install on those places.

⚠ Warning

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by person responsible for their safety.

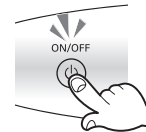
Children should be supervised to ensure that they do not play with the appliance.



Air Purifier Start Guide

Turn off air purifier when cleaning.

- Cleaning the air purifier with opened windows would disturb the natural air circulation to cause intake too much particles, it may shorten the filter life. After complete cleaning process with enough air circulation, close the windows, turn on the air purifier is the appropriate way to purify air.



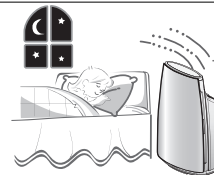
Use after enough air circulation when cooking

- When roast meat or fishes, remove the smell by air purifier is not appropriate. The oil particle will block cells on filter, it may cause filter life shorten or filter polluting etc. negative effects. Under this circumstance enough air circulation is necessary. Remove leftover odors by air purifier after no oil particle is the correct and effective way to use product in long-term scale.



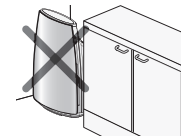
Do not stay too closed when sleeping.

- Air purifier fan speed is not strong, before fallen asleep feel cool, after fallen asleep would feel cold. The appropriate way is to keep at least 1 meter distance with air purifier.



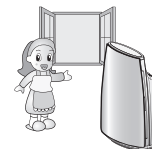
Do not place in the corner edge.

- Avoid to install at places surrounded by furniture, appliances etc. or in the edge corner. Install in the edge corner may cause difficulty to purify indoor air from the rest space.



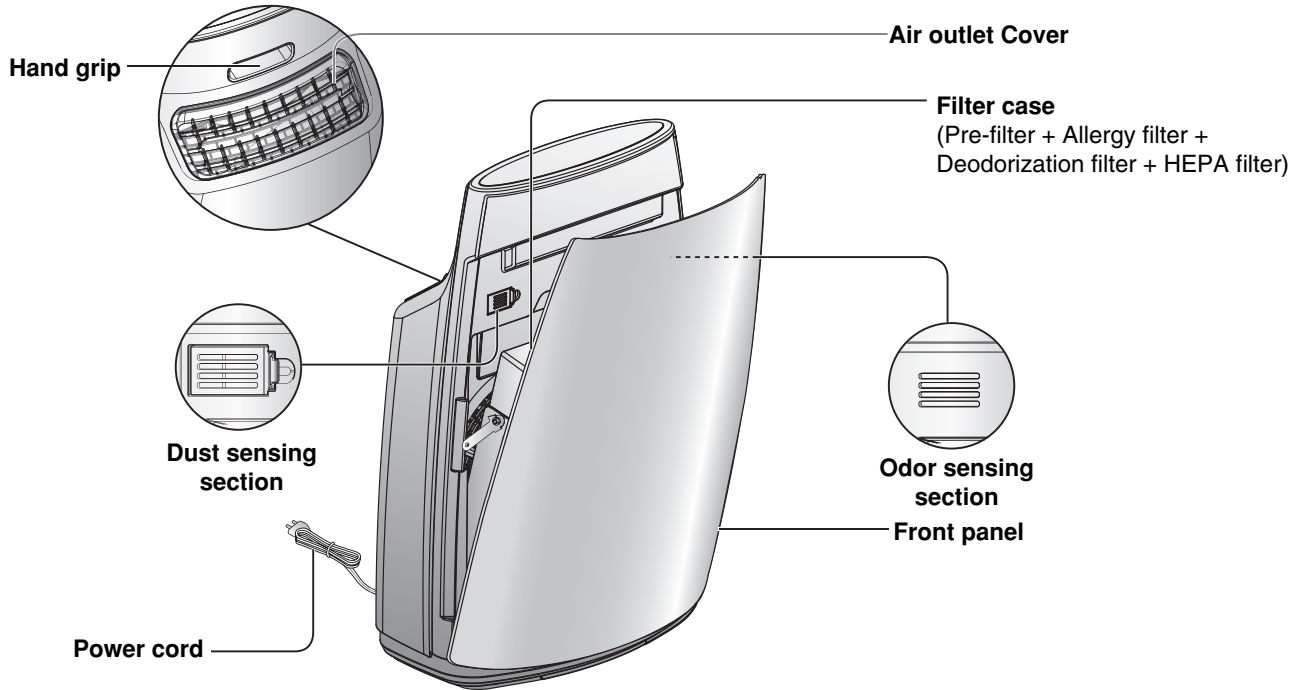
Ensure air circulate 30 minutes at least everyday.

- For those families use the air purifier, air circulation is the prerequisite to ensure enough oxygen supply. Ensure air circulation 30 minutes at least everyday could brings fresh air inflow. Keep opposite windows open may gain a better result for air circulation. In case of being lazy may weaken air refreshing function, therefore it is necessary to ensure clean and maintenance.



Name of Each Part

Mainframe



Name of Each Part

LED Lighting

The front LED Lighting can be ON/OFF with the lighting button on the control panel.



Action Indicator Light

The air purification process will be expressed with the graphic design.

Clean Air Indicator Light / Mood Light

- Under general mode, clean air indicator light will show the quality of the air in the surrounding area.
- When the air is at clean, contaminated, and intermediated stage, blue, red and violet color will be indicated respectively.
- When pressing the lighting button on the control panel, serene mood lighting of blue color will be produced regardless of the cleanness level.

Name of Each Part

Display and Control Panel

Operation mode indicator

Press the operation mode button to select the operation mode.

Fan speed indicator

This can be selected by pressing the fan speed button.

Dust / Odor indicator

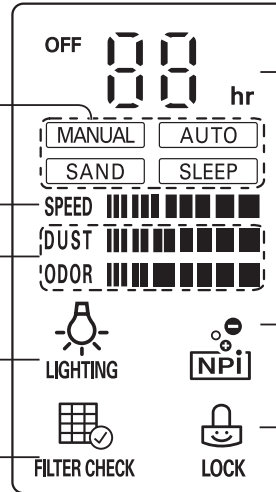
Higher level of dust / odor indicator reflects higher air clogging level.

Lighting indicator

Serene mood lighting will be turned on by pressing the lighting button.

Filter self-checking indicator

Check the filter when light is on.



Off timer indicator

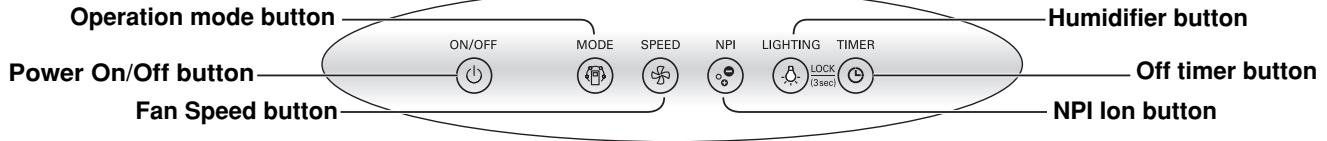
This can be selected from 1 to 9 hours by pressing off timer button. If the front panel is open, "DR" is displayed. "DR" is the abbreviation of DOOR.

NPI Ion indicator

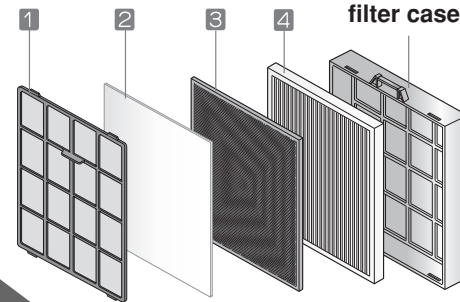
NPI sterilization ion will remove various kinds of bacteria from indoor air.

Lock indicator

Locking setup or release will be realized when pressing the lighting selection button and off timer button for 3 seconds simultaneously.



Name of Each Part



Filter system (Only the filter section is described.)

Filter name		Function	Washing/Cleaning Cycle
1	Pre-filter Remove big particles Anti-bacteria function Anti-mildew function	This filter has anti-bacteria, anti- mildew, big particles filtering fuctions. These 3 functions may extend the filter replacement frequency.	About a month washing cycle
2	Allergy filter	Adsorb and decompose allergic ingredients.	About a month Washing Cycle
3	Deodorization filter Washable deodorization filter	This is the integrated deodorization filter and it removes cigarette smoke (odor), odor of living food waste, odor of animal's fur, NO2, odor of toilet, alkaline & acidic odor, and volatile organic compound (VOCs).	About 6 months washing cycle
	Bio-enzyme treatment	This filter specially removes harmful chemical material such as VOCs which is the causing material of new house syndrome that induces atmospheric contamination.	
4	Washable HEPA filter	This filter removes fine particles such as the carcass of tick, pollen sac, cigarette smoke (particle), fine dust, mote, fur of animal, etc., and effectively removes virus, mold, bacteria, etc. in the air of the room.	About 6 months washing cycle

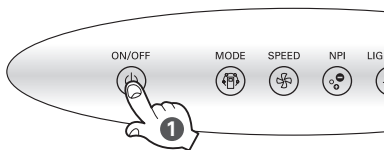
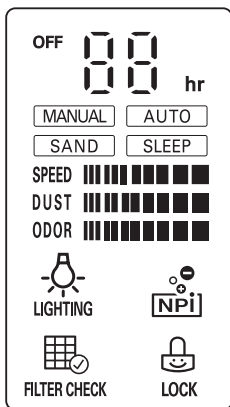
※ For washable filter, please dry it completely in a shade without any dampness.

(If it is not completely dried, it may cause failure or bad odor.)

※ The exchange cycle of allergen, HEPA, and deodorization filter will be altered in accordance with the application environment.

※ Filter case are not enclosed. Do not throw them away.

Operation

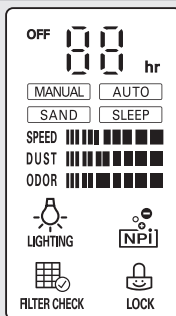


Air Purifying Operation Purify Indoor Air.

1 Press On/Off Button.

A confirmation tone will sound to indicate that the unit is powering on. The unit will also produce a tone when the unit is first plugged in. (Refer to the “start-up operation”.) Fresh air will come out from the air outlet.

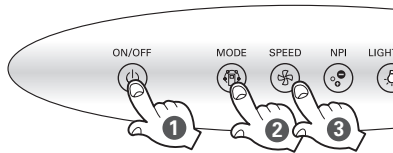
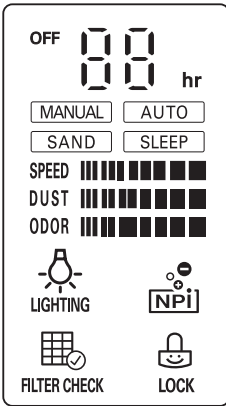
- Press On/Off button again to turn off.
- When restart air purifier, system will retrieve to the previous operating condition.



What is “Start-up Operation”?

When first turned on, the unit will go through a Start-up function which prepares the unit for operation. During this two minutes period, the display will fluctuate to indicate that the unit is sensing the air quality in the room.

Operation

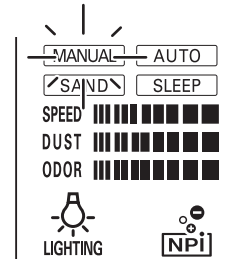


Manual Mode

User may manually adjust fan speed.

- 1 Press the On/Off button.
- 2 Select Manual Mode by pressing the Operation Mode Button.
- 3 Select the desired fan speed by pressing the Fan Speed Button.

- Default fan speed is weak speed.
- Fan speed can be operated in 4 levels.

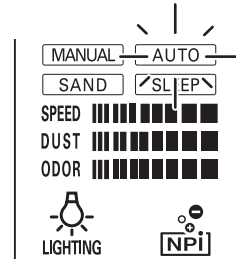


Automatic mode

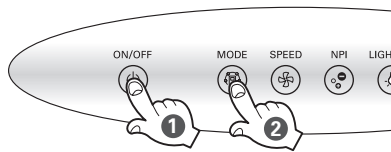
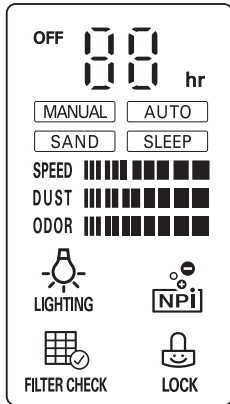
The air purifier will automatically set the most appropriate fan speed.

- 1 Press On/Off button.
- 2 Select Auto Mode by pressing the Operation Mode Button.

- The fan speed will automatically adjust to the air quality of the room.
- During the Auto Mode, if the Fan Speed Button is pressed, it will be converted into the Manual Mode and fan speed will increase by one level.
- Those functions other than fan speed will be activated when setting up by the user.



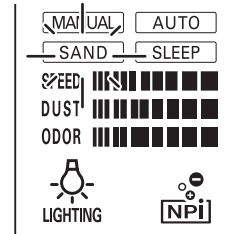
Operation



Sandstorm Mode Purify indoor air effectively when the sandstorm occurs.

- 1 Press the On/Off button.
- 2 Select Sand Mode by pressing the Operation Mode Button.

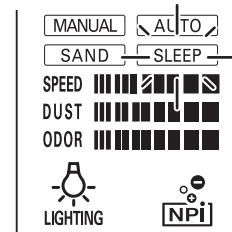
- During the Sand Mode, if the Fan Speed Button is pressed, it will be converted into the Manual Mode and fan speed will increase by one level.
- Fan speed will automatically be adjusted with the pre-inputted program.
- Those functions other than fan speed will be activated when setting up by the user.



Sleeping Mode Provide quiet indoor atmosphere while sleeping.

- 1 Press the On/Off button.
- 2 Select Sleep Mode by pressing the Operation Mode Button.

- During the Sleep Mode, fan speed will switch to weak level, and only the sleeping light on LED indicator will be lighted shortly.
- During the sleep mode, if the Fan Speed Button is pressed, it will be converted into the Manual Mode and the fan speed will increase by one level.

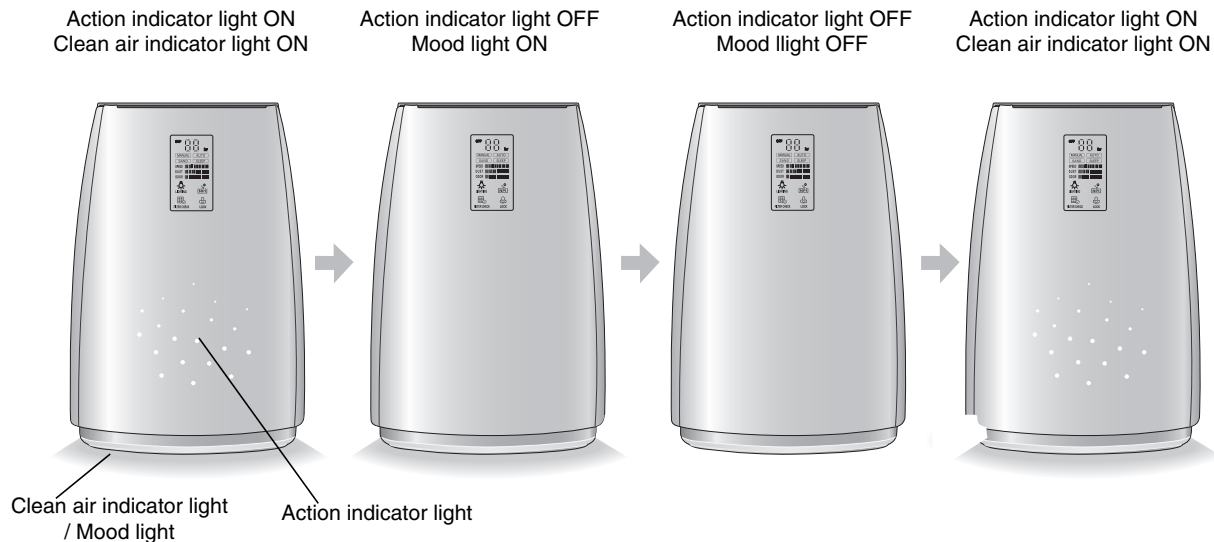


Additional function

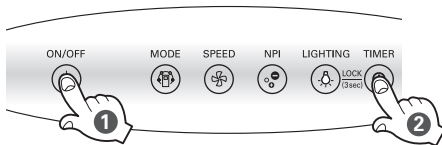
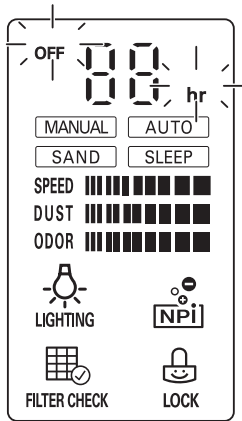
Lighting selection function

This will be used when selecting the lighting of the front panel.

1. Press the On/Off Button.
2. Select the desired lighting by pressing the Lighting Button.
Whenever pressing the button once, the lighting will be changed as the following sequence.



Additional function



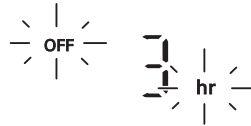
Off Timer function Automatically shut down after several hours.

Example) shut down automatically after 3 hours

1 Press the On/Off button.

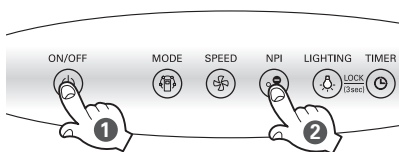
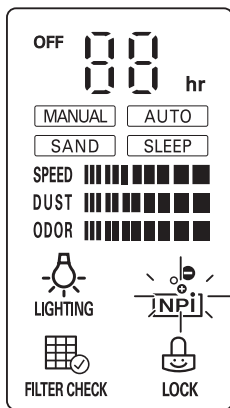
2 Press Off Timer Button to set 3 hours.

- Each time pressing the button, operation time will increase 1 more hour.
- When selecting 3 hours, the product will be stopped after 3 hours of operation.



- Each time pressing the button, operation time will increase 1 more hour.
- Up to 9 hours can be selected. After operating till the presetting time, the product will be stopped automatically.

Additional function



NPI Sterilization function

Purify indoor air effectively when the sandstorm occurs.

During the NPI sterilization operation, many kind of bacteria in the room will be eliminated by discharging the sterilization ion which is harmless to the human body.

1 Press the On/Off Button.

2 Press the ION button to choose expected function.

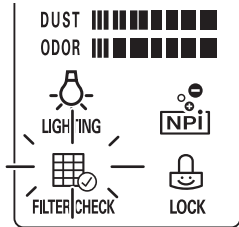
- Whenever pressing the button once, it will be changed in the sequence of NPI → Function release → NPI → Function release



NPI → Function release → NPI → Function release



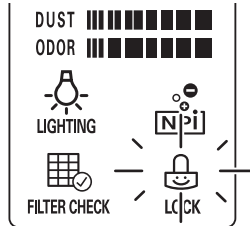
Additional function



Filter Checking Function May remind users to clean or replace the filter after use for a certain period.

- 1 During the operation, if the filter checking indicator light is on, open the front panel and check the filter under the operation state of the air purifier.
- 2 Detailed information for the filter cleaning, refer to the page 25-26.

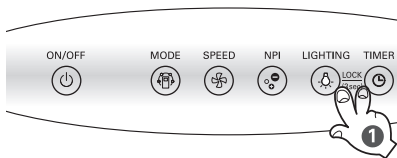
- Filter maintenance may vary depending on the environment.



Lock Function This is the function so that the button of the product will not be acted in unintended condition.

- 1 During the operation, if pressing the Lighting Button and Off timer Button for 3 seconds simultaneously, the locking setup or release will be realized.

- If buttons are not acted during the product operation, check the locking indicator of the display and release the locking setup.
- When the power cord is pulled out under the locking setup state, the locking setup will be released.



Exterior and dust sensor cleaning method

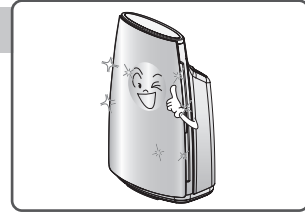
Exterior and dust sensor cleaning method

Wipe the exterior of the unit with a soft cloth using warm water and a mild detergent.



Caution

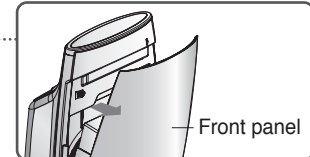
- Do not use harsh cleaners or very hot water. Do not wash in the dishwasher.
- Never pour water onto the unit; it could damage the internal components and create a shock and fire hazard.



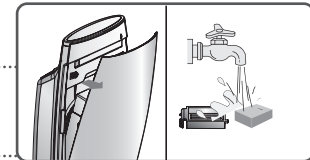
Dust sensor cleaning method

The dust sensor is a device that senses the minute and large dust particles. The lens part must be periodically cleaned to maintain the performance.

1 In case of under operation, be sure to OFF the power supply.



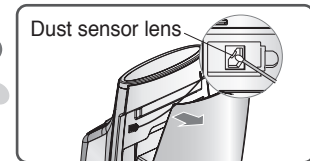
2 Open the dust sensor cover. Wash the sensor filter and dry the filter properly.



3 Wipe the lens of the dust sensor with a cotton stick.

* After cleaning the lens, close the cover of the dust sensor in the reverse order.

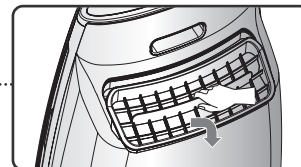
- Clean the lens of the dust sensor once every 2 months. But the cleaning frequency can differ according to the using environment and time. So in an environment where it is dusty, clean more frequently.



Exterior and dust sensor cleaning method

Air outlet cleaning method

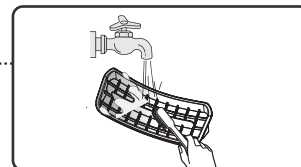
- 1 Separate the air outlet cover by grabbing its protruded section and lifting it up.



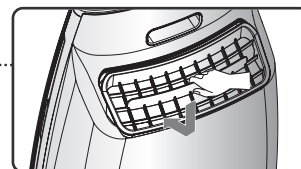
- 2 Clean the safety grille with the soft brush and the suction inlet of vacuum cleaner.



- 3 Wash the air outlet cover with soft brush in the running water.



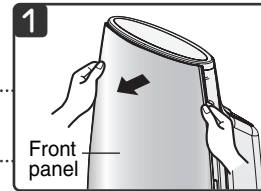
- 4 When assembling after the cleaning, settle the front section of the air outlet cover after inserting the cover rear section to suit to the product as shown in the right side figure.



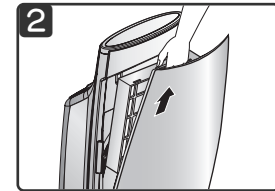
- Clean the air outlet once every 1~2 months.
But the cleaning frequency can differ according to the using environment and time.
So in an environment where it is dusty, clean more frequently.

Filter cleaning and exchange

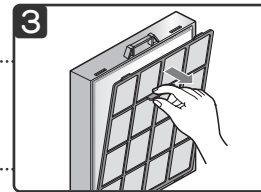
1 In case of under operation, be sure to OFF the power supply. Open the front panel by pulling it forward.



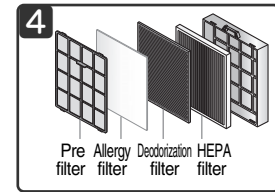
2 Remove the filter case by pulling it up.



3 Separate the pre filter from the filter case by pulling it forward.



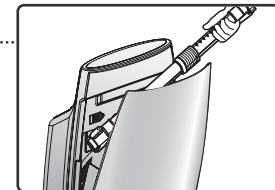
4 Clean the disassembled filter in accordance with the filter cleaning method in the next page.



Caution

- For washable filter, please dry it completely in a shade without any dampness. (If it is not completely dried, it may cause failure or bad odor.)
- Replace filters when unable to remove all dirt on the filter. (After cleaning the filter, close the front panel. If not closed completely, the product will not work.)

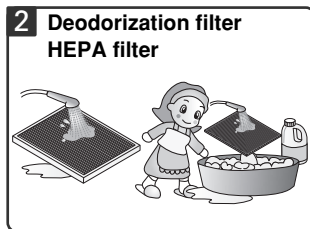
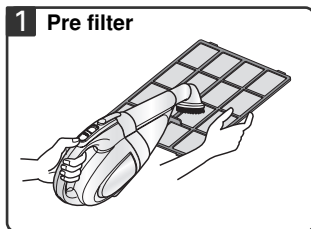
■ Clean the inside of the product with the suction inlet of vacuum cleaner.



Filter cleaning

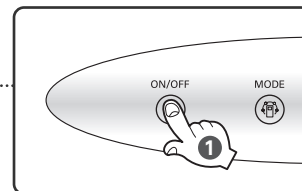
Cleaning method of various filters

Type of filter	Classification	Washing & replacement cycle	Cleaning method	
Pre filter	For washing	About a month washing Cycle	Clean the Pre-filter with a vacuum cleaner or a soft brush, and when the contamination is severe, use a neutral detergent and water to clean it off.	Refer to the Fig. 1.
Allergy filter	For Washing	6~12 months replacement cycle	Using a natural detergent and water to clean it off.	
Deodorization filter	For washing	About 6 months washing cycle	To clean both the HEPA filter and the Deodorizing filter, soak the filter in warm water with a mild detergent for 1 hour. Remove particles from the filter by shaking the water from the filter. Rinse the filter with warm water. Let air dry before placing filters back in the unit.	Refer to the Fig. 2.
HEPA filter		About 6 months washing cycle		

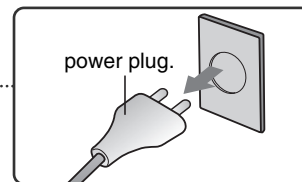


Storage

- 1 Operate the air cleaner for more than 1 hour on a clear day and then press the On/Off button to stop the operation.**

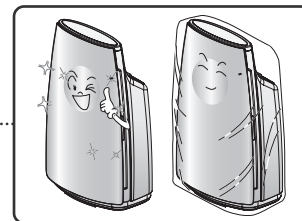


- 2 Unplug the power plug.**



- 3 Clean and protect the unit's mainframe. Cover the unit while storing for an extended period of time. When cleaning, wipe the main body with smooth cloth.**

Otherwise, there is the worry of external damage due to the scratch etc.



Troubleshooting before calling for service

If abnormality is occurred, confirm the following items in advance before requesting to the customer care center.

Symptom	Confirmation	Procedures
Air Purifier will not start.	• Is the power plug unplugged?	• Plug the power properly.
	• Whether a power cut occur?	• Retrieve working when power cut finish.
	• Whether the front panel open or not?	• When the front panel opened, operation cannot be performed. Close it completely.
Air Purifier function is not working well.	• Is the indoor contamination severe?	• Ventilate the area to use the product.
	• Are there many particles on the Pre-filter?	Clean the Pre-filter.
	• Are there many particles on the washable HEPA filter?	Wash with clean water. (Do not use hot water of 40°C or higher or volatile liquid.) When drying the filter, avoid fire or direct sunlight and sufficiently dry it in the shades.
	• Is the using location too wide?	• Use the product that fits the room size. • Avoid using it where it is ventilated well such as entrance, window etc.)
Action of buttons is not functioning well.	• Is the unit installed at a location where air flows freely?	• Remove any obstacles. • Move and install at a different location.
	• Isn't there any foreign material like gloves in the hand?	• Remove the foreign material such as gloves before the use.
	• Isn't "locking" lighted at the operation indicator?	• Release the locking setup by pressing the Lighting Button and Off timer Button for about 3 seconds simultaneously.

Troubleshooting before calling for service

Problem	Possible cause	Solutions
Air outlet has an abnormal odor	<ul style="list-style-type: none"> • Are you using the product where there is smoke or odor? 	<ul style="list-style-type: none"> • The air cleaning function can deteriorate in locations where there is a lot of smoke or odor. Ventilate the space and then use the air purifier.
	<ul style="list-style-type: none"> • Are you using the product where there is a food smell? 	<ul style="list-style-type: none"> • For the food smell, it can be penetrated to the filter, therefore ventilate the space and then use the air purifier.
	<ul style="list-style-type: none"> • Did you completely dry the washable HEPA filter? 	<ul style="list-style-type: none"> • If you use the washable filter without completely drying it, it can generate a weird smell. Therefore dry the filter completely before using it again.
Sensor indicator has problem.	<ul style="list-style-type: none"> • Dust sensor keeps high level always. 	<ul style="list-style-type: none"> • Clean the dust sensor or the filter. Due to the vapor particles generated during the cooking or boiling, the numerical value of the dust sensor can be raised.
	<ul style="list-style-type: none"> • Odor sensor level goes up? 	<ul style="list-style-type: none"> • LG air purifier is designed to detect polluted air, therefore odor sensor may not react to food odors. But deodorization filter will remove odor.
	<ul style="list-style-type: none"> • Aren't the numerical values of the dust sensor, odor sensor and cleanliness level continuously moving from side to side? 	<ul style="list-style-type: none"> • It is the Start-up function which prepares the unit for operation. During this two minutes period, the display will fluctuate to indicate that the unit is sensing the air quality in their room.

Product Specification

The external dimension, design and product standard can change to improve the quality of the product.

Model Name	PS-T450 Series
Power Supply	220-240 V~ 50/60 Hz
Weight of Product	10 kg
Appearance Size(mm)	425 (Width) x 625 (Height) x 265 (Depth)
Power consumption	50 W

Memo

