



Owner Manual

Mini Split Systems, Cassette Type 18000- 42000 Btu/h, 50Hz & 60Hz R22 & R407c Units



	Indoor Unit	Outdoor Unit
50 Hz,R22		
Cooling only	MCC518BB MCC524BB MCC536BB MCC542BB	TTK518ZB TTK524ZB TTK536ZD TTK542ZD
Heat pumps	MWC518BB MWC524BB MWC536BB MWC542BB	TWK518ZB TWK524ZB TWK536ZD TWK542ZD
50 Hz,R407c		
Cooling only	MCC518CB MCC524CB MCC536CB MCC542CB	TTK518BB TTK524BB TTK536BD TTK542BD
Heat pumps	MWC518CB MWC524CB MWC536CB MWC542CB	TWK518BB TWK524BB TWK536BD TWK542BD
60 Hz,R22		
Cooling only	MCC524B1 MCC542B1	TTK524Z1 TTK542Z3
Heat pumps	MWC542B1	TWK542Z3



General Information

Foreword

These Installation instructions are given as a guide to good practice in the installation, start-up and operation by the installers of MCC/MWC and TTK/TWK split systems.

They do not contain the full service procedures necessary for the continued successful operation of this equipment. The services of a qualified service technician should be employed, through the medium of a maintenance contract with a reputable service company.

Read them completely before doing anything with your air conditioning system.

Warranty

Warranty is based on the general

terms and conditions of the constructor. The warranty is void if the equipment is modified or repaired without the written approval of the constructor, if the operating limits are exceeded, or if the control system or the electrical wiring is modified. Damage due to misuse, lack of maintenance, or failure to comply with the manufacturer's instructions, is not covered by the warranty obligation. If the user does not conform to the rules described in the manual, it may entail cancellation of warranty and liabilities by the Trane Company.

Reception

On arrival, inspect the unit before signing the delivery note. Specify any damage on the delivery note, and send a registered letter of protest to the last carrier of the goods within 72 hours of delivery. Notify the local sales office at the same time. The unit should be totally inspected within 7 days of delivery. If any concealed damage is discovered, send a registered letter of protest to the carrier within 7 days of delivery and notify the local sales office. Units are shipped with the refrigerant operating or holding charge and should be examined with an electronic leak detector to determine the hermetic integrity of the unit. The refrigerant charge is not included in the standard warranty cover.

About this manual

Cautions appear at appropriate places in this instruction manual. Your personal safety and the proper operation of this machine require that you follow them carefully. The constructor assumes no liability for installation or servicing performed by unqualified personnel.

All phases of the installation of these air conditioning systems must conform to all provincial/state and local codes. Please keep this installation manual carefully for consultation.

About the unit

These MCC, MWC and TTK/TWK units are assembled, pressure tested, dehydrated, charged and run tested before shipment. The information contained in this manual applies to units designated MCC/MWC and TTK/TWK. MCC and TTK units are designed to operate in cooling mode only, whereas MWC and TWK can operate in cooling or heating modes.

Refrigerant

The refrigerant provided by the constructor meets all the requirements of our units. When using recycled or reprocessed refrigerant, it is advisable to ensure its quality is equivalent to that of a new refrigerant. For this, it is necessary to have a precise analysis made by a specialized laboratory. If this condition is not respected, the constructor warranty could be cancelled.

Important

These instructions do not cover all variations in system, nor do they provide for every possible contingency to be met.

Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the Trane sales office in your region.

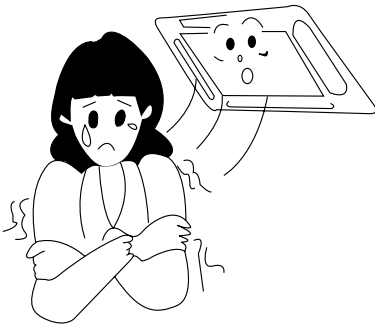


Contents

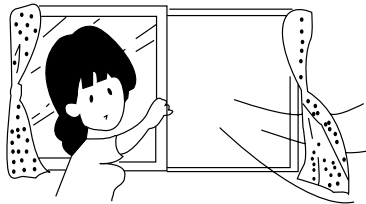
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Safety Precautions

Avoid direct air flow to your body and avoid excessive heating or cooling, which may make you feel uncomfortable and do harm to your health.



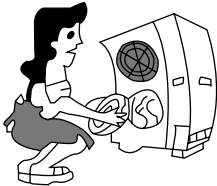
If room air is stuffy, ventilate the room by opening doors and windows for a while, but please close the curtains when operating the unit to prevent conditioned air from leaking.



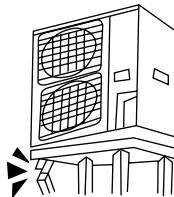
Do not stand on the outdoor unit or put anything on it, or you may fall down or people may get hurt by the falling things.



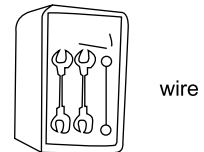
Do not remove protection grill from the outdoor unit. Do not insert your hands or anything into the air outlet.



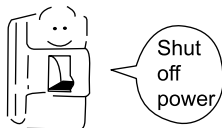
Check whether the installed stand is still firm enough after the unit has been operating for a long time. If a worn-out stand is left unfixed, the unit may topple and do harm.



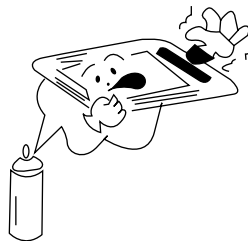
Do not use fuse excluding the fuse of correct capacity. Improper wire could cause break down or fire.



If there is something abnormal (eg. burning smell), shut off the power immediately and contact service agency.



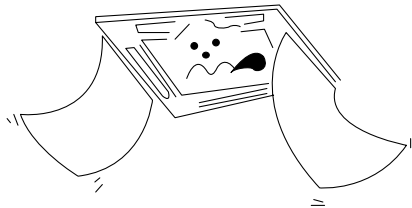
Do not spray any paint or pesticide on the unit, or it may cause fire.



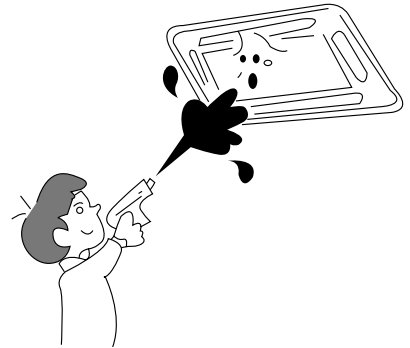
Do not check or repair during the unit is operating. It is very dangerous.



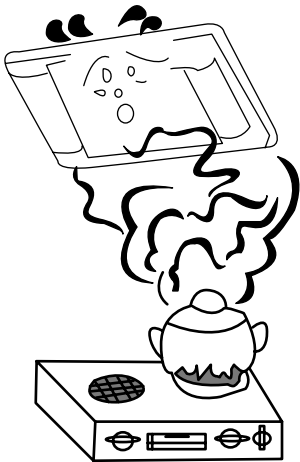
Never place objects near the air intake and the air outlet of the unit. It may affect performance or stop operation of the unit.



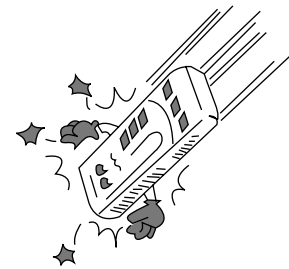
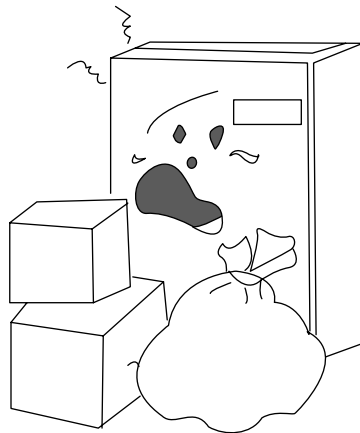
Do not splash water directly to indoor unit. It may cause trouble or electric shock.



Do not use other heating equipment near the air conditioner. It will affect the cooling performance.



Do not bang the remote control and do not press the button of the remote control with pointed object, or the remote control may be damaged.

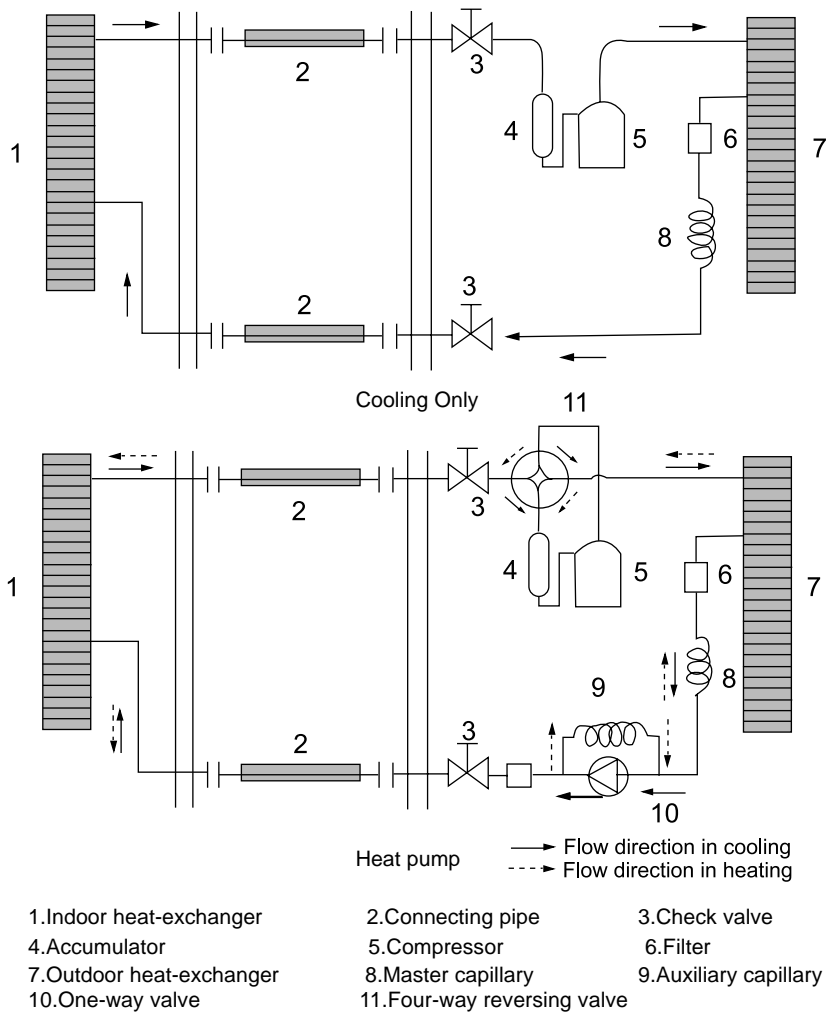


Working temperature range and Refrigeration System

Working temperature range.

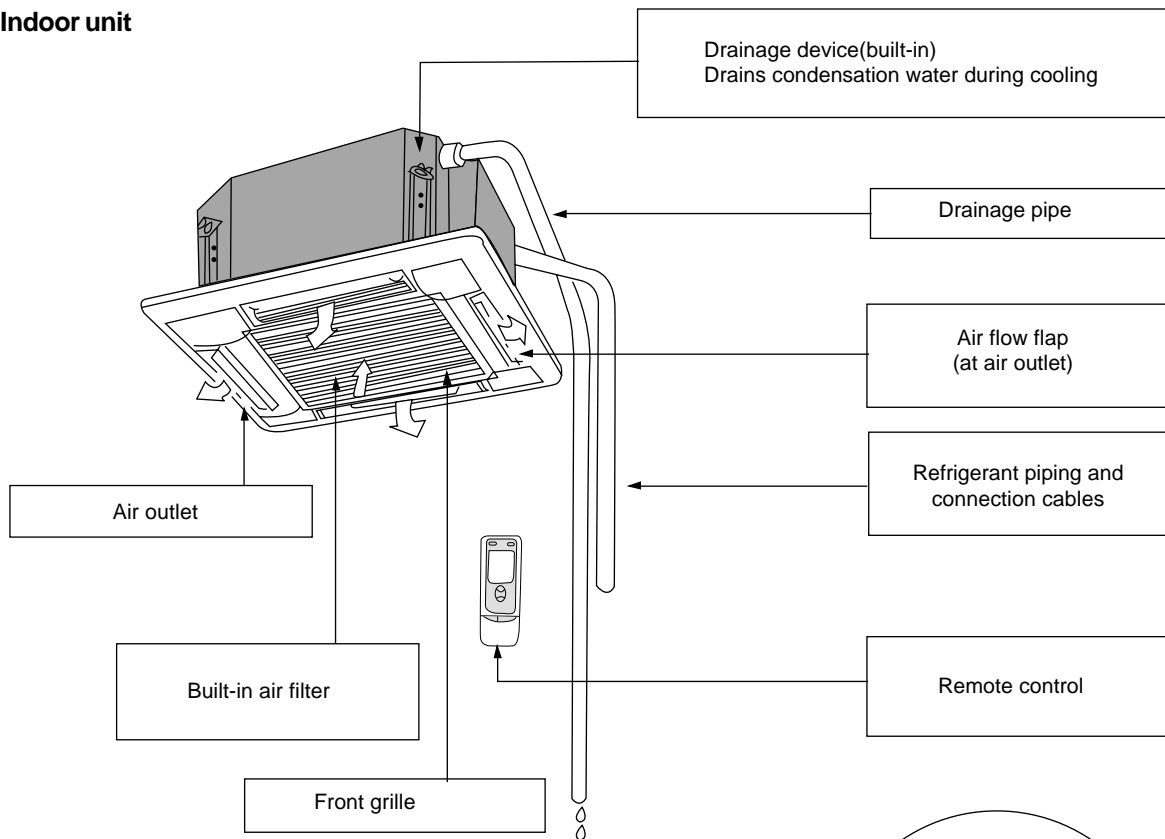
	Indoor side DB/WB (°C)	Outdoor side DB/WB (°C)
maximum cooling	32/23	43/26
minimum cooling	21/15	21/15
maximum heating	27/-	24/18
minimum heating	20/-	-5/-6

Refrigeration System



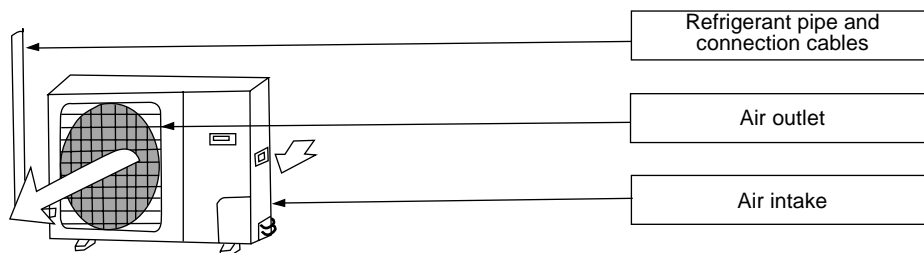
System Appearance

- Indoor unit

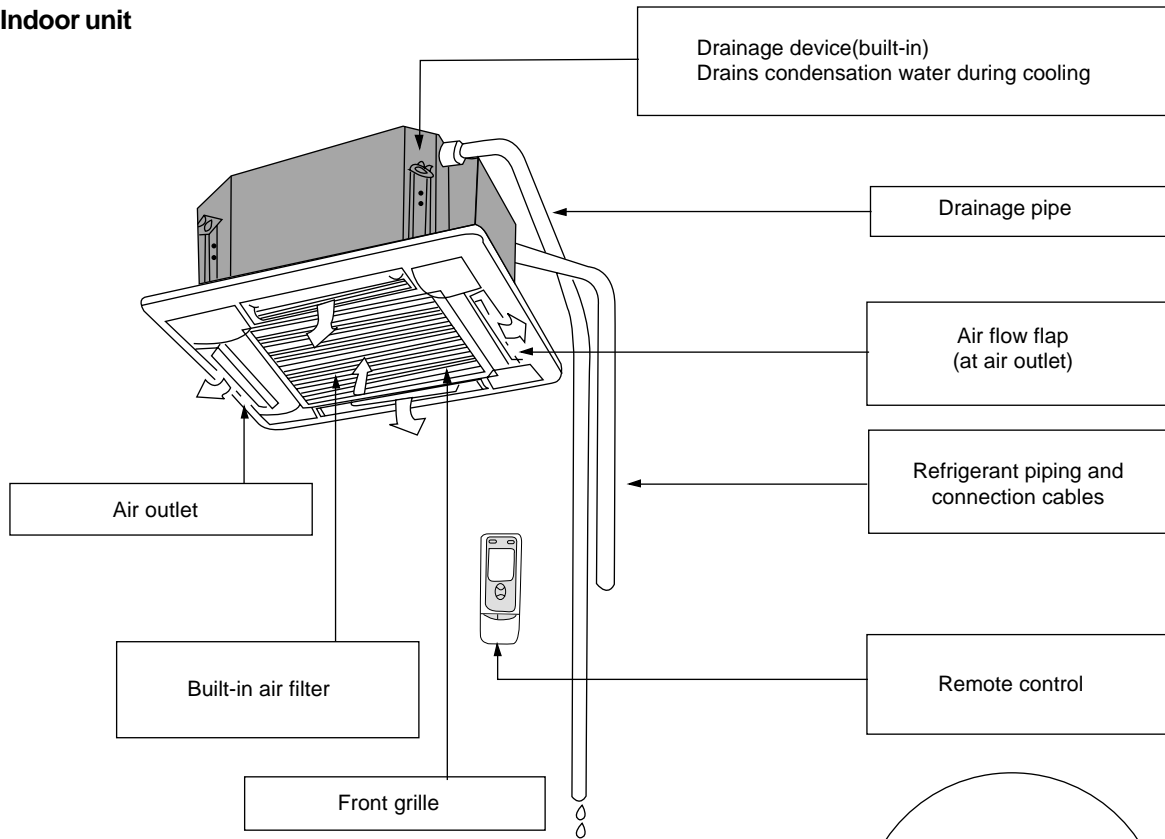


- Outdoor unit

MCC518/524
MWC518/524
TTK518/524
TWK518/524

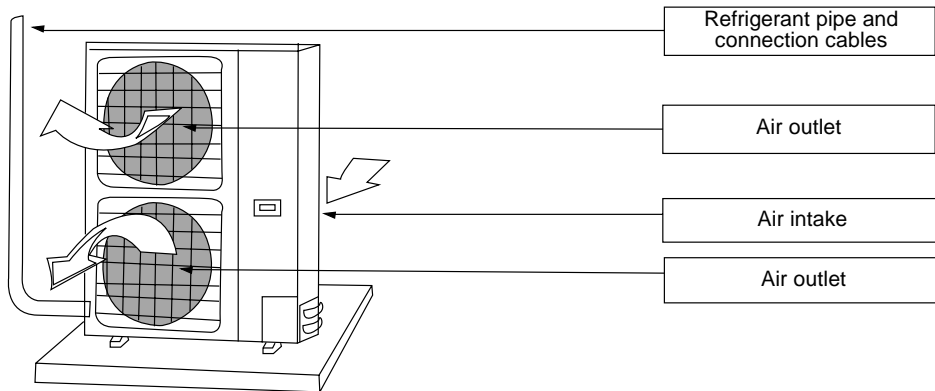


● Indoor unit



MCC536/542
MWC536/542
TTK536/542
TWK536/542

● Outdoor unit





Romote Control Operation

Remote Control Functions and Description. (Door closed)

CAUTION!

- Be sure that there are no obstructions between the receiver in the unit and remote control.
- The remote control signal can be received at a distance of up to about 10m.
- Do not drop or throw the remote control.
- Do not let liquid get into the remote control.
- Do not place the remote control in a location exposed to direct sunlight or extremely hot.

1. SWING button

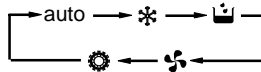
When it is pressed, the louvers start to swing up and down automatically and stop when repressed.

2. TEMP. button

TEMP. increases 1°C by pressing \oplus button once, and decreases 1°C by pressing \ominus button once. At **COOL** mode operation, SET TEMP. can be selected from 16°C to 30°C. At **DRY** mode operation, SET TEMP. can be selected from 16°C to 30°C. At **HEAT** mode operation, SET TEMP. can be selected from 16°C to 30°C.

3. MODE button

Press this button to change the operation mode in order of



- “❄️” COOL mode
- “💧” DRY mode
- “🌀” FAN mode
- “⚙️” HEAT mode

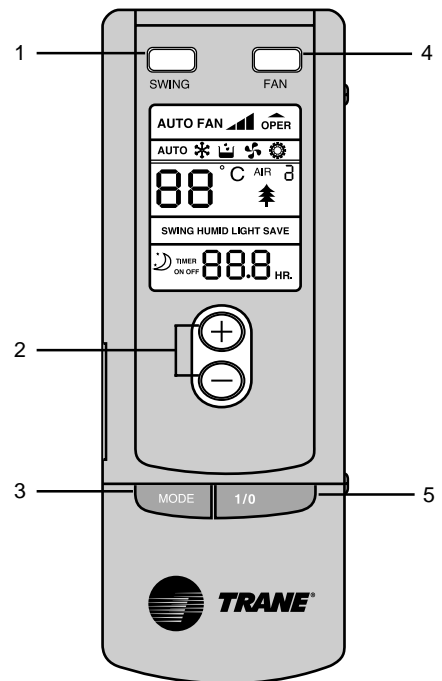
4. FAN button

Press this button to change the fan speed of:



5. 1/0 button

Press this button to turn on or turn off the unit.





**Remote control layout and Description
(Door open).**

CAUTION!

- The remote control is designed to be compatible with other models.
- Some buttons of the remote control which are not available to this air conditioner will not be described below.

1. Liquid crystal displayer.

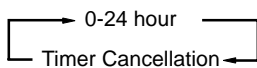
It shows all set contents.

2. SLEEP button

Press this button to set SLEEP operation, and cancel SLEEP operation when repressed.

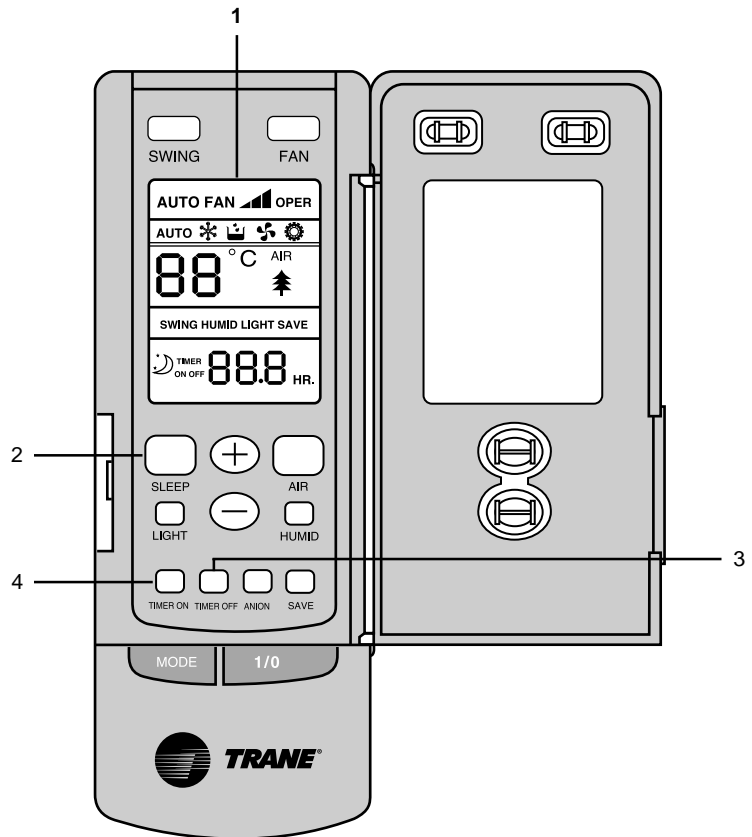
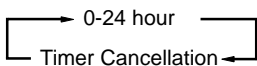
3. TIMER OFF button

At operating, press TIMER OFF button, to set OFF TIME in range of 0 to 24 hour to stop the unit automatically. Increase 0.5 hour by pressing the button once, cycle as following.



4. TIMER ON button

At stopping, press TIMER ON button to set ON TIME to start the unit automatically. ON TIME increase 0.5 hour by pressing the button once, cycle as following.



COOL mode operation procedure

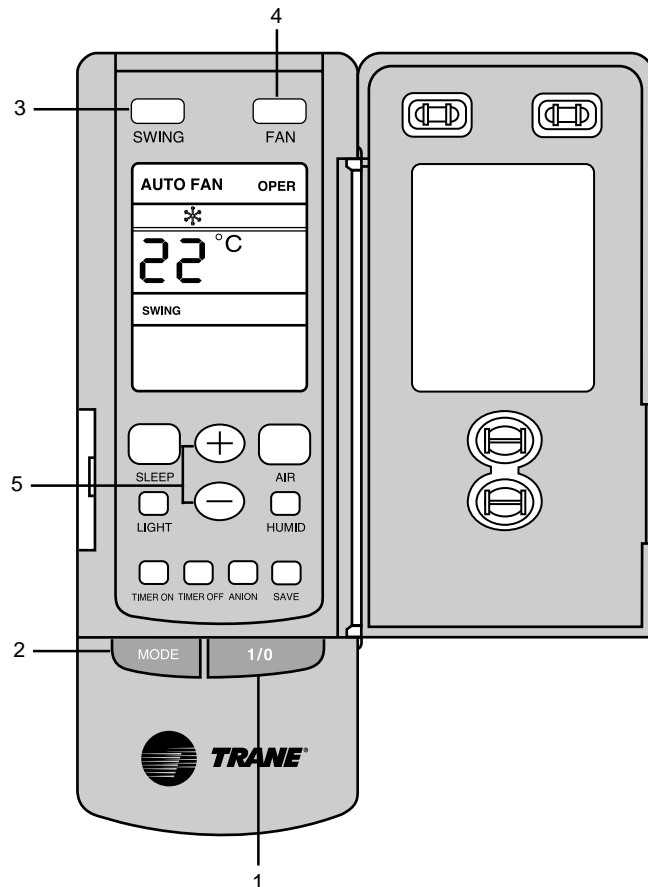
According to the difference between room temp. and set temp., microcomputer can control cooling on or not.

If room temp. is higher than set temp., the compressor runs at COOL mode.

If room temp. is lower than set temp., the compressor stops and only indoor fan motor runs.

SET TEMP. should be in range of 16°C to 30°C.

1. Plug in, press **1/0** button, then air conditioner is turned on.
2. Press **MODE** button, set COOL operation mode - *
3. Press **SWING** button, the louver start to swing automatically, and stop when repressed.
4. Press **FAN** button, set fan speed.
5. Press **TEMP.** button, set suitable SET TEMP.






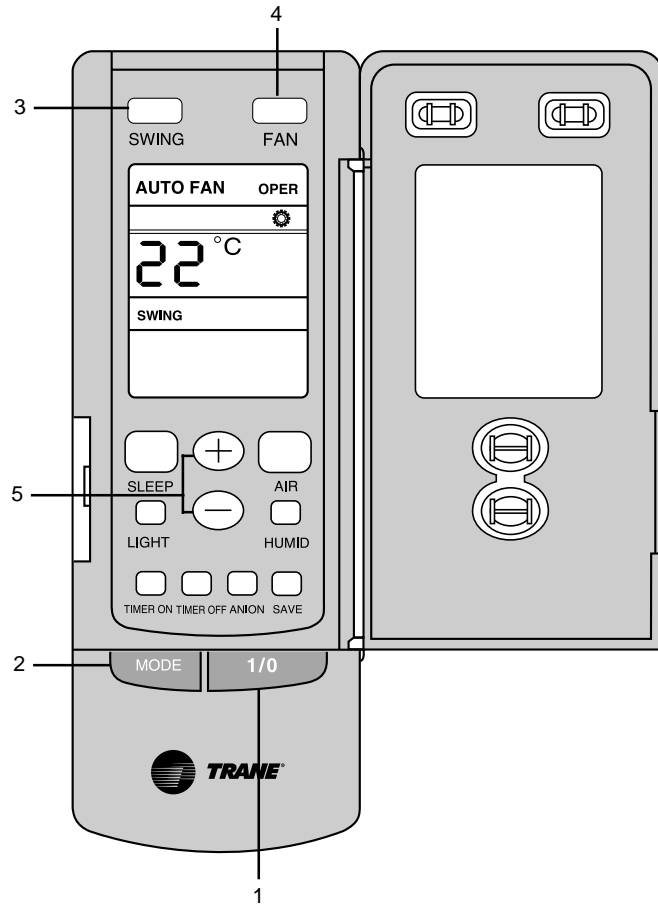
HEAT mode operation procedure

If room temp. is lower than set temp., the compressor runs at HEAT mode;

If room temp is higher than set temp., the compressor and outdoor fan motor stop, only indoor fan motor runs.

SET TEMP. should be in range of 16°C to 30°C.

1. Plug in, press **1/0** button, then air conditioner is turned on.
2. Press **MODE** button, set HEAT  operation mode.
3. Press **SWING** button, the louver start to swing automatically, and stop when repress it.
4. Press **FAN** button, set fan speed.
5. Press **TEMP.** button, set suitable SET TEMP.




DRY mode operation procedure

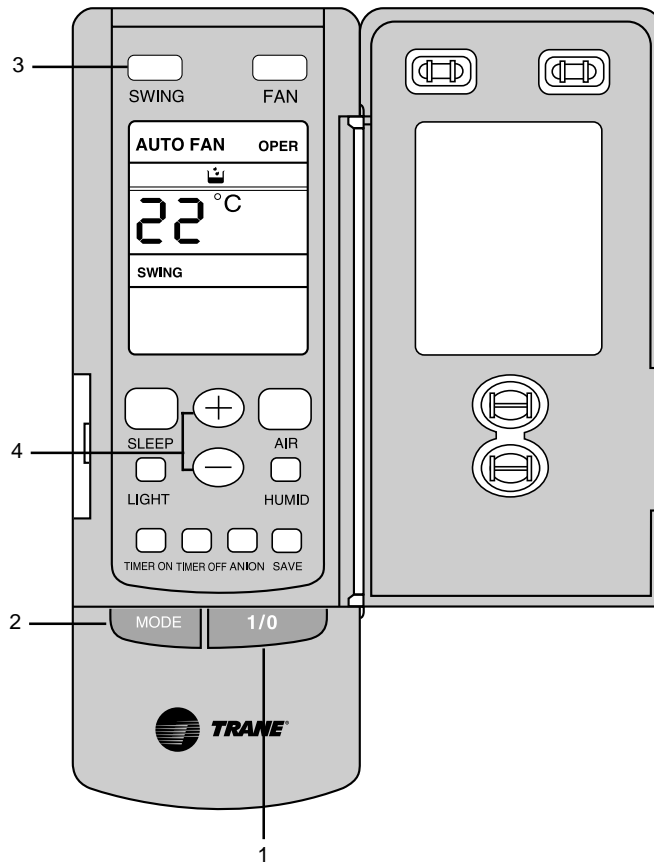
If room temp. is lower than set temp., compressor, outdoor and indoor fan motor stop.

If room temp. is between $\pm 2^{\circ}\text{C}$ of set temp., air conditioner is drying.

If room temp. is higher than set temp., it is at COOL mode, indoor fan speed can be set.

SET TEMP. should be in range of 18°C to 30°C .




1. Plug in, press **1/0** button, then air conditioner is turned on.
2. Press **MODE** button, set DRY  operation mode. (In **DRY** mode indoor fan speed can not be set.)
3. Press **SWING** button, the louver start to swing automatically, and stop when repressed.
4. Press **TEMP.** button, set suitable SET TEMP.

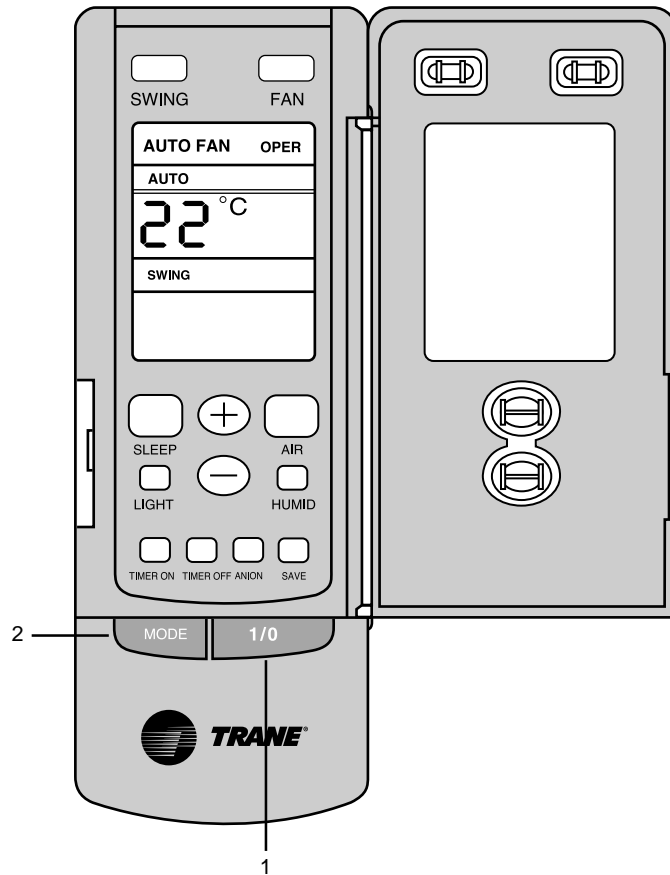




AUTO mode operation procedure

At AUTO mode operation, standard SET TEMP. is 25°C for COOL mode and 20°C for HEAT mode.




1. Plug in, Press **1/0** button, then air conditioner is turned on.
2. Press **MODE** button, set **AUTO** operation mode, according to room temp., microcomputer can automatically set operation , , , mode, so as for best comfort effect.

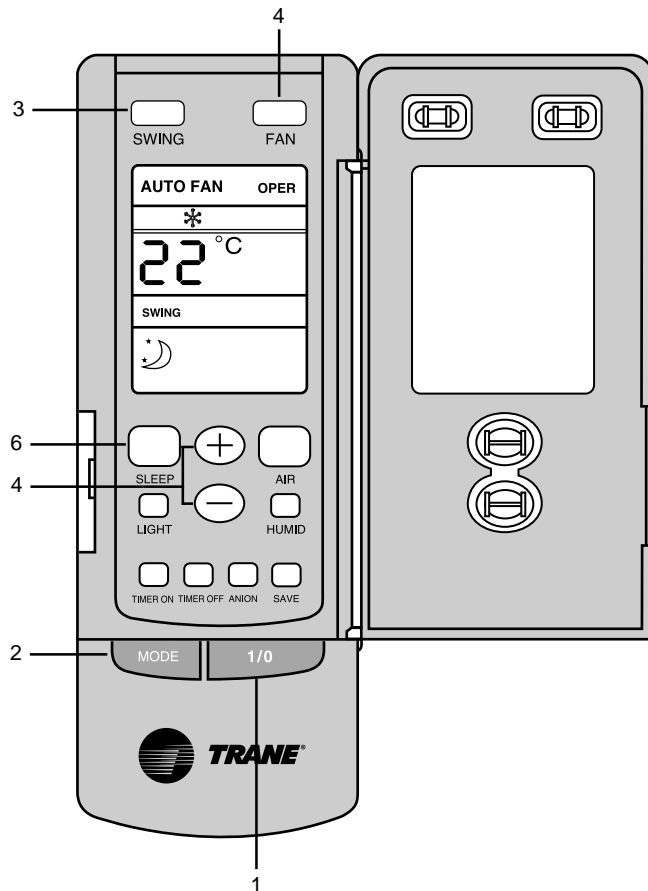


SLEEP mode operation procedure

When the unit is cooling or drying, if SLEEP operation is set, SET TEMP. would increase 1°C in 1 hour and 2°C in 2 hours, indoor fan motor runs at low speed.

When the unit is heating, if SLEEP operation is set, SET TEMP. would decrease 1°C in 1 hour and 2°C in 2 hours, indoor fan motor runs at low speed.

1. Plug in, press **1/0** button, then air conditioner is turned on.
2. Press **MODE** button, set ,  or  operation mode.
3. Press **SWING** button, the louvers start to swing automatically, and stop when repressed.
4. Press **FAN** button, set fan speed.
5. Press **TEMP.** button, set suitable SET TEMP.
6. **SLEEP** button.
Press it to set SLEEP operation, and exit when repressed.



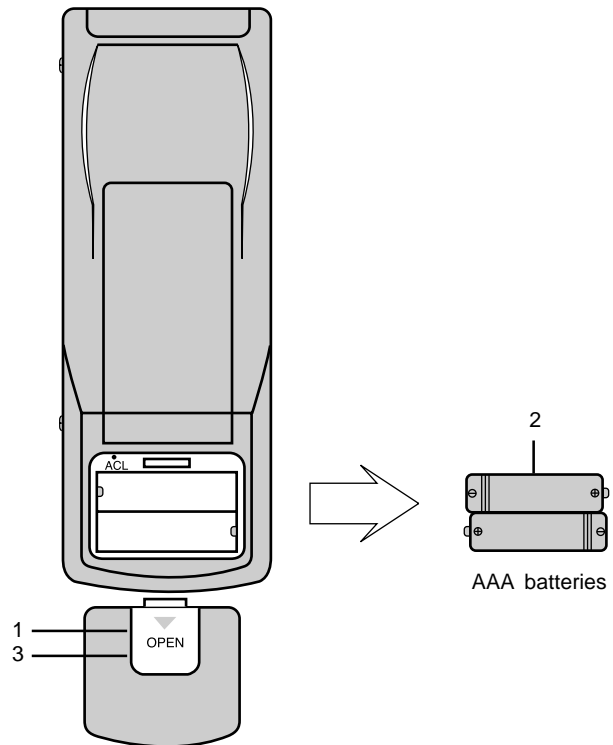


How to replace batteries

1. Remove the cover from the back of the remote control.
2. Remove 2 worn batteries, insert 2 new ones. (Two AAA dry - cell batteries) and press button "ACL".
3. Re-attach the cover.

CAUTION!

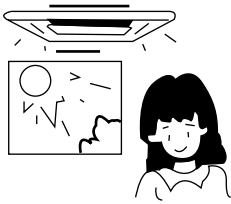
- Do not confuse the new and worn or different batteries.
- Remove batteries when not in use for a few weeks to prevent liquid leakage to damage the remote control.
- The life time of batteries is about 1 year.
- The remote control signal can be received at a distance of up to about 10m.
- Remote control shall be far away from TV set or other electric appliances more than 1 meter.



User's Guide

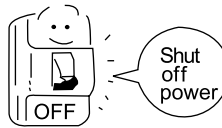
Adjust the room temperature properly

Adjust the room temperature properly for a comfortable environment.



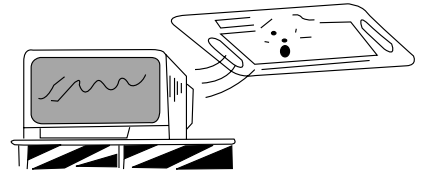
Turn off the main power supply switch when it is not to be used for a long period of time

When the main power switch is turned on, some watts of electricity is being used even if the system is not operating. Turn off the main power supply switch to save energy.



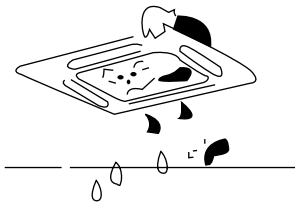
Place TV, radio, stereo, etc. at least 1m away from the indoor unit and the remote control

It may cause interference in the picture or sound.



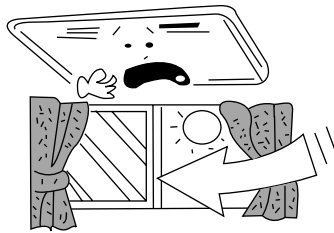
Never place anything under the indoor unit that is to be kept dry.

Water may drop from the indoor unit when the humidity is over 80% or when the drainage outlet is clogged.



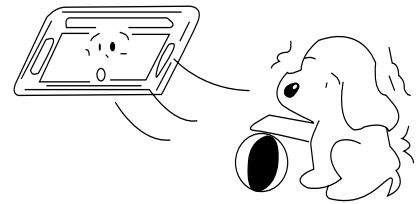
Do not open doors and windows for a long time when the air conditioner is operating

Cooling and heating performance will be affected if doors and windows have been open for a long time.



Avoid direct air flow to pets and plants.

It may do harm to them.



Maintenance

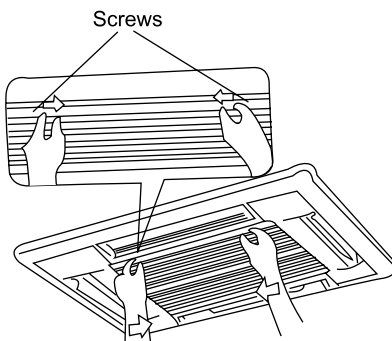
Please pull out the power plug after you used the air conditioner.

CAUTION!

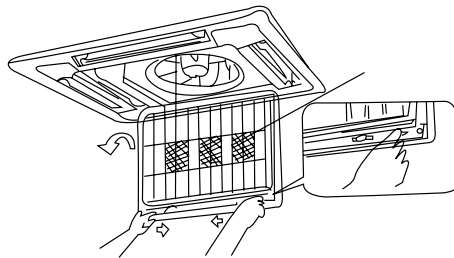
- Pull out the power plug before cleaning
- Do not splash water directly to the unit

How to clean the air filter

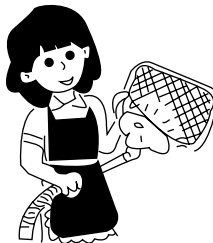
1. Open the return grille
Use screwdriver screws the two screws.
Slide both knobs simultaneously as shown and then pull them downward slowly.



2. Remove the air filters.
Slide knobs on the back of the return grille outward and remove the air filter.
Then remove three air cleaners on it.



3. Clean the air filter
Use vacuum or wash the air filter with water when the air filter is very dirty, use neutral detergent and water. Let the filter dry naturally at shady place.

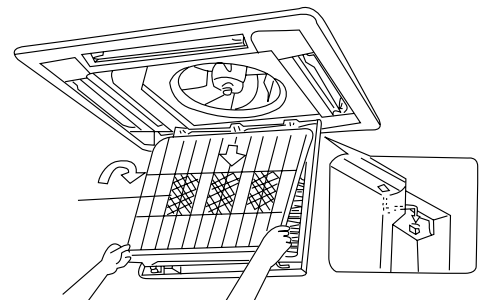


CAUTION!

- Do not clean with hot water
- Do not dry over fire
- Do not run the air conditioner without the air filter.



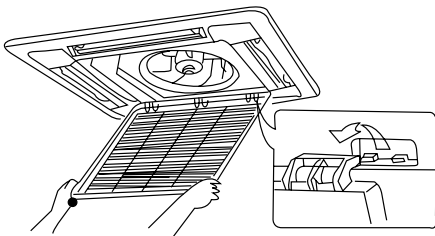
4. Fix the air filters
 - Fix three air cleaner on the air filter and then fix the air filter to the return grille by hanging it to the projected portion above return grille.
 - Set air filter by sliding the knob on the back of the return grille inward.



Shut the return grille.
Refer to step 1.

How to clean the return grille

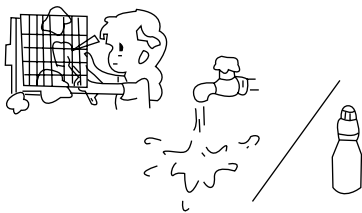
1. Open the return grille.
See step 1 of "How to clean the air filter"
2. Remove the air filters.
See step 2 of "How to clean the air filter"
3. Remove the return grille.
Open the return grille at 45° and then lift.



CAUTION!

Do not wash with hot water.

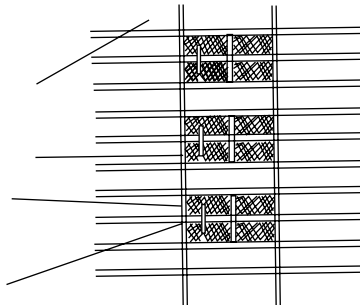
4. Wash with water.
When the return grille is very dirty, use soft brush and neutral detergent. Shake off water and dry in a shady place.



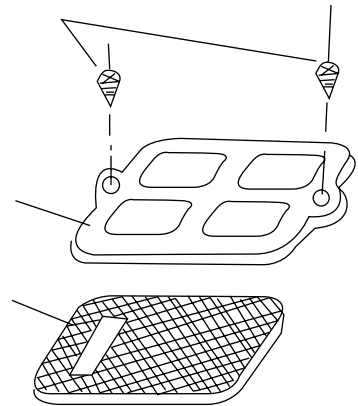
5. Fix the return grille.
Refer to step 3.
6. Fix the air filter.
See step 4 of "How to clean the air filter."
7. Close the return grille.
Refer to step 1.

Changing air cleaner

1. Open the return grille.
See step 1 of "How to clean the air filter".
2. Remove the air cleaner.
Remove the air filter, and remove the air cleaner after unscrewing.



3. Take off packing bag and put in new static electricity fiber filter, then fix them on the air filter.



4. Fix the air filter.
See step 4 of "How to clean the air filter".

Air cleaner functions and service cycle time

- Absorbs bad smell in air such as carbon monoxide, carbon dioxide, benzol, gasoline and so on.
- Absorbs harmful objects bigger than 1.0 um in air such as dust, flower power, germ, virus and so on.
- It can be used for about half a year to one year.

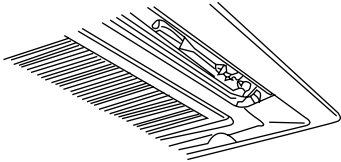


How to clean the air outlet and case.

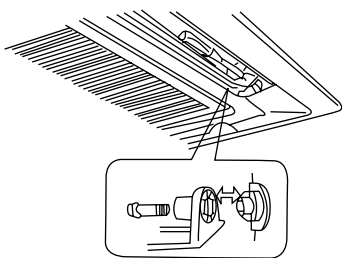
- Clean with soft cloth or use water and neutral detergent.
- Do not use gasoline, benzene, thinner, polishing power, liquid insecticide, which may cause discoloring or warping. If the air flow flap is very dirty, you may remove it to clean as shown below.

Detach and fix the flap

1. Detach the flap
Loosen the screws on the sides of the flap.
Clean with soft cloth.

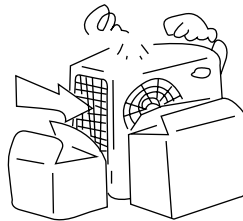
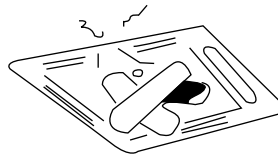


2. Fix the flap
Set the ribs on the sides of the air outlet to the slit of the flap and then screw together to fix the flap.



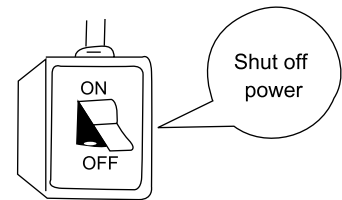
Before starting the air conditioner for the first time in the season

1. Check to make sure no objects obstructing the intake and outlets parts on the indoor and outdoor units.
2. Check to make sure ground wire is connected and that it is not damaged.
3. Check to make sure air filter has been cleaned.
4. Turn on the power 6 hours before starting the air conditioner.



Clean at the end of season

1. Clean the filter and the body of the unit.
2. Turn off power.
3. Clear outdoor unit of dust.
4. If there is any rust in the outdoor unit, this should be painted over to prevent the rust from spreading.





Troubleshooting

CAUTION!

- In case of something abnormal (such as bad smell), shut off the power switch immediately and contact service agency.
- Do not repair the air conditioner by yourself because wrong repair may cause fire, please contact service agency to do it.

Check item shown below before contacting service agency.

Symptom	Cause	Corrective Measures
The system does not operate at all	Fuse broken	Replace fuse
	Power off	It will restart when power is on
	Loose plug	Put the plug in proper place
	Batteries of remote control wore	Replace batteries
	Out of the range of remote control	Keep distance in 8m or less
The system stops right after it is started	Object at the air intake and air outlet of the air conditioner	Remove the obstruction
Cooling or heating malfunction	Object at the air intake and air outlet of indoor and outdoor units	Remove the obstruction
	Wrong temperature setting	Refer to "remote control operation"
	Low fan speed	Refer to "remote control operation"
	Air direction is not correct	Refer to "remote control operation"
	Doors or windows are open	Close doors or windows
	Direct sunshine	Close the curtain or blinder
	Too many people in the room	
	Too many heat sources	
	Dirty air filter	Clean the air filter

- If trouble still exists after checking the above items, please contact service agency.



- **The following are not troubles**

	“Trouble”	Cause
The unit does not operate when	Restart right after stopping	Once the unit is stopped, it will not operate for about 3 minutes to protect the system.
	Press SET TEMP and then release immediately.	
	Power is switched on	Wait for 1 minute
Mist is emitted	When cooling	Room air is chilled rapidly and becomes foggy.
Outdoor unit is hot	After the unit is stopped	Compressor is emitting heat to get ready for restarting.
Noise	Buzz is heard at starting	It is the starting sound of thermostat and will decrease after 1 minute.
	Sound of running water can be heard during operation	This is caused by the refrigerant flowing inside the unit
	A “shuh” sound heard at the start or immediately after the stop of operation or at the start or immediately after the stop of defrosting operation. A continuous low “shah” sound is heard when the system is in cooling operation or at a stop.	This is the noise made by refrigerant in flow stop and flow change. The noise is heard when the drainage pump is in operation.
	Cracking noise can be heard during or after operation.	This is caused by the panel expanding or shrinking due to the change in temperature.
Dust from the units	Starting operation after have not been used for a long time.	Dust absorbed by the unit blows out
Wind from the outlet smells	During operation	This is caused by the odors in the room which have got onto the air conditioner

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