

SINCLAIR
AIR CONDITIONER

OWNER'S MANUAL

ASH-24CN

NATURE SERIE

Before operating the unit please
carefully read this manual.



SPLIT AIR CONDITIONER WALL MOUNTED MODEL SINCLAIR

The instructions before use

WARNING

The power plug must be inserted tightly.

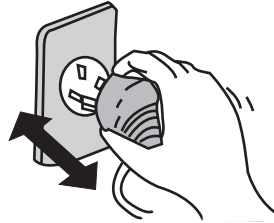
Otherwise, it can cause an electric shock, overheating or fire. The ground must be connected. For the security of the air conditioner, it should be safely connected to earth.

The line that be connected to the earth of the outdoor unit should be connected correctly and tightly. Don't connect the earth wire to gas or water pipes. Lighting telephone rods or earth lines.



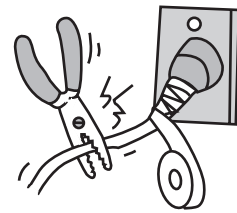
Don't pull out the power plug during operation.

It can cause an electric shock or fire.



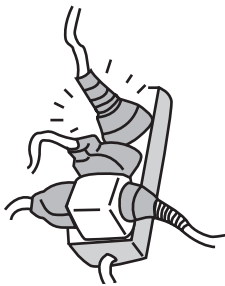
Never splice the power cord or use an extended cord.

It can cause overheating or fire.



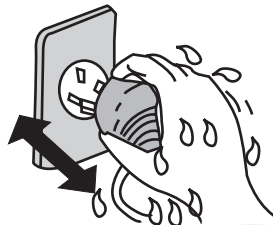
Don't use longer power lines and don't share a same socket with other electric appliances.

It can cause an electric shock or fire.



Don't operate the Air conditioner with wet hands.

It can cause an electric shock.



Don't insert your hands or stick into the air intake or outlet vents.

It can cause danger.

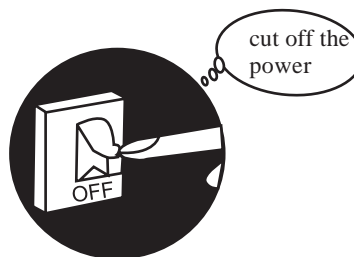


Don't apply the cold wind to the body for a longtime.

It cause the physical condition deferioration and health problems.



When having a burning smell or smoke, please turn off the power supply and contact with the Service center.



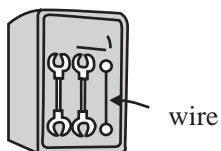
Don't attempt to repair the air conditioner by yourself.

You may cause further malfunctions.

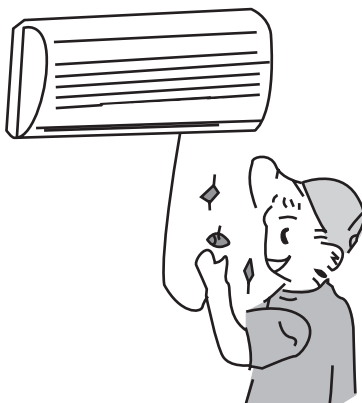


Don't use any other fuse excluding the fuse of correct capacity.

Improper wire could cause the breaking down or fire.

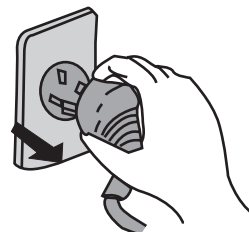


Be sure to pull out the power plug as the Air Conditioner will not be used for a longtime.



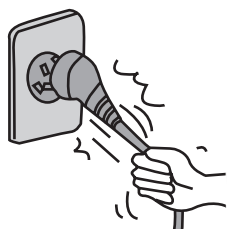
When cleaning, it is necessary to stop driving and turn off the power supply.

It occasionally cause the electric shock.



Don't pull the power cord to pull out the power plug.

It can cause fire.



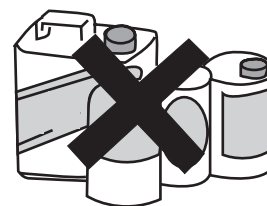
Don't place a space heater near the air conditioner.

Air flow from the air conditioner can cause incomplete combustion to the space heater.



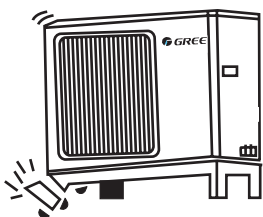
Keep combustable spray away from the units.

It is likely to ignite and explore.

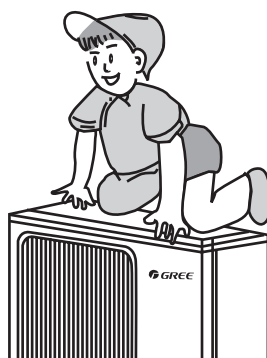


Please note whether the installed stand is firm enough or not.

It leads to the falling of the unit which causes the injury etc. occasionally.

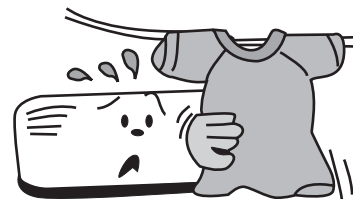


Don't step on the top of the outdoor unit. As falling off the outdoor unit can be dangerous.



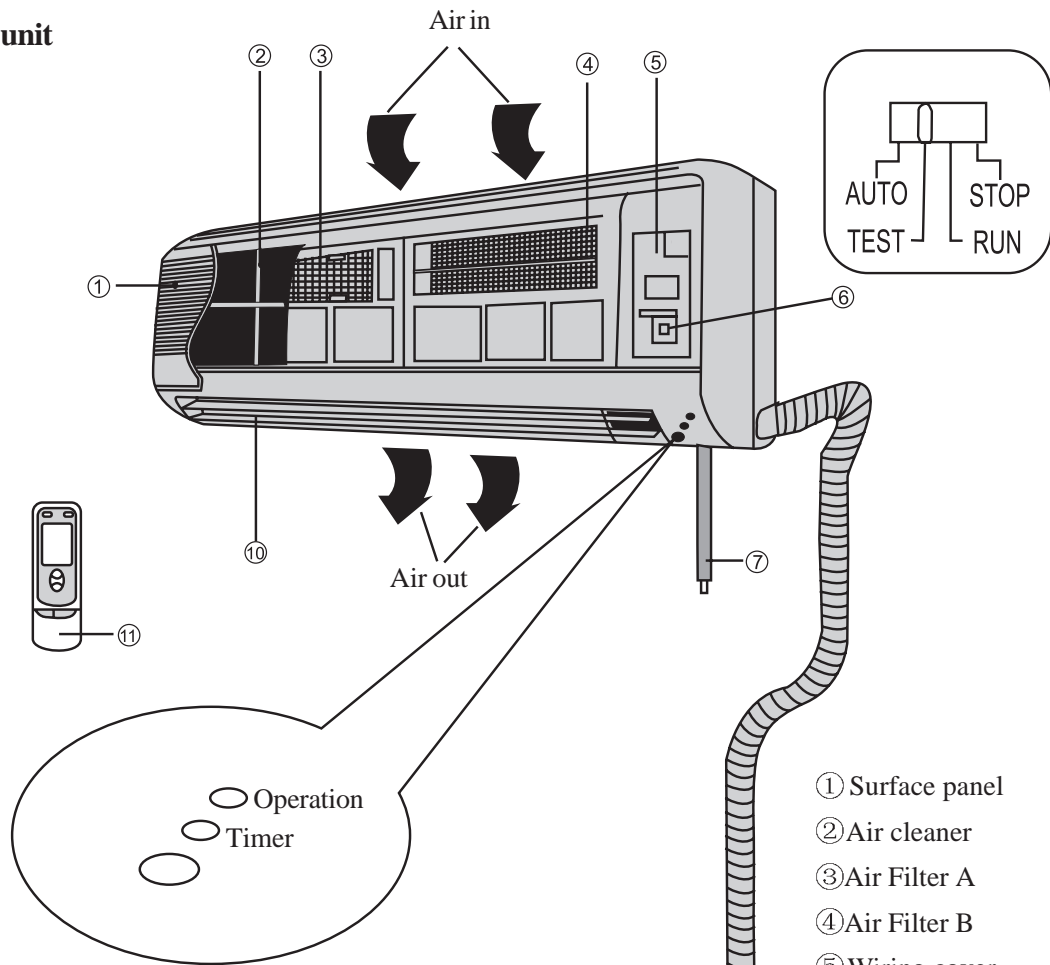
Don't block the air intake or outlet vents of both the outdoor and indoor units.

It can decrease the air conditioning capacity or cause a malfunction.



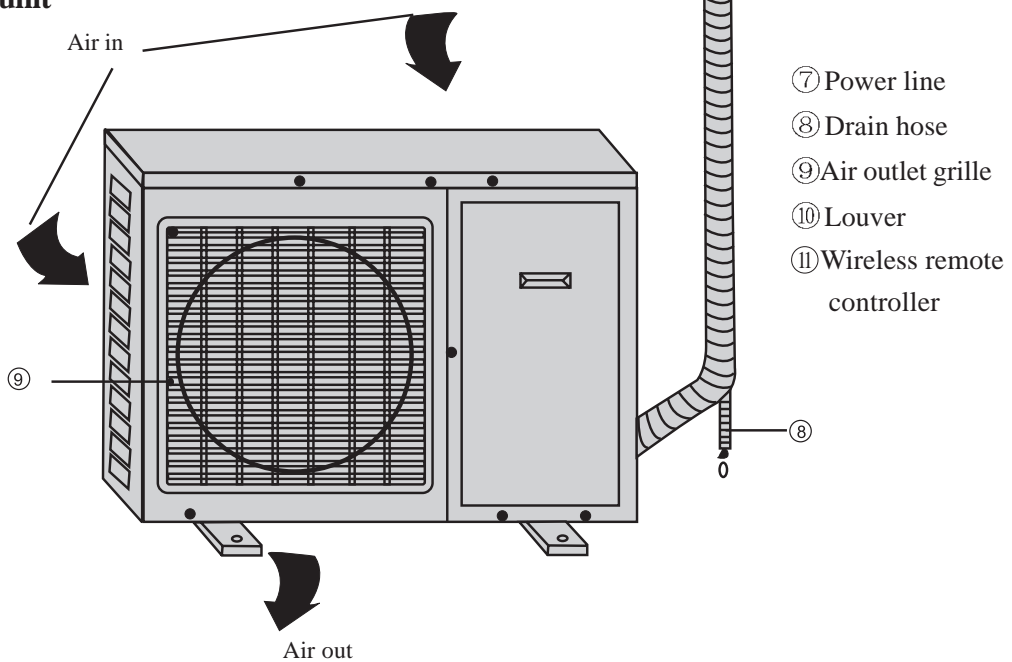
Name and function of each part

● Indoor unit



* Operation indicator (red) lights up when the unit is on, and flashes when the unit is defrosting.

● Outdoor unit



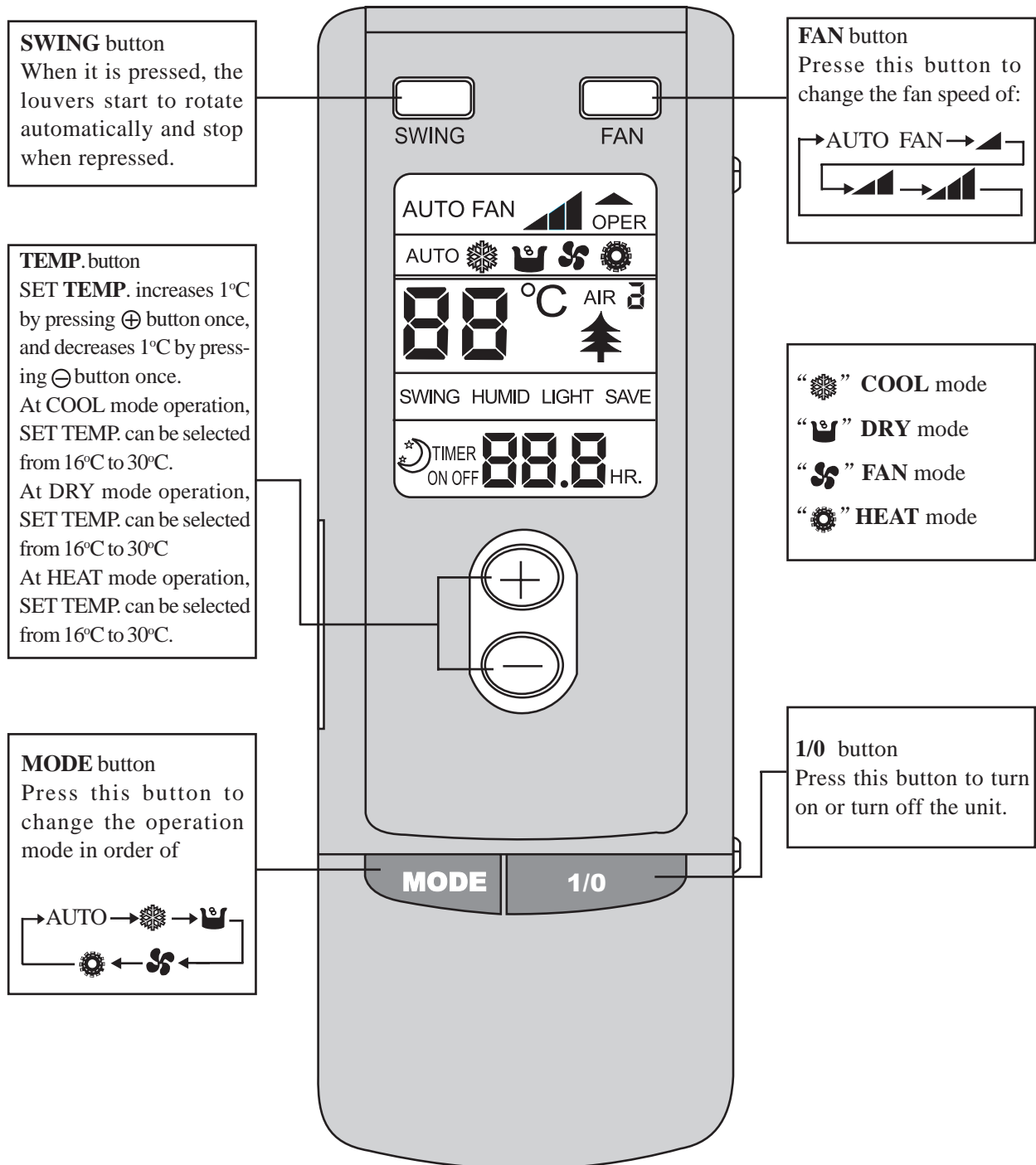
- ① Surface panel
- ② Air cleaner
- ③ Air Filter A
- ④ Air Filter B
- ⑤ Wiring cover
- ⑥ Handling switch
- ⑦ Power line
- ⑧ Drain hose
- ⑨ Air outlet grille
- ⑩ Louver
- ⑪ Wireless remote controller

Remote control operation procedure

● Name and Function-Remote control

Note:

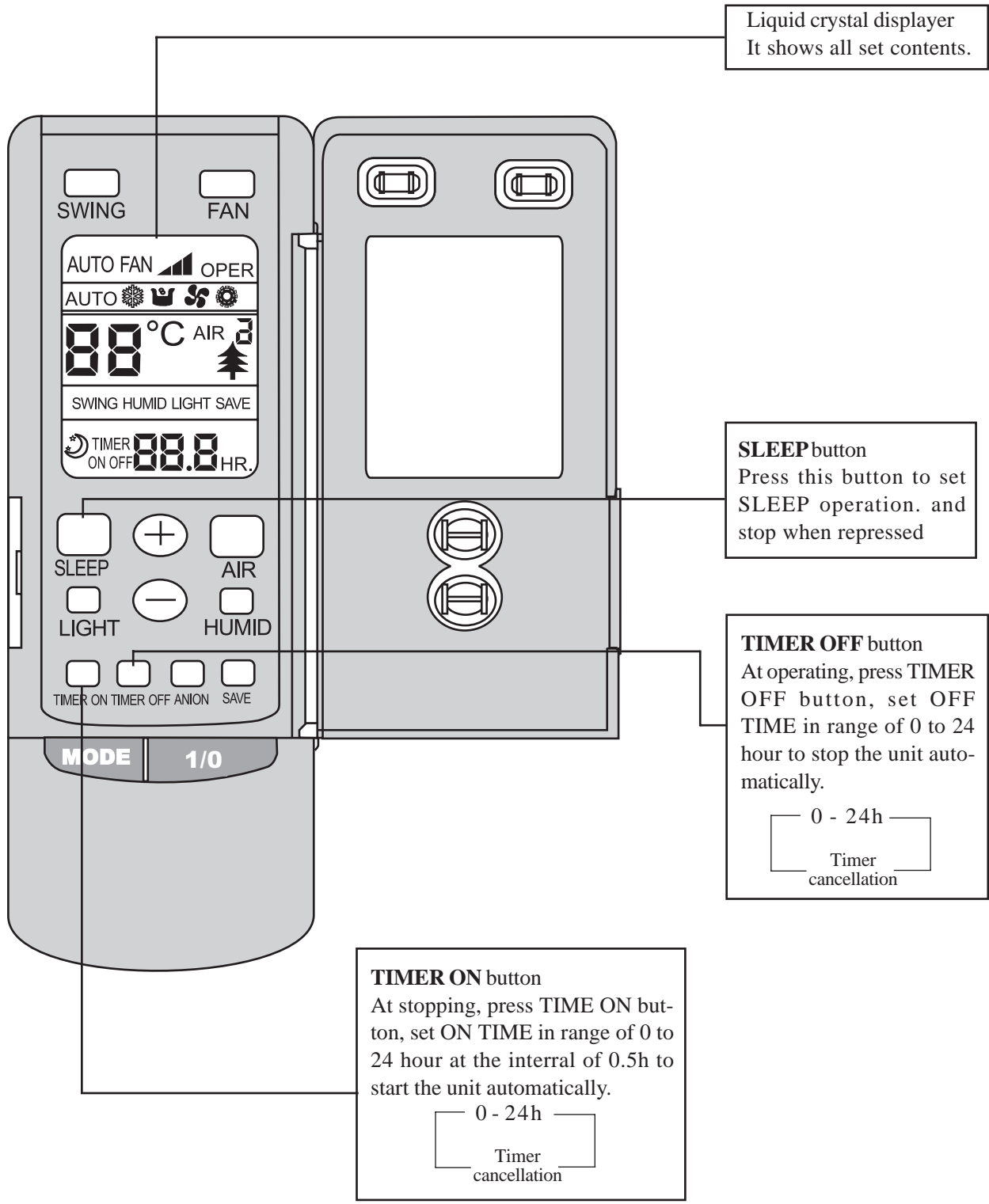
- Be sure that there are no obstructions between receiver and remote controller.
- The remote control signal can be received at the distance of up to about 10m.
- Don't drop or throw the remote control.
- Don't let any liquid in the remote controller and put the remote controller directly under the sunlight or any place where is very hot.



● **Name and Function-Remote control .(Remove the cover)**

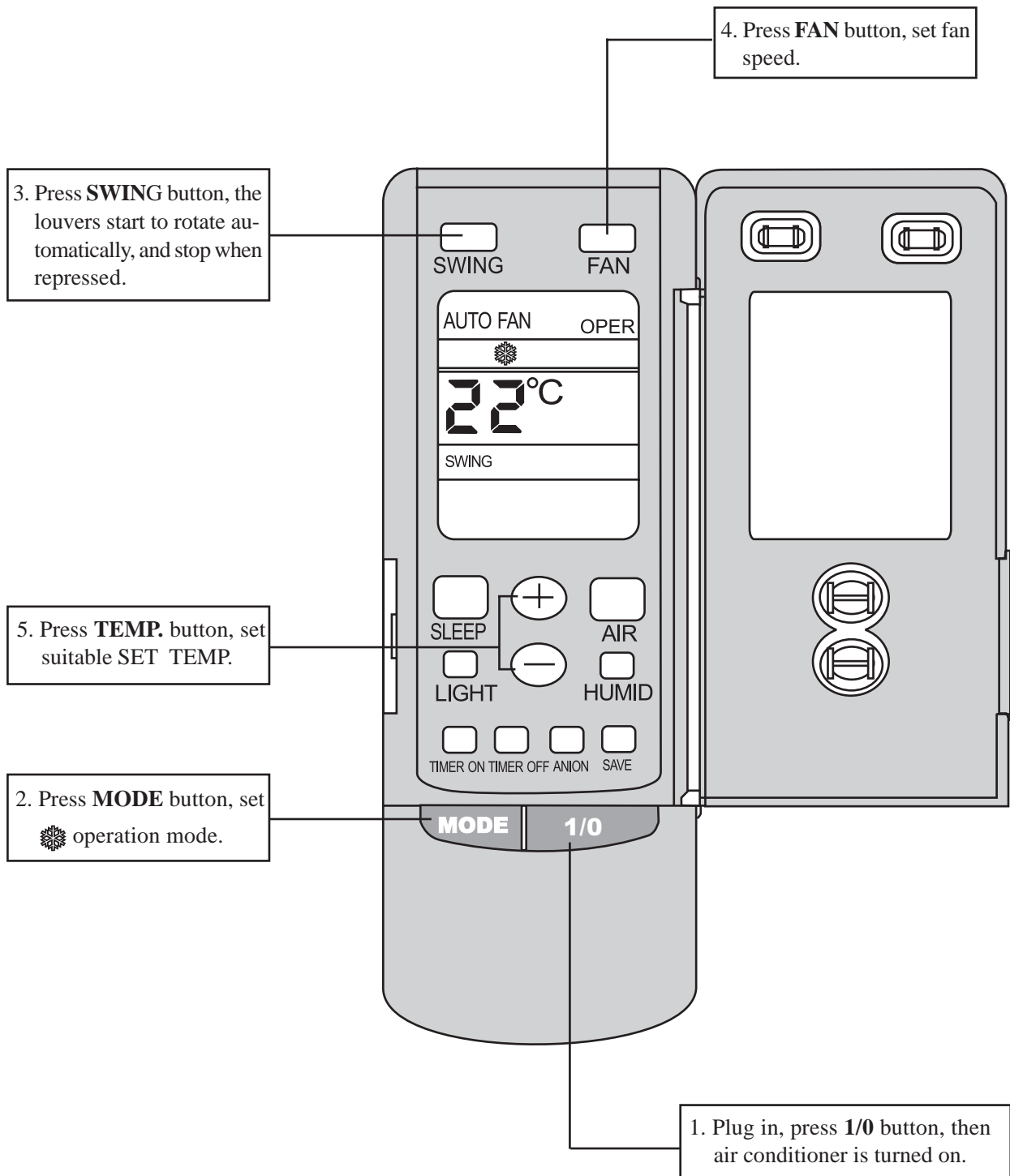
Note: •This type of remote controller is a kind of new current controller. some buttons of the controller which are not available to this Air conditioner will not be described below.

•Operate on unmentioned buttons would not impact on the normal use.



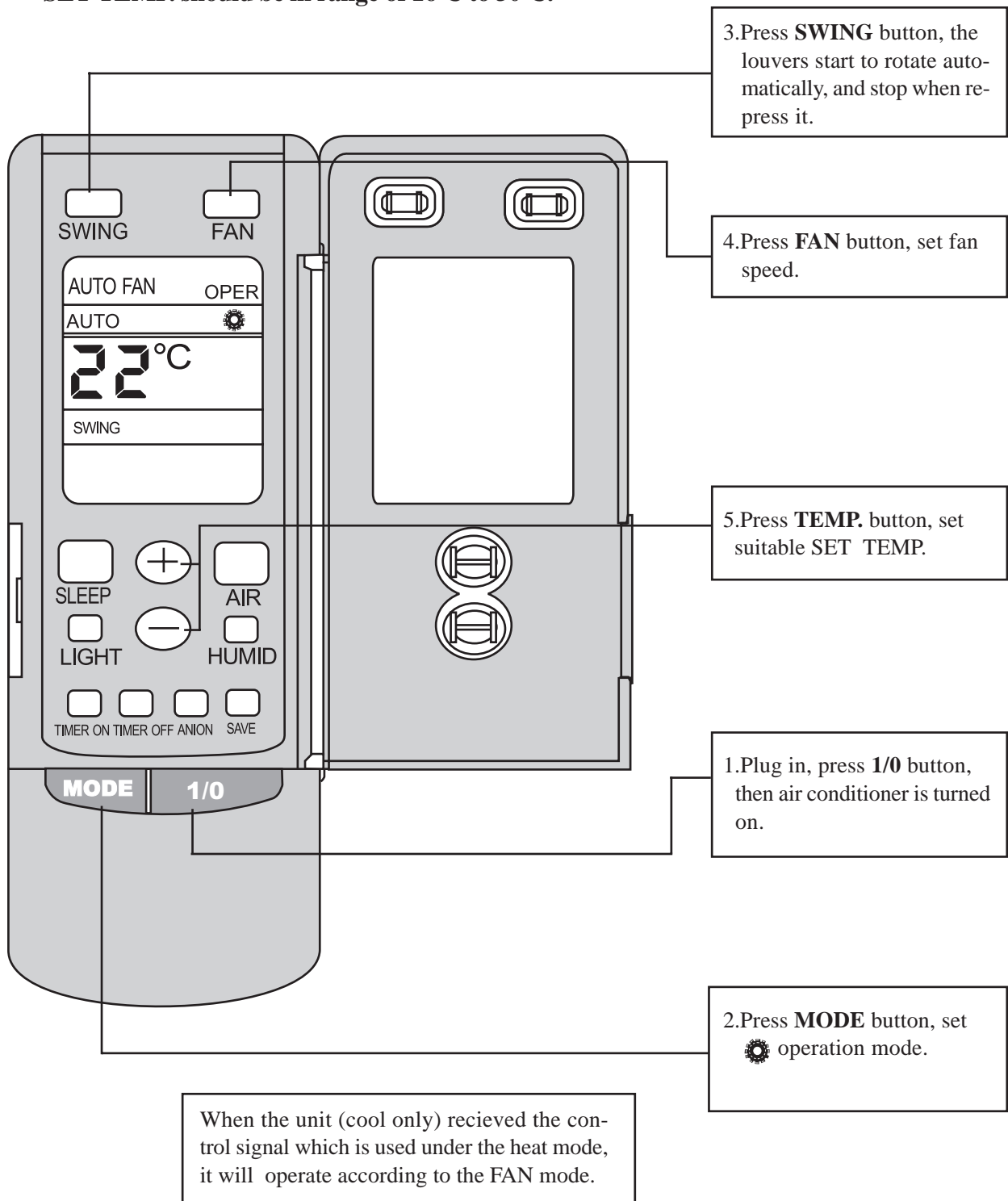
● COOL mode operation procedure

- According to difference between room temp. and set temp., microcomputer can control cooling on or not.
- If room temp. is higher than set temp. , compressor runs at COOL mode.
- If room temp. is lower than set temp., compressor stops and only indoor fan motor runs.
- SET TEMP. should be in range of 16°C to 30°C.



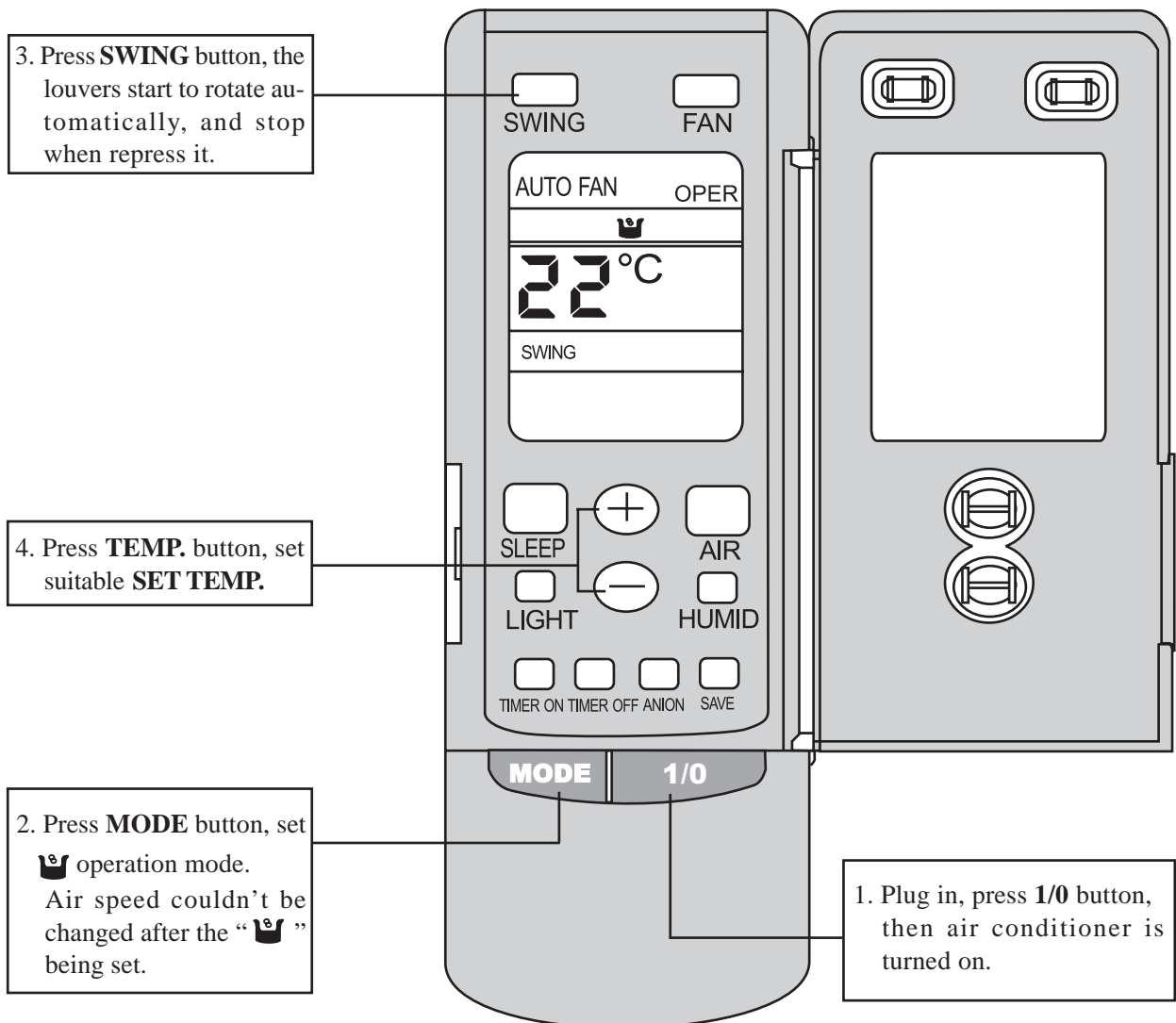
● HEAT mode operation procedure

- If room temp. is lower than set temp. , compressor runs at HEAT mode;
- If room temp. is higher than set temp., compressor and outdoor fan motor stop, only indoor fan motor runs, louver motor makes the louvers horizontal, after about one minute, indoor fan motor will stop .
- SET TEMP. should be in range of 16°C to 30°C.



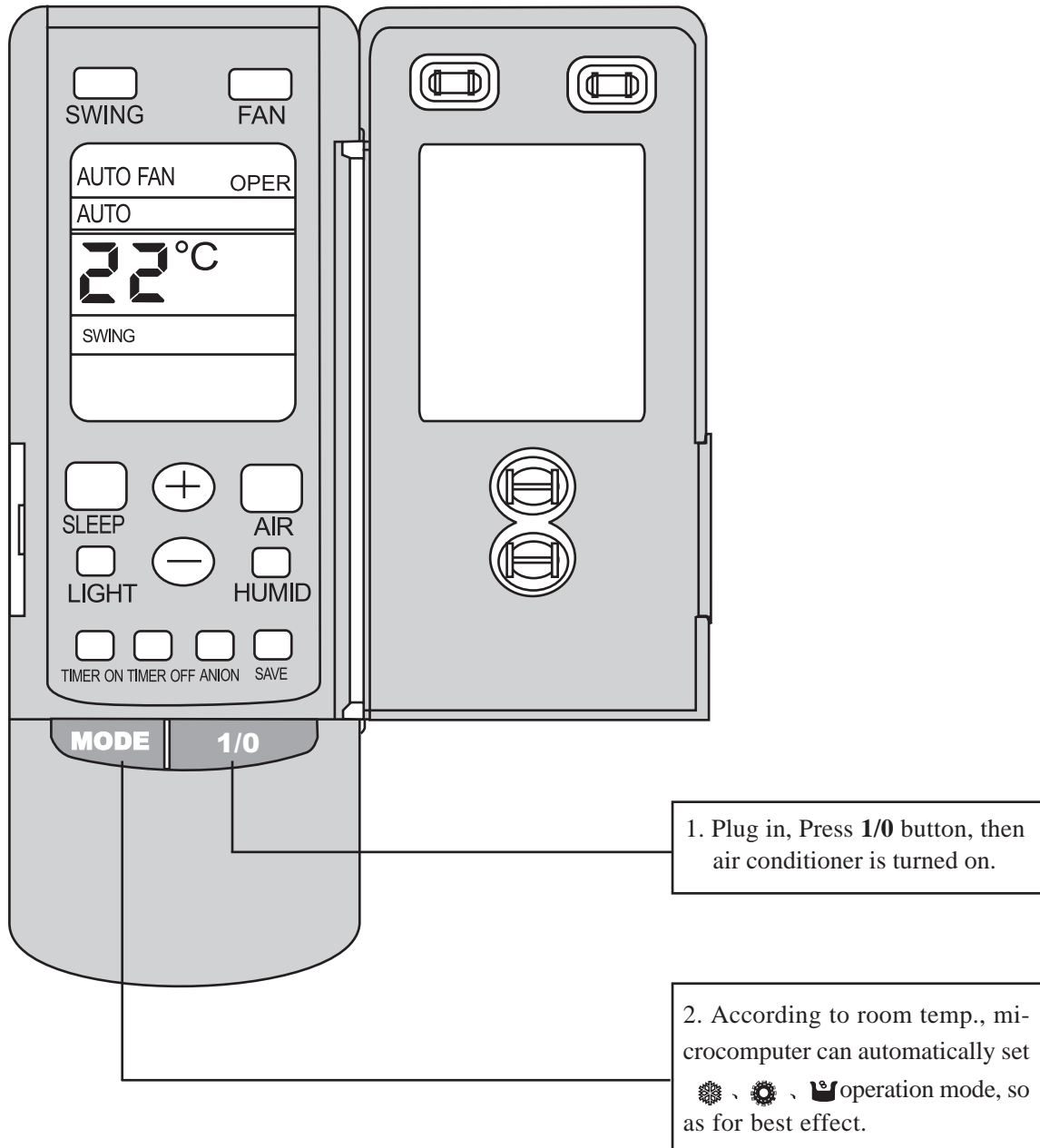
● DRY mode operation procedure

- 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's at COOL mode.
- SET TEMP. should be in range of 16°C to 30°C .

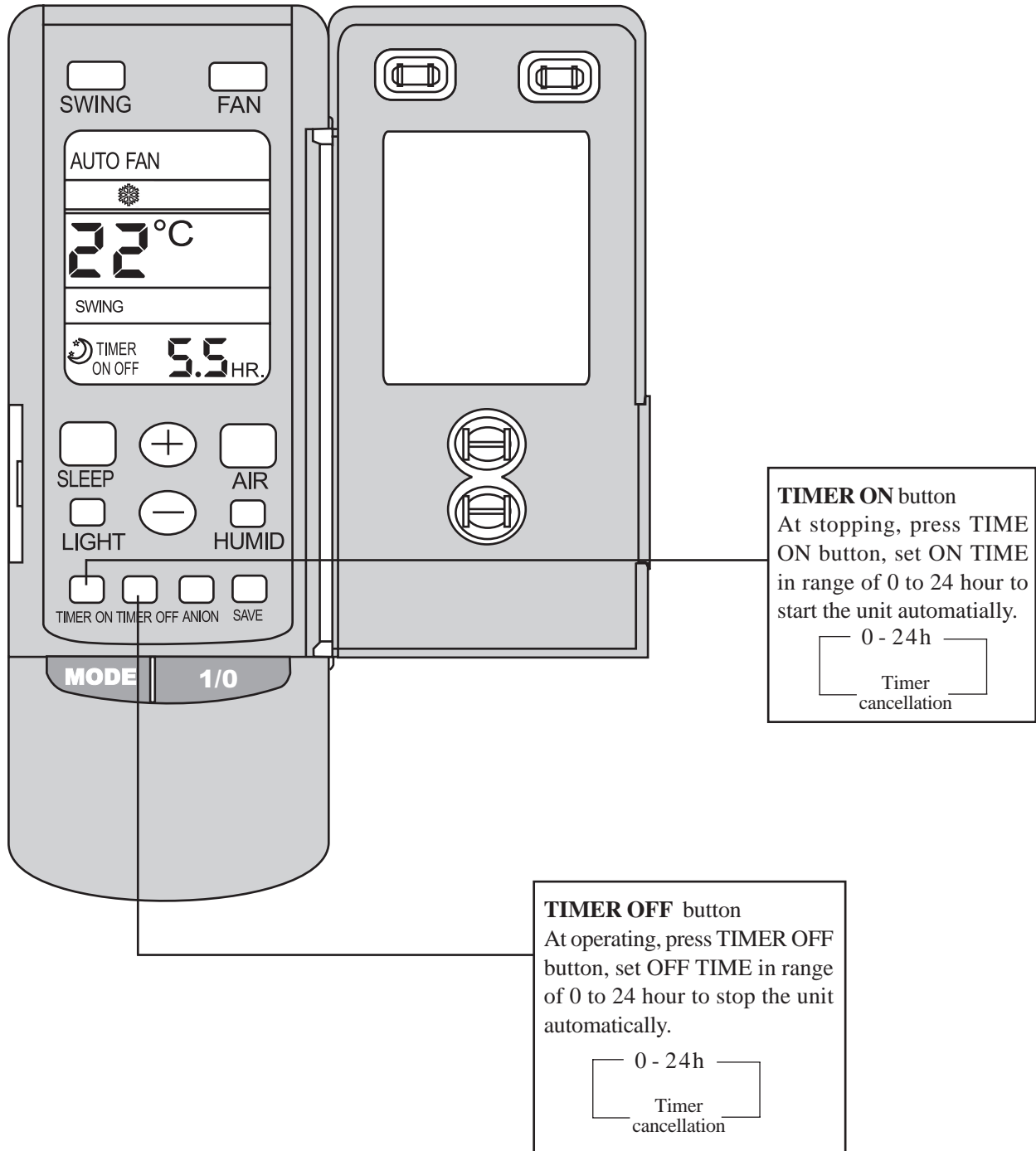


● AUTO mode operation procedure

- Under Auto mode operation, standard SET TEMP. is 25°C for COOL mode and 20°C for HEAT mode .

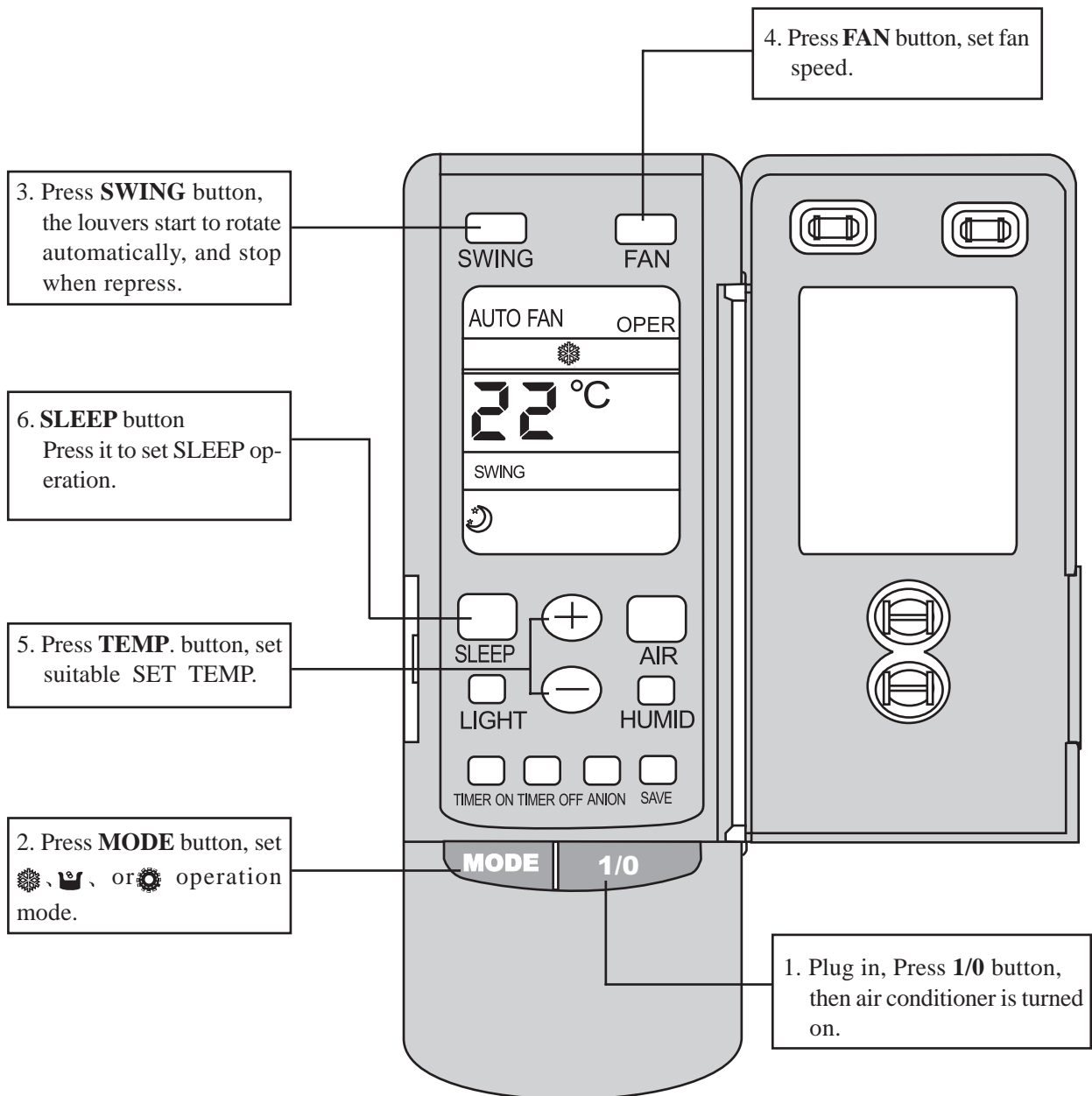


● **TIMER mode operation procedure**



● SLEEP mode operation procedure

- As 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.
- As the unit is heating, if SLEEP operation is set, SET TEMP. would decrease 1°C in 1 hour and 2°C in 2 hours.

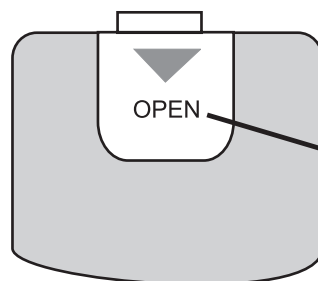
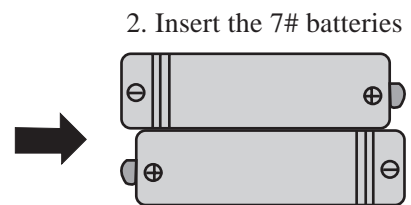
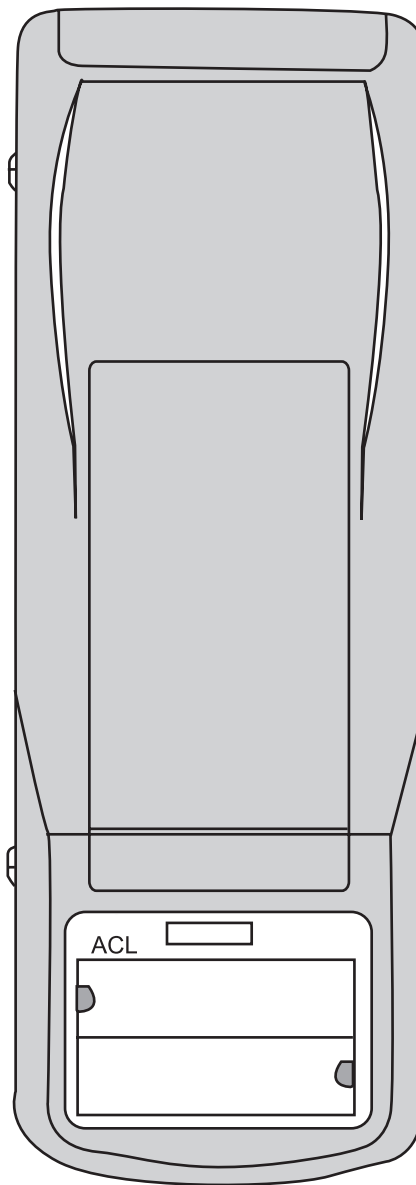


● How to insert batteries

1. Remove the cover from the back of the remote control.
2. Insert the two batteries (Two AAA dry - cell batteries) and press button "ACL".
3. Re - attach the cover.

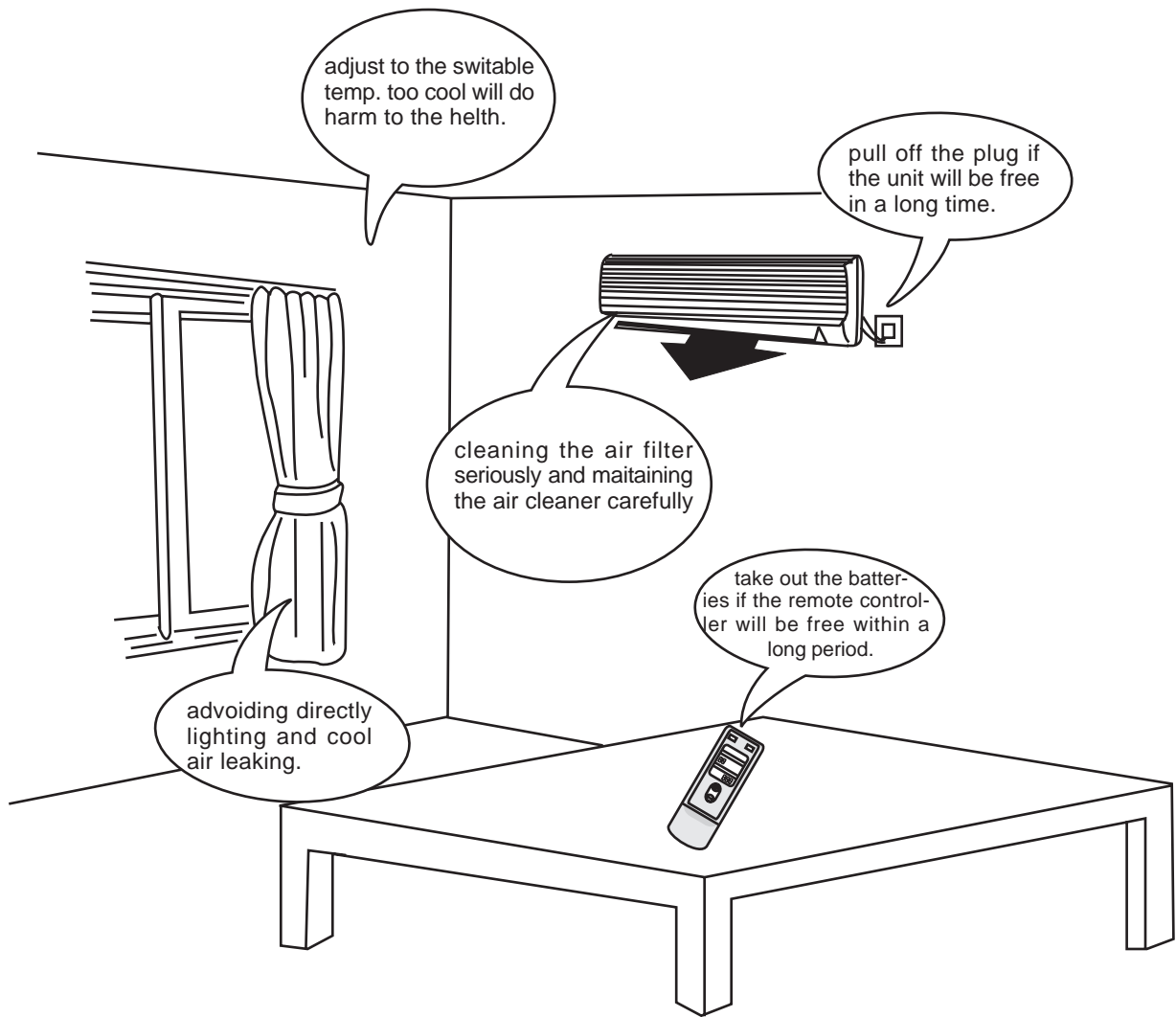
NOTE:

- Don't confuse the new and worn or different types of batteries.
- Remove batteries when the remote controller will be not in use for a longtime.
- The remote control signal can be received at the distance of up to about 10m.
- The lifetime of the batteries is about one year.
- The remote controller should be placed about 1m or more away from the TV. or any other electric appliances.
- Bad batteries are forbidden



1. Remove the cover
3. Re - attach the cover.

● The best operating methods

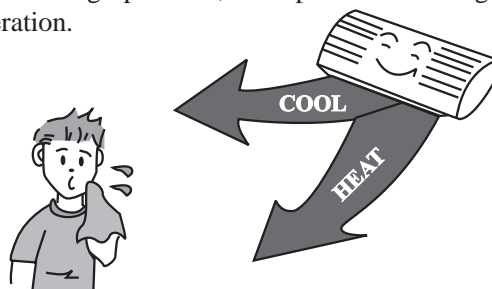


USER NOTICES

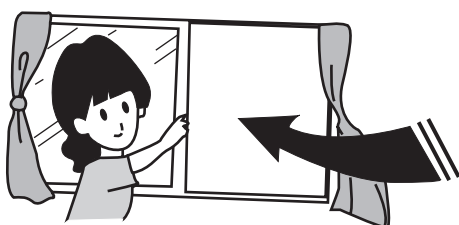
- **Select the most appropriate temperature.** It can avoid the electricity wasting.



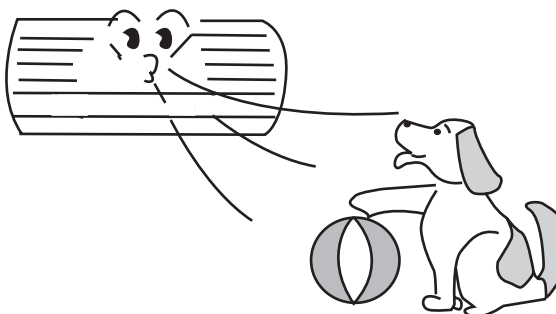
- **The airflow direction can be adjusted appropriately.** The louvers can be adjusted downward at heating operation, and upward at cooling operation.



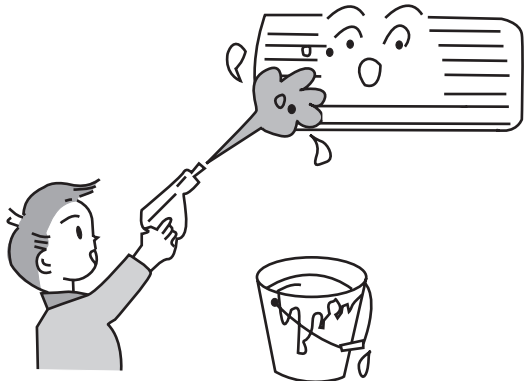
- **Don't leave windows and doors open while the air conditioner is on for a longtime.** It can decrease the air conditioning capacity.



- **Don't blow the wind to animals and plants directly.** It can cause a bad influence to them.



- **Splashing water on the air conditioner can cause an electric shock and mal - function.**



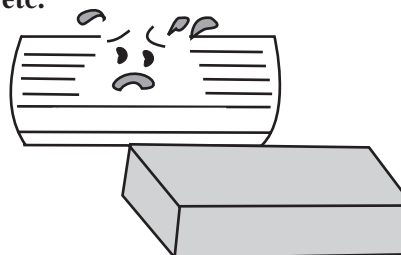
- **The appliance is not intended for use by the young children and the infirm persons without supervision.**
Young children should be supervised to ensure that they don't play with the appliance.



- **Air conditioner should be operated with stable voltage in range of 198 – 244V 1ph. otherwise, compressor would vibrate terribly to damage refrigeration system.**



- **Don't use the air conditioner for other purposes, such as drying clothes, preserving foods, etc.**



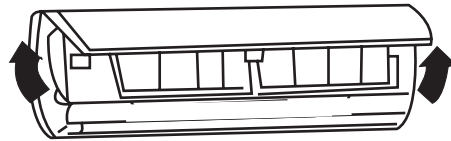
Care and Maintenance

CAUTION

- Turn power off and pull out the power plug before cleaning air conditioner.
- Don't sprinkle water on the indoor unit and the outdoor unit for cleaning.
- Wipe the units with a dry soft cloth, or a cloth slightly moistened with water or cleaner.

Take down surface panel and washing

1. Pull along the direction of arrows to take down surface panel.



2. Washing

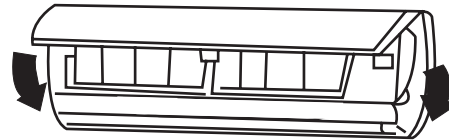
Wipe with a cloth slightly moistened with water or cleaner, and then dry it in the shade.

NOTE: Never use water above 45°C to wash the panel, or it could cause deformation or discoloration.



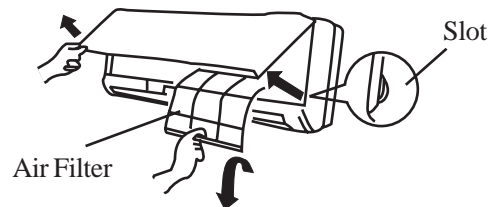
3. Install surface panel

Cover the surface panel and clasp it.



Cleaning the Air Filters (Recommended once every three months)

1. Open the surface panel, hold the tab of Air Filter and raise it slightly, and then take it out.

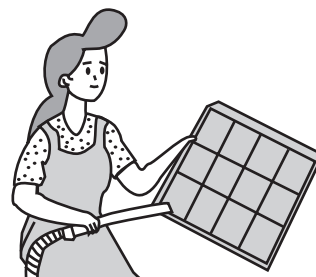


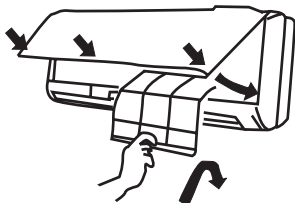
2. Cleaning

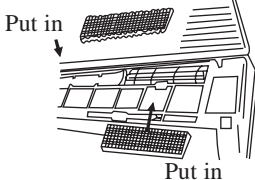
To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with water and dry it in the shade.

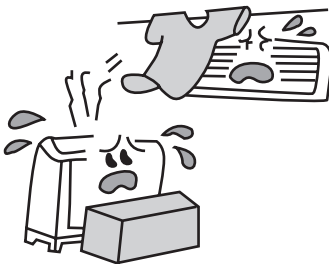
NOTE:

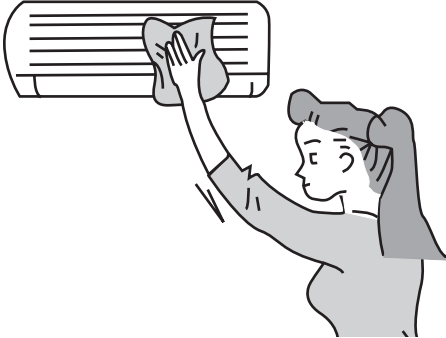
- Never use water above 45°C to wash the filters, or it could cause deformation or discoloration.



<p>3. Reinsert the filters Reinsert the filters with side marked “FRONT” facing forward.</p>	
---	--

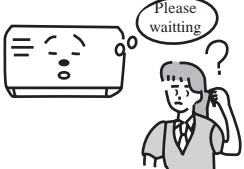



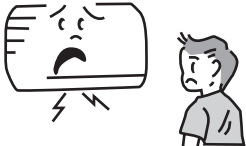
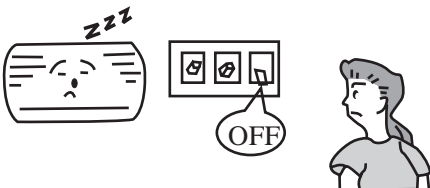


<p>Replacement of Air cleaner ● Recommended once every three years, and the alternate filters can be found in the Service center.</p>	
<p>1. Remove the Air Filters</p>	<p>(Refer to the first step of “cleaning the Air Filters”)</p>
<p>2. Replace the Air cleaner Take off the packed bag of Air purifying Filters, and then put new Filters into the Filter frame.</p>	<p>Air cleaner</p>  <p>NOTE: Be careful not to injure yourself on the fins</p>
<p>3. Re-insert the filters</p>	<p>(Refer to the third step of “cleaning the Air Filters”)</p>

<p>Preparation before use</p>	
<p>1. Be sure that nothing obstructs the air outlet and intake vents. 2. Check that whether ground wire is properly connected or not. 3. Replace filters if necessary. 4. Replace the batteries if necessary.</p>	

<p>Maintain after use</p>	
<p>1. Clean filters and other parts. 2. Turn main power off. 3. Clear dust from the outdoor unit 4. If there is any rust in the outdoor unit, this should be painted over to prevent it from spreading.</p>	

Troubleshooting

Check the following points before requesting on Service center if the malfunction persist, it saves your time and money.

Phenomenon	Trouble Shooting
 <p>Indoor unit does not operate immediately when the air conditioner is restarted.</p>	<p>Once the air conditioner is stopped, it will not operate in approximately 3 minutes to protect itself.</p>
 <p>There's unusual smell blowing from the outlet after operation is started.</p>	<p>This is caused by the odors in the room which have been breathed into the air conditioner.</p>
 <p>Sound of water flow can be heard during operation.</p>	<p>This is caused by the refrigerant flowing inside the unit.</p>
 <p>Mist is emitted during cooling operation.</p>	<p>Because the air of the room is cooled down rapidly by the cold wind and it looks like the fog.</p>
 <p>Creaking noise can be heard when start or stop the unit.</p>	<p>This is caused by the deformation of plastic due to the change of temperature.</p>
 <p>Air conditioner does not operate at all.</p>	<ul style="list-style-type: none"> • Has the power been shut down? • Is the wiring loose? • Is the leakage protection switch in operation? • Is voltage higher than 244V or lower than 198V? • Is TIMER ON in operation?
 <p>Cooling (Heating) efficiency is not good.</p>	<ul style="list-style-type: none"> • Is SET TEMP. suitable? • Is air inlet or outlet obstructed? • Are air filters dirty? • Is indoor fan speed set at low speed? • Is there any other heat source in your room?
 <p>Wireless remote controller is not available.</p>	<ul style="list-style-type: none"> • Is the remote control unit out of effective distance to the indoor unit? • Replace the worn batteries of wireless remote controller. • Are there any obstructions between the wireless remote controller and the signal receptor?

Troubleshooting

Immediately stop all operations and plug out, contact with service center in following situations.



- Unusual noise can be heard during operation.
- Power fuse or switch often breaks.
- Carelessly splash water or something into air conditioner.
- Electrical lines and power plug are very hot.
- Wind blowing from the outlet smells terrible during operation.

NOTE:

Equipment subject to notification to or consent by the supply authority before connection to the system (consent by the supply authority may be requested for high-power appliances which are intended to be used only in systems having impedances considerably lower than the reference impedance. General consent may declared for use of a type of appliance in a defined part of the supply system):

1. Equipment intended exclusively for professional purposes;
2. Appliances and equipment without automatic control means;
3. Appliances producing less than one voltage change per hour;
4. Appliances producing more than 1800 voltage changes per minute;
5. Disturbances caused by manual switching.

Technical specifications

Model										ASH - 24CN
Functions	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat
Accessory	Air cleaner									
Cooling capacity (W)	4500W	4500W	5000W	5000W	5000W	5000W	6000W	6000W	6000W	7000W
Heating capacity (W)	—	5200W	—	6200W	—	6200W	—	7000W	—	7600W
Power supply	220V-240V~									
Frequence	50Hz									
Cooling/Heating rated current	7.83/-A	7.83/7.83A	9.0/-A	9.0/10A	9.01-A	9.0/10A	11.3/-A	11.7/12A	11.3/-A	11.3/11,9A
Maximum input current	8.9A	8.9A	12A	12A	12A	12A	14.5A	14.5A	14.5A	14.5A
Cooling/Heating rated power	1950/-W	1950/2055W	2400/-W	2400/2650W	2400/-W	2400/2650W	2600/-W	2600/2680W	2600/-W	2500/2500W
Recycling air volume	620m ³ /h		700m ³ /h		700m ³ /h		720m ³ /h			
Refrigerant and weightt	R407C 1.80Kg		R407C 2.0Kg		R22 1.9kg	R22 1.95kg	R22 1.6kg	R22 2.0kg	R407C 2.0kg	R407C 2.2kg
Waterproof level	IP24									
Noise (Indoor/outdoor) dB (A)	43/56 dB(A)		46/58 dB(A)		46/58 dB(A)		48/59 dB(A)			
Climate type	T1									
Anti-electric shock protection	I									
Weight(kg) Indoor unit/ outdoor unit	12/59kg									
Dimension(cm) (Width × height × depth)	Indoor : 90.7 × 29.0 × 19.5 Outdoor : 95.0 × 70.0 × 41.0									

Technical specifications

Model										
Functions	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat	Cool	Cool Heat
Accessory	Air cleaner, Memory function *									
Cooling capacity (W)	6000W	6000W	6000W	6000W	6000W	6000W	6000W	6000W	5000W	5000W
Heating capacity (W)	—	7000W	—	6800W	—	6800W	—	6800W	—	6000W
Power supply	220V-240V~				220V~					
Frequency	50Hz				60Hz					
Cooling/Heating rated current	11.3/-A	11.3/11.9A	13.8/-A	13.8/14.8A	12/-A	12/11.5A	12.8/-A	12.8/12.6A	9.1/-A	9.1/9.8A
Maximum input current	14.5A	14.5A	16.5A	16.5A	16A	16A	16A	16A	12A	12A
Cooling/Heating rated power	2500/-W	2500/2500W	2800/-W	2800/2800W	2500/-W	2500/2400W	2600/-W	2600/2500W	2000/-W	2000/2200W
Recycling air volume	720m ³ /h								700m ³ /h	
Refrigerant and weight	R22 1.6kg	R22 2.0kg	R22 2.0kg	R22 2.0kg	R22 2.0kg	R22 2.0kg	R22 1.6kg	R22 2.0kg	R22 1.6kg	R22 1.9kg
Waterproof level	IP24									
Noise (Indoor/outdoor) dB (A)	48/59 dB(A)								46/58 dB(A)	
Climate type	T1		T3				T1			
Anti-electric shock protection	I									
Weight(kg) Indoor unit/ outdoor unit	12/59kg									
Dimension(cm) (Width×height×depth)	Indoor : 90.7 × 29.0 × 19.5 Outdoor : 95.0 × 70.0 × 41.0									

① All above are test according to CHINA NATIONAL STANDARD GB/T 7725-1996.

② All above should be changed without notice, there are latest and accurate specifications on the nameplate of your air conditioner.

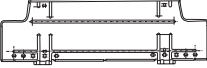

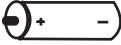




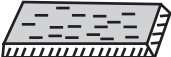








* “Memory function” means that after the power supply turns off suddenly and then turns on, the air conditioner automatically runs in the old state, the compressor runs in 3 minutes later after the power supply turns on again. (Remark: The memory function will be clear when the unit is stopped by the remote controller).

※ Working temperature range

	Indoor side DB/WB(°C)	Outdoor side DB/WB(°C)
Maximum cooling	32/23	43/26(T1) 55/24(T3)
Minimum cooling	21/15	21/—
Maximum heating	20/12	20/12
Minimum heating	20/—	-5/-6

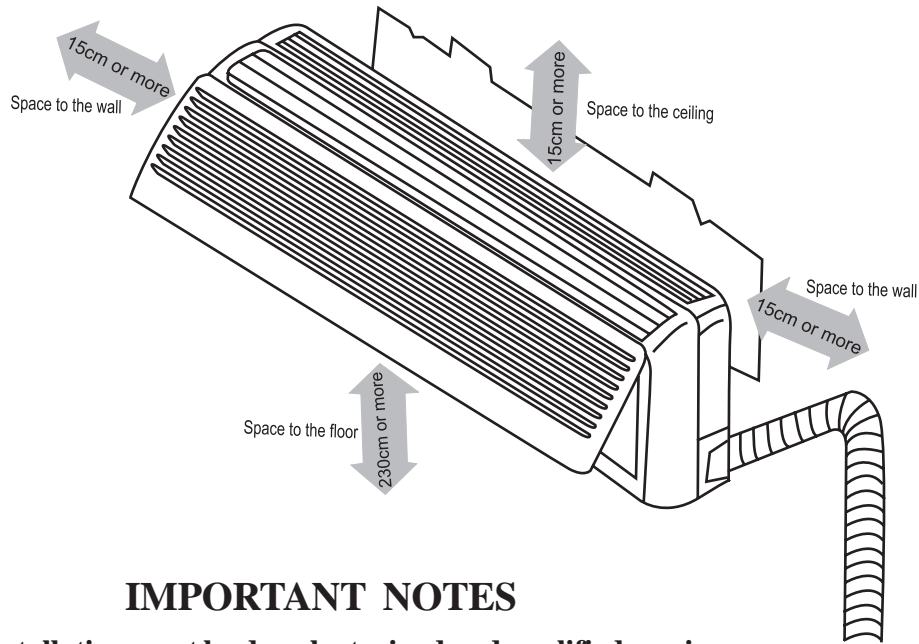
Accessories and Installation diagram

● Accessories (Check that all accessory parts are present before installation)

No.	Part name	Diagram	Qty	Specification	Memo
1	Rear panel		1		
2	Wireless remote controller		1		
3	Battery		2	7#1.5V	
4	Power connection cord		1		
5	Control cord		1		Heat pump type only
6	Tapping screw		10	ST4.2 × 25	Fix the rear panel
7	Plastics drain hose		1	L=2m	Packaged with connection piping
8	Gum type sealer		1		
9	Piping-hole sleeve		2		Packaged with connection piping
10	Wrapping tape		2	30 × 10	Packaged with connection piping
11	Connection piping		1		Packaged with connection piping
12	Thermal insulation hose		1		
13	outdoor drain elbow		1		Heat pump type only
14	outdoor drain stem		2		Heat pump type only
15	Air cleaner		2		Packaged with indoor unit
16	rubber bush		1		Packaged with outdoor unit

* Be sure to use the exclusive accessories list above in the installation, or it will lead to water leakage, electric shock, fire, etc.

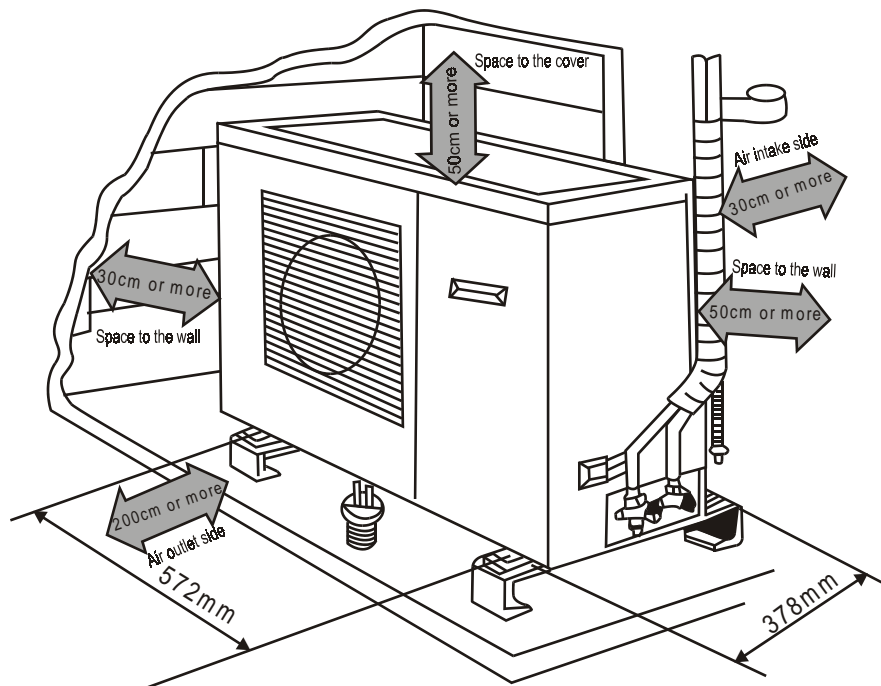
● Installation dimension diagram



IMPORTANT NOTES

- * The installation must be done by trained and qualified service personnel with reliability according to this manual.
- * Contact with service center before installation to avoid the mal - function due to unprofessional installation.
- * When picking up and moving the units, you must be guided by trained and qualified personnal.

The air conditioner should be connected to the earth, correctedly, if not, contact with the service center.



Installation location

● Indoor unit

1. The inlet and outlet should not be covered so that the outflow air can reach all parts of the room.
2. Install in a location where is easy to connect to the outdoor unit.
3. A location from which the condensation water can be drained out conveniently.
4. Avoid a location where there is heat source, high humidity or inflammable gas.
5. Install in a location where is strong enough to withstand the full weight and vibration of the unit.
6. Be sure that the installation conforms to the installation dimension diagram.
7. Be sure to leave enough space to allow access for routine maintenance. The height of the installed location should be 2.3m or more from the floor.
8. Install in a location where is 1m or more away from other electric appliances such as television, audio device, etc.
9. Select location where is easy to remove and clean the filter.
10. Do not use the unit in the immediate surroundings of a laundry, a bath, a shower or a swimming pool.

● Outdoor unit

1. Select location from which noise and outflow air emitted by unit will not disturb neighbors.
2. Select location where ventilate freely.
3. The inlet and outlet should not be covered.
4. The location should be able to withstand the full weight and vibration of the outdoor unit.
5. There should be no danger of flammable gas or corrosive gas leaks.
6. Be sure that the installation conforms to the installation dimension diagram.

NOTE:

Install in the following place may cause mal-function. If it is unavoidable, contact with Service center please.

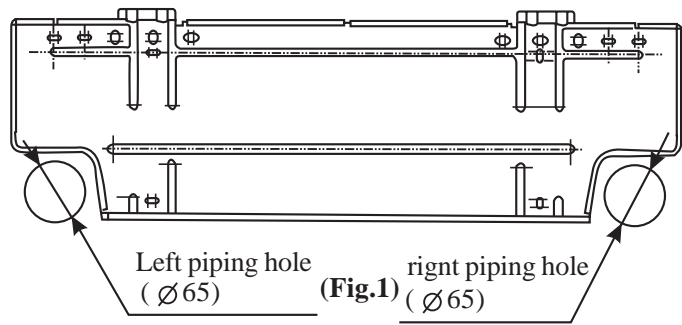
- Place where oil (machine oil) is used.
- The place where a lot of salinities such as coast exists.
- Place where a sulfured gas such as the hot spring zones is generated.
- Place where high-frequency waves are generated by radio equipment, welders and medical equipment.
- Other place with special circumstance.



Install the indoor unit

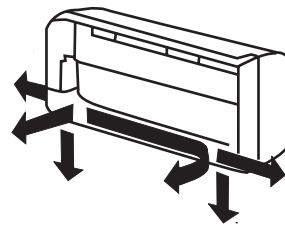
● Install the rear panel

1. Always mount the rear panel horizontally.
2. Fix the rear panel on the selected location with screws supplied with the unit.
3. Be sure that the rear panel has been fixed firmly enough to withstand the weight of an adult of 60kg, furthermore, the weight should be evenly shared by each screw.



● Install the piping hole

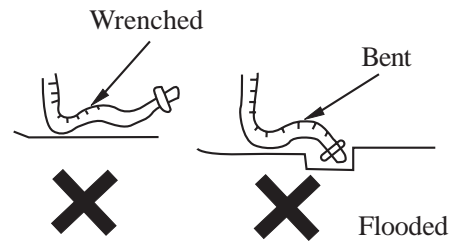
1. Make the piping hole (Ø65) in the wall at a slight downward slant to the outdoor side. The center of the hole should be determined refer to Fig.1.
2. Insert the piping-hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.



(Fig.2)

● Install the drain hose

1. For well draining, the drain hose should be placed at a downward slant.
2. Do not wrench or bend the drain hose or flood its end by water.



(Fig.3)

● Install the connection pipes

Connect the connection pipes with the relevant union pipes of the indoor unit (Shown in P26 "Install the connection pipes")

NOTE:

- Connect the connection pipes with the indoor unit firstly and the outdoor unit secondly.
- Be careful in bending the connection pipes, or you will damage the pipes.
- If the tightening torque is too great in tightening the flare nuts, leakage will happen.

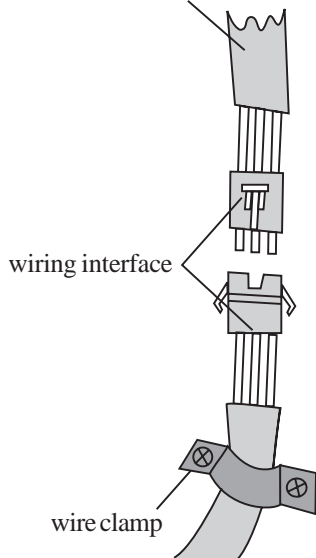
● Electrical wiring

1. Open the surface panel.
2. Remove the wiring cover (Fig.4).
3. Route the power connection cord from the back of the indoor unit and pull it toward the front through the wiring hole for connection.
4. Connect the blue wire of the power connection cord to the terminal "N(1)", the brown one to "2", the red one to "3", and the yellow-green one (earth wire) to "⊕" as shown in Fig. 4.
5. For the heat pump type, connect the control cord to the indoor unit through wiring interface shown in Fig.4, and clamp the connected cord on the chassis.

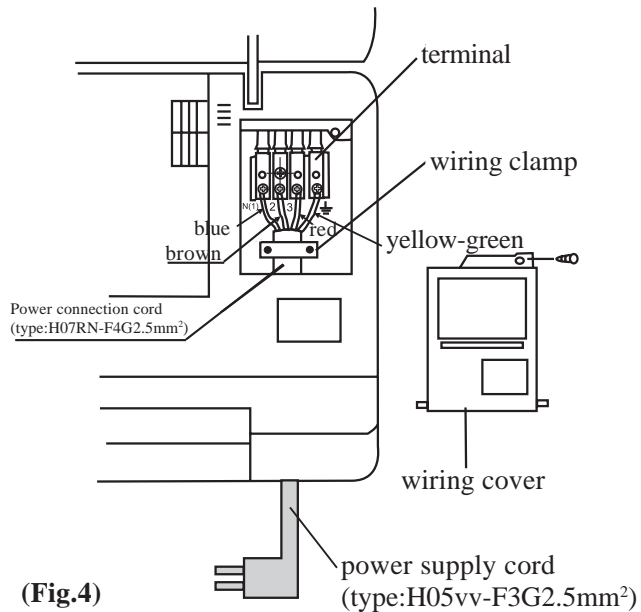
Install the indoor unit

6.Reassemble the clampand wiring cover.

7.Recover the surface panel.
control cord (5×0.75)
(for CE stand5×1.0)



For heat pump type only



(Fig.4)

NOTE:

- All the electrical work must be done by qualified personnel according to the local rules and this manual.
- The rated voltage and the exclusive circuit must be used.
- Leakage circuit-breaker must be installed.
- Please use specified fuse.
- If the power supply cord of the unit is damaged, it must be replaced by a special cord or assembly available from the manufacture or its service agent.
- The diameter of power cord should be large enough. Use the exclusive wire to replace the damaged wire.
- Wiring work should conform to national standard.
- All the power supply cord directly connected to the fixed wiring without plug, and must incorporated a supply disconnection with have at least 3mm open contact separation in each pole.

● Install the indoor unit

1. When routing the piping and wiring from the left or right side of the indoor unit, cut off the tailings from the pipe holder in necessary (shown in Fig.5).

- ① Through the hole when routing the wiring only.
- ② Cut off the tailings 1 when routing both the wiring and piping.

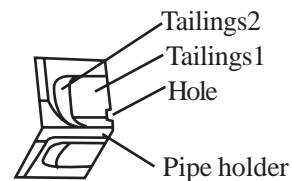


Fig.5

- 2.Wrap the piping and wiring and pull them through the cut-off-tailings hole (shown in Fig.6).
3. Hang the 2 mounting slots of the indoor unit on the upper tabs of the real panel and check if it is firm enough.
- 4.The height of the installed location should be 2.3m or more from the floor.

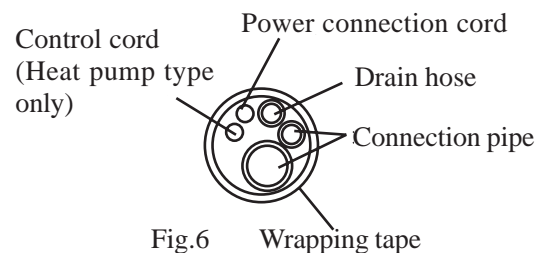


Fig.6

Install the outdoor unit

● Install the connection pipe

1. Align the center of the piping flare with the relevant valve.
2. Screw in the flare nut by hand and then tighten the nut with spanner and torque wrench refer to the diagram at right.

Note: Exceeding tightening torque will damage the flare surface.

Tightening torque table

Hex nut diameter (mm)	Tightening torque (N.m)
∅6	15~20
∅9.5	31~35
∅12	50~55
∅16	60~65

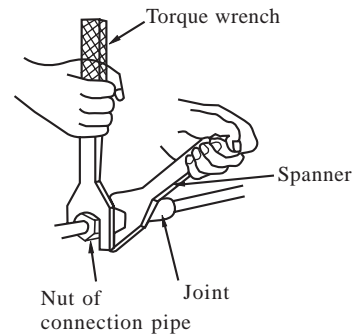


Fig.7

● Electric wiring connection

1. Remove the front side plate (Fig.8)
2. Break through the hole for wires and put on rubber bush.
3. Pull all wires throught the rubber bush.
4. Remove the wire clamp and connect the end of the power connection cord with screws to the wiring terminal board according to the “WIRING DIAGAM” of outdoor unit.
5. Make sure that the wiring has been connected firmly.
6. Tighten the wire with clamp and clasp.

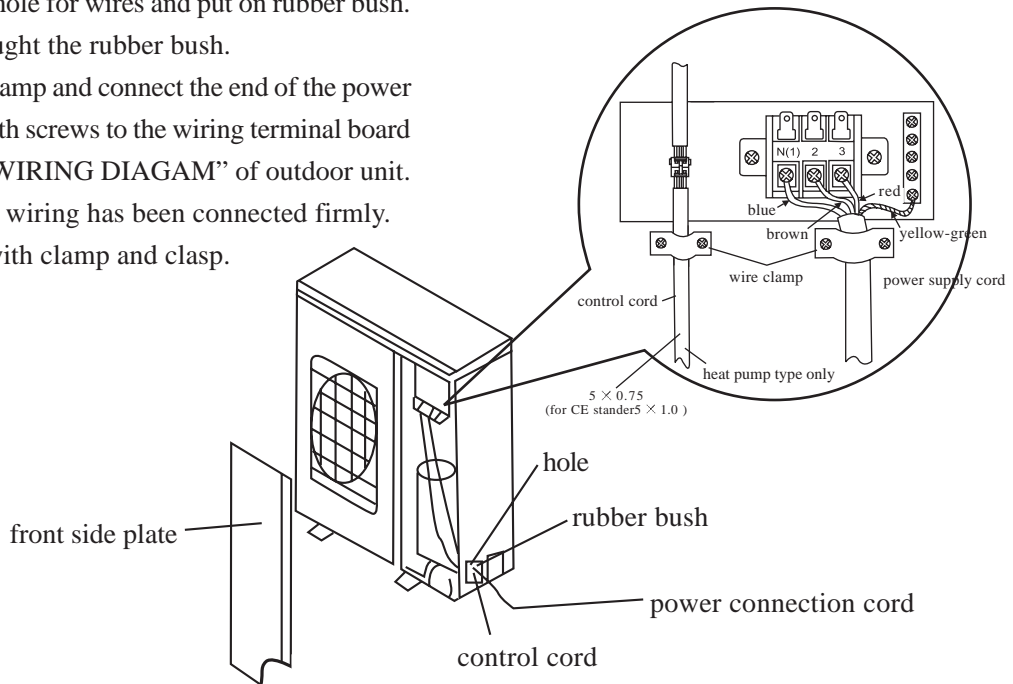


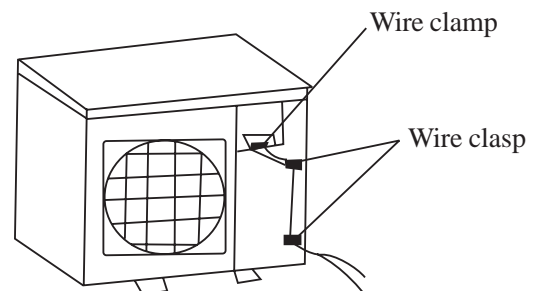
Fig.8

NOTE:

Wrong wiring connection will cause electrical malfunction.

Do not pull the wire when fixing it with wire clamp.

Do not let the wire too loose in the outdoor unit.



Install the outdoor unit

● Connecting the pipe

1. Remove the flare nuts from the cut-off valves of the outdoor unit.
2. Align the center of the piping flare with the relevant valve, and screw in the flare nut about 3~4 turns by hand.
3. Tighten the flare nut with spanner and torque wrench.
4. Remove the valve caps of the gas valve and liquid valve and the service port nut.

● Air purging and leakage test

For the air conditioners with R22 refrigerant, as the below step:

1. Loosen the valve stem of the liquid valve with a hex wrench.
2. Push the check valve core of the gas valve to discharge air and moisture remaining in the refrigerant system.
3. Stop pushing the valve core as soon as the refrigerant starts to be discharged, and reinstall the service port nut.
4. Open the liquid valve and gas valve entirely (shown in Fig.9).

5. Tighten the valve caps and test leakage at all joints of the piping (both indoor and outdoor) with liquid soap or leak detector.

6. If possible, discharge air and moisture remaining in the refrigerant system with a vacuum pump. (shown in Fig.10)

For the air conditioners with R407C refrigerant, as the below step:

1. Remove the nuts of one-way valve.
2. Evacuate from the one-way valve with a vacuum pump until the vacuum meter is 5 Torr, and keep up evacuating 1 hour or more.
3. Turn off the valve and tighten the nuts.
4. Fully open valves. (Fig.9)
5. Tighten the nuts. then check whether there is gas leaking out.

*Moisture inside pipeline must be less 200 PPM.

● Outdoor condensation drainage (Heat pump type only)

When the unit is heating or defrosting, the waste water formed in the outdoor unit can be drained out reliably through the drain hose.

Installation:

Install the outdoor drain elbow in the $\varnothing 25$ hole on the base plate as shown in Fig.11, and joint the drain hose to the elbow, so that the waste water formed in the outdoor unit can be drained out to a proper place.

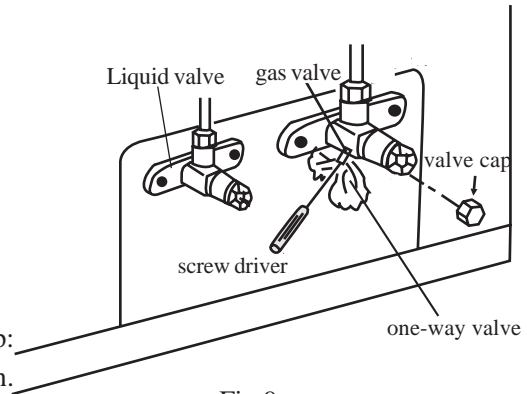


Fig.9

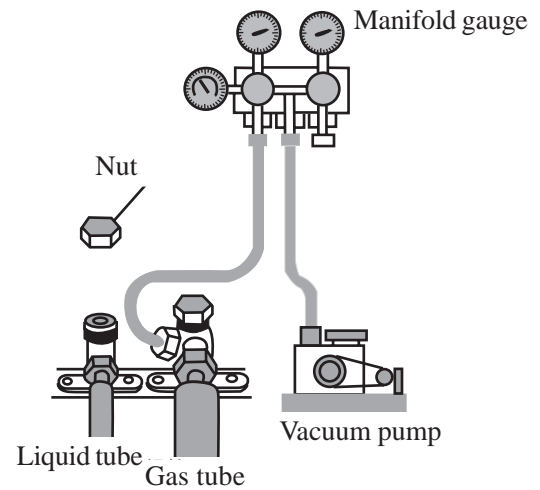


Fig.10

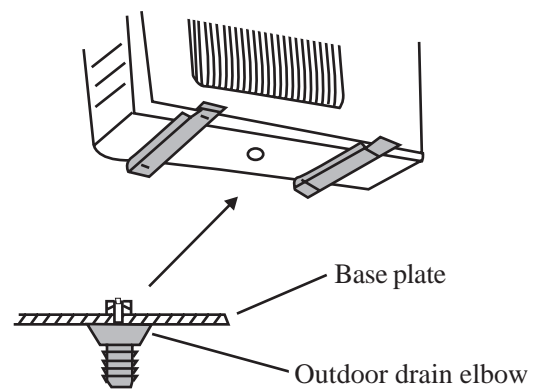


Fig.11

Check after installation

● Check after installation

Items to be checked	Possible mal-function	Situation
Has it been fixed firmly?	The unit may drop, shake or emit noise.	
Have you done the refrigerant leakage test?	It may cause insufficient refrigerating capacity.	
Is heat insulation sufficient?	It may cause condensation and dripping.	
Does the unit drain well?	It may cause condensation and dripping.	
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause electric mal-function or damage the part.	
Is the electrical wiring and piping connection installed correctly and securely?	It may cause electric mal-function or damage the part.	
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.	
Is the power cord specified?	It may cause electric mal-function or damage the part.	
Has the inlet and outlet been covered?	It may cause insufficient refrigerating capacity.	
Has the length of connection pipes and the refrigerant capacity been record?	The refrigerant capacity is not accurate.	



CONTENT

Operation and maintenance	The instructions before use		1	
	Name and function of each part		3	
	Remote Control operation procedure	Name and function - Remote control		4
		Name and function - Remote control (Remove the cover)		5
		COOL mode operation procedure		6
		HEAT mode operation procedure		7
		DRY mode operation procedure		8
		AUTO mode operation procedure		9
		TIMER mode operation procedure		10
		SLEEP mode operation procedure		11
		HOW to install batteries		12
		The best operating methods		13
	User notices		14	
	Care and Maintenance		15	
	Troubleshooting		17	
Technical specifications		19		
Installation	Accessories and Installation diagram		21	
	Installation location		23	
	Install the indoor unit		24	
	Install the outdoor unit		26	
	Routine check after installation		28	

● Thank you for choosing this Air conditioner, please keep this owner's manual carefully for consultation.