



# Air conditioner

## User manual

AM\*\*\*TNVD\*\*

- 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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# Safety Information

California Proposition 65 Warning (US)

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

**⚠ WARNING: Read This Manual**

Read and follow all safety information and instructions before installation, use, or maintenance of this appliance. Incorrect installation, use, or maintenance of this appliance can result in death, serious injury, or property damage. Keep these instructions with this appliance. This manual is subject to change. For the latest version, visit [www.samsung.com](http://www.samsung.com).

Because the instructions in this manual cover various models, the characteristics of your air conditioner may differ slightly from those described. If you have any questions, please contact your service provider or visit [www.samsung.com](http://www.samsung.com).

## 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



# Safety Information

## 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.

## 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 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.

**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 (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.**

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

## Safety Information

### 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.**

- 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.

**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 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.

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 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 centre.

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

In case of a malfunction, immediately stop operation of the air conditioner and disconnect the entire power system. Then consult the authorized service personnel.



## Safety Information

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.
- 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.



**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 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 centre.**

- 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

### 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)**

**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 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, alcohol or acetone to clean the appliance.

- This may result in discolouration, 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.**

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

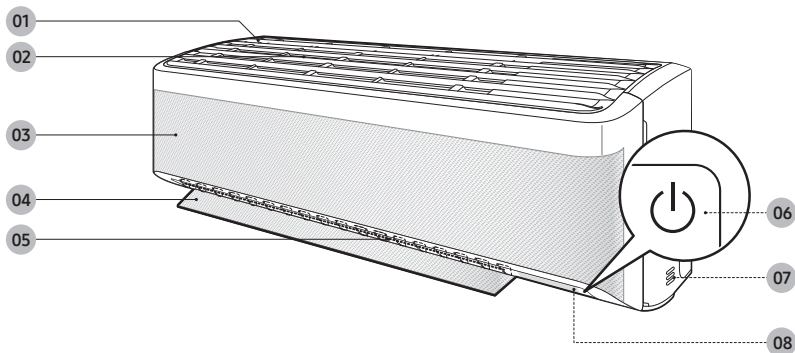
**Do not clean the inside of the air conditioner by yourself.**

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



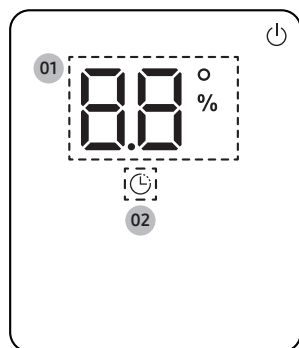
## Indoor Unit Overview (Wind-Free)

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 Wind-Free panel             | 07 Room temperature sensor              |
| 04 Airflow blade (up and down) | 08 Display                              |

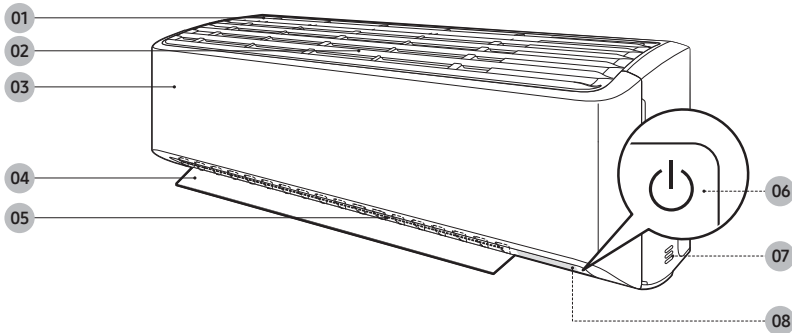
### Display



- |    |  |
|----|--|
| 01 | Temperature indicator (numeric)<br>Filter reset indicator (CF)<br>Auto clean indicator (C i) |
| 02 | Timer indicator<br>good'sleep indicator  |

# Indoor Unit Overview

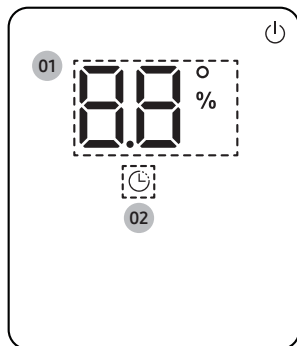
The appearance of the actual product may differ slightly from the image below.



- 01 Air intake
- 02 Air filter
- 03 Front panel
- 04 Airflow blade (up and down)

- 05 Airflow blade (left and right)
- 06 Power button/Remote control receiver
- 07 Room temperature sensor
- 08 Display

## Display

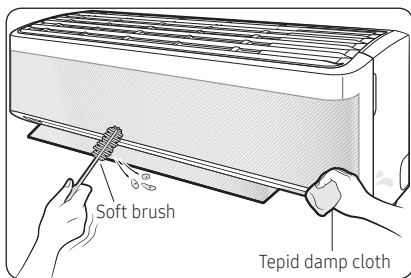


- 01 Temperature indicator (numeric)  
Filter reset indicator (F)  
Auto clean indicator (i)
- 02 Timer indicator  
good'sleep indicator



# 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.

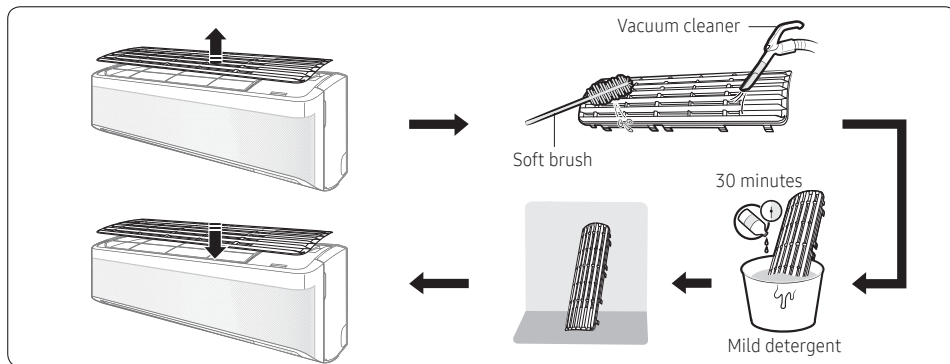




# Cleaning

## Cleaning the filter

Clean the air filter every two weeks or when the **F** (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:

In operation ► **Options** ► **<** **>** ► Select Filter Reset. ► **SET**

### ⚠ CAUTION

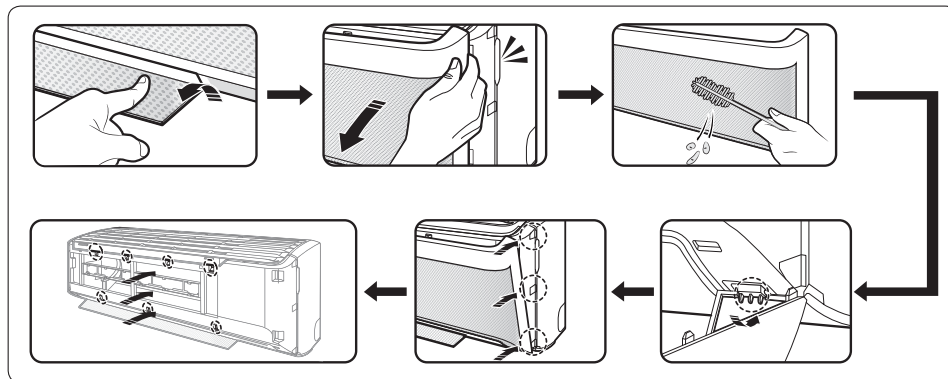
- Take care not to damage the filter during cleaning.
- Do not scrub the air filter with a hard-bristle brush or another cleaning utensil.
- Do not expose the air filter to direct sunlight when drying it.





## Cleaning the Wind-Free panel

Clean the Wind-Free panel at least once a month.



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



### CAUTION

- If you attach the Wind-Free panel without the airflow blade being open, it may become obstructed by the Wind-Free 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.

## Periodical checks

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

Type	Description	Monthly	Every 4 months	Once a year
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 the remote control batteries (1).			●
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).			●

### 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.



## 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 against cold air when the heat pump is heating.
De-ice cycle	The internal fan will be off against cold air 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, the de-ice cycle is actuated to remove frost from an outdoor unit that may have deposited at low temperatures.
- The internal fan is switched off automatically and restarted only after the de-ice cycle is completed.
- When the de-ice cycle is operating, it may generate strange sound. 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
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 that the power plug is properly connected. Insert the power plug into the wall socket correctly.</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  button on the remote control to select another mode.</li></ul>
The cool (or 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  or  button on the remote control to change the set temperature. Press the Temperature  or  button to increase or decrease 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 for 3 minutes.</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 is not set.	<ul style="list-style-type: none"><li>Check if you press the  and  button on the remote control after you have set the time.</li></ul>
Odours 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 the selected mode.</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 that comes from fluorescent bulbs or neon signs may interrupt the electric waves.</li></ul>

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





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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>

