

Air conditioner

User manual

AM*FEVDCG**

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

SAMSUNG

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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.samsunghvac.com

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 set forth 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 in conjunction with any other antenna or transmitter.

Notices and notes

To make you aware of safety messages and highlighted information, we use the following notices and notes throughout this manual:



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.



IMPORTANT

Information of special interest



NOTE

Supplementary information that may be useful



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

FOR GENERAL

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.

IMPORTANT

To perform its antimicrobial function this product has been treated with the biocide substance Silver zinc zeolite.



Safety Information

FOR INSTALLATION



WARNING

Use a power cord with this product's power specifications or higher and use the power cord for this appliance only. In addition, do not use an extension cord.

- Extending the power cord 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. Do not attempt to install the air conditioner yourself.

- Failing to do so may result in electric shock, fire, explosion, problems with the product, or injury and may also void warranty on the installed product.

Install an Isolation Switch next to the Air Conditioner (but not on the panels of the Air Conditioner) 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, fire, explosion, or problems with the product.

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, or inflammable material. Do not install this appliance in a humid, oily or dusty location, in a location exposed to direct sunlight and water (or rain). 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.

- Failing to do so may result in electric shock, fire, and explosion.
- Make sure to use a socket-outlet with ground.

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 odour.

CAUTION

Please cover the air conditioner with PE BAG after installation, and remove it when you start to run air conditioner.

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 drains correctly.



Safety Information

- 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.

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 odour.

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

- The water generated during heating 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.

Do not install the product in a place where thermo-hygrostat is needed (such as server room, machinery room, computer room, etc.)

- Those places do not provide guaranteed operation condition of the product therefore performance can be poor in these places.

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.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



 CAUTION

When not using the air conditioner 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, cut off the power supply immediately and contact the nearest service center.

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

If the air conditioner malfunctions or requires repair, immediately stop its operation and disconnect the entire power system. Then consult the authorized service personnel.

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.
- 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.



Safety Information

- 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 airflow blade with your hands or fingers during heating.

- This may result in electric shock or burns.

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.



Do not use means to accelerate the defrost operation or to clean, other than those recommended by Samsung.

Do not pierce or burn.

Be aware that refrigerants may not contain an odour.

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.

To prevent personal injury, make sure that you change the directions of the horizontal airflow blades after stopping the movements of the vertical airflow blade. (In case of adjusting the horizontal airflow manually)

Safety Information

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 immediately for recharging refrigerant.

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

During transportation of the indoor unit, the pipe lines shall be covered with brackets for protection. Do not move the product with holding the pipe lines.

- It may cause gas leakage.

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

- Salt, vibration or other environmental factor may cause the product 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 hit, shake, drop, or attempt to disassemble the remote control.

When replacing the remote control batteries, keep them out of the reach of infants.

- If an infant eats batteries, contact a doctor immediately.

When replacing the remote control batteries, be careful not to get the battery fluid on your skin.

- Battery fluid is harmful to humans.

Do not touch the pipes connected with the product.

- This may result in burns or injury.

Do not cut or burn the refrigerant container or pipings.

Do not point the air direction to the fireplace or heater.

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 airflow from the air conditioner for long periods of time.

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



Safety Information

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 discolouration, deformation, damage, electric shock or fire.

Before cleaning, servicing, or performing maintenance, make sure to disconnect the product from its power source 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.

- This should be done by a qualified technician. Please contact your installer or service center.

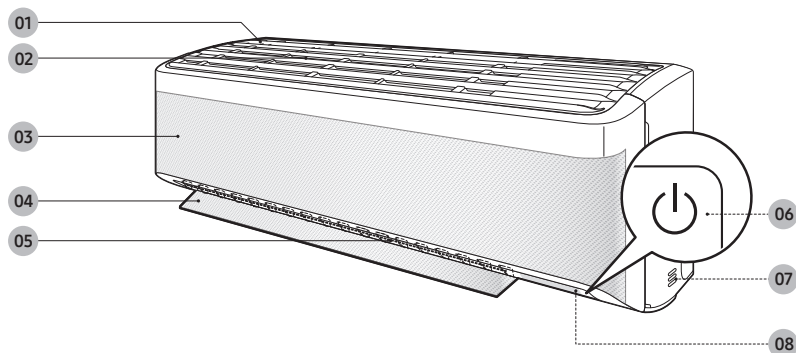
Do not clean the inside of the air conditioner by yourself.

- For cleaning inside the appliance, contact your nearest service center.
- When cleaning the filter, refer to the descriptions in the 'Cleaning' section.
- Failing to do so 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.



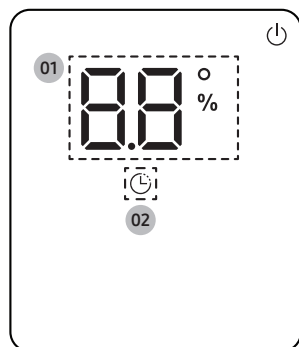
Indoor Unit Overview

The appearance of the actual product may differ slightly from the image below.



- | | |
|--------------------------------|---|
| 01 Air intake | 05 Airflow blade (left and right) |
| 02 Air filter | 06 Power button/Remote control receiver |
| 03 WindFree panel | 07 Room temperature sensor |
| 04 Airflow blade (up and down) | 08 Display |

Display

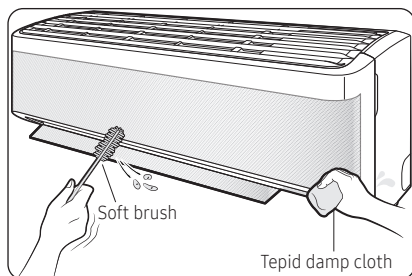


- | | |
|----|---|
| 01 | Temperature indicator (numeric)
Filter reset indicator (F)
Auto clean indicator (i) |
| 02 | Timer indicator
good'sleep indicator |



Cleaning

Cleaning the outside of the indoor unit



- 1 Turn off the air conditioner and wait until the fan stops.
- 2 Disconnect the power supply.
- 3 Use a soft brush or tepid damp cloth to clean the exterior.



WARNING

- Do not clean the appliance by spraying water directly onto it. Water entering the unit may result in electric shock or fire that could cause death, serious injury, or property damage:



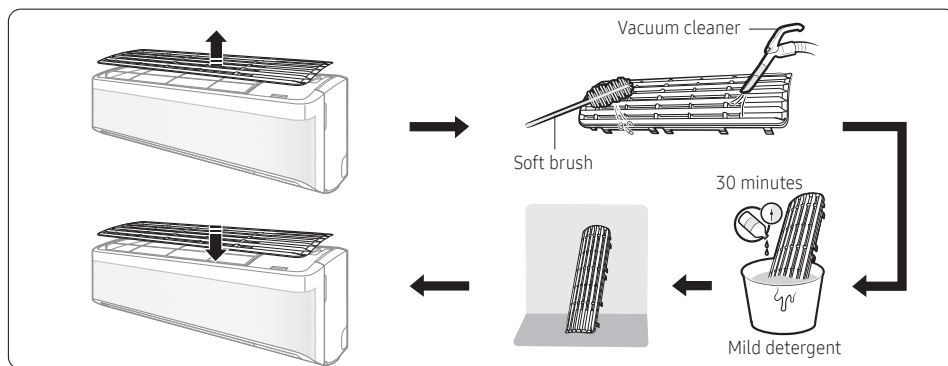
CAUTION

- Do not use an alkaline detergent to clean the indoor unit display.
- Do not use sulphuric acid, hydrochloric acid, or organic solvents such as paint thinner, kerosene, acetone, benzene, or alcohol to clean the unit surfaces.

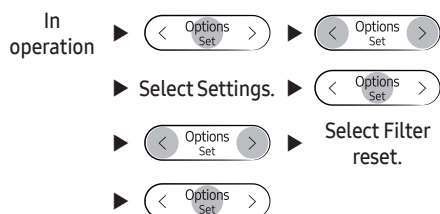


Cleaning the filter

Clean the air filter every two weeks or when the **CF** (filter-cleaning reminder) appears on the indoor unit display. The time between cleanings may vary, depending on the usage and environmental conditions.



- 1 Slide the filter off of the unit.
- 2 Use a soft brush or vacuum cleaner to remove any dust or debris on the filter.
- 3 Soak the filter in a solution of water and mild detergent for 30 minutes.
- 4 Rinse the filter and let it air dry in a well-ventilated area that is out of direct sunlight.
- 5 Reinstall the filter.
- 6 Reset the filter-cleaning reminder:



⚠ CAUTION

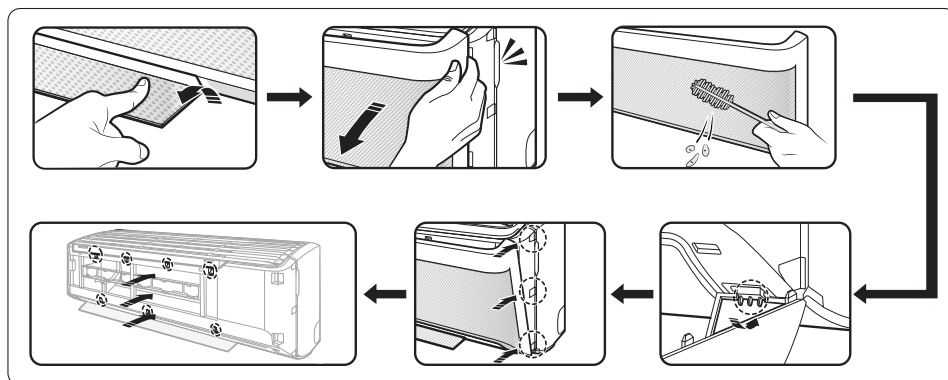
- Take care not to damage the filter during cleaning.
- Do not scrub the air filter with a hard-bristle brush or another cleaning utensil.
- Do not expose the air filter to direct sunlight when drying it.



Cleaning

Cleaning the WindFree panel

Clean the WindFree panel at least once a month.



- 1 Pull the airflow blade open.
- 2 Hold and pull both sides of the WindFree panel until it comes free from the air conditioner.
- 3 Use a soft brush or vacuum cleaner to remove any dust.
- 4 Hang the WindFree panel in the grooves at the bottom left and right.
- 5 Align the projections of the WindFree panel with the grooves at the top, middle, and bottom of the front panel.
- 6 After inserting the WindFree panel, press the upper 4 places and the lower 3 places by hand so that there is no gap to the panel.



CAUTION

- If you attach the WindFree panel without the airflow blade being open, it may become obstructed by the WindFree panel and may not open properly.



Maintaining the Air Conditioner

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

- 1 Dry the air conditioner thoroughly by operating in Fan mode for 3 to 4 hours and disconnect the power plug. There may be internal damage if moisture is left in components.
- 2 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 odours that may have generated from dampness.

Periodic checks

Refer to the following chart to maintain the air conditioner properly.

Type	Description	Monthly	Every 4 months	Once a year	10 years
Indoor unit	Clean the air filter (1).	●			
	Clean the condensate drain pan (2).			●	
	Thoroughly clean the heat exchanger (2).			●	
	Clean the condensate drain pipe (2).		●		
	Replace R-32 detecting sensor				●
Outdoor unit	Clean the heat exchanger on the outside of the unit (2).		●		
	Clean the heat exchanger on the inside of the unit (2).			●	
	Clean the electric components with jets of air (2).			●	
	Verify that all the electric components are firmly tightened (2).			●	
	Clean the fan (2).			●	
	Verify that all the fan assembly is firmly tightened (2).			●	
	Clean the condensate drain pan (2).			●	
MCU or SVB unit	Replace R-32 detecting sensor				●

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) These operations must always be performed by qualified personnel. For more detailed information, refer to Installation Manual.
 - (3) If the period of use date exceed 10 years(3650 days), "E689"(MCU or SVB unit) or "E699"(Indoor unit) is displayed on the wired remote control and the product works normally. If the period of use date exceed 10 years 3 months (3740 days), "E690"(MCU or SVB unit) or "E700"(Indoor unit) is displayed on the wired remote control and the product does not work. It must be replaced through Samsung Electronics Service Center before the expiration of the period of use date.
 - (4) 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.

Maintaining the Air Conditioner

Internal protections via the unit control system

The air conditioner control system has internal protection for user comfort and system faults.

Type	Description
Cold air prevention	While in heat mode, the internal fan will not operate while the indoor unit coil is warming up to prevent the circulation of cold air.
Defrost cycle	While the heat pump defrosts, the internal fan will not operate to prevent circulation of cold air.
Anti-Freezing of Indoor Heat Exchanger	The compressor will be off if the heat exchanger temp of the indoor unit decreases to 32 °F (0 °C) or more to prevent the ice on the heat exchanger.
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, the 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.
- When the defrost cycle is operating, it may generate strange sounds. It is normal operation for product safety.

Troubleshooting

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

Problem	Solution
An alarm sounds, and the product does not work. Error E696	- 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 speed). 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). Do not use any high-concentration chemicals in the vicinity of the indoor unit, as these may cause false operation of the sensor.
An alarm sounds, and the product does not work. Error E697, E797	- The "E687" or "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. - The refrigerant inside the product has been recovered. ※ MCU or SVB unit not in use 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. ※ MCU or SVB unit in use If an E687 error occurs, all indoor units cease operation. If an E697 error occurs, the affected indoor units cease operation, and indoor units connected to the same port of the affected MCU or SVB unit display an E797 error and cease operation. (Indoor units connected to another port operate normally.) - Contact the Samsung Electronics service center for assistance. NOTE - Error codes can only be checked using the separately purchased R-32 wired remote control (MWR-WG01*N). - Alarm functions can only be checked using the separately purchased R-32 wired remote control or a separate alarm device. - If you are unable to check the error code, contact the Samsung Electronics service center for assistance.

Troubleshooting

Problem	Solution
The product does not work. Error E116, E698, E700 (Indoor unit), E686, E688, E690 (MCU or SVB unit)	- This error occurs when the R-32 refrigerant sensor has a malfunction or the sensor's life has expired. - Display "E116" or "E698" or "E686" or "E688" when a sensor failure occurs - The R-32 sensor's lifespan is 10 years 3 months. If the period of use date exceed 10 years 3 months (3740 days), "E700" or "E690" is displayed on the wired remote control and the products not work - Contact the Samsung Electronics service center for assistance.
The air conditioner does not operate immediately after it has been restarted.	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.	- Check whether the power is turned on, and then operate the air conditioner again. - 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, 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.  NOTE - 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. - 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.	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.	- 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.
The fan speed does not change.	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.



Problem	Solution
The wireless remote control does not operate.	• Ensure the remote control is charged. Charge the control if necessary. • 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.	• 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.	• 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.	• 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.	• 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.	• Operate the air conditioner with a electric fan to save energy and enhance the cooling efficiency.
The air is not cool or warm enough.	• In the Cool mode, cool air does not come out if the set temperature is higher than the current temperature. – 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. – 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.



Troubleshooting

Problem	Solution
The air is not cool or warm enough.	- 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.	- 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.
Unpleasant odours permeate the room.	- 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.	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.	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.	Condensation may develop due to the difference in temperature. This is a normal condition.
Steam is produced on the outdoor unit.	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.

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	OPERATIONAL TEMPERATURE		INDOOR HUMIDITY	IF OUT OF CONDITIONS
	INDOOR	OUTDOOR		
COOLING	64 °F ~ 90 °F (18 °C to 32 °C)	Depends on the specifications of the outdoor unit.	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 (27 °C) or less		-	Internal protection triggers and the air conditioner will stop.
DRYING	64 °F ~ 90 °F (18 °C to 32 °C)		80 % or less	Condensation may occur on the indoor unit with risk to have either water blow off or drops on the floor.

 NOTE

- The rated temperature for heating is 47°F (8°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.

Operation Ranges

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.

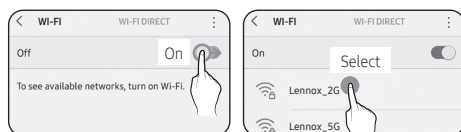
1 Checking the power connections

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

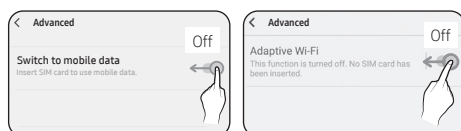
1 To connect the product to a Wi-Fi network, turn on Wi-Fi at “Settings > Wi-Fi”, and then select the access point to connect to

- 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.

SmartThings app

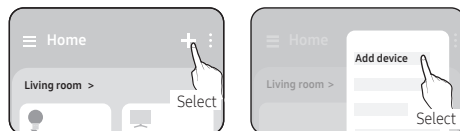
2 Registering your Samsung account

- 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

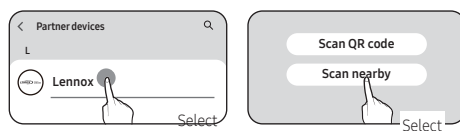
- If you already have a Samsung account, log in to the account. If you have a smartphone that is a Samsung device and you have a Samsung account, your smartphone is automatically logged in to your account.
- If you log in from a smartphone produced for another country, you need to log in with its country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

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



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

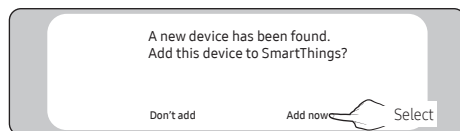
- Select manually: Samsung devices > Air conditioner
- Scan: Scan nearby > Air conditioner



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.



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.

- 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 27. 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.



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.

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 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.

SAVE THESE INSTRUCTIONS

SAMSUNG

QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT
AMERICA	888-699-6067 (Samsung HVAC)	www.samsunghvac.com