

# Air conditioner

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## User manual

AJ\*\*\*TNDCH

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



**SAMSUNG**

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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](http://www.energystar.gov).



# Safety Information

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## California Proposition 65 Warning (US)

### WARNING

**Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**

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






Because the following operating instructions cover various models, the characteristics of your air conditioner may differ slightly from those described in this manual. If you have any questions, call your nearest contact centre or find help and information online at [www.samsung.com](http://www.samsung.com).

### 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.

## FOR INSTALLATION

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### 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.

# Safety Information

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- !** 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.
- ⊘ 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 to use a socket-outlet with ground and make sure that it is in accordance with local and national codes.

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**⚠ 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.

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**FOR POWER SUPPLY****⚠ WARNING****❗ When the circuit breaker is damaged, contact your nearest service centre.****⊘ 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 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.

# Safety Information

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## FOR USING

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### WARNING

**!** If the appliance is flooded, please contact your nearest service centre.

- 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 centre.**

- 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 centre.

**⊘ 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.

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- ⊘ **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.**
    - 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.

# Safety Information

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## CAUTION

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

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

- Failing to do so may result in injury, death or property damage.

- ⊘ Do not stand on top of the appliance or place objects (such as laundry, lighted candles, lighted cigarettes, dishes, chemicals, metal objects, etc.) on the appliance.**

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

**Do not operate the appliance with wet hands.**

- This may result in electric shock.

**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.**

**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.



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## FOR CLEANING

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### 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

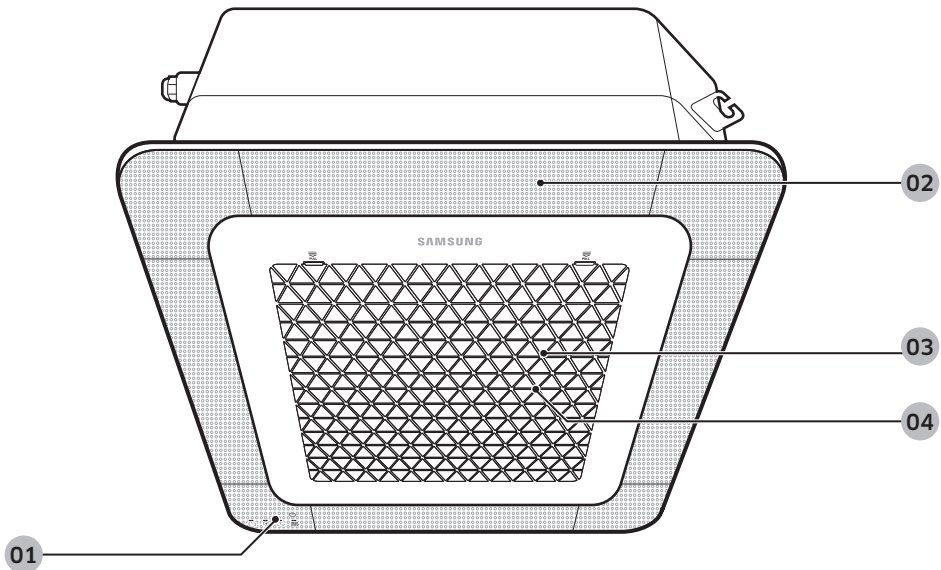
 **Take care when cleaning the surface of the heat exchanger of the outdoor unit since it has sharp edges.**

- 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 centre.

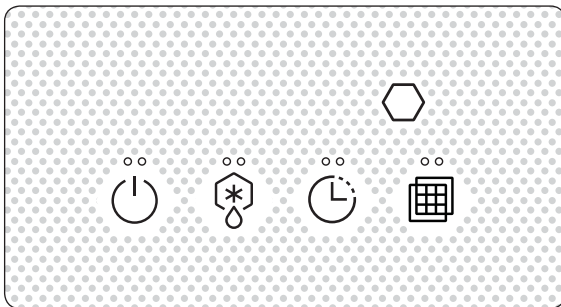
 **Do not clean the inside of the air conditioner by yourself.**

- For cleaning inside the appliance, contact your nearest service centre.
- 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.

# Indoor Unit Overview



## 01 Display



Indication	Function
	On/Off operation indicator
	Defrost operation indicator
	Timer indicator
	Filter cleaning indicator
	Remote control sensor

**02** Air flow blade/Air outlet (inside) / Wind-Free panel  
 (You can use the Wind-Free Cooling function when the Cool, Dry, or Fan mode is running.)  
 (Refer to the remote control manual for product operation.)

**03** Air intake

**04** Air filter (under the grille)

# Operation Features

## Operating temperature and humidity

When using the air conditioner follow the operating temperature and humidity ranges.

Mode	Outdoor temperature	Indoor temperature	Indoor humidity	If out of conditions
Cool mode	Depending on the outdoor unit specifications	61 °F to 90 °F	80 % or less relative humidity	Condensation may occur on the indoor unit with risk to have either water blow off or drop on the floor
Heat mode		81 °F or less	-	Internal protection triggers and the air conditioner will stop.
Dry mode		65 °F to 90 °F	-	Condensation may occur on the indoor unit with risk to have either water blow off or drop on the floor

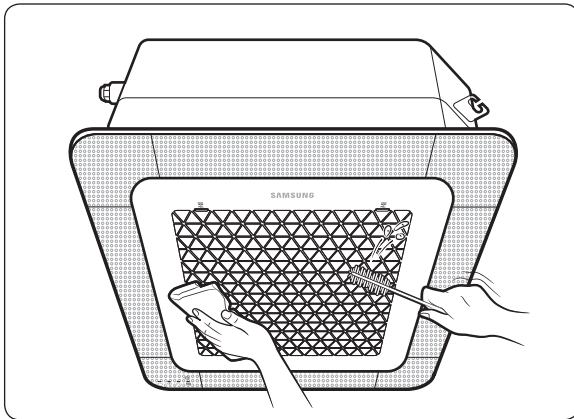
### CAUTION

- 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 standardized temperature for heating is 45°F. If the outdoor temperature drops to 32 °F or below, the heating capacity can be reduced depending on the temperature condition. If the cooling operation is used at over 90 °F (indoor temperature), it does not cool at its full capacity.
- If the indoor unit is out of the operating temperature and humidity range, the safety device may operate and the air conditioner may stop.

# Cleaning and Maintaining

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

## Cleaning the indoor unit exterior

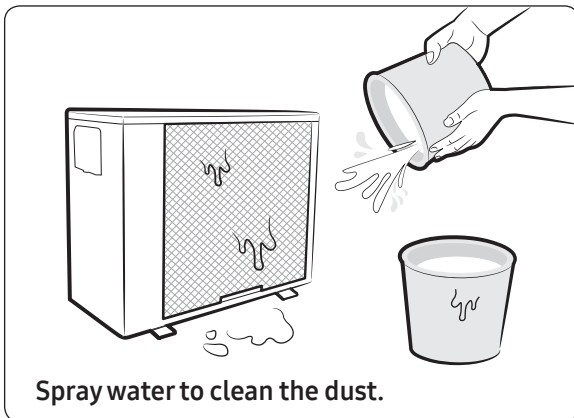


Wipe the surface of the unit with a slightly wet or dry cloth when needed. Wipe off dirt of odd-shaped areas by using a soft brush.

### CAUTION

- Do not use alkaline detergent, sulphuric acid, hydrochloric acid, or organic solvents (such as thinner, kerosene, and acetone) to clean the surfaces.
- Do not attach any stickers on the surfaces because this may cause damage.
- When you clean the heat exchanger on the indoor unit, you need to disassemble the indoor unit. Therefore, you must contact the local service center for help.

## Cleaning the outdoor unit heat exchanger



### CAUTION

- Turn off power to the outdoor unit before cleaning
- The heat exchanger of the outdoor unit has sharp edges. Take care when cleaning its surface.

### NOTE

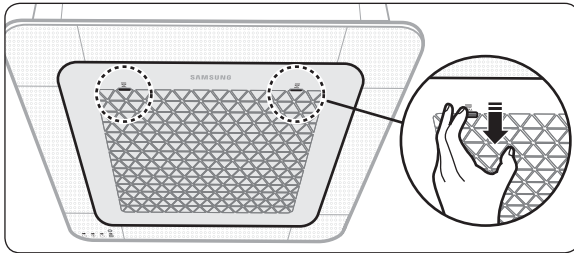
- If it is difficult to clean the heat exchanger of the outdoor unit, contact the local service center.

## Cleaning the air filter

### ⚠ CAUTION

- Before cleaning the indoor unit, be sure to turn off the auxiliary power switch.
- Be sure to support the grille when opening to prevent the grille from dropping.

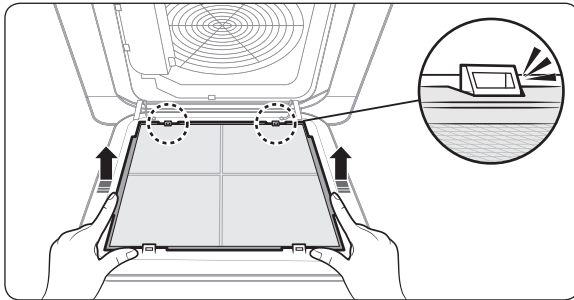
#### 1 Detaching the air filter



Push down the hooks at each side of the front grille to open the grille.

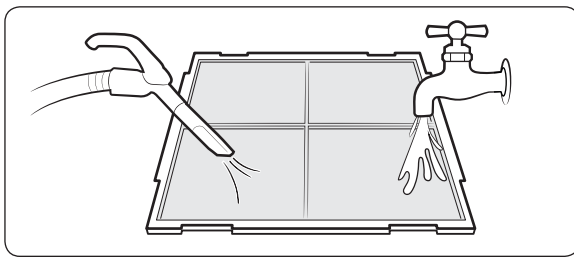
### 📄 NOTE

- The hooks are located on both sides of the front grill with the Samsung logo.



Pull out the air filter from the indoor unit.

#### 2 Cleaning the air filter



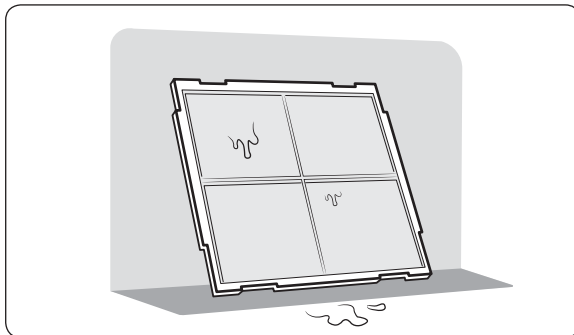
Clean the air filter with a vacuum cleaner or soft brush. If dust is too heavy, then rinse it with running water and dry it in a ventilated area.

### ⚠ CAUTION

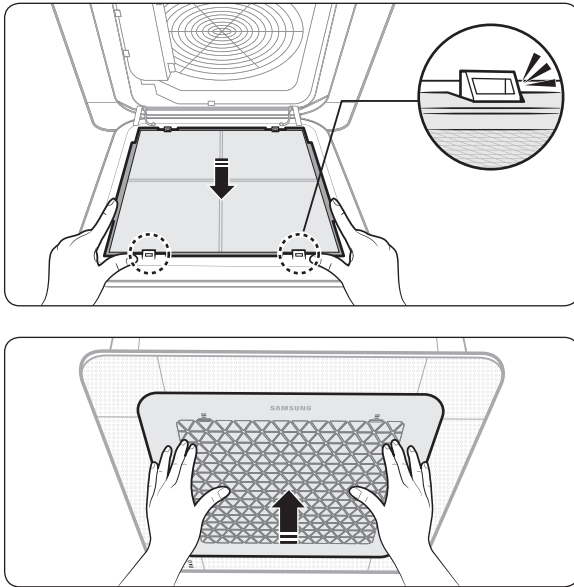
Do not scrub the air filter with a brush or other cleaning utensil. This may damage the filter.

### 📄 NOTE

- If the air filter dries in a humid area, it may produce offensive odours. Clean it again and dry it in a well-ventilated area.
- The cleaning period may differ depending on the usage and environmental conditions, so clean the air filter every week if the indoor unit is in the dusty area.



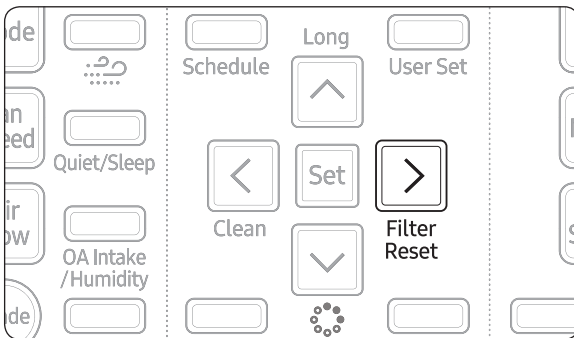
### 3 Reassembling the air filter



#### ⚠ CAUTION

- If the indoor unit is used without the air filter, the indoor unit may be damaged due to dust.

### 4 Resetting the air filter (Wired remote control is an optional item)

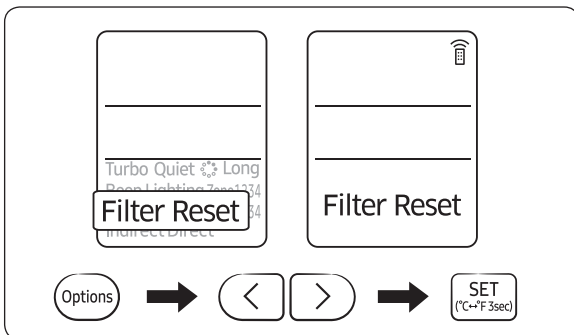


After cleaning and reassembling the air filter, be sure to reset the filter-cleaning reminder as follows:

- Indoor unit with the wired remote control: Press the **Filter Reset** button.
- Indoor unit with the wireless remote control: Press the **Options** button → < or > → (**Filter Reset**) Blinking → press the **SET** button.

#### 📄 NOTE

- The filter reset indicator blinks when the air filter should be cleaned.
- If the angle of the air flow 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 be changed and the blades may not be closed after turning off the indoor unit.



## 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 the remote control batteries.	At least once a year	
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

## Troubleshooting

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

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



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

QUESTIONS OR COMMENTS?

COUNTRY	CALL	OR VISIT US ONLINE AT
AMERICA	888-699-6067 (Samsung HVAC)	<a href="http://www.samsunghvac.com">www.samsunghvac.com</a>