

VRF (Variable Refrigerant Flow) User manual

VUCD***S6-5P

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



Contents

Safety Information	3
Safety Information	3
At a Glance	14
Checking before use	14
Operation ranges • Maintaining your air conditioner	14
Tips on using air conditioner	15
Selecting the best location	16
Adjusting the air flow direction	17
Viewing the parts	18
Main parts	18
Cleaning and Maintenance	20
Cleaning and Maintaining	20
Cleaning the indoor unit exterior • Cleaning the filter	20
Periodical maintenance	26
Troubleshooting	27
How to use	32
SmartThings app	32
Open Source Announcement	34
Troubleshooting	35
Regulatory Notice	36

Safety Information

California Proposition 65 Warning (US)

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

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

Because the following operating instructions cover various models, the characteristics of your air conditioner 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.

ENERGY STAR qualified model only

Proper sizing and installation of equipment is critical to achieve optimal performance.

Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.



Safety Information

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation. This Class B digital apparatus complies with Canadian ICES-003.

This equipment complies with FCC and IC RSS-102 radiation exposure limits for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 23.62 inches (600mm) between the radiator & your body. Any changes or modifications not expressly approved by the manufacturer could void the manufacturer's warranty.






This device and its antenna(s) must not be co-located or operated with any other antenna or transmitter.







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.

Symbol	Meaning
	Flammable gas
	Flammable materials
	Refrigerant safety group
	Read operating manual
	Refer to operating manual
	Read service manual

Safety Information

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. This 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 air conditioner.


- 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.

This product is equipped with a safety device that operates on electricity.

- To ensure normal operation of the safety device, power must be supplied to the product at all times after installation, except when repairing it. This product is equipped with a refrigerant leak sensor for the purpose of safety.
- To ensure normal operation of the refrigerant leak sensor, power must be supplied to the product at all times after installation, except when repairing it.

 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 drain hose properly so that water is drained correctly.

- Failing to do so may result in water overflowing and property damage. Avoid adding drain to waste pipes as odours may arise in the future.

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

- The water generated during the heating operation in 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 Information

- ❗ The product shall be stored in a room with no ignition sources (e.g. open flames, gas appliance, electric heater, etc.).
 - Note that the refrigerant has no odor.

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 air conditioner for a long 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.

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, cut-off 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 air conditioner, 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 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 turn the air conditioner off with the circuit breaker while it is operating.

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

After unpacking the air conditioner, 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 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 outlet when the air conditioner is operating or the front panel is closing.

Safety Information

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

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

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

Do not strike or pull the air conditioner 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 use this air conditioner 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 copper, 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.
When the air conditioner does not operate properly for cooling or heating, there is a possibility of refrigerant leakage. If any leakage, stop operation, ventilate the room, and consult your dealer to recharge the refrigerant.

The refrigerant is not harmful. However, if it comes in contact with fire, it may generate harmful gases and there is a risk of fire.

During the transportation of the indoor unit, the pipelines shall be covered with brackets for protection. Do not move the product by holding the refrigerant or drain pipe connections.

- It may cause gas leakage.

Do not install the product on a ship or a vehicle (such as a campervan).

- Salt, vibration or other environmental factors may cause the product to malfunction, electric shock or fire.

- ⊘ **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.

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 air conditioner.

- The water may be harmful to humans.

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

Safety Information

⊘ Do not touch the pipes connected with the product.

- This may result in burns or injury.

Do not use this air conditioner 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 to the air flow from the air conditioner 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.

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 air conditioner to preserve precision equipment, food, animals, plants or cosmetics, or for any other unusual purposes.

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FOR CLEANING

WARNING


 **Do not clean the appliance by spraying water directly onto it. Do not use benzene, thinner, alcohol or acetone 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 air conditioner 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' 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 air conditioner 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 air conditioner 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.

CAUTION

- If you use the air conditioner at a relative humidity above 80%, it may cause a formation of condensation and a leakage of water on the floor.
- The rated heating capacity is based on an outdoor temperature of 47°F (8°C). If the outdoor temperature goes down below 32°F (0°C), heating efficiencies may decrease depending on the temperature conditions.
- If the indoor unit is out of the operating temperature and humidity range, the safety device may operate and the air conditioner may stop.
- If the indoor unit is installed in an IT room (for example, a computer room), a separate backup system must be installed, and the reliability of our product cannot be guaranteed at temperatures outside the operating temperature range.

Maintaining your air conditioner

Internal protections via the unit control system

This internal protection operates if an internal fault occurs in the air conditioner.

Type	Description
Against cold air	The internal fan will be off to prevent cold drafts when the heat pump is heating.
Defrost cycle	The internal fan will be off to prevent cold drafts when the heat pump is heating.
Protect compressor	The air conditioner 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, Defrost 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 defrost cycle is completed.

Tips on using air conditioner

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

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 air conditioner 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 air conditioner insufficiently heats, using an additional heating appliance in combination with the air conditioner is recommended.
Frost & Defrost	<ul style="list-style-type: none"> When the air conditioner 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 air conditioner stops heating. The air conditioner will operate automatically in Defrost mode for 10 minutes. The steam produced on the outdoor unit in Defrost mode is safe. No intervention is required; after about 10 minutes, the air conditioner 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 air conditioner is warming up.
High indoor/outdoor temperatures	<ul style="list-style-type: none"> If both indoor and outdoor temperatures are high and the air conditioner is running in Heat mode, the outdoor unit's fan and compressor may stop at times. This is normal; wait until the air conditioner turns on again.
Power failure	<ul style="list-style-type: none"> If a power failure occurs during the operation of the air conditioner, the operating immediately stops and unit will be off. When power returns, the air conditioner will run automatically.
Protection mechanism	<ul style="list-style-type: none"> If the air conditioner 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

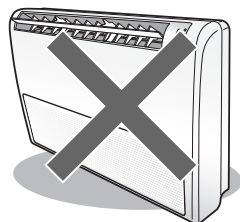
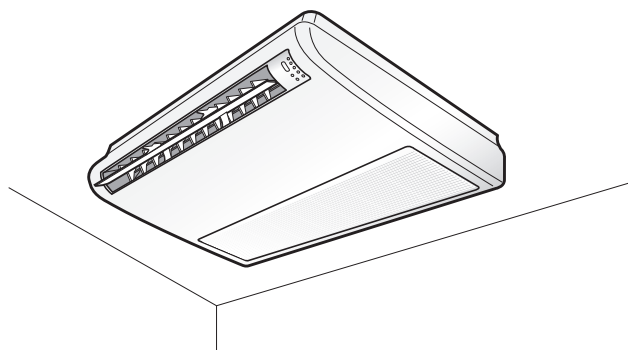
Selecting the best location

Ceiling type (VUCD018S6-5P)

You may set up your air conditioner 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. (Vertical installation is not possible.)

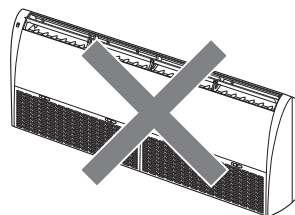
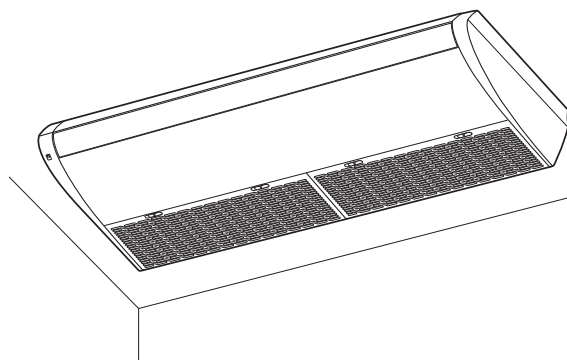


Big Ceiling type (VUCD024/036/048S6-5P)

You may set up your air conditioner 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. (Vertical installation is not possible.)

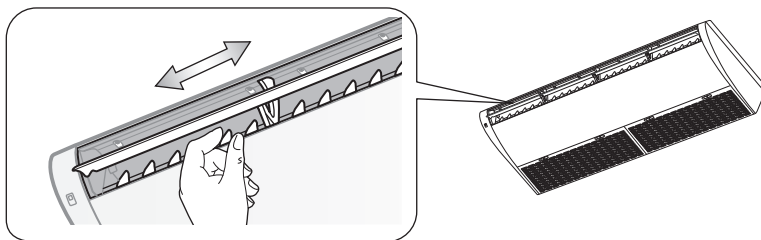


Under the ceiling

Adjusting the air flow direction

You may set up your air conditioner 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.

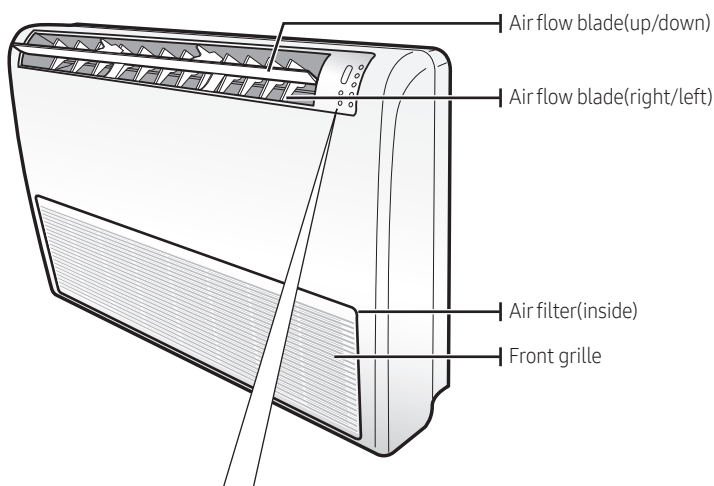
Viewing the parts

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

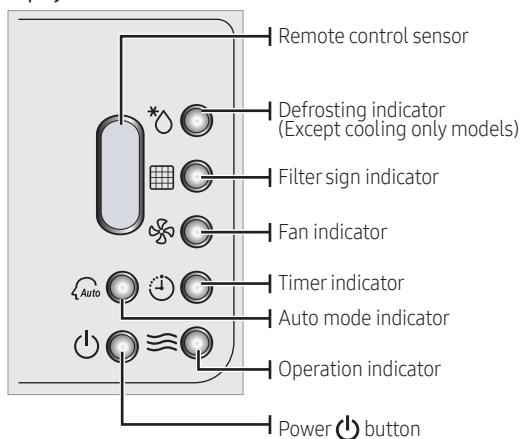
Please read the user manual to get started and to make the best use of the air conditioner.

Main parts

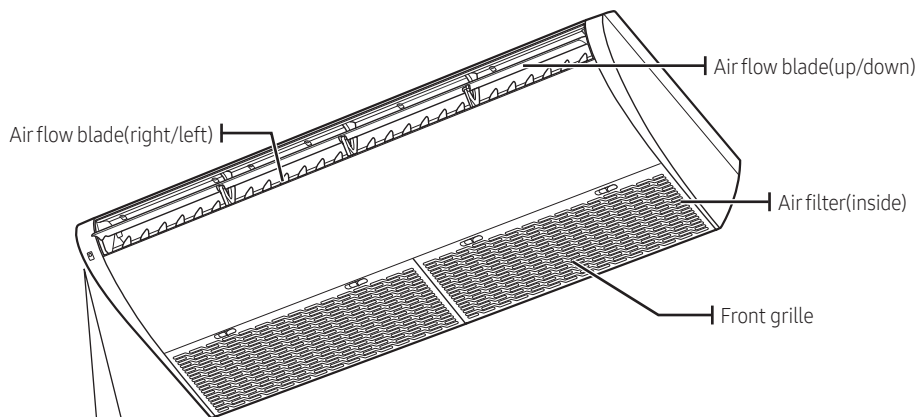
Ceiling type (VUCD018S6-5P)



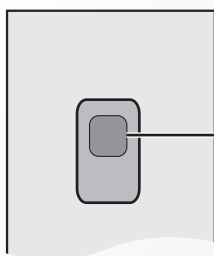
display



Big Ceiling type (VUCD024/036/048S6-5P)



Display



NOTE

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

Cleaning and Maintaining

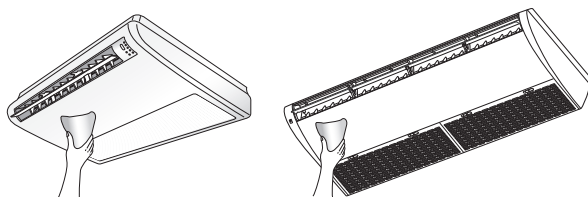
⚠ Before cleaning the indoor unit, be sure to turn off the auxiliary power switch.

Cleaning the indoor unit 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

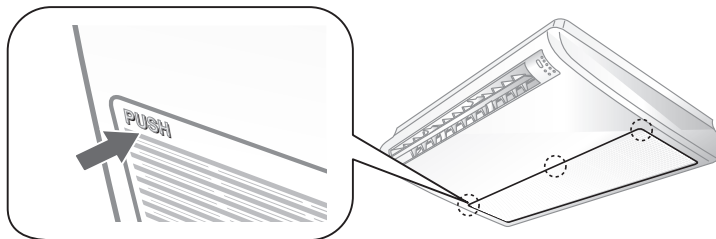
- Do not use alkaline detergent, sulphuric acid, hydrochloric acid, or organic solvents (such as thinner, kerosene, and acetone) to clean the surfaces.
They may damage the surface of the air conditioner and can create a risk of fire.
- Do not put any stickers on it as this can damage the surface of the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

Cleaning the filter

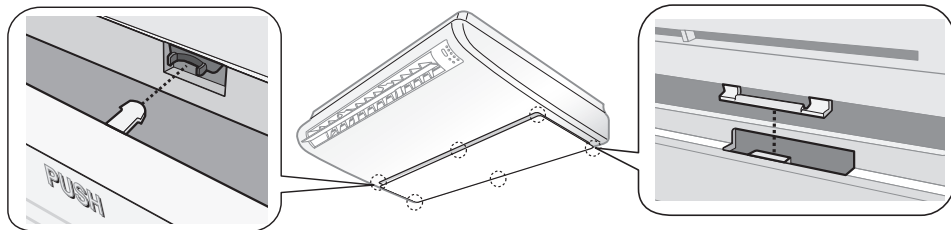
Ceiling type (VUCD018S6-5P)

When cleaning the exterior, 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.

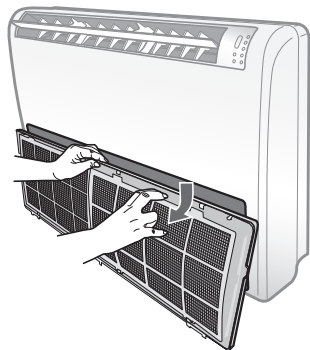
- 1 Open the front grille.
Push the **[PUSH]** tabs located in 3 places to unlock the groove on the front grille.



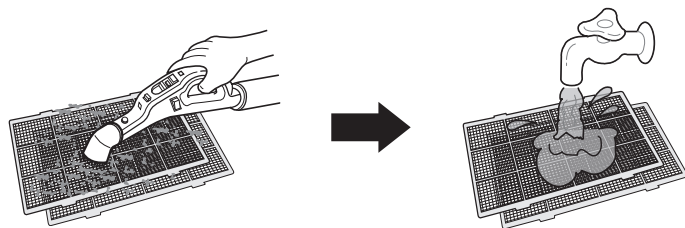
- 2 Detach the front grille.
Hold the front grille at about 45° angle. Push the bottom part of the grille to make sure it is unhooked. Then, lift up the front grille.



- 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.



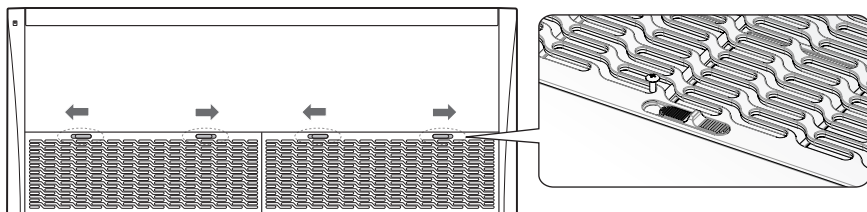
- 5 Insert the Air filter back in its original position.
- 6 Close the front grille.

Cleaning and Maintaining

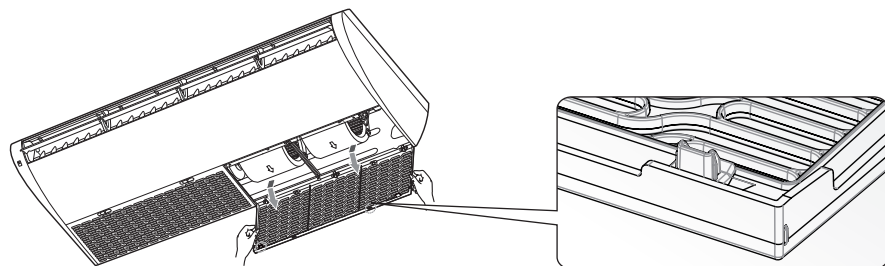
Big Ceiling type (VUCD024/036/048S6-5P)

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.

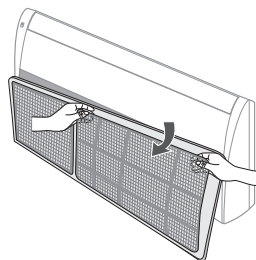
- 1 Open the front grille.
Slide the both hooks and unscrew two screws by screw driver from both of front grille.



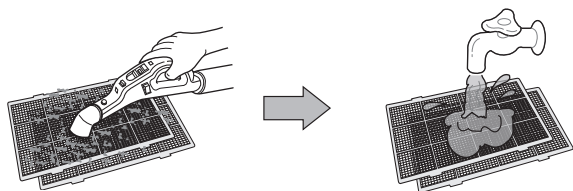
- 2 Detach the front grille.
Open the grill and push it gently (over 100°) to detach the grille. Then, lift up the front grille.



- 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.

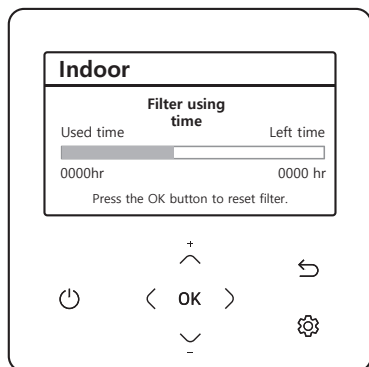
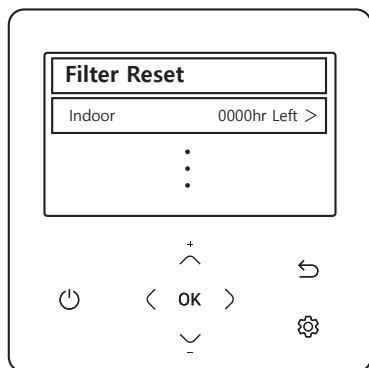
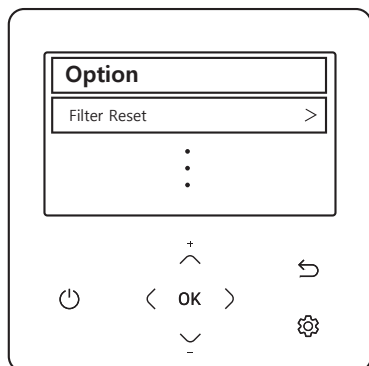


- 5 Insert the Air filter back in its original position.
- 6 Close the front grille.




Cleaning and Maintaining

Resetting the filter-cleaning reminder

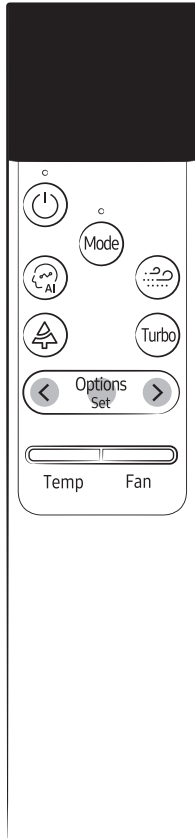
Programmable Wired Controller



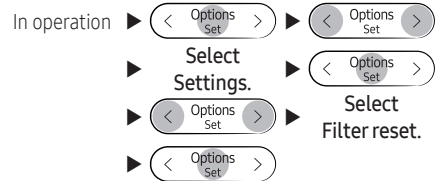
After cleaning and reassembling the air filter, be sure to reset the filter-cleaning reminder as follows :

- Indoor unit with the wired remote control:
 - a. Press the  button to display the **Option** menu.
 - b. Press the  button to select **Filter Reset** and press the **OK** button.
 - c. Press the  button to select **Indoor** and press the **OK** button to display **Filter using time**.
 - d. 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 (📅) 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.

Cleaning and Maintaining

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

- Dry the air conditioner 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 air conditioner again, dry the inner components of the air conditioner again by running in Fan mode for 3 to 4 hours. This helps remove odors which may have generated from dampness.

Periodical maintenance

Unit	Maintenance item	Interval	Requires qualified technicians
Indoor unit	Clean the air filter.	At least once a month	
	Clean the condensate drain pan.	Once a year	Required
	Clean the heat exchanger	Once a year	Required
	Clean the condensate drain pipe.	Once every 4 months	Required
	Replace R-32 detecting sensor	10 years	Required
Outdoor unit	Clean the heat exchanger on the outside of the unit.	Once every 4 months	Required
	Clean the heat exchanger on the inside of the unit.	Once a year	Required
	Clean the electric components with jets of air.	Once a year	Required
	Verify that all the electric components are firmly tightened.	Once a year	Required
	Clean the fan.	Once a year	Required
	Verify that the fan assemblies are firmly tightened.	Once a year	Required
	Clean the condensate drain pan.	Once a year	Required

NOTE




- The checks and maintenance operations described above are essential to guarantee the efficiency of the air conditioner. The frequency of these operations may vary depending on the characteristics of the area, the amount of dust, etc.
- 1 The above mentioned operations should be performed more frequently if the area of installation is very dusty.
 - 2 In some cases, if the period of use of the R-32 detecting sensor exceeds 5 years, "E695" is displayed on the wired remote control. The product works normally.
Six months before the expiration of the period of use date, "E699" is displayed on the wired remote control, and the product operates normally.
If the period of use date exceeds 10 years, the wired remote control displays "E700", and the use of the product is restricted.
It must be replaced through Lennox Service Center before the expiration of the period of use date.
 - 3 This refrigerant sensor shall only be replaced with manufacturer approved sensor these operations must always be performed by qualified personnel. For more detailed information, refer to Installation Manual.




Troubleshooting

Refer to the following chart if the air conditioner operates abnormally. This may save time and unnecessary expense.


Problem	Solution
<p>The product does not work.</p> <p>Error E694</p>	<ul style="list-style-type: none"> Connect an R-32-capable wired remote control. * VSTAT04P-1 * R-32-capable wired remote controls should be purchased separately.
<p>An alarm sounds, and the product does not work.</p> <p>Error E696</p>	<ul style="list-style-type: none"> This is intended to determine whether there is a leak or not, as R-32 refrigerant is sensed. The indoor unit determines again whether or not there is a refrigerant leak while operating for 2 minutes using fan mode (specifically High mode). If there is no refrigerant leak, the indoor unit stops operating, the error is cleared and the product can operate normally. The R-32 sensor, embedded in the indoor unit, reacts not only to R-32 refrigerant but also to high-concentration chemicals (e.g. organic solvents, hair spray and paint). <p>Do not use any high-concentration chemicals in the vicinity of the indoor unit, as these may cause false operation of the sensor.</p>
<p>An alarm sounds, and the product does not work.</p> <p>Error E697, E797</p>	<ul style="list-style-type: none"> The 'E697' alarm sounds when the R-32 refrigerant leaks. To alert customers about the refrigerant leak, the wired remote control displays the screen shown below, and an alarm sounds for 4 minutes. This alarm can be turned off by pressing the OK button on the wired remote control for 3 seconds. <div data-bbox="356 975 768 1222" data-label="Image"> <p>The image shows a rectangular display screen. At the top, there are two warning icons: a triangle with a flame and a diamond with a flame. Below these are three book-like icons. In the center, the text reads "Indoor address : 200001" and "Error code : E697". At the bottom, in smaller text, it says "Press the 'OK' button for 3 seconds to dismiss the alert."</p> </div> <ul style="list-style-type: none"> The refrigerant inside the product has been recovered and held in the outdoor unit. Ventilate the room for which the alarm was activated. When E697 alarm occurs, E797 error is displayed in other indoor unit connected to the corresponding indoor unit and operation is stopped and does not work. Contact the Lennox service center for assistance.

Cleaning and Maintaining

Problem	Solution
The product does not work. Error E116, E698, E699, E700	<ul style="list-style-type: none"> This error occurs when the R-32 refrigerant sensor has a malfunction or the sensor's life has expired. Display 'E116' or 'E698' when a sensor failure occurs The R-32 sensor's lifespan is 10 years. <p>The wired remote control displays 'E699' 6 months before the sensor's lifespan expires.</p> <p>After the sensor's lifespan expires, the wired remote control displays 'E700', and the product usage is limited.</p> <ul style="list-style-type: none"> Contact the Lennox service center for assistance.
The air conditioner 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 air conditioner will start in 3 minutes.
The air conditioner does not operate at all.	<ul style="list-style-type: none"> Check if the power plug is properly connected. Check whether the auxiliary power switch (MCCB, ELB) is turned on. If the auxiliary power switch (MCCB, ELB) is turned off, the air conditioner does not work although you press the  (Power) button. When you clean the air conditioner or do not use it for an extended period of time, turn off the auxiliary power switch (MCCB, ELB). After the air conditioner is not used for an extended period of time, be sure to turn on the auxiliary power switch (MCCB, ELB) 6 hours before starting operation. <p> NOTE</p> <ul style="list-style-type: none"> The auxiliary power switch (MCCB, ELB) is sold separately. Make sure that auxiliary power switch (MCCB, ELB) is installed in the distribution box inside the building. <ul style="list-style-type: none"> If the air conditioner is turned off by the Timed off function, turn on the air conditioner again by pressing the  (Power) button.
The temperature does not change.	<ul style="list-style-type: none"> Check whether the Fan mode is running. In the Fan mode, the air conditioner controls the set temperature automatically, and you cannot change the set temperature.
Warm air does not come out of the air conditioner.	<ul style="list-style-type: none"> Check whether the outdoor unit is designed for cooling only. In this case, warm air does not come out although you select the Heat mode. Check whether the remote control is designed only for cooling only. Use a remote control that supports both cooling and heating.

Problem	Solution
The fan speed does not change.	<ul style="list-style-type: none"> Check whether the Auto or Dry mode is running. In these modes, the air conditioner controls the fan speed automatically, and you cannot change the fan speed.
The wireless remote control does not operate.	<ul style="list-style-type: none"> Check whether the wireless controller is charged. Charge the controller if needed. Make sure that nothing is blocking the remote control sensor. Check whether any strong lighting sources are near the air conditioner. Strong light which comes from fluorescent bulbs or neon signs may interfere with the remote control.
The wired remote control does not operate.	<ul style="list-style-type: none"> Check whether the  indicator is displayed at the bottom right of the remote control display. In this case, turn off both the air conditioner and the auxiliary power switch, and then contact a service center.
The air conditioner is not turned on or off immediately with the wired remote control.	<ul style="list-style-type: none"> Check whether the wired remote control is set for group control. In this case, the air conditioners connected to the wired remote control are turned on or off sequentially. This operation takes up to 32 seconds.
The Timed on/off function does not operate.	<ul style="list-style-type: none"> Check whether you pressed the  (SET) button on the remote control after setting the on/off time. Set the on/off time.
The indoor unit display blinks continuously.	<ul style="list-style-type: none"> Turn on the air conditioner again by pressing the  (Power) button. Turn off and then turn on the auxiliary power switch, and then turn on the conditioner. If the indoor unit display is still blinking, contact a service center.
I want to get cooler air.	<ul style="list-style-type: none"> Operate the air conditioner with a electric fan to save energy and enhance the cooling efficiency.

Cleaning and Maintaining

Problem	Solution
The air is not cool or warm enough.	<ul style="list-style-type: none"> In the Cool mode, cool air does not come out if the set temperature is higher than the current temperature. <ul style="list-style-type: none"> Remote control: Press the Temperature button repeatedly until the set temperature [minimum: 64°F (18°C)] is set to lower than the current temperature. In the Heat mode, warm air does not come out if the set temperature is lower than the current temperature. <ul style="list-style-type: none"> Remote control: Press the Temperature button repeatedly until the set temperature [maximum: 86°F (30°C)] is set to higher than the current temperature. Both cooling and heating do not operate in the Fan mode. Select the Cool, Heat, Auto, or Dry mode. Check whether the air filter is blocked with dirt. A dusty filter may decrease the cooling and heating efficiencies. Clean the air filter frequently. If a cover is on the outdoor unit or any obstacle is present near the outdoor unit, remove them. Install the outdoor unit in a well-ventilated place. Avoiding places exposed to direct sunlight or close to a heating appliance. Place a sunscreen over the outdoor unit to protect it from direct sunlight. If the indoor unit is installed in a place exposed to direct sunlight, pull the curtains on the windows.
The air is not cool or warm enough.	<ul style="list-style-type: none"> Close the windows and doors to maximize the cooling and heating efficiencies. If the Cool mode is stopped and then started immediately, cool air comes out after about 3 minutes to protect the compressor of the outdoor unit. When the Heat mode is started, warm air does not come out immediately to prevent cool air from coming out at the beginning. If the refrigerant pipe is too long, the cooling and heating efficiencies may be decreased. Avoid exceeding the maximum pipe length.
The air conditioner makes strange noises.	<ul style="list-style-type: none"> In certain conditions [especially, when the outdoor temperature is lower than 68°F (20°C)], a hissing, rumbling, or splashing sound may be heard while the refrigerant is circulating through the air conditioner. This is a normal operation. When you press the  (Power) button on the remote control, noise may be heard from the drain pump inside the air conditioner. This noise is a normal sound.

Problem	Solution
Unpleasant odours permeate the room.	<ul style="list-style-type: none"> • If the air conditioner is running in a smoky area or if there is a smell entering from outside, ventilate the room properly. • If both indoor temperature and indoor humidity are high, operate the air conditioner in the Clean or Fan mode for 1 to 2 hours. • If the air conditioner has not been operated for an extended period of time, clean the indoor unit and then operate the air conditioner in the Fan mode for 3 to 4 hours to dry the inside of the indoor unit for removal of unpleasant odours. • If the air filter blocked with dirt, clean the air filter.
Steam is produced on the indoor unit.	<ul style="list-style-type: none"> • In winter, if the indoor humidity is high, steam may be produced around the air outlet while the defrost function is running. This is a normal operation.
The outdoor unit fan continues to operate when the air conditioner is turned off.	<ul style="list-style-type: none"> • When the air conditioner is turned off, the outdoor unit fan may continue to operate to reduce noise of the refrigerant gas. This is a normal operation.
Water drops from the piping connections of the outdoor unit.	<ul style="list-style-type: none"> • Condensation may develop due to the difference in temperature. This is a normal condition.
Steam is produced on the outdoor unit.	<ul style="list-style-type: none"> • In winter, when the air conditioner runs in the Heat mode, the frost on the heat exchanger melts and steam may be produced. This is a normal operation, neither product malfunction nor a fire.

SmartThings app

To use the SmartThings app, connect the product to the network in the sequence described below. The images shown may differ depending on your smartphone model, OS version and manufacturer. You need to set up the Wi-Fi access point only when connecting the product to a Wi-Fi network. Once the product is connected, you can use the SmartThings app via Wi-Fi, 3G, LTE, 5G or more wireless networks.

1 Checking the power connections

Check if the power is connected to the product and the access point.

2 Setting up and connecting to a Wi-Fi access point using your smartphone

1 To connect the product to a Wi-Fi network, turn on Wi-Fi at "Settings > Wi-Fi", and then select the access point to connect to

- Only alphanumeric characters are supported for wireless access point names (SSIDs). If an SSID has a special character, rename it before connecting to it.
- This product supports only Wi-Fi 2.4 GHz.



2 Turning off "Switch to mobile data" at "Settings > Wi-Fi" on your Smartphone

- If "Switch to mobile data" or "Adaptive Wi-Fi" is turned on, you cannot connect to the network. Be sure to turn off these functions before connecting to the network.



NOTE

- The setup may differ depending on your smartphone model, OS version and manufacturer.

3 Checking the Internet connectivity

- After connecting to Wi-Fi, check that your smartphone is connected to the Internet.

NOTE

- A firewall may prevent your smartphone from connecting to the Internet. Contact your Internet service provider for troubleshooting.

3 Downloading the SmartThings app and registering your Samsung account

1 Downloading the SmartThings app

- Search for "SmartThings" on Play Store or App Store, and download the SmartThings app to your smartphone.
- If the SmartThings app is already installed on your smartphone, update it to the latest version.

NOTE

- The SmartThings app supports Android OS 7.0 or later (with at least 2 GB RAM) and iOS 12.0 or later. The app is optimized for iPhone 6s or later and Samsung smartphones (Galaxy S and Note series). The updates of the SmartThings app or the functions supported by it may be discontinued for the previously supported OS versions due to reasons such as usability and security.
- The SmartThings app may change without prior notice to improve product usability and performance.

2 Registering your Samsung account

- A Samsung account is required to use the SmartThings app. To create your Samsung account and log in to your account, follow the instructions displayed on the SmartThings app. You do not need to install an additional app.

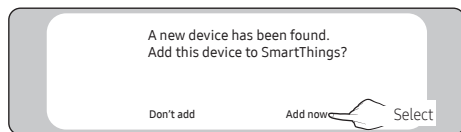
NOTE

- If you already have a Samsung account, log in to the account. If you have a smartphone that is a Samsung device and you have a Samsung account, your smartphone is automatically logged in to your account.
- If you log in from a smartphone produced for another country, you need to log in with its country code when you create your Samsung account, and the SmartThings app may not be used on some smartphones.

4 Connecting the SmartThings app to your product

1 Selecting the product to connect to

- 1) Start the SmartThings app about one minute after turning on the product to connect to.
- 2) After the SmartThings app is started, select 'ADD NOW' when a pop-up window saying that a product to connect to is found appears.

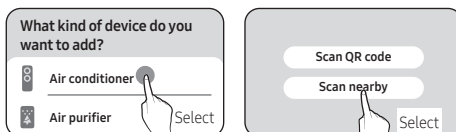


- 3) If the pop-up window does not appear, select "+", and then "Add Device".



You can add a product you want to connect to by selecting it manually or by selecting "Scan nearby".

- Select manually: Samsung devices > Air conditioner
- Scan: Scan nearby > Air conditioner



2 Connecting the SmartThings app to your product

- Follow the instructions displayed on the SmartThings app to connect to your product.
- For information on how to use the SmartThings app, select the How To menu on the app.

NOTE

- If any pop-up window appears on the top of the smartphone while connecting to your product, do not select it.
- If a pop-up window saying that the device is already registered appears during connecting to your product, get permission using "REQUEST PERMISSION" from a user already connected to the product, or create a new account using "REGISTER MY ACCOUNT" to independently connect to the product.
- If a Samsung account-related country error occurs while connecting to your product, log out of your current Samsung account, log in to your previous Samsung account, and then delete all devices that have been connected previously. Then, log in to your current Samsung account again, and configure the settings.

SmartThings app

- If a failure message appears while adding a device, see "Setting up and connecting to a Wi-Fi access point using your smartphone" on page 32. The connection may fail temporarily due to an installation location problem of the access point or other problems.
- If a message appears on the SmartThings app, follow its instructions.

NOTE

- For the security protocols for wireless/wired access points, WPA-PSK and WPA2-PSK are recommended. For the authentication methods, AES is recommended. New Wi-Fi authentication specifications and Wi-Fi non-standard authentication methods are not supported.
- The product supports the IEEE802.11 b/g/n (2.4 GHz) communication protocol. (Samsung recommends IEEE802.11n.)
- If your Internet service provider has permanently registered the MAC address (a unique identification number) of your PC or modem, you may not be able to connect your product to the Internet. Contact your Internet service provider and ask how to connect devices other than your PC (such as an air conditioner and an air purifier) to the Internet.

Open Source Announcement

The software included in this product contains open source software.

The following URL http://opensource.Samsung.com/opensource/SMART_TP1_0/seq/0 leads to open source license information as related to this product.



Troubleshooting

Check the following before requesting a service from the Service Center

Symptom		Measure
The installed SmartThings app cannot access the air conditioner.		<ul style="list-style-type: none">• Make sure you have connected the air conditioner to a wireless router.
I cannot log in with my Samsung account.		<ul style="list-style-type: none">• Try recovering your ID and password from the Samsung account page.
Adding device(s)	A failure message appears while adding devices.	<ul style="list-style-type: none">• This may fail temporarily due to the distance from the router or some interferences. Try again later.
	While adding the device, the progress stops at 0%-1% and a message appears saying that adding the device has failed.	<ul style="list-style-type: none">• You cannot add any device without deleting it once the device has already been added to the SmartThings app. To add the connected device again, first remove it and then proceed with the process.
	While adding the device, the progress is stuck at 99% and a message appears saying that adding the device has failed.	<ul style="list-style-type: none">• If you are using a Samsung smartphone, the server may not be connected temporarily. Restart the SmartThings app and then try adding the device again.• If your phone is not a Samsung product, check that you have entered a wrong Wi-Fi password. Try adding devices again.
	The app displays an authorization failure before pressing the user agreement button.	<ul style="list-style-type: none">• Check if a Wi-Fi Kit Single is already connected from the SmartThings app. When there are devices added, first remove them and try again.
	The app displays an authorization failure on the user agreement screen.	<ul style="list-style-type: none">• Make sure to press the [Power] button within 2 minutes after the screen appears. Try adding devices again.
	The screen requests to initialize the user account.	<ul style="list-style-type: none">• This happens when the user has already added devices. Follow the instructions provided in the SmartThings app.
After adding a device, the SmartThings app displays the disconnection event.		<ul style="list-style-type: none">• This happens when a device is being added to the server or it is temporarily disconnected from the router. End the SmartThings app and then launch it again.

Regulatory Notice

FCC Notice

FCC CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This appliance contains the transmitter module.

This device complies with Part 15 of FCC Rules. Operation is Subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received including interference that cause undesired operation.

For products available in the US and Canadian markets, only channels 1~11 are available.

You cannot select other channels.

FCC STATEMENT:

This equipment has been tested and found to comply within the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna

Increase the separation between the equipment and receiver

Connect the equipment to an outlet that is on a different circuit than the receiver.

Consult the dealer or an experienced radio/TV technician for help.

FCC RADIATION EXPOSURE STATEMENT:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated so there is at least 8 inches (20 cm) between the radiator and your body. This device and it's antennas must not be co-located or operated in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

IC Notice

This appliance contains the transmitter module.

The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met. Operation is subject to the following two conditions : (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

For products available in the US and Canadian markets, only channels 1~11 are available.

You cannot select other channels.

Regulatory Notice

IC RADIATION EXPOSURE STATEMENT:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated so there is at least 8 inches (20 cm) between the radiator and your body. This device and its antennas must not be co-located or operated in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.



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