

VRF (Variable Refrigerant Flow)

User manual

VUCC***S4-4P

- Thank you for purchasing this Lennox Product.
- Before operating this unit, please read this manual carefully and retain it for future reference.



Contents

| | |
|---|-----------|
| User manual | 3 |
| Safety precautions | 3 |
| Checking before use | 12 |
| Operation ranges • Maintaining your product | 12 |
| Tips on using product | 13 |
| Selecting the best location | 14 |
| Adjusting the air flow direction | 15 |
| Viewing the parts | 16 |
| Main parts | 16 |
| Cleaning and maintaining the product | 18 |
| Cleaning the exterior • Cleaning the filter | 18 |
| Periodical checks | 26 |
| Appendix | 27 |
| Troubleshooting | 27 |

Safety precautions

California Proposition 65 Warning (US)

 **WARNING:** Cancer and Reproductive Harm
- www.P65Warnings.ca.gov

Before using your new product, please read this manual thoroughly to ensure that you know how to safely and efficiently operate the extensive features and functions of your new appliance.

Because the following operating instructions cover various models, the characteristics of your product may differ slightly from those described in this manual. If you have any questions, call your nearest contact center or find help and information online at

www.lennox.com for homeowners and

www.lennoxpros.com for dealer/contractor.






Important safety symbols and precautions:

WARNING

Hazards or unsafe practices that may result in severe personal injury or death.

CAUTION

Hazards or unsafe practices that may result in minor personal injury or property damage.

-  **Follow directions.**
-  **Do NOT attempt.**
-  **Make sure the machine is grounded to prevent electric shock.**
-  **Cut-off the power supply.**
-  **Do NOT disassemble.**

Safety precautions

FOR INSTALLATION



WARNING

- ❗ **Use the power line with the power specifications of the product or higher and use the power line for this appliance only. In addition, do not use an extension line.**
 - Extending the power line may result in electric shock or fire.
 - Do not use an electric transformer. It may result in electric shock or fire.
 - If the voltage/frequency/rated current condition is different, it may cause fire.

The installation of this appliance must be performed by a qualified technician or service company.

- Failing to do so may result in electric shock, fire, explosion, problems with the product, or injury.

Install a switch and circuit breaker dedicated to the product.

- Failing to do so may result in electric shock or fire.

Fix the outdoor unit firmly so that the electric part of the outdoor unit is not exposed.

- Failing to do so may result in electric shock or fire.

- ⊘ **Do not install this appliance near a heater, inflammable material. Do not install this appliance in a humid, oily or dusty location, in a location exposed to direct sunlight and water (rain drops). Do not install this appliance in a location where gas may leak.**
 - This may result in electric shock or fire.

-
- ⊘ **Never install the outdoor unit in a location such as on a high external wall where it could fall.**
 - If the outdoor unit falls, it may result in injury, death or property damage.
 - ⚡ **This appliance must be properly grounded. Do not ground the appliance to a gas pipe, plastic water pipe, or telephone line.**
 - Failure to do so may result in electric shock, fire, an explosion, or other problems with the product.
 - Make sure that it is in accordance with local and national codes.



CAUTION

- ❗ **Install your appliance on a level and hard floor that can support its weight.**
 - Failing to do so may result in abnormal vibrations, noise, or problems with the product.

Install the draining hose properly so that water is drained correctly.

- Failing to do so may result in water overflowing and property damage.

When installing the outdoor unit, make sure to connect the draining hose so that draining is performed correctly.

- The water generated during the heating operation by the outdoor unit may overflow and result in property damage. In particular, in winter, if a block of ice falls, it may result in injury, death or property damage.

Safety precautions

FOR POWER SUPPLY

WARNING

- ❗ When the circuit breaker is damaged, contact your nearest service center.
- ⊘ Do not pull or excessively bend the power line. Do not twist or tie the power line. Do not hook the power line over a metal object, place a heavy object on the power line, insert the power line between objects, or push the power line into the space behind the appliance.
 - This may result in electric shock or fire.

CAUTION

- ⚡ When not using the product for a long period of time or during a thunder/lightning storm, cut the power at the circuit breaker.
 - Failing to do so may result in electric shock or fire.

FOR USING

WARNING

- ❗ If the appliance is flooded, please contact your nearest service center.
 - Failing to do so may result in electric shock or fire.
- If the appliance generates a strange noise, a burning smell or smoke, cutoff the power supply immediately and contact the nearest service center.
- Failing to do so may result in electric shock or fire.

-
- ❗ In the event of a gas leak (such as propane gas, LP gas, etc.), ventilate immediately without touching the power line. Do not touch the appliance or power line.**

- Do not use a ventilating fan.
- A spark may result in an explosion or fire.

To reinstall the product, please contact your nearest service center.

- Failing to do so may result in problems with the product, water leakage, electric shock, or fire.
- A delivery service for the product is not provided. If you reinstall the product in another location, additional construction expenses and an installation fee will be charged.
- Especially, when you wish to install the product in an unusual location such as in an industrial area or near the seaside where it is exposed to the salt in the air, please contact your nearest service center.

- ⊘ Do not touch the circuit breaker with wet hands.**

- This may result in electric shock.

Do not strike or pull the product with excessive force.

- This may result in fire, injury, or problems with the product.

Do not place an object near the outdoor unit that allows children to climb onto the machine.

- This may result in children seriously injuring themselves.

Do not turn the product off with the circuit breaker while it is operating.

Safety precautions

- ⊘ • Turning the product off and then on again with the circuit breaker may cause a spark and result in electric shock or fire.

After unpacking the product, keep all packaging materials well out of the reach of children, as packaging materials can be dangerous to children.

- If a child places a bag over its head, it may result in suffocation.

Do not insert your fingers or foreign substances into the outlet when the product is operating or the front panel is closing.

- Take special care that children do not injure themselves by inserting their fingers into the product.

Do not touch the front panel with your hands or fingers during the heating operation.

- This may result in electric shock or burns.

Do not insert your fingers or foreign substances into the air inlet/outlet of the product.

- Take special care that children do not injure themselves by inserting their fingers into the product.

This may result in children seriously injuring themselves.

Do not use this product for long periods of time in badly ventilated locations or near infirm people.

- Since this may be dangerous due to a lack of oxygen, open a window at least once an hour.

- ⚠ **If any foreign substance such as water has entered the appliance, cut-off the power supply and contact the nearest service center.**
 - Failing to do so may result in electric shock or fire.
- ⊘ **Do not attempt to repair, disassemble, or modify the appliance yourself.**
 - Do not use any fuse (such as cooper, steel wire, etc.) other than the standard fuse.
 - Failing to do so may result in electric shock, fire, problems with the product, or injury.



CAUTION

- ⚠ **Do not place objects or devices under the indoor unit.**
 - Water dripping from the indoor unit may result in fire or property damage.

Check that the installation frame of the outdoor unit is not broken at least once a year.

 - Failing to do so may result in injury, death or property damage.
- ⊘ **Do not stand on top of the appliance or place objects (such as laundry, lighted candles, lighted cigarettes, dishes, chemicals, metal objects, etc.) on the appliance.**
 - This may result in electric shock, fire, problems with the product, or injury.

Do not operate the appliance with wet hands.

 - This may result in electric shock.

Safety precautions

⊘ **Do not spray volatile material such as insecticide onto the surface of the appliance.**

- As well as being harmful to humans, it may also result in electric shock, fire or problems with the product.

Do not drink the water from the product.

- The water may be harmful to humans.

Do not apply a strong impact to the remote controller and do not disassemble the remote controller.

Do not touch the pipes connected with the product.

- This may result in burns or injury.

Do not use this product to preserve precision equipment, food, animals, plants or cosmetics, or for any other unusual purposes.

- This may result in property damage.

Avoid directly exposing humans, animals or plants from the air flow from the product for long periods of time.

- This may result in harm to humans, animals or plants.

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 a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

FOR CLEANING

WARNING

- ⊘ **Do not clean the appliance by spraying water directly onto it. Do not use benzene, thinner or alcohol to clean the appliance.**

- This may result in discoloration, deformation, damage, electric shock or fire.

Before cleaning or performing maintenance, cut-off the power supply and wait until the fan stops.

- Failing to do so may result in electric shock or fire.

CAUTION

- ⓘ **Take care when cleaning the surface of the heat exchanger of the outdoor unit since it has sharp edges.**

- To avoid cutting your fingers, wear thick cotton gloves when cleaning it.
- This should be done by a qualified technician please contact your installer or service center.

- ⊘ **Do not clean the inside of the product by yourself.**

- For cleaning inside the appliance, contact your nearest service center.
- When cleaning the internal filter, refer to the descriptions in the 'Cleaning and maintaining the product' section.
- Failure to do may result in damage, electric shock or fire.
- Make sure to prevent any injury from sharp edges of the surface when handling the heat exchanger.

Checking before use

Operation ranges

The table below indicates the temperature and humidity ranges the product can be operated within. Refer to the table for efficient use.

| MODE | INDOOR | OUTDOOR | INDOOR HUMIDITY | IF OUT OF CONDITIONS |
|---------|--------------------------------|---------------------------------|-----------------|--|
| COOLING | 64°F to 90°F (18°C to 32°C) | 23°F to 118°F (-5°C to 48°C) | 80% or less | Condensation may occur on the indoor unit with risk to have either water blow off or drops on the floor. |
| HEATING | 81°F or less (27°C or less) | -4°F to 75°F (-20°C to 24°C) | - | Internal protection triggers and the product will stop. |
| DRYING | 64°F to 90°F (18°C to 32°C) | 23°F to 118°F (-5°C to 48°C) | - | Condensation may occur on the indoor unit with risk to have either water blow off or drops on the floor. |

NOTE

- The standardized temperature for heating is 45°F/7°C. If the outdoor temperature drops to 32°F/0°C or below, the heating capacity can be reduced depending on the temperature condition.
If the cooling operation is used at over 90°F/32°C (indoor temperature), it does not cool at its full capacity.

CAUTION

- The use of the product at a relative humidity above the expected one (80%) may cause the formation of condensate and the leakage of water drops on the floor.

Maintaining your product

Internal protections via the unit control system

This internal protection operates if an internal fault occurs in the product.

| Type | Description |
|------------------------------|---|
| Against cold air | The internal fan will be off to against cold air when the heat pump is heating. |
| De-ice cycle (Defrost cycle) | The internal fan will be off to against cold air when the heat pump is heating. |
| Protect compressor | The product does not start operating immediately to protect the compressor of the outdoor unit after it has been started. |

NOTE

- If the heat pump is operating in Heat mode, De-ice cycle is actuated to remove frost from an outdoor unit that may have deposited at low temperatures.
The internal fan is switched off automatically and restarted only after the de-ice cycle is completed.

Tips on using product

Here are some tips that you would follow when using your product.

| TOPIC | RECOMMENDATION |
|----------------------------------|--|
| Cooling | <ul style="list-style-type: none"> • If current outside temperatures are much higher than the selected indoor temperature, it may take time to bring the inner temperature to the desired coolness. • Avoid drastically turning down the temperature. Energy is wasted and the room does not cool faster. |
| Heating | <ul style="list-style-type: none"> • Since the product heats the room by taking heat energy from outdoor air, the heating capacity may decrease when outdoor temperatures are extremely low. If you feel the product insufficiently heats, using an additional heating appliance in combination with the product is recommended. |
| Frost & De-ice | <ul style="list-style-type: none"> • When the product runs in Heat mode, due to temperature difference between the unit and the outside air, frost will form. If this happens: <ul style="list-style-type: none"> – The product stops heating. – The product will operate automatically in De-ice mode for 10 minutes. – The steam produced on the outdoor unit in De-ice mode is safe. – No intervention is required; after about 10 minutes, the product operates again normally. <p>※ The unit will not operate when it starts to de-ice.</p> |
| Fan | <ul style="list-style-type: none"> • Fan may not operate for about 3~5 minutes at the beginning to prevent any cold blasts while the product is warming up. |
| High indoor/outdoor temperatures | <ul style="list-style-type: none"> • If both indoor and outdoor temperatures are high and the product is running in Heat mode, the outdoor unit's fan and compressor may stop at times. This is normal; wait until the product turns on again. |
| Power failure | <ul style="list-style-type: none"> • If a power failure occurs during the operation of the product, the operating immediately stops and unit will be off. When power returns, the product will run automatically. |
| Protection mechanism | <ul style="list-style-type: none"> • If the product has just been turned on after operation stops or being plugged in, cool/warm air does not come out for 3 minutes to protect the compressor of the outdoor unit. |

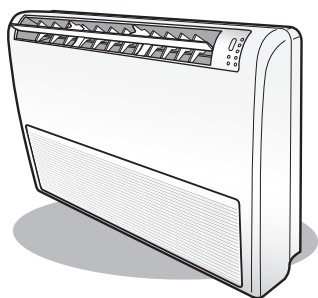
Checking before use

Selecting the best location

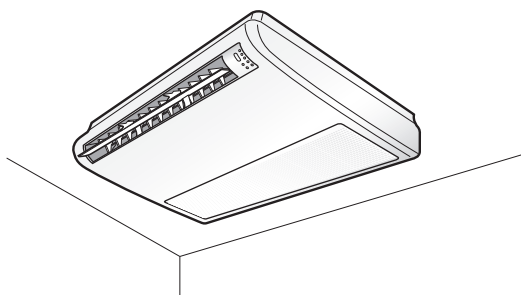
Ceiling type (VUCC018S4-4P)

You may set up your product under the ceiling or on the floor depending on your installation environment. Consider interior design, available space and the origin of cool or warm air to select the best location.

On the floor



Under the ceiling



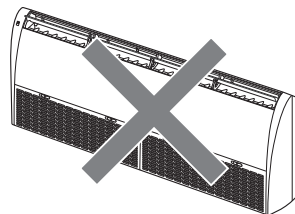
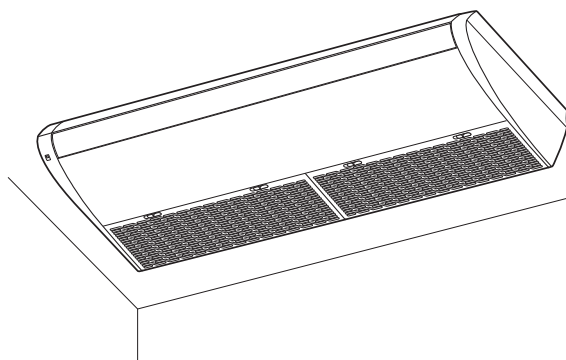
Big Ceiling type (VUCC024S4-4P)

You may set up your product under the ceiling .

Consider interior design, available space and the origin of cool air to select the best location.

※ This product must be installed on the ceiling. (Do not make it stand up for use.)

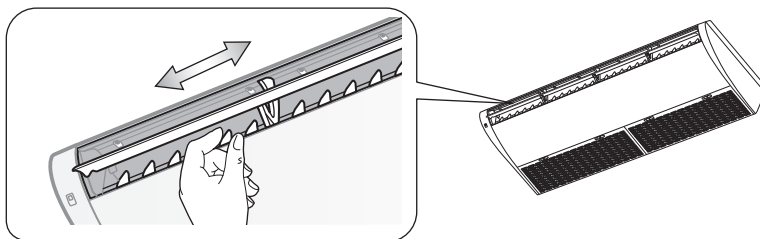
Under the ceiling



Adjusting the air flow direction

You may set up your product under the ceiling .

Move the each set of inner air flow blades left or right to keep the air flow direction in a constant position you prefer.



CAUTION

- Be extremely careful with your fingers while adjusting the Horizontal air flow direction. There is a potential risk of personal injury when the unit is mishandled.

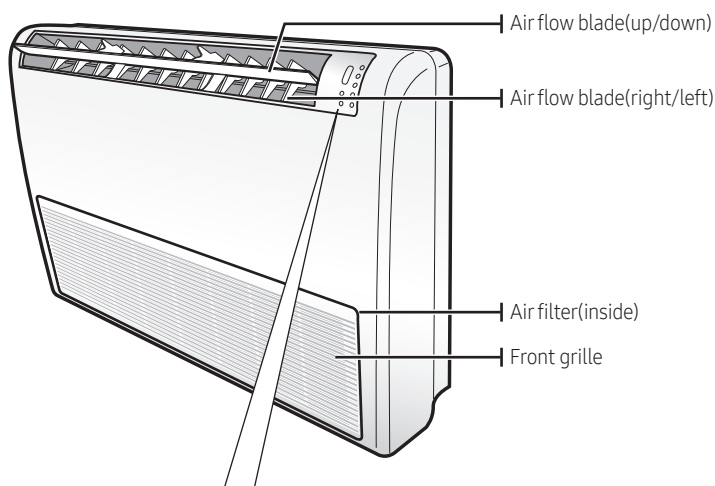
Viewing the parts

Congratulations on the purchase of the product. We hope you enjoy the features of your product and stay cool with optimal efficiency.

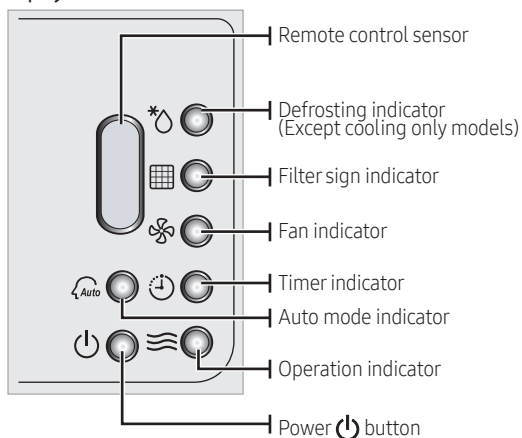
Please read the user manual to get started and to make the best use of the product.

Main parts

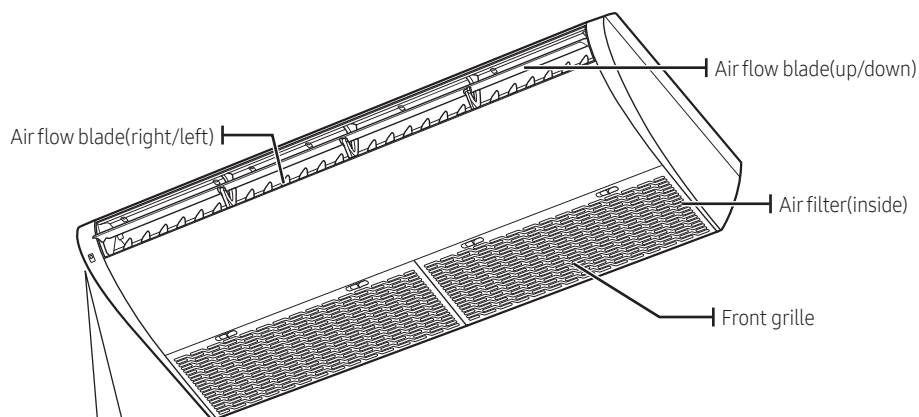
Ceiling type (VUCC018S4-4P)



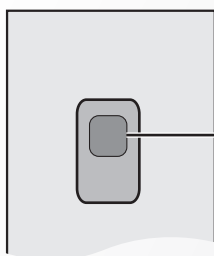
display



Big Ceiling type (VUCC024S4-4P)



Display



Blue : Operating indicator

Orange: Filter indicator

Green : Schedule indicator

Red : Error indicator

NOTE

- Your product and display may look slightly different from the illustration shown above depending on your model.

Cleaning and maintaining the product

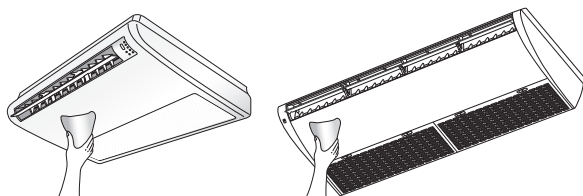
For the best performance from your product, clean it periodically. For cleaning and maintenance, be sure to turn off the circuit breaker.

Cleaning the exterior

When cleaning the exterior, make sure to turn off the auxiliary power switch. No special tools are needed to clean it.

Wipe the surface of the unit with a slightly wet or dry cloth when needed.

Wipe off dirt of odd-shaped area by using a soft brush.



CAUTION

- Do not use alkaline detergent, sulphuric acid, hydrochloric acid, or organic solvents (such as thinner, kerosene, and acetone) to clean the surfaces. They may damage the surface of the product and can create a risk of fire.
- Do not put any stickers on it as this can damage the surface of the indoor unit.

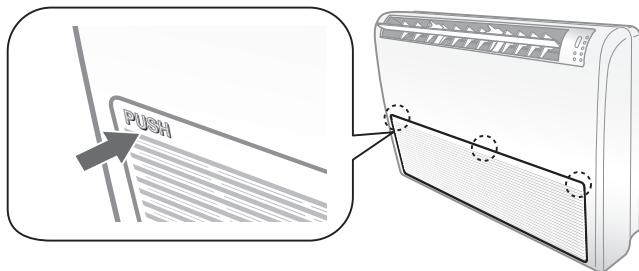
Cleaning the filter

Ceiling type (VUCC018S4-4P)

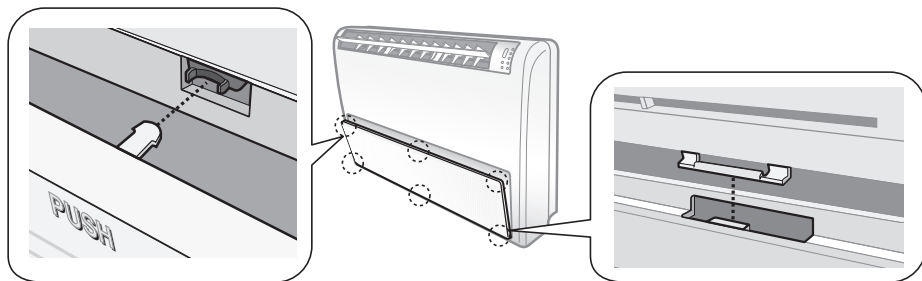
When cleaning the filter, make sure to turn off the auxiliary power switch. Washable foam based Air filter captures large particles from the air. The filter is cleaned with a vacuum or by hand washing.

- 1 Open the front grille.

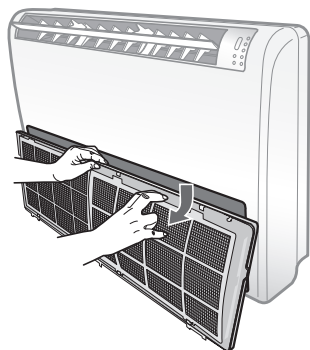
Push the **[PUSH]** tabs located in 3 places to unlock the groove on the front grille.



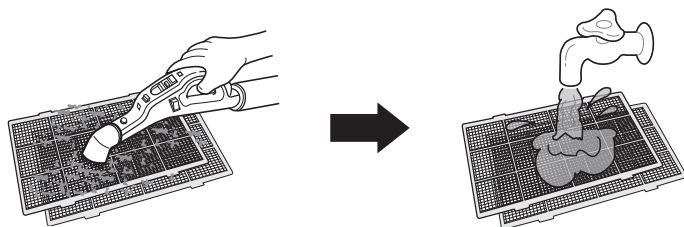
- 2 Detach the front grille.
Hold the front grille at about 45° angle. Push the bottom part of the grille to make sure it is unhooked. Then, lift up the front grille.



- 3 Pull out the Air filter.
Slightly press the air filter and then pull the air filter out.



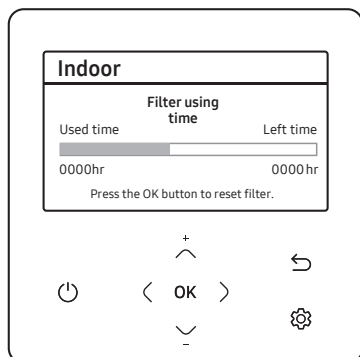
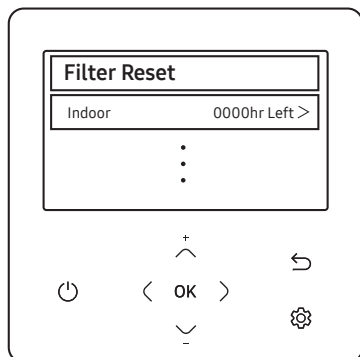
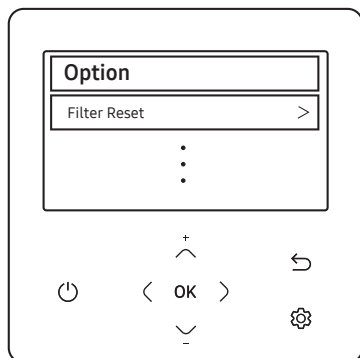
- 4 Clean the Air filter with a vacuum cleaner or soft brush. If dust is too heavy, then rinse it with running water and dry it in a ventilated area.






- 5 Insert the Air filter back in its original position.
- 6 Close the front grille.

Cleaning and maintaining the product

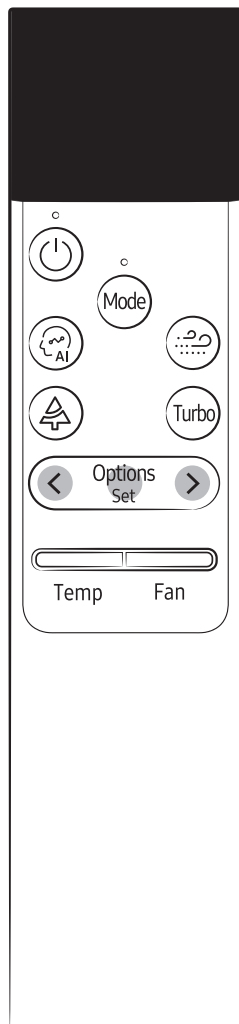
7 Resetting the filter-cleaning reminder Programmable Wired Controller



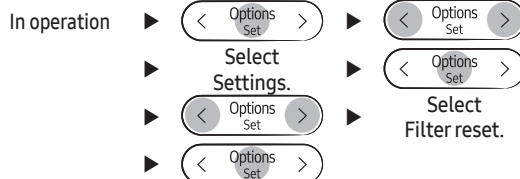
After cleaning and reassembling the air filter, be sure to reset the filter-cleaning reminder as follows :

- Indoor unit with the programmable wired controller:
 - Press the  button to display the **Option** menu.
 - Press the  button to select **Filter Reset** and press the **OK** button.
 - Press the  button to select **Indoor** and press the **OK** button to display **Filter using time**.
 - Press the **OK** button to reset the air filter.

Wireless Remote Control



- Indoor unit with the wireless remote control:



CAUTION

- The filter reset indicator blinks when the air filter should be cleaned.
- Although the filter cleaning indicator (grid icon) does not light, be sure to set the **"Filter Reset"** after cleaning the air filter.
- If the angle of the airflow blade is changed by opening the front grille for installation or maintenance of the indoor unit, be sure to turn off and then on the auxiliary switch before operating the indoor unit again. If not, the angle of the air flow blade may change and the blades may not be closed after turning off the indoor unit.



NOTE

- The illustration shown above may differ from yours depending on your model.

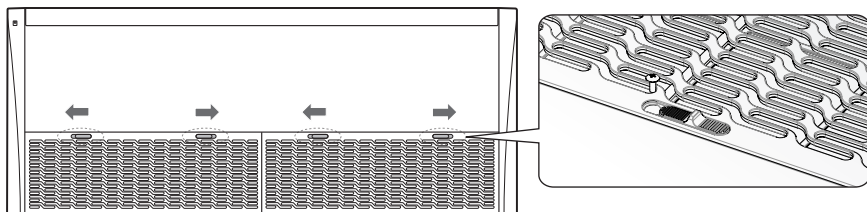
Cleaning and maintaining the product

Big Ceiling type (VUCC024S4-4P)

When cleaning the filter, make sure to turn off the auxiliary power switch. Washable foam based Air filter captures large particles from the air. The filter is cleaned with a vacuum or by hand washing.

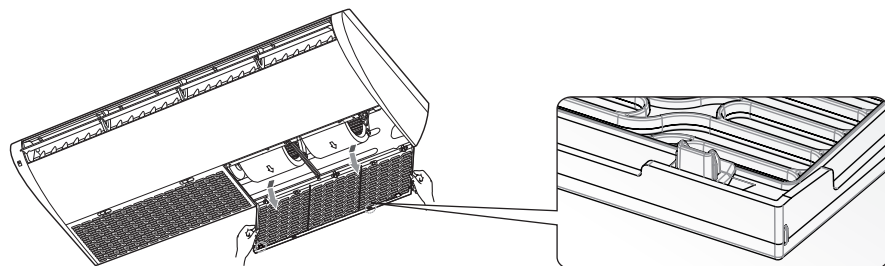
1 Open the front grille.

Slide the both hooks and unscrew two screws by screw driver from both of front grille.

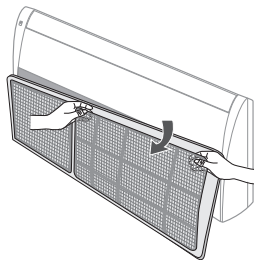


2 Detach the front grille.

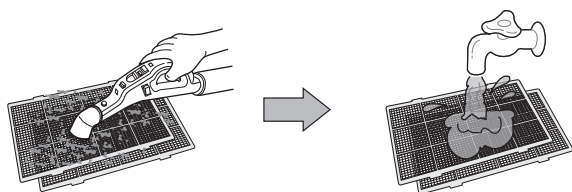
Open the grill and push it gently (over 100°) to detach the grille. Then, lift up the front grille.



- 3 Pull out the Air filter.
Slightly press the air filter and then pull the air filter out.



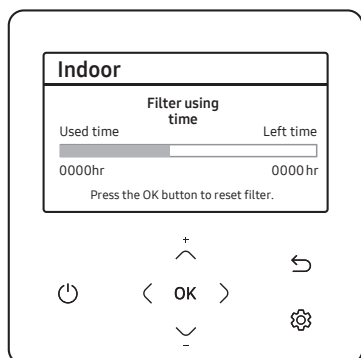
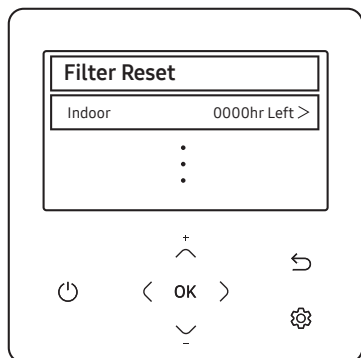
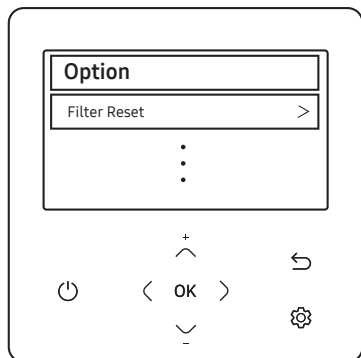
- 4 Clean the Air filter with a vacuum cleaner or soft brush. If dust is too heavy, then rinse it with running water and dry it in a ventilated area.






- 5 Insert the Air filter back in its original position.
- 6 Close the front grille.

Cleaning and maintaining the product

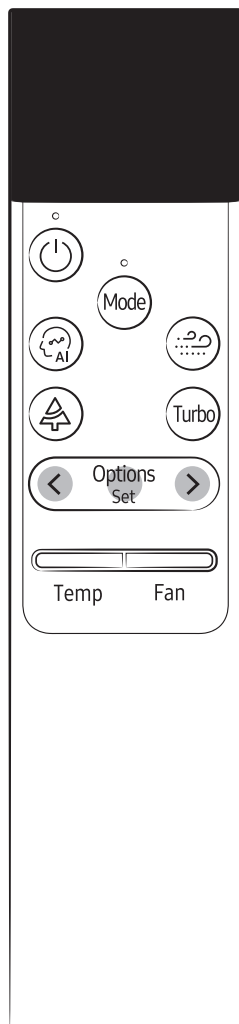
7 Resetting the filter-cleaning reminder Programmable Wired Controller



After cleaning and reassembling the air filter, be sure to reset the filter-cleaning reminder as follows :

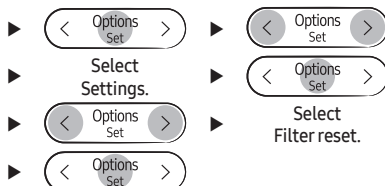
- Indoor unit with the programmable wired controller:
 - Press the  button to display the **Option** menu.
 - Press the  button to select **Filter Reset** and press the **OK** button.
 - Press the  button to select **Indoor** and press the **OK** button to display **Filter using time**.
 - Press the **OK** button to reset the air filter.

Wireless Remote Control




- Indoor unit with the wireless remote control:

In operation



CAUTION

- The filter reset indicator blinks when the air filter should be cleaned.
- Although the filter cleaning indicator () does not light, be sure to set the "Filter Reset" after cleaning the air filter.
- If the angle of the airflow blade is changed by opening the front grille for installation or maintenance of the indoor unit, be sure to turn off and then on the auxiliary switch before operating the indoor unit again. If not, the angle of the air flow blade may change and the blades may not be closed after turning off the indoor unit.

NOTE

- The illustration shown above may differ from yours depending on your model.

Cleaning and maintaining the product

If the product will not be used for an extended period of time, dry the product to maintain it in best condition.

- Dry the product thoroughly by operating in Fan mode for 3 to 4 hours and turn off the circuit breaker. There may be internal damage if moisture is left in components.
- Before using the product again, dry the inner components of the product again by running in Fan mode for 3 to 4 hours. This helps remove odors which may have generated from dampness.

Periodical checks

Refer to the following chart to maintain the product properly.

| Type | Description | Monthly | Every 2 months | Every 6 months | Once a year |
|--------------|--|---------|----------------|----------------|-------------|
| Indoor unit | Clean the air filter | ● | | | |
| | Clean the condensate drain pan | | | ● | |
| | Thoroughly clean the heat exchanger | | | ● | |
| | Clean the condensate drain pipe | | ● | | |
| | Replace the remote control batteries | | | | ● |
| Outdoor unit | Clean the heat exchanger on the outside of the unit | | ● | | |
| | Clean the heat exchanger on the inside of the unit | | | ● | |
| | Verify that all the electric components are firmly tightened | | | ● | |
| | Clean the fan | | | ● | |
| | Verify that all the fan assembly is firmly tightened | | | ● | |
| | Clean the condensate drain pan | | | ● | |

●: This check mark requires checking the indoor/outdoor unit periodically, following to the description to maintain the product properly.

NOTE

- The described operations should be performed more frequently if the area of installation is very dusty.

CAUTION

- These operations must always be performed by qualified personnel.
For more detailed information, see the installation part in the manual.

Appendix

Troubleshooting

Refer to the following chart if the product operates abnormally. This may save time and unnecessary expenses.

| PROBLEM | SOLUTION |
|---|---|
| The product does not operate immediately after it has been restarted. | <ul style="list-style-type: none">Because of the protective mechanism, the appliance does not start operating immediately to keep the unit from overloading. The product will start in 3 minutes. |
| The product does not work at all. | <ul style="list-style-type: none">Check whether the power is turned on, and then operate the product again.Check if the circuit breaker is switched off.Check if there is a power failure.Check your fuse. Make sure it is not blown out. |
| The temperature does not change. | <ul style="list-style-type: none">Check if you selected Fan mode. Press the Mode button on the remote control to select another mode. |
| The cool (warm) air does not come out of the product. | <ul style="list-style-type: none">Check if the set temperature is higher (lower) than the current temperature. Press the Temperature button on the remote control to change the set temperature. Press the Temperature button to decrease or increase the temperature.Check if the air filter is blocked by dirt. Clean the air filter once a month.Check if the product has just been turned on. If so, wait 3 minutes. Cool air does not come out to protect the compressor of the outdoor unit.Check if the product is installed in a place with a direct exposure to sunlight. Hang curtains on windows to boost cooling efficiency.Check if the cover or any obstacle is not near the outdoor unit.Check if the refrigerant pipe is too long.Check if the product is only available in Cool mode.Check if the remote control is only available for cooling model. |
| The fan speed does not change. | <ul style="list-style-type: none">Check if you selected Auto or Dry mode. The product automatically adjusts the fan speed to Auto in Auto/Dry mode. |
| Timer function does not set. | <ul style="list-style-type: none">Check if you press the Power button on the remote control after you have set the time. |
| Odors permeate in the room during operation. | <ul style="list-style-type: none">Check if the appliance is running in a smoky area or if there is a smell entering from outside. Operate the product in Fan mode or open the windows to air out the room. |

Appendix

| PROBLEM | SOLUTION |
|---|---|
| The product makes a bubbling sound. | <ul style="list-style-type: none">• A bubbling sound may be heard when the refrigerant is circulating through the compressor. Let the product operate in a selected mode.• When you press the Power button on the remote control, noise may be heard from the drain pump inside the product. |
| Water is dripping from the air flow blades. | <ul style="list-style-type: none">• Check if the product has been cooling for an extended period of time with the air flow blades pointed downwards. Condensation may generate due to the difference in temperature. |
| Remote control is not working. | <ul style="list-style-type: none">• Check if your batteries are depleted.• Make sure batteries are correctly installed.• Make sure nothing is blocking your remote control sensor.• Check that there are strong lighting apparatus near the product. Strong light which comes from fluorescent bulbs or neon signs may interrupt the electric waves. |
| The product does not turn on or off with the programmable Wired Controller. | <ul style="list-style-type: none">• Check if you set the programmable Wired Controller for group control. |
| The programmable Wired Controller does not operate. | <ul style="list-style-type: none">• Check if TEST indicator is displayed on the programmable Wired Controller. If so, turn off the unit and switch off the circuit breaker. Call your nearest contact center. |
| The indicators of the digital display flashes. | <ul style="list-style-type: none">• Press the Power button on the remote control to turn the unit off and switch the circuit breaker off. Then, switch it on again. |



Register Product to Receive enhance warranty and view product documentation :
<https://www.warrantyyourway.com/>

| COUNTRY | CALL | OR VISIT US ONLINE AT |
|---------|--------------|--|
| AMERICA | 800-953-6669 | www.lennox.com for homeowners, www.lennoxpros.com for dealer/contractor |