Room Air Conditioner

User Manual

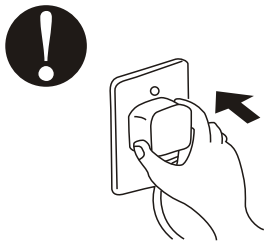
R410A DC INVENTER

CONTENTS

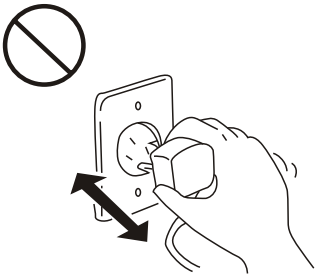
Attention during Usage

⚠ WARNING

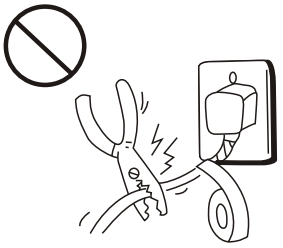
■ **Ensure the power plug is secure**
If the plug is not secure, it may cause a electric shock, over-heat-Ing or a fire.



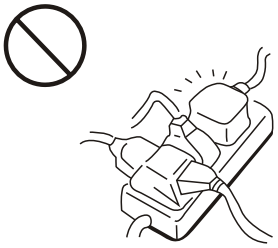
■ **Never pull out the power plug during operation.**
Otherwise, it may cause a electric shock or a fire due to over - heating.



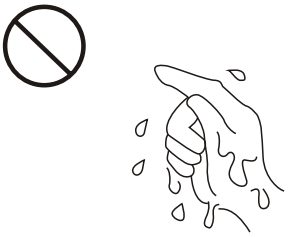
■ **Never use damaged electric wires or unspecified electric wires.**
otherwise it may cause a electric shock or a fire.



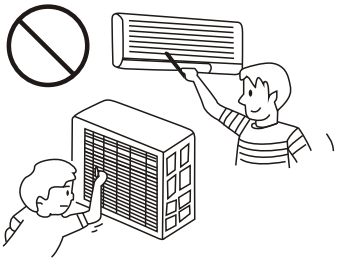
■ **Do not use the same socket with other electric appliances or use an extension cord.**
otherwise it may cause a electric shock or a fire due to over-heating.



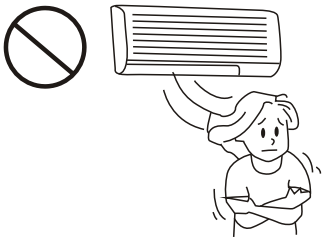
■ **Do not operate when the hands are wet.**
due to danger of a electric shock.



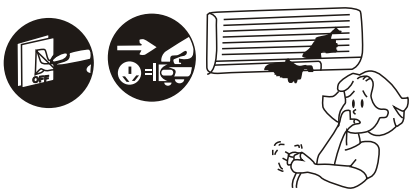
■ **Do not insert a rod or other objects into the inlet or outlet vents.**
Otherwise, it may cause a electric shock or a fire.



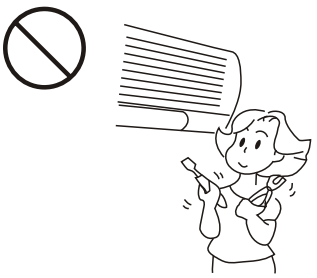
■ **Do not expose yourself to a single directional airflow for a long period** to avoid harming to your health.



■ **In case of abnormal condition (burning smell etc.),pull out the power plug to stop the air-conditioner from running, or disconnect the power supply by means of a electric current protector.**
If the abnormal condition persists, it may cause a electric shock or a fire due to over-heating. Please consult the dealer of service centre as soon as possible to arrange for a repair.

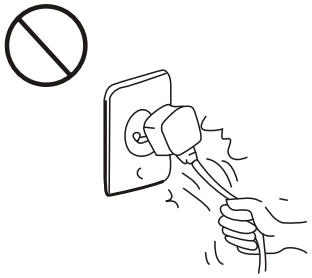


■ **Do not attempt to carry out a repair.**
Improper repairs may cause a electric shock or a fire. You should contact the dealer of service centre to arrange for a repair.

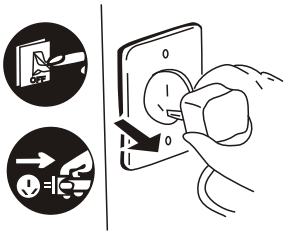


Attention during Usage

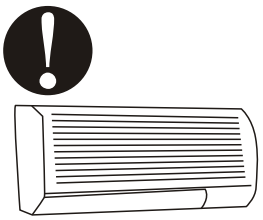
■ **Do not hold the electric wire to pull out the power plug.**
Otherwise may cause over-heating of the electric wire or a fire.



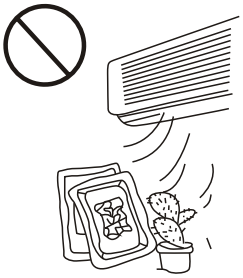
■ **If the air-conditioner is not in use for a long time, it is necessary to pull out the power plug.**
Excessive dust on the power plug may also cause over-heating or a fire.



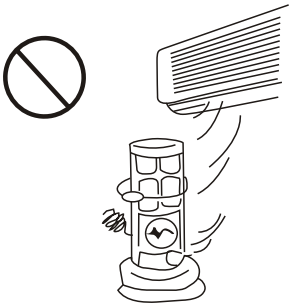
■ **Switch off the power supply while cleaning the air-conditioner.**
Please take care not to damage the internal fan which is rotating at a high speed.



■ **Do not use the air-conditioner for other purposes.**
Do not use it for keeping precision instruments, food, plants and artistic items. This may affect the quality of the food.

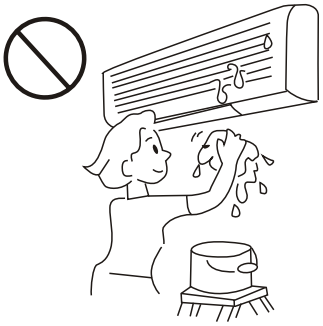


■ **Do not place a heater in front of the air-conditioner.**
If internal combustion of the heater is not complete, it may give out poisonous carbon monoxide.

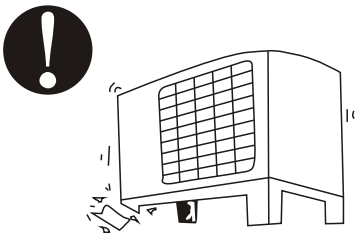


■ **The room should be kept well-ventilated.**
When a heater is used in the room, it should be noted that poor ventilation or lack of oxygen may cause head-ache.

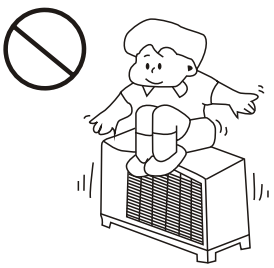
■ **Do not clean the air-conditioner with water.**
Due to danger of electric shocks.



■ **For long period of usage, please check that the installation platform is not damaged.**
Otherwise the outdoor unit may fall down or be damaged.
Please contact the dealer.

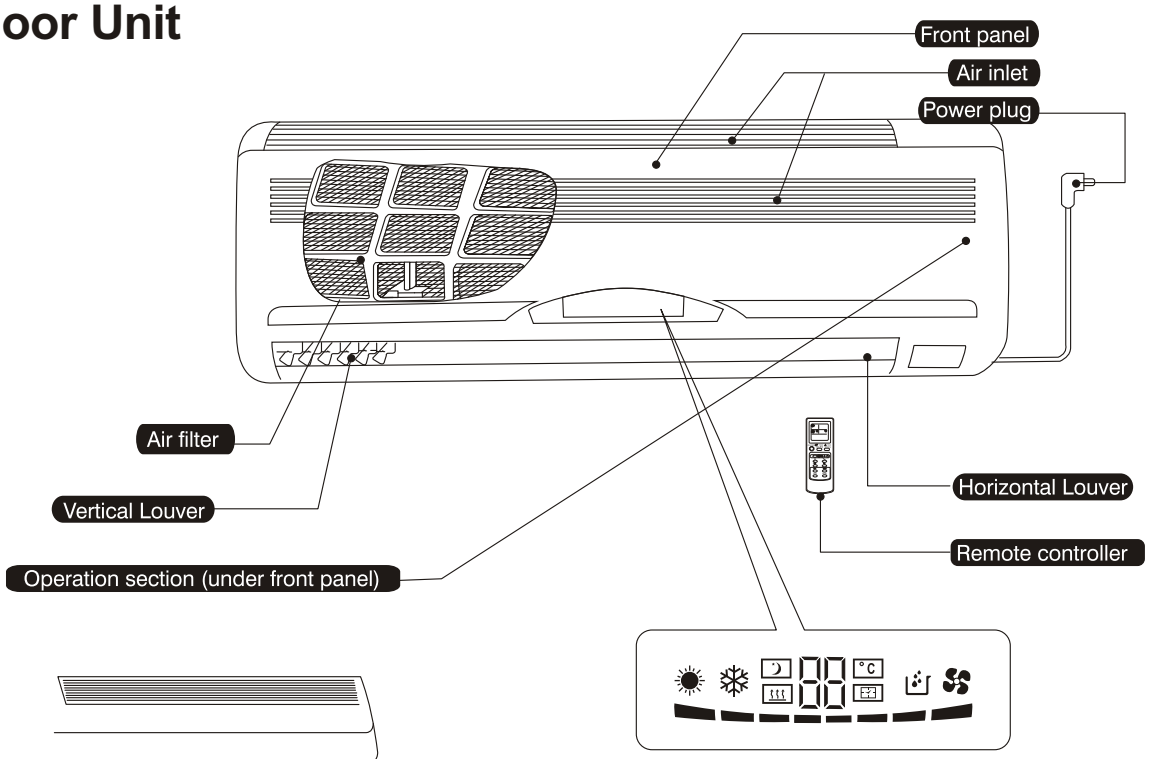


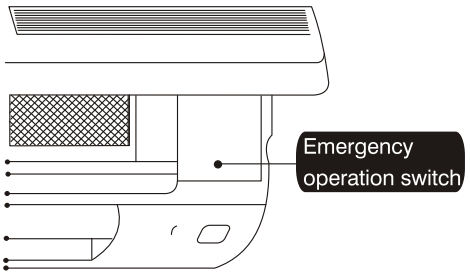
■ **Do not climb or place articles on the outdoor unit**
avoid being hurt on falling down.



Descriptions of Parts

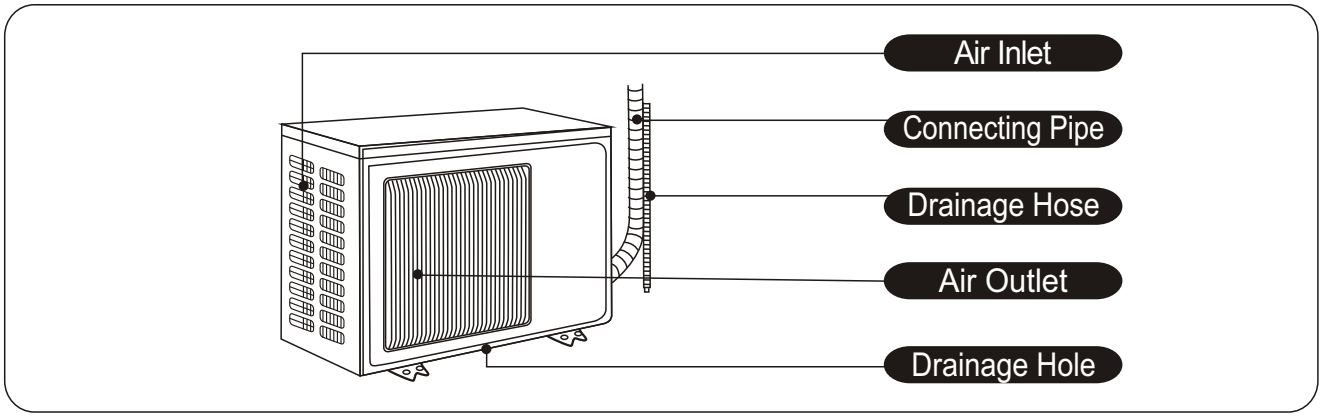
Indoor Unit





- Auto operation mode
- Cooling operation mode
- Heating operation mode
- Dehumidifying operation mode
- Swing
- CLOCK or TEMPERATURE display
- Displays when turns to CLOCK status
- Displays when turns to TEMPERATURE status
- SLEEP

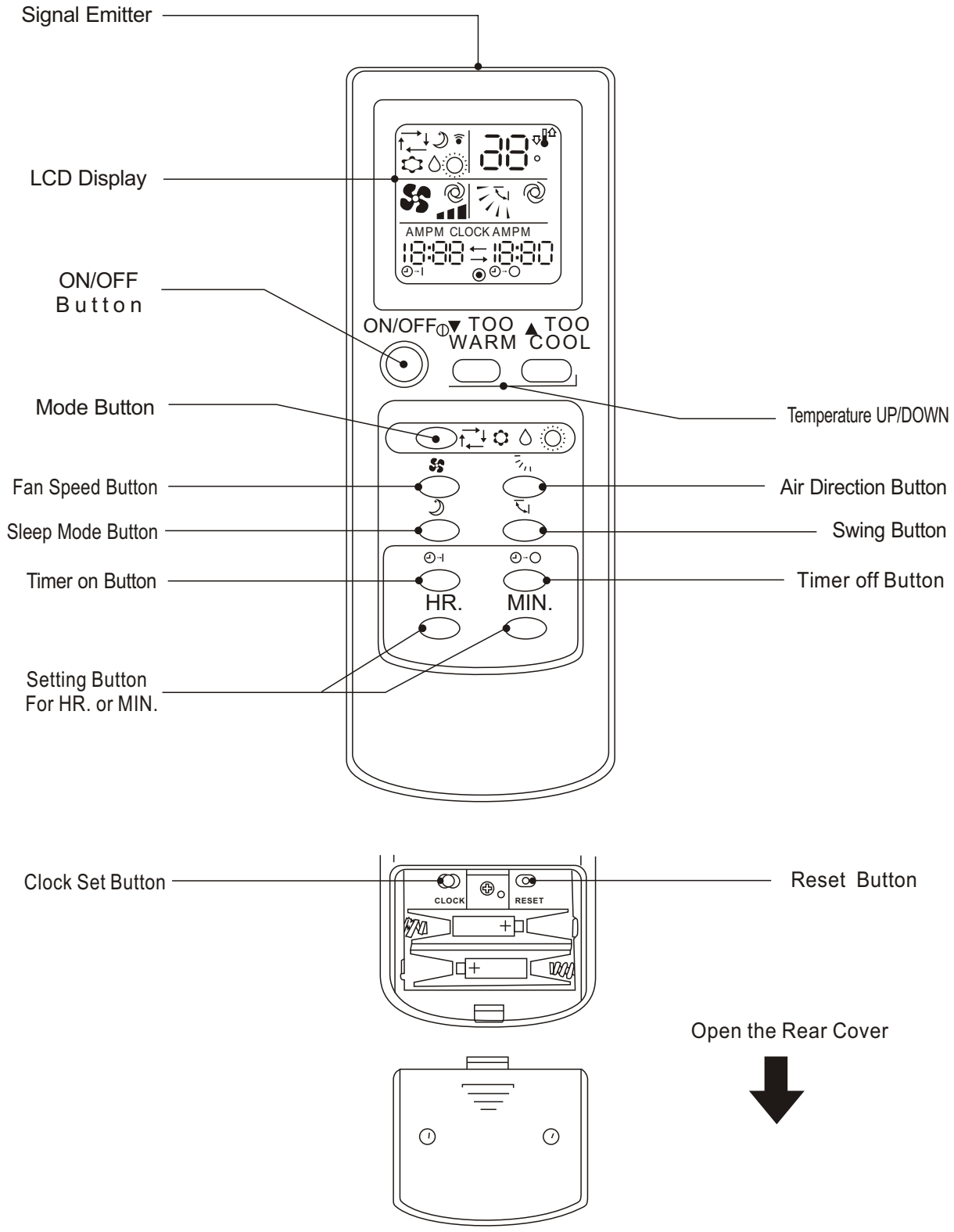
Outdoor Unit



The figures of indoor unit and outdoor are only simple presentation of the appearance of the application; it may not conform with actual one your purchased.

Descriptions of Parts

Remote Controller



Preparing for Run

Indoor Unit

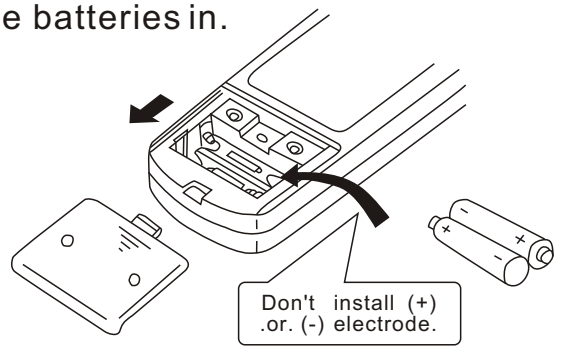
■ Put the power plug in.

⚠ Warning:

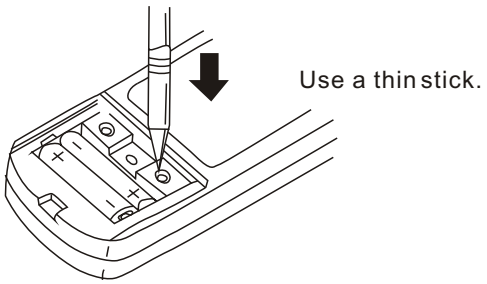
The plug should been clear and fixed well, otherwise it will be very dangerous.

Remote controller(setting clock)

1 Open the rear cover, put the batteries in.

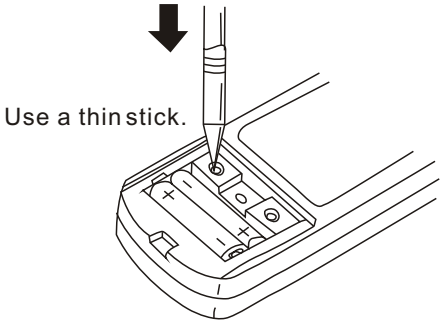


2 Press the RESET button.

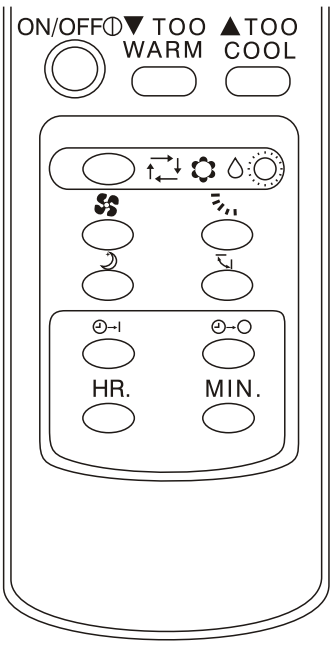


After change batteries, you must reset.
If no reset, it maybe operate wrong.

3 Press the CLOCK SET button.

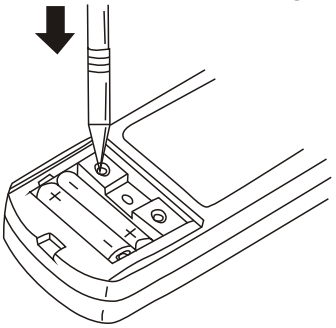


4 Press the HR. or the MIN.Button to set the time.



Press HR. once, the time change one hour.
Press MIN. once, the time change one minute.

5 Press the CLOCK SET again, the time confirm, then closing the rear cover.



Preparing for Run

How to use the remote controller.

- The distance from the remote controller to the indoor unit is 6 metres.
- Every time you press the button, the indoor unit will give out "Beep" tone, if not, press again.
- The remote controller must be used carefully, otherwise it would have no signal to send out.

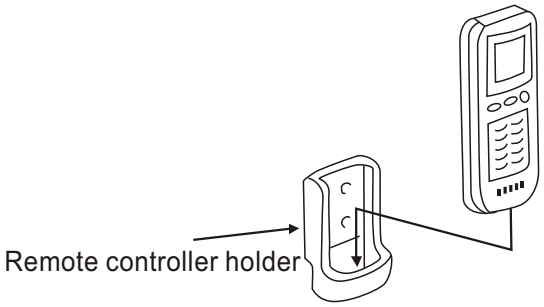
Fix the remote controller on the wall.

- Fix the remote controller at a place where the remote controller can control the machine.

Installing/Uninstalling the remote controller

Installation method Insert the remote controller into the remote controller holder.

Taking out the remote controller Put out the remote controller from the remote controller holder.



Battery

Change the dry batteries

Please change the two No.7 batteries when the machine often can not receive the remote signal or the remote controller display is not clear enough.

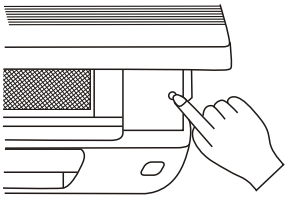
- Put into the batteries correctly according to it's positive and negative polarities.
- When changing the batteries, please replace 2 batteries at the same time.

When the remote controller can not be used (Emergency Operation)

When the remote controller is lost or cannot be used due to battery run-out, please use the "Emergency" button on the unit to run on the air-conditioner.

1 Press the "Emergency" button.

Press the "Emergency" button, the air-conditioner operate with the mode which is changed at a sequence"Cooling →Heating →Stop" or "cooling →stop" (for cooling-only type).



The running content:
But the temperature adjustment is not effect and the air-conditioner run continuously in the first 30 minutes.

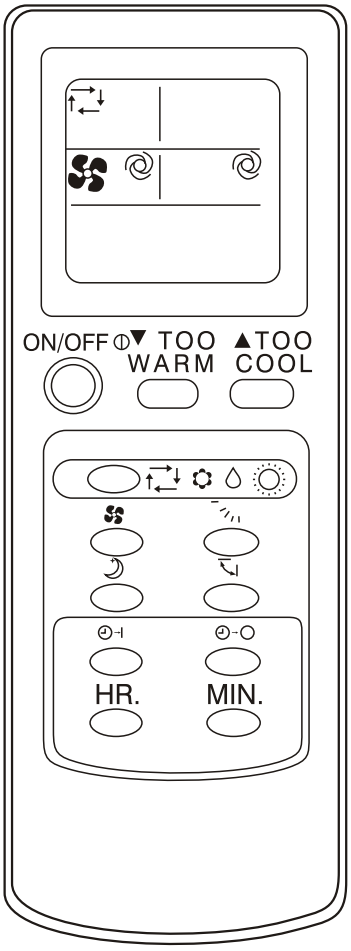
Running content	Cooling	Heating
Set temperature	24°C	24°C
Fan speed	(Mid)	(Mid)
Louver	Auto	Auto

2 Please press the "Emergency" button if you want to stop the air-conditioner.

Press the "Emergency" button, the air-conditioner operate with the mode which is changed at a sequence"Cooling →Heating →Stop" or "cooling →stop" (for cooling-only type).

"I FEEL..." Auto Running Mode

Press one button, "I FELL..." auto running mode is accessed, and you will become comfortable in the room.



• Start running

■ Please press the ON/OFF button.
When the LCD display , the machine can run automatically.

• Need to stop

■ Please press the ON/OFF button again.

---

15 minutes later, If you feel warm,

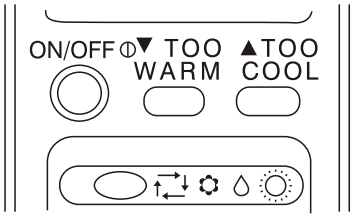
■ Need to lower the temperature, press the TOO WARM button once, it would lower 1°C.

If you feel cold,

■ Need to upper the temperature, press the TOO COOL button once, it would upper 1°C.

If the machine is not in auto mode, please press , turn the mode to auto.

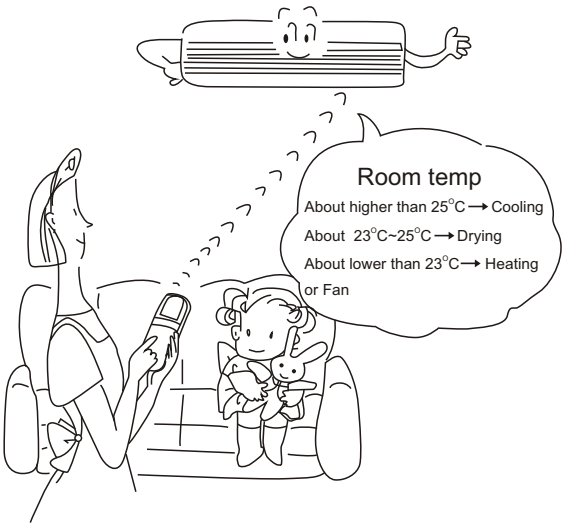
Press once, the machine will change the mode as the order: (auto)/ (cooling)/ (dehumidifying)/ (heating)(only for heating pump type).



"I FEEL..." Auto Running Mode

What is auto run?

While starting, the machine will set the mode according the room temperature automatically. When run again before stopping 2Hrs, the machine will work as the same mode before. If you have set the mode, the room temperature has no influence to it. If you want to change the mode, you can press the to select the mode.



How to run automatically

Room temp. When starting	Run mode	Setting temperature
Higher than 25°C	Cooling	About 24°C
Between 23°C~25°C	Dehumidifying	——
Lower than 23°C	Heating (for heating pump type) Fan (for cooling-only type)	About 26°C

Caution:

About the display

When it is in cooling (heating) mode, if the room temperature higher (lower) 4°C than the setting temperature, you may not change the setting temperature.

Caution:

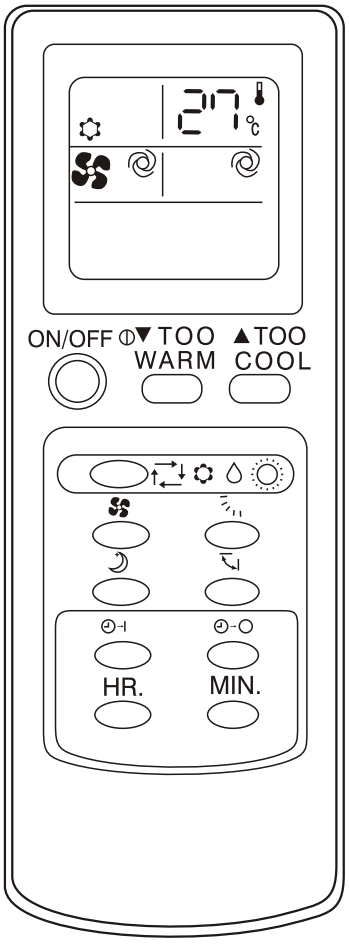
- If the environment temperature is too high, the machine works hard, the room temperature will not reach the setting temperature.
- When starting, the light for monitor may be changed.

Light for monitor

When running or timer on, it will be on.

Select the Mode (Cooling-Dehumidifying-Heating)

Select the mode, and you can adjust the temp. or air direction.



Select cooling-dehumidifying-heating

1 press ON/OFF button.

2 Please ⬭ ⇄ ✿ ♢ ☼ to select the running mode.

Press once, the mode change as the sequence:
⇄ (I feel) → ✿ (cooling) → ♢ (dehumidifying) → ☼ (heating)(only for heating pump type).

• Need to stop

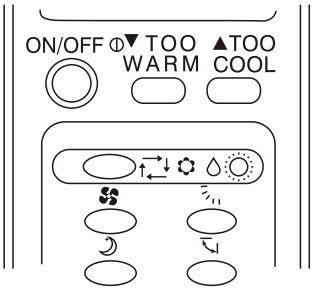
◆ Press the ON/OFF button again.

If you have set the mode, the next time you press ON/OFF button, the machine will run as before.

Need to change the temperature.

■ Want to lower the temperature, please press the TOO WARM button once, it will lower 1°C.

■ Want to upper the temperature, please press the TOO COOL button once, it will upper 1°C.



Heating operation (only for heating pump type)

■ When the machine works hard, the outdoor fan motor will stop, and the condenser will frost, it is not a trouble.

Dehumidifying operation

■ The temperature can be set automatically, not be changed. The machine works at the temperature lower the room temperature a little.

✻ The indoor display is as the same as the "I feel".(Please to see page 8.)

Caution:

If the environment temperature is too high, the machine works hard, the room temperature will not reach the setting temperature.

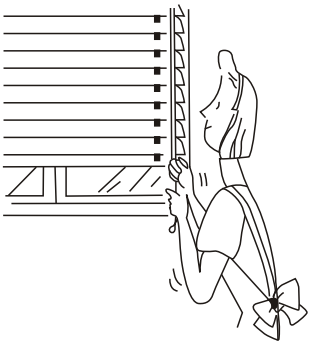
Select the Mode (Cooling-Dehumidifying-Heating)

Notice for using air-conditioner

Cooling

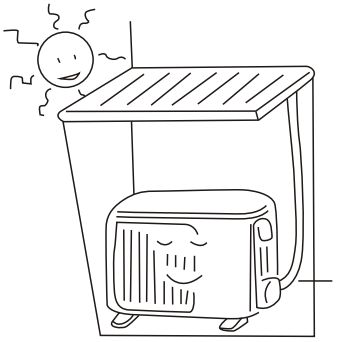
How to make the cooling run effectively.

1. Close the window, and pull down the curtain. This will decrease the sunlight, and increase the cooling effect.



2. Or you can paste the covering film on the window to decrease the sun heat.

3. Do not place the outdoor unit under the sunlight.



Heating pump

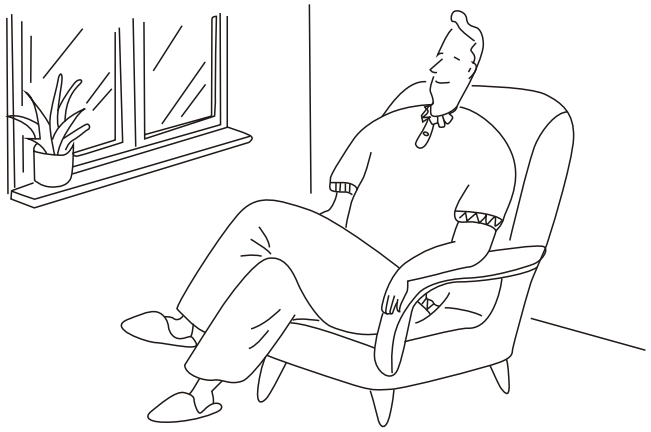
The temperature balance between indoor and outdoor is a sticking point to a healthy live.

Do not set the setting temperature too higher or too lower than the outdoor temperature when heating pump running. Usually you can set the temperature at 20~24°C.

Drying

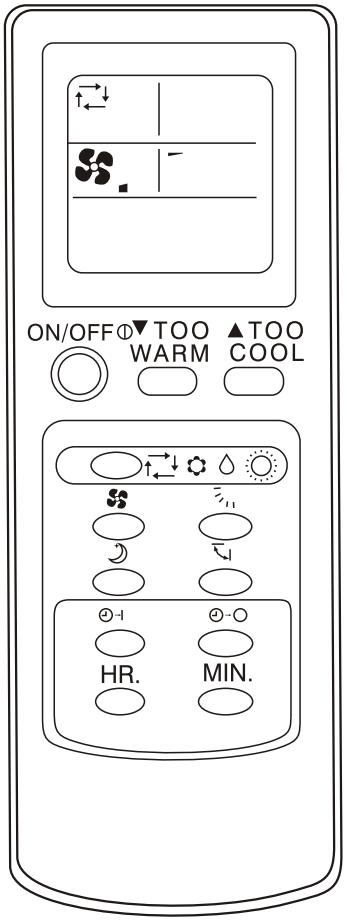
70% is the point for a people to feel comfortable .

Normally, the best comfortable humidity is 60%~75% on Summer, and 55%~70% on Winter.



Fan Speed and Air Direction Adjustment

Select the fan speed and air direction you like.



■ Please press button to change the fan speed.

When pressed once, the fan speed will be changed in the following sequence: →
(Low) → (Mid) → (High) → (Auto)

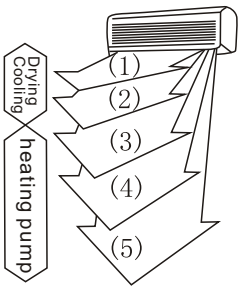
- Please set the fan speed to high speed if you want to cool the whole room.
- If you are annoyed at the running sound when you sleep, please set the sleep operation.(See Page 13)

■ Please press button to change the up-down air direction.

When pressed once, the up-down air direction will be changed as the following sequence: ⌐ (1) → ⌐ (2) → ⌐ (3) → ⌐ (4) → ⌐ (5) → (Auto)

The advised range of the up-down air direction.

Usually you can use (Auto)
When adjustment, ⌐ (1) ⌐ (2) place can be set at cooling or drying mode, ⌐ (3) to ⌐ (5) place can be set at heating pump mode.



Caution:

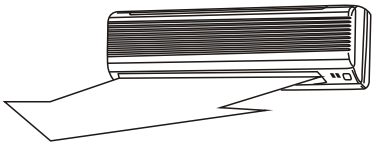
- The air direction will automatically become horizontal when the air-conditioner run at drying or cooling mode for a hour with ⌐ (4) or ⌐ (5) place.
- Please use remote controller to adjust the up-down air direction. Do not adjust the up-down louver with the hand to avoid the fault.
- The louver will be set to ⌐ (1) automatically if the blowout air temperature is too low or the machine is defrosting.

Fan Speed and Air Direction Adjustment

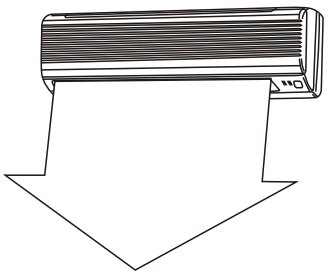
Auto air direction

■ When the air direction is set to auto direction with button, the louver Place will be select automatically according the running mode.

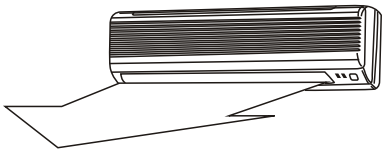
（1） Heating pump mode(only for heating pump type)
The louver direction is horizontal
when the blowing out air temperature is lower.



The louver direction is down
when the blowing out air temperature is higher.

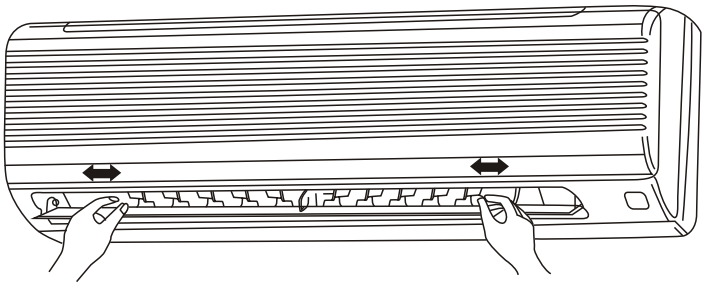


（2） Cooling and Dehumidifying mode.
The louver direction is horizontal.



■ Changing Left-right air direction

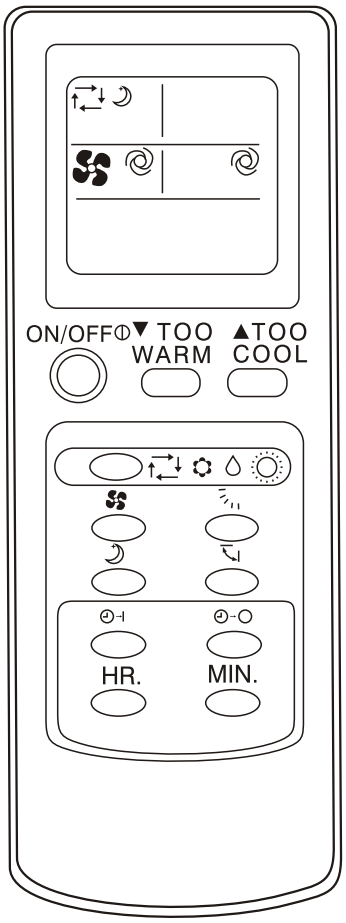
Please move the vertical louver with the hand.



Please adjust the louver before starting operation.
When running, your finger may be nipped because the horizontal louver is swinging.

Sleep Operation

Please set this function when you want a quiet environment to rest.



Please set the following operation while the air-conditioner is running.

■ Press button

Please set this function when you want a quiet environment to rest.

· To cancel sleep operation

■ Press button again.

■ The air flowing sound form the indoor unit becomes low immediately.

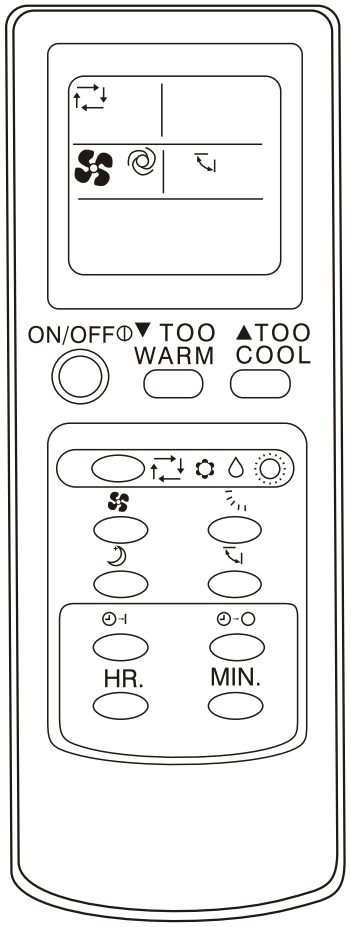
■ In sleep operation, if button is pressed, the sleep operation will be cancelled.

Caution:

■ Please set this operation when you sleep. Because the environment temperature is too high ,the cooling ability will become lower if you set this operation at daytime.

Swing Operation

Please set swing operation if you want the cool air blow to all over the room.



Please set the following operation while the air-conditioner is running.

■ Press ⟲ button.

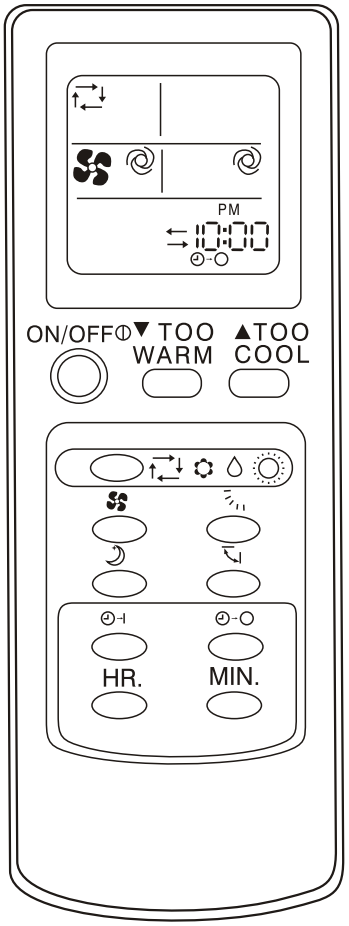
• Cancel the swing operation.

■ Please press ⟲ button.

■ The swing operation will be cancelled if the button is pressed. please set this swing operation if you want the cool air blow to all over the room.

Timer Operation (Timer-on/Timer-off)

You can set the timer-on or timer-off before you sleep or go home.



Setting the Timer-on

1 Press ⏲-I button when the unit is running to set the timer-on.

2 Press HR. · MIN. button to set the time.
Press once, the hour will change with 1 hour, the minute will change with 10 minutes.

· Cancelling the Timer-on

■ Press ⏲-I button to cancel the timer-on setting .

Setting the Timer-off

1 Press ⏲-O button when the unit is running to set the timer-off.

2 Press HR. · MIN. button to set the time.
Press once, the hour will change with 1 hour, the minute will change with 10 minutes.

· Cancelling the Timer-off

■ Press ⏲-O button to cancel the timer-off setting .

Program timer operation

■ Time-on and timer-off can be set together, the near setting will take effect first.
(The ⇆ sign indicates the timer-off and timer-on operation order.)

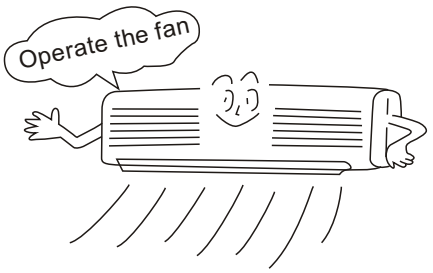
■ The timer will not be accuracy if you do not adjust the clock on the remote controller.

Air-conditioner's Maintenance and Servicing

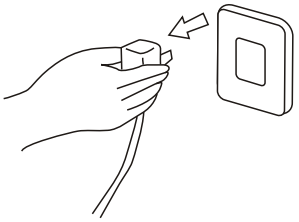
It's idle for a long time

1 Operate the fan for 3 and 4 hours, let the conditioner dryness wholly.

When operate the fan, please set auto mode and select the highest setting temperature.



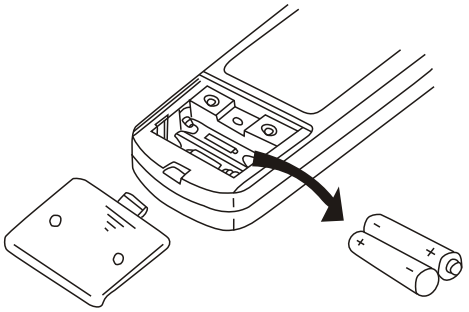
2 Close up the conditioner, and pull out the power plug.



Caution:

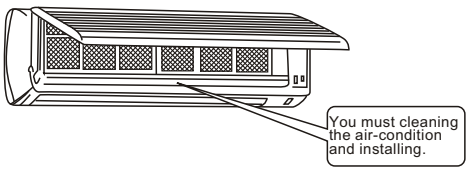
If the air-conditioner is not in use for a long time, it is necessary to pull out the power plug, because excessive dust on the power plug may cause a fire.

3 Pull out the batteries from the remote controller.

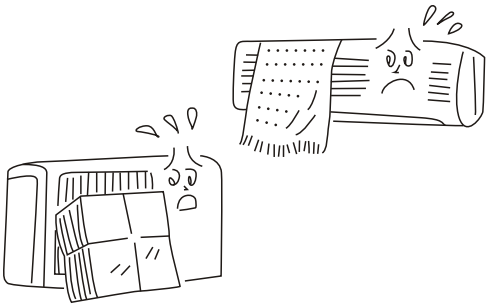


It start again after stopping last time

1 Clean the air filters and set them in their original position.(The method of cleaning, please to see page 18.)



2 You must affirm the air inlet and outlet about indoor and outdoor units they shouldn't be blocked.

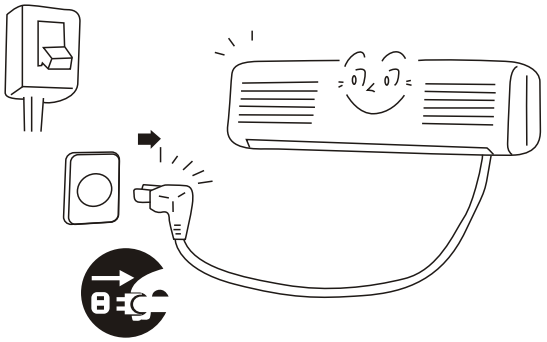


3 You must sure whether the earth wire is tight connection or not.

Air-conditioner's Maintenance and Servicing

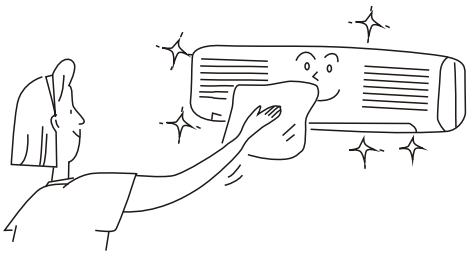
Before clean the conditioner

- Turn off the breaker and pull out the power plug.



Cleaning the indoor unit

- Please wipe the conditioner with dry soft cloth.



Caution:

You must stop running, turn off the breaker and pull out the power plug before cleaning the air conditioner, because high speed running fan maybe harm you during operation.

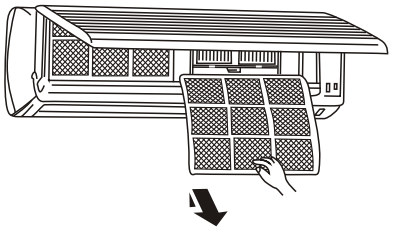
You mustn't use gasolene, benzene, dilute crocus, scour, pesticide ,etc. to clean the conditioner

Air-conditioner's Maintenance and Servicing

Please open the front panel to the position according to the drawing when cleaning the air conditioner, and don't open to the horizontal position, otherwise the front panel can fall off.

Cleaning the air filters (it is recommended to clean them every two weeks)

1 Pull out the air filters.

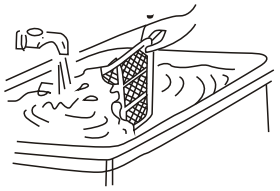


Caution

When pull out the air filters, please take care not to bump the metal of the indoor unit, otherwise you maybe scraped.

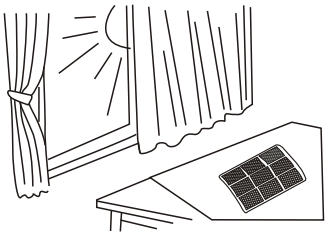
2 You can clean the air filters with vacuum cleaner or with water.

- If the air filters are too dirty, you can wash them with neutral detergent.
- You can't wash them with hot water (about over 50°C) to prevent changing shape.

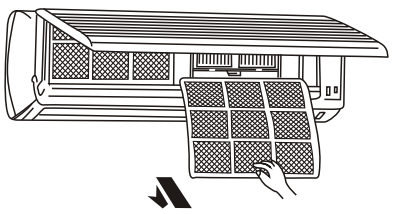


3 After wash the air filter, you can use them after they have been dried in the shade.

- Don's dry the air filters with the point-blank sunlight and fire.



4 Install the air filters.

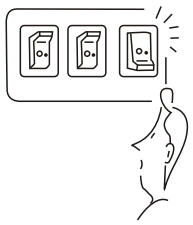


Trouble Affirm and Analyse

Please affirm the conditioner again before require to maintain

Can not start? Go on the next examine!

1 Hasn't a breaker turned OFF or a fuse blown?

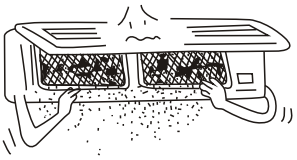


2 Is the timer setting set?

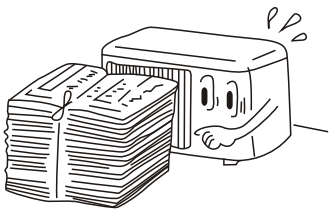
Can't achieve sufficient refrigerant effect? Go on the next examine!

1 Is the temperature setting appropriate?

2 Are the air filters dirty?



3 Is there anything to block the air inlet or the air outlet of the outdoor unit ?



4 Is the sleep mode set in daytime?

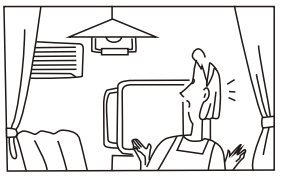
The remote-controler can't display. Go on the next examine!

1 Are the dry batteries run out.

2 Are the dry battery's anode and cathode conversed?

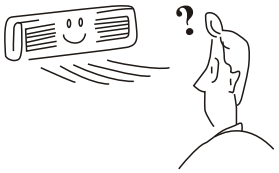
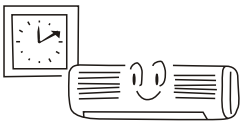
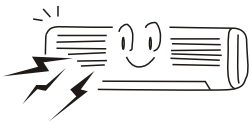
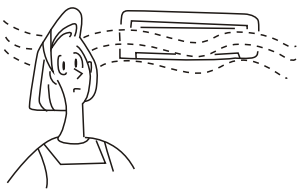
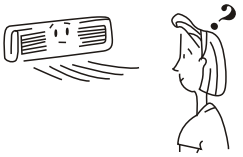
When power cut happens, go on the next examine.

When the condition is in power cut. Please repress the ON/OFF button after in power.



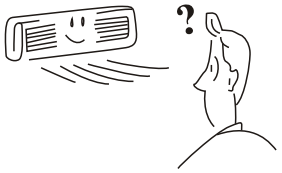
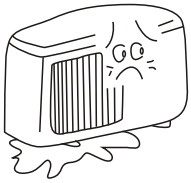
Trouble Affirm and Analyse

Trouble analyse

Whether there are troubles?	Explanation (these cases are not troubles)
Run it again, but can't work about three minutes. 	■ Please take easy to wait. This means the air conditioner is protected by microcomputer control.
Hot air does not flow out soon after the start of heating operation. 	■ Please take easy to wait. The air conditioner is warming up.
The heating operation stops about 10 minutes. 	■ The system is taking away the frost on the outdoor unit (defrosting). You should wait for lest than 10 minutes. (The frost occur in low temp and high humidify.)
A snap sound is heard. 	■ This is a sound produced when the front panel casing shrinks or expands due to temperature changes.
Mists come out of the indoor unit. 	■ This happens when smells of the room, carpet, furniture, clothes are absorbed into the unit and discharged with the air flow.
In dehumidify course, the fan cease. 	■ The temperature will rise when water attaching to thermal exchanger of indoor unit. In order to avoid that happen, fan of indoor unit can stop automatically when room is cooled sufficiently.

Trouble Affirm and Analyse

Trouble analyse

Whether there are troubles?	Explanation (these cases are not troubles)
A flowing sound is heard. 	■ This is the sound of refrigerant gas flowing in the air conditioner. ■ This is the sound of infusing drip on the thermal exchanger. ■ This is the sound of melting frost on the thermal exchanger
Blowing direction can be changed automatically during operation. 	■ After a hour running in dehumidify or cool mode change the vertical louver to horizontal position automatically to prevent dropping water. ■ In heating operation, there be changed to horizontal position automatically if the blowing temperature is lower or in defrosting operation.
A "Plop-Plop" sound is heard from the indoor unit. 	■ This is a sound produced when the fan or compressor is transforming(ON/OFF).
A "Pass" sound is heard from the indoor unit 	■ This is a sound emitted when the refrigerant flow stops or changes in the unit.
The outdoor unit emits water. 	■ In cool mode, moisture in the air condenses into water on the surface of the pipe or pipe joint. ■ The frost melts into water or steam when in heat or defrost operation. ■ Water drop from attaching to the thermal exchanger in heat operation.

Installation Instructions

Installation notice:

- Users must have the same qualified voltage as the rating label. The tolerance amount is +/-10% of the nominal voltage.
- Independent wire circuitry must be set for a/c, more than 10A self-interruptor or delay action fuse is required.
- The air conditioner must be connected to the earth line; otherwise it may cause fire or electric shock.
- The minimum distance between the a/c and tinder is 100mm.
- The wire set must follow the stipulation of the country.
- The specification of delay action fuse is: T3. 15A/250V.
- If the power cord and power cable is damaged, they must be replaced by the professional.

Location of indoor unit

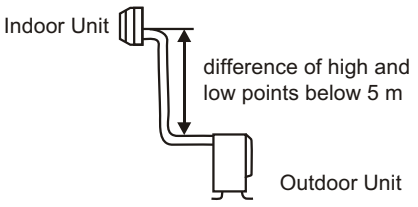
- Cooled or heated air should be blown to every part of the room.
- Maximum height between indoor/outdoor units is 5m.
- Mount on firm wall to avoid any vibration. Avoid direct sunshine.
- Easy to drain condensate water.
- Do not make any interference caused by the fluorescent lamp to the remote controller's signal.
- Minimum distance between air conditioner and home appliance (TV/ Radio etc.) is 1m.

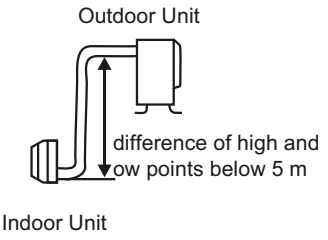
Location of outdoor unit

- A place solid enough to bear the weight of the unit and not cause any shake.
- Good ventilation, less dust, far from direct rain and sunshine.
- A place where the air discharged out of the outdoor unit or the operation noise will not annoy your neighbours.
- No blockage near the outdoor unit.
- Avoid places close to inflammable gas leakage.

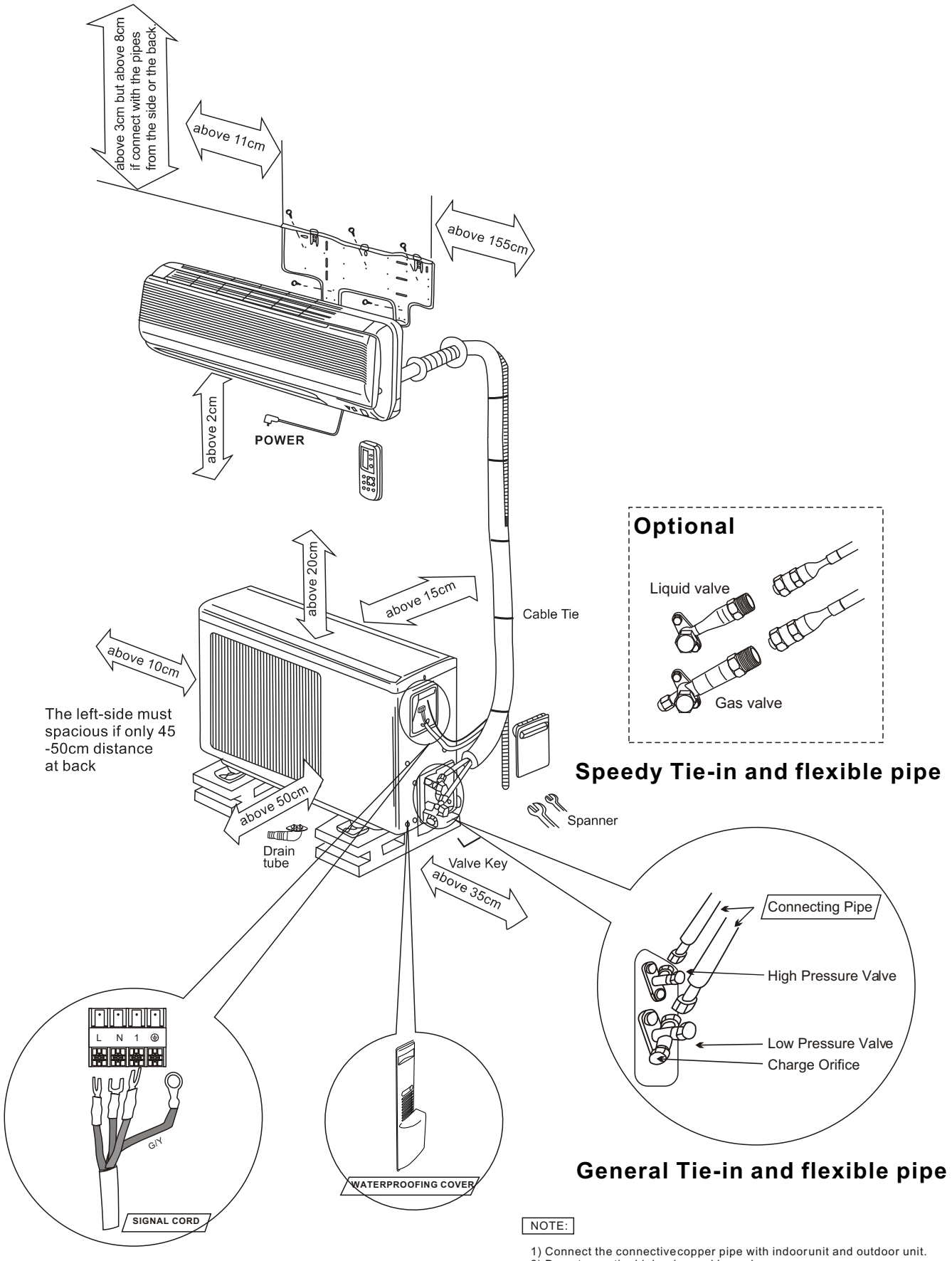
Choice of Pipes

Model	Size of connecting pipe		Standard length (m)
	Gas	Liquid	
8000Btu/h, 9000Btu/h	9.52mm	6.35mm	3
12000Btu/h	12.7mm	6.35mm	
18000Btu/h	12.7mm	6.35mm	
24000Btu/h	15.88mm	9.52mm	
42000Btu/h	19.05mm	12.7mm	





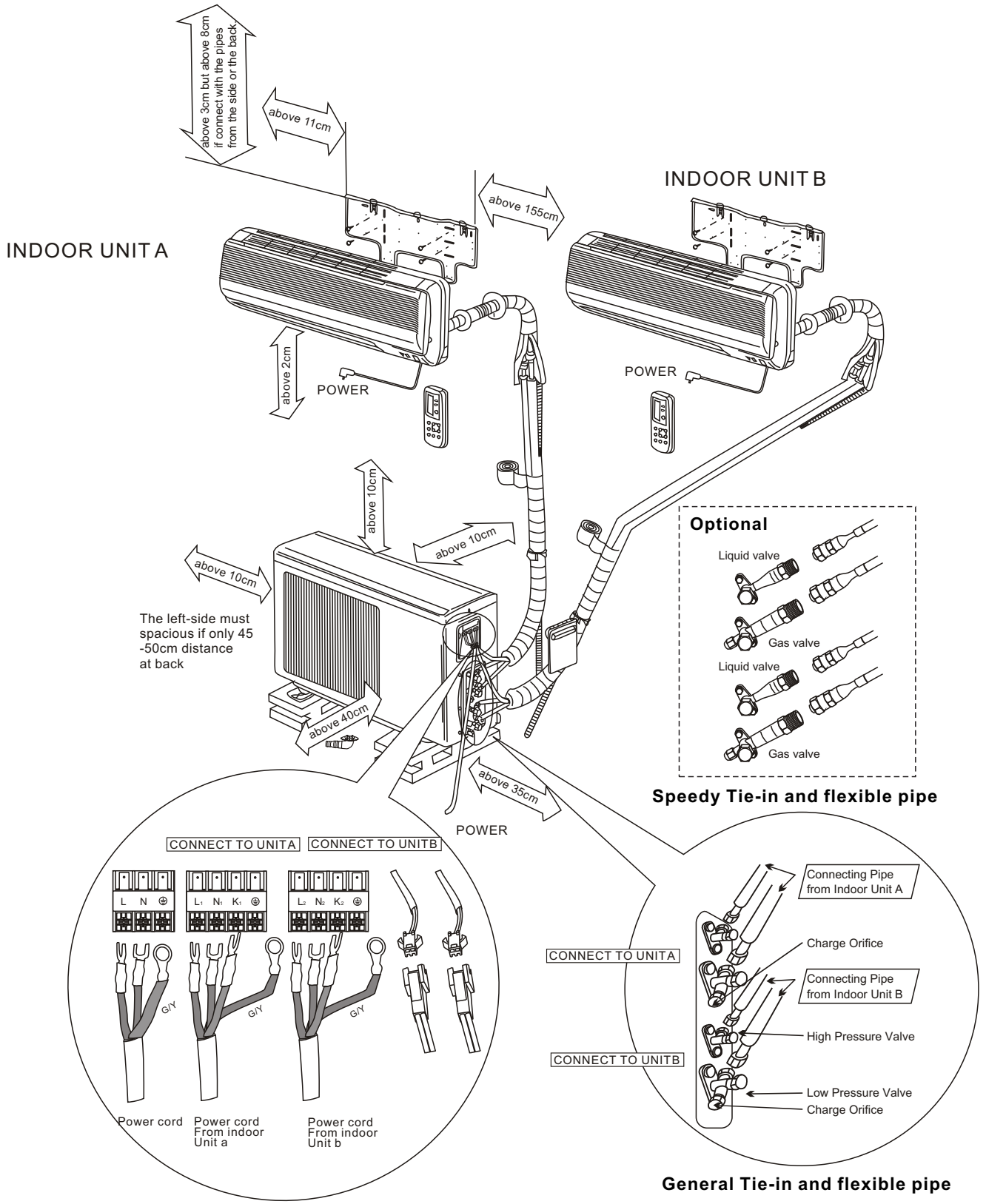
Installation Master Plan



NOTE:

1) Connect the connective copper pipe with indoor unit and outdoor unit.
2) Do not open the high valve and low valve.
3) Connect the vacuum pump to charge orifice of low valve.
4) Vacuum the air from connective copper pipe and indoor unit.
5) Open high valve.
6) Open low valve.

Installation Master Plan (for Multi Split)



NOTE:

Indoor Unit A, Indoor Unit B and Outdoor Unit must connect to power supply separately.

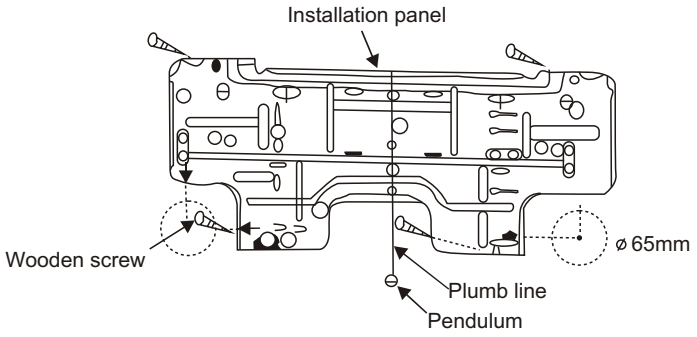
NOTE:

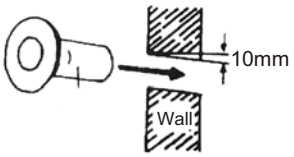
1) Be sure that connecting pipe of indoor unit A connects to A valve, be sure that connecting pipe of indoor unit B connects to B valve.
2) Vacuum the air from indoor unit A and indoor unit B separately as following steps:
   (1) Do not open the high valve and low valve.
   (2) Connect the vacuum pump to charge orifice of low valve.
   (3) Vacuum the air from connective copper pipe and indoor unit.
   (4) Open high valve.
   (5) Open low valve.

Installation Indoor Unit

(1) Installation of Wall-Hanging Panel

- Select a suitable wall-hanging location
- Adjust the wall-hanging panel to horizontal position by means of a level or a plumb-line.
- Select at least 6 evenly-spaced drilling positions to fix the wall-hanging panel.
- Position the drill-holes by following the routing of the joining hose. Position of the rear outlet pipe is as indicated in the diagram below. The outlet pipe-holes on the left and right sides should be lower than the internal unit to ensure smooth drainage.

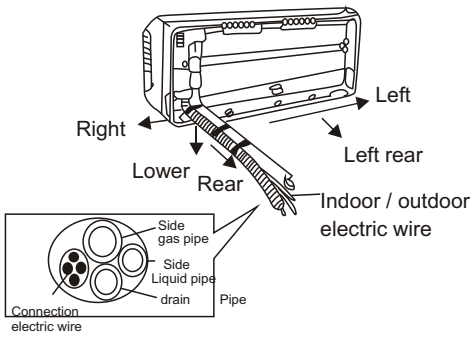


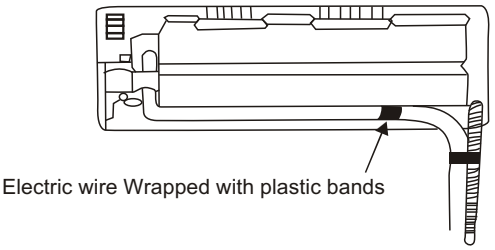


(2) Piping connection

1. Rear connection pipe (similarly for right and lower connection pipes)
   - Pull out the joining hose from the chassis.
   - Connect the connecting wire as per circuit diagram, and bundle it with the copper coil and drainage pipe together for insertion into the wall hole.
   - Hang the internal unit on the wall.

2. Left Outlet Pipe (similarly for left rear pipe)
   - Change the drainage pipe to the left side. Other steps as Item 1.

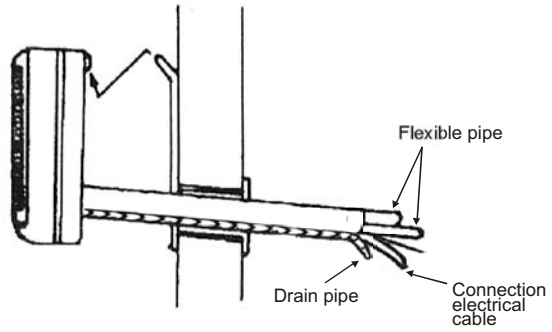




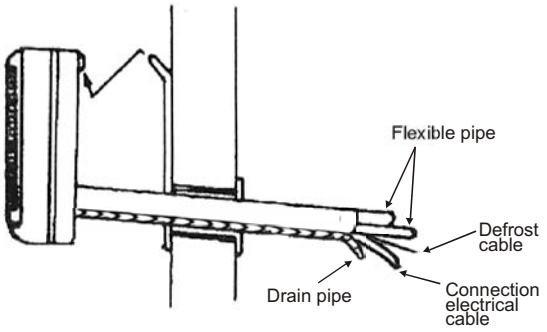
Installation Indoor Unit

(3) Indoor Unit Installation

- Run the bound pipe and cable through the wall hole and mount the indoor unit onto the installation panel securely.
- Arrange the pipes and cable well.



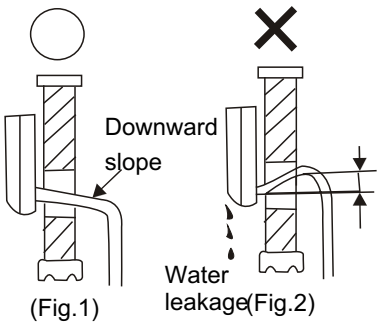
Cooling Only

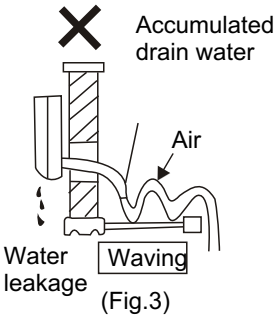


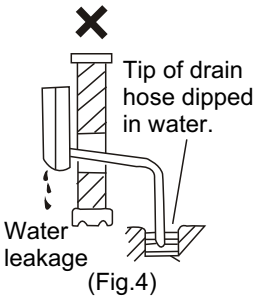
Cooling And Heating

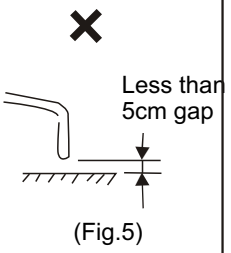
(4) Drain Piping

- The drain pipe should point downward for easy drain flow.(Fig.1)
  Do not make drain piping as shown in Fig.2 to 5.



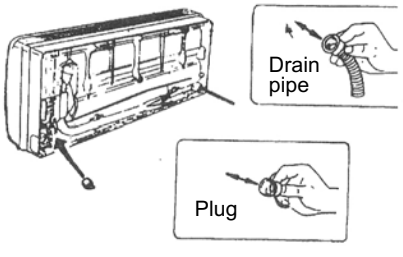




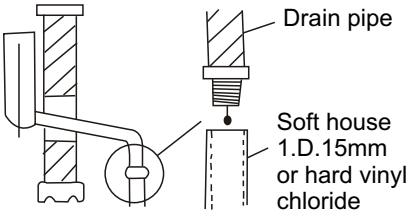


- If the piping runs to the left as shown in the right figure, seal the drain port on the right with the plug and connect the drain pipe on the left.

  Check that:
  1) The top and bottom hooks are hooked firmly.
  2) The main unit is accurately positioned horizontally and vertically. If the unit is not installed properly, water will drip onto the floor.
  3) The drain pipe is not bent upwards as shown in the figure.



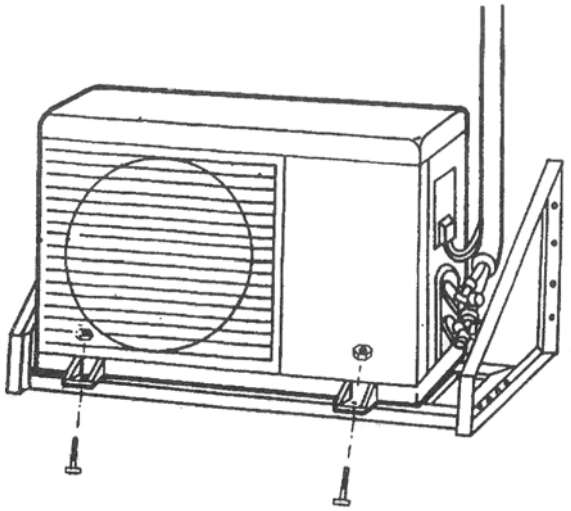
- Connect the drain pipe with extension drain hose
  If the extension drain pipe has to pass through a room, be sure to wrap with commercially soil insulation.



Installation Outdoor Unit

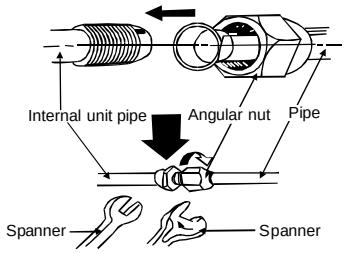
Select the Installation Place of Outdoor Unit

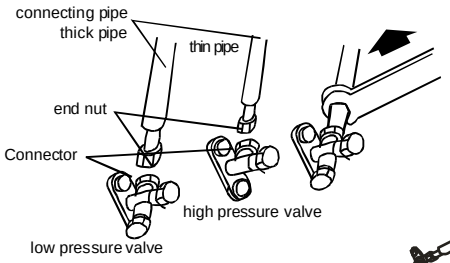
- The outdoor unit should be installed on a solid wall and fastened securely.
- The following procedure must be observed before connecting the pipes or electric cables.
  1) decide which is the best position on the wall and leave enough space to be able to carry out maintenance easily.
  2) fasten the outdoor unit support to the wall using screw anchors which are particularly suited to that type of wall.
  3) use a larger quantity of screw anchors than normally required for the weight they have to bear: during operation the machine vibrates and has to remain fastened in the same position for years without the screws becoming loose.
  4) .mount the outdoor unit on the support using the four bolts supplied.



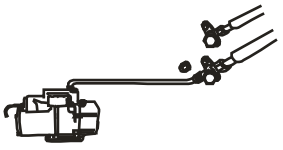
Piping Connecton

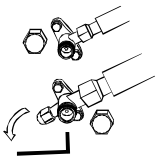
1. Open the cover of the outdoor unit.
2. Connect the pipe to the indoor unit and outdoor unit.
   - Wipe the quick connectors with clean cloth to prohibit dust and impurity entering the pipes.
   - Align the centre of the pipe and fully screw in the angular nuts with Finger.





3. Use Vacuum pump to remove the air from indoor unit and connection pipe.
4. Connect the electric cable as per circuit diagram, and bundle it with the connecting pipe.
5. Take off the nuts in the mouths of high valve and low valve, turn the valves core anticlockwise with hexagon panner till the valves are opened completely. Recover and tighten the nuts.
6. Check leakage: check if there is leakage at each connection of the pipes or nuts. If yes, remedial neasure must be taken, leakage is not permitted in any case.





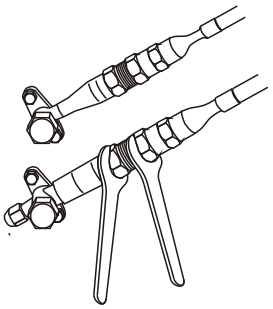
Attention :

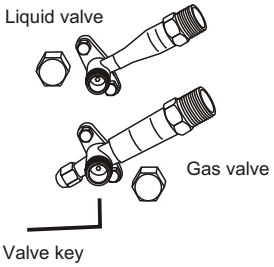
- When connectiong the pipe, a suitable pitching spanner must be used. If other spanner is used, it may damage the joint due to inappropriate force.
- On connecting the pipe, one should ensure that the insulating material of the pipe be closely fitted to the nuts at the joint.
- On connecting to the external unit, the pipe should be wrapped with sponge padding to prevent rain water from flowing in.
- When bending the pipe, the radius cannot be too small and be about 150~160 mm.

Installation Outdoor Unit

Piping Connecton (for Speedy Tie-in type)

- Take off the waterproofing cover of the outdoor unit valve.
- Connect the speedy tie-in to the outdoor unit valve. Tighten them with 2 spanners.
- Remove the cap of two valves with the spanner.
- Open the liquid valve and gas valve with valve key.
- Tighten the cap of two valves.
- Gas leakage inspection:
  After connecting the piping, checking the joints for gas leakage with gas leakage carefully. Soap water or electrical detector can be used for gas leakages.





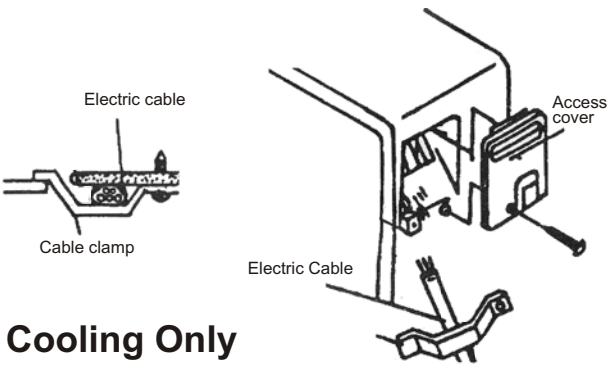
Attention :

- When connectiong the pipe, a suitable pitching spanner must be used. If other spanner is used, it may damage the joint due to inappropriate force.
- On connecting the pipe, one should ensure that the insulating material of the pipe be closely fitted to the nuts at the joint.
- On connecting to the external unit, the pipe should be wrapped with sponge padding to prevent rain water from flowing in.
- When bending the pipe, the radius cannot be too small and be about 150~160 mm.

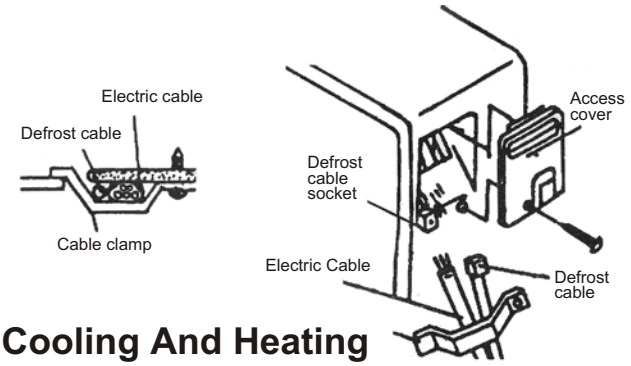
Connection Electric Cable

Outdoor Unit Wiring

- Remove the electric box access cover.
- Insert the defrost cable into its socket.
- Connect the electric cable to the terminal by the number.
- Secure the cables with cable clamp.
- Fix back the access cover.



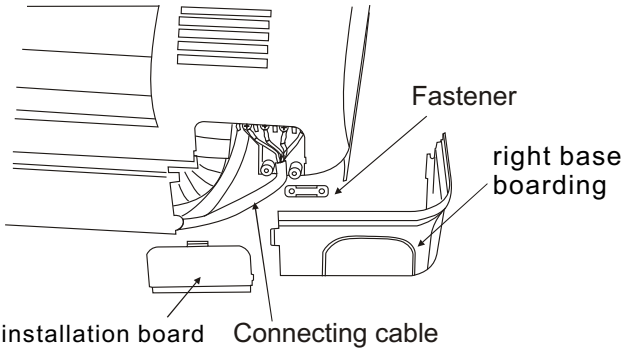
Cooling Only



Cooling And Heating

Indoor unit wiring

- Discharge right base boarding and installation board.
- Remove the screw from fastener, pull the fastener away from the unit and set aside.
- Connect the cable.
- Replace the fastener and electrical box cover.

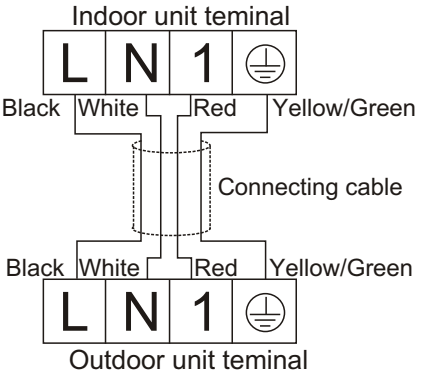


Warning!

When doing the connection of the wires from indoor to outdoor unit, the wires must be connected to the terminals with the same symbols on both ends; otherwise the air conditioner cannot work normally.

Indoor unit and Outdoor unit must be connected firmly with approved power cable and ensure the terminal won't be affected by outside force. Otherwise, it may cause fire.

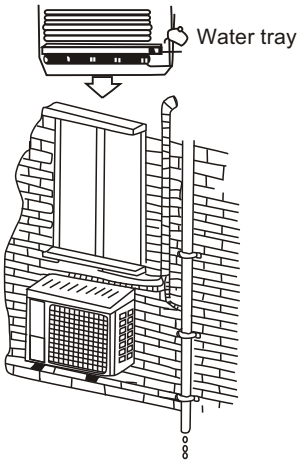
Ensure the cover of the indoor electrical box is firmly fixed; if not, it may cause fire or electric shock.

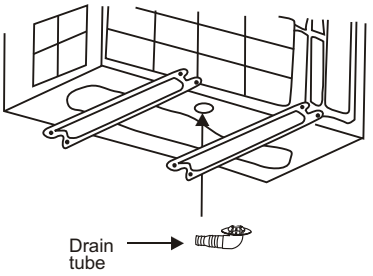


Attention: If the color of the power cables does not match with the above figure, please be according to the practicality when doing the connection, but please make sure that wires of one color must be connected to the terminals with the same symbol.

Finishing

- Bind the flexible pipe, electric cable, drain pipe with 5 pieces cable tie.
  Make sure to put drain pipe at the bottom.
- Drain tube:
  Fix the drain tube on the bottom of the outdoor unit to allow drainage of condensation water.
- Drainage Test:
  Pour a cup of water to the water tray along the evaporator to check if the water drains out from the drainage hose.





Start:

Before start the air conditioner, Please check the following plints:

- Install the air conditioner according to the instruction of the manual.
- The circutiry is connected correctly.
- Wires are fixed firmly in terminals.
- Stop valve is opened fully.
- Ensure the pipe tis-ins tighter firmly.

Start the air condetioner and check its operation under heating and cooling mode.

Error codes and paraphrase :

This table explains the error codes caused by a defective regulating component or by a security operation. You have to call your retailer.

Screen and state of the heat water pump	Component
E2	Indoor temperature sensor failure
E3	Indoor tube coil temperature sensor failure
E4	Defrost temperature sensor failure
E5	cooling and heating bad failure
E6	frost prevent (coolng mode) / overheating protection (heating mode)
E7	feedback and PG electrical failure
E8	Signal transportation failure between indoor unit and outdoor unit
E9	Failure of compressor start
EA	Current overloaded of outdoor unit
EB	Oultlet compressor temperature sensor failure
EC	Ambient air temperature sensor failure
ED	Outdoor unit mould overheated/overloaded
EE	Oultlet compressor overheated
EF	Coil of outdoor heat exchanger overheated
F1	The two indoor units running in different mode synchronously

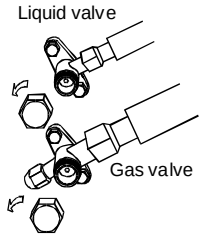
The instruction of 'F1' code

When the two indoor units send the mode instruction to outdoor unit, and the mode they request are different (one is heating, the other is cooling),the outdoor unit will execute the indication which from the indoor unit send the indication first, at the moment, the other indoor unit will displays F1 code which shows the failure of start the mode.(That is to say, it is impossible for two indoor units to working in different mode at the same time.)

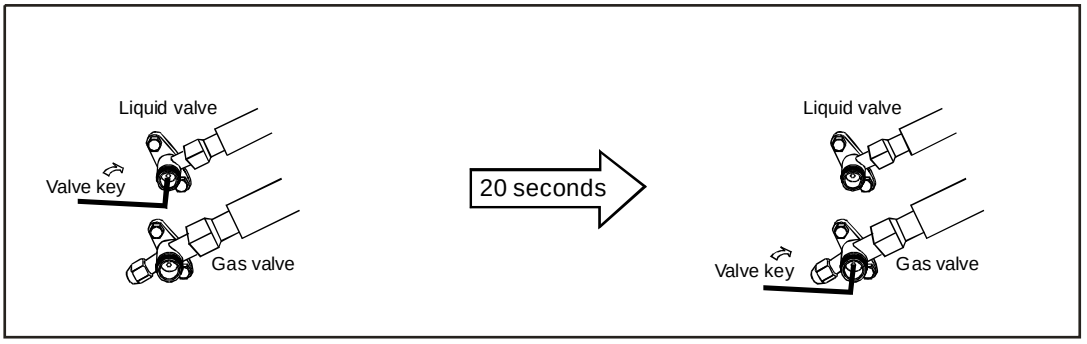
The step and diagram of Collect refrigerant

- **If the air conditioner needs to be disconnected and moved to another place, please recycle the gas back into the compressor according to the following steps before doing the disconnecting:**

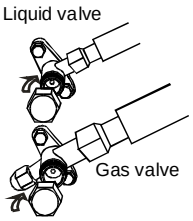
1. Start the a/c, operate cooling state.
2. Remove the cap of two valves with the spanner.



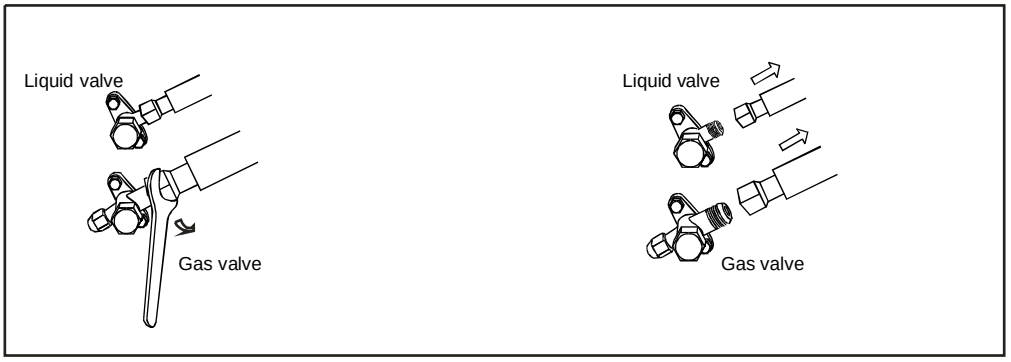
3. Tighten the core of the liquid valve (the smaller one) with valve key at first . After about 20 seconds, tighten the core of the gas (the bigger one) with valve key. Turn off the a/c at once and cut off the power supply.



4. Tighten the cap of two valves.



5. Disconnect the power cable from outdoor unit.
6. Loose the nut of the connect pipe to the outdoor unit valve with 2 spanner, disconnect the connect pipe and the two valves.

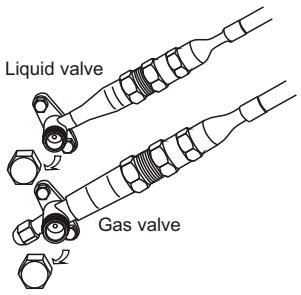


The step and diagram of Collect refrigerant

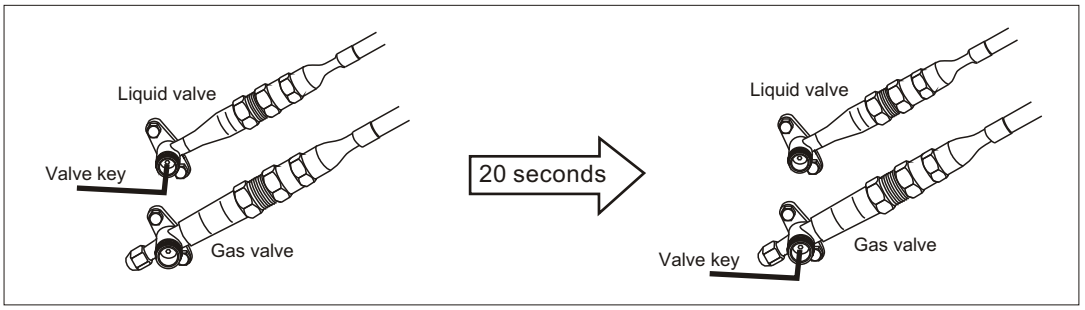
(for Speedy Tie-in type)

- **If the air conditioner needs to be disconnected and moved to another place, please recycle the gas back into the compressor according to the following steps before doing the disconnecting:**

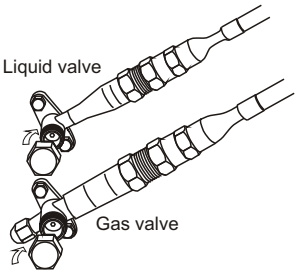
1. Start the a/c, operate cooling state.
2. Remove the cap of two valves with the spanner.



3. Tighten the core of the liquid valve (the smaller one) with valve key at first . After about 20 seconds, tighten the core of the gas (the bigger one) with valve key. Turn off the a/c at once and cut off the power supply.



4. Tighten the cap of two valves.



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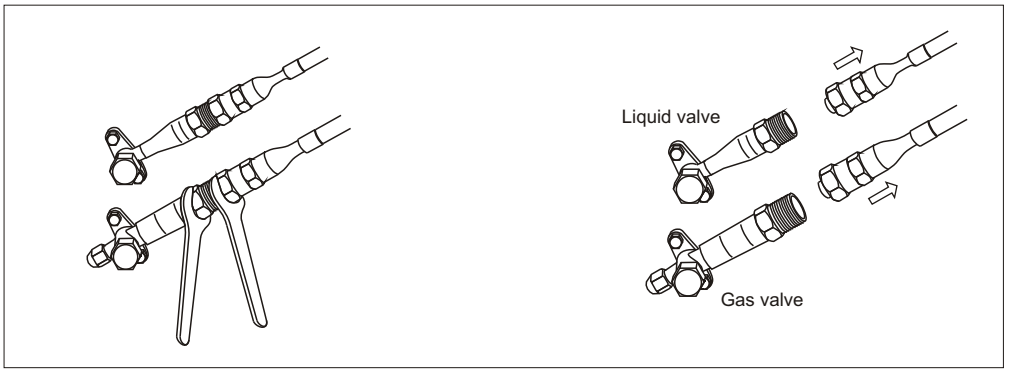
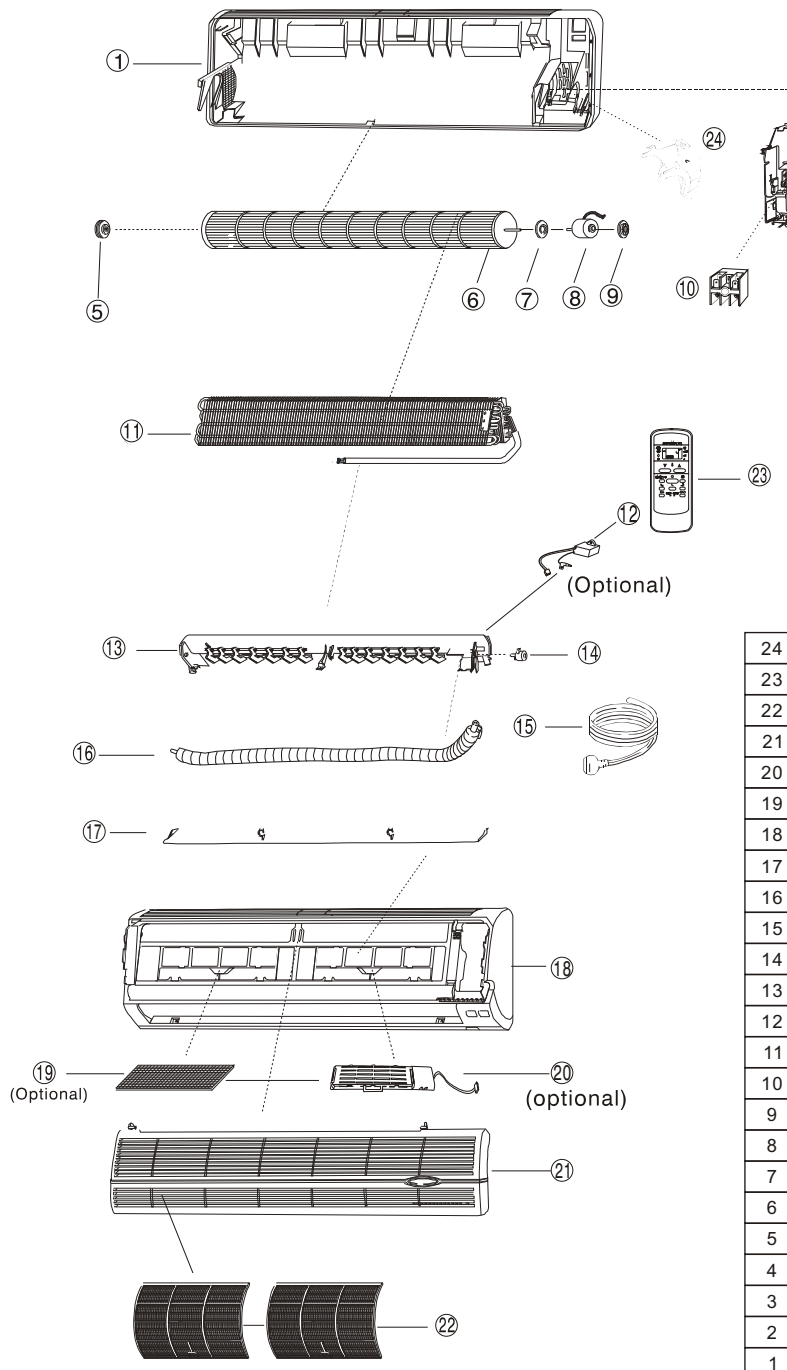


Parts List

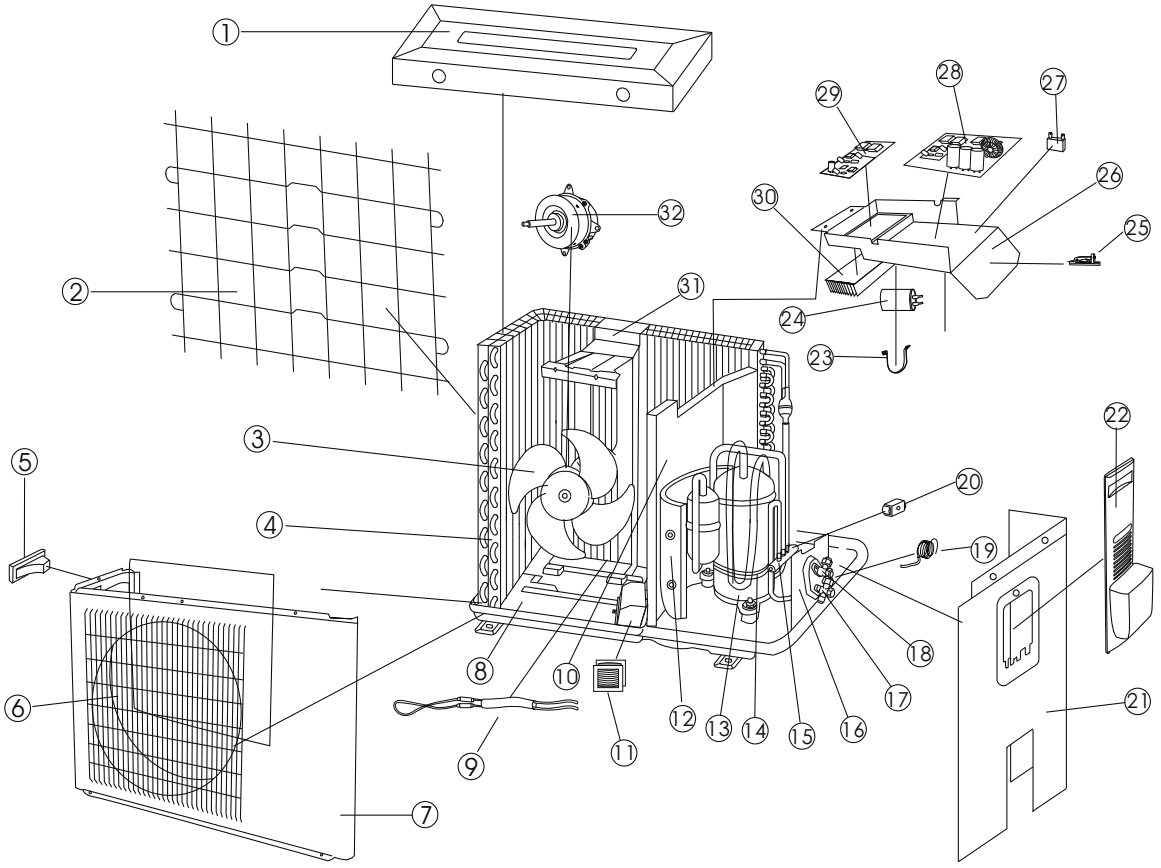
Indoor Unit



No	Name	Q`ty
24	Fan motor cover	1
23	Remote controller	1
22	Filter	1
21	Air intake grill	1
20	Plasma	1
19	Photo catalyzer filter	1
18	Front cover	1
17	Louver	1
16	Drain hose	1
15	Power cable with plug	1
14	Step motor	1
13	Air deflector assembly	1
12	Iniozer	1
11	Evaporator	1
10	Terminal block	1
9	Motor butter right	1
8	Blower motor	1
7	Motor butter left	1
6	Blower	1
5	Blower bearing	1
4	PCB	1
3	Electric box cover	1
2	Electric box	1
1	Back cover	1

Parts List

Outdoor Unit

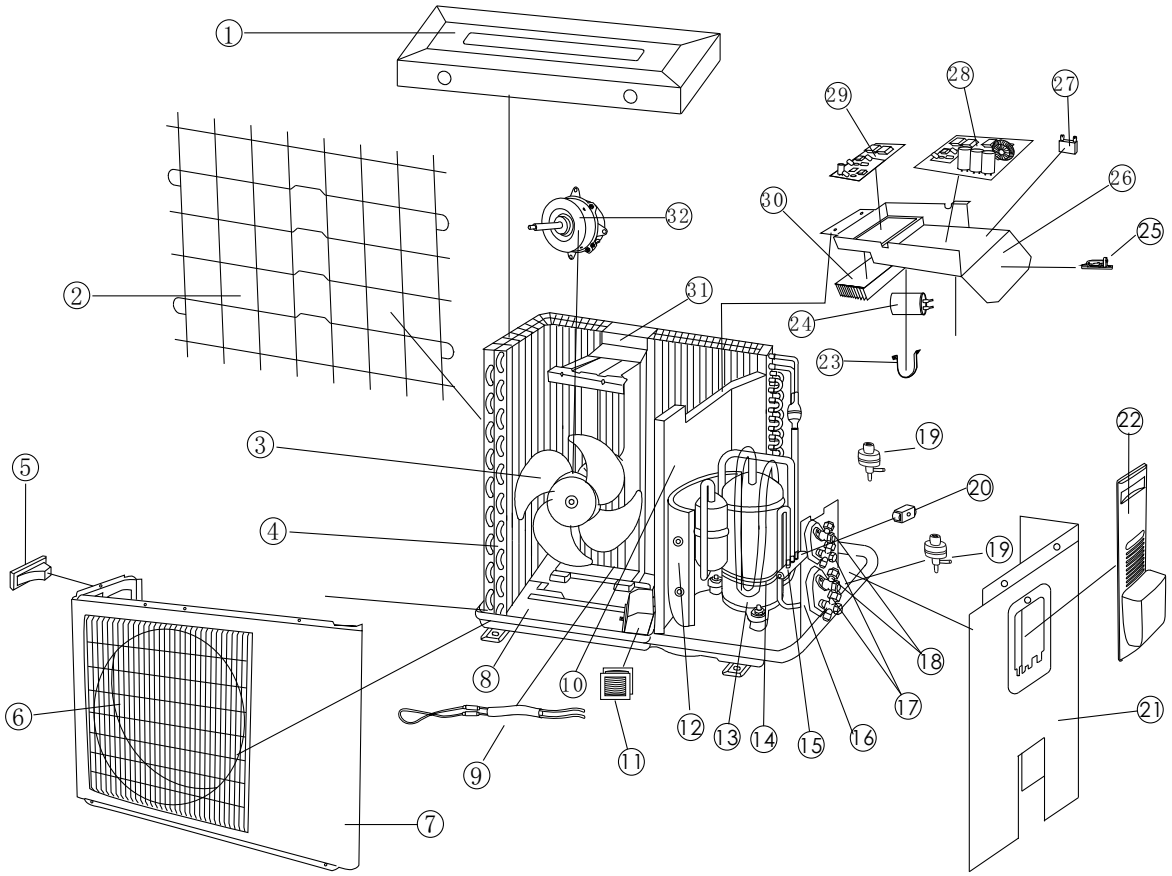


NO.	NAME	Q'TY
1	Top panel	1
2	Back grill	1
3	Outdoor fan	1
4	Condenser	1
5	Handle	1
6	Front grill	1
7	Front panel	1
8	Bottom plate	1
9 *	Condenser heater	1
10	Partition board	1
11	Reactor	1
12	Compressor jacket	1
13	Compressor	1
14*	Crankcase heater	1
15	Reversing valve	1
16	Valve plate	1

NO.	NAME	Q'TY
17	Gas valve	1
18	Liquid valve	1
19	Capillary	1
20	Rev valve coil	1
21	Side panel	1
22	Access plate	1
23	Capacitor clips	1
24	Compressor capacitor	1
25	Wire clip	1
26	Electric box	1
27	Fan motor capacitor	1
28	Outdoor PCB	1
29	Module	1
30	Radiator	1
31	Motor bracket	1
32	Outdoor motor	1

Parts List

Outdoor Unit (for Multi Split)



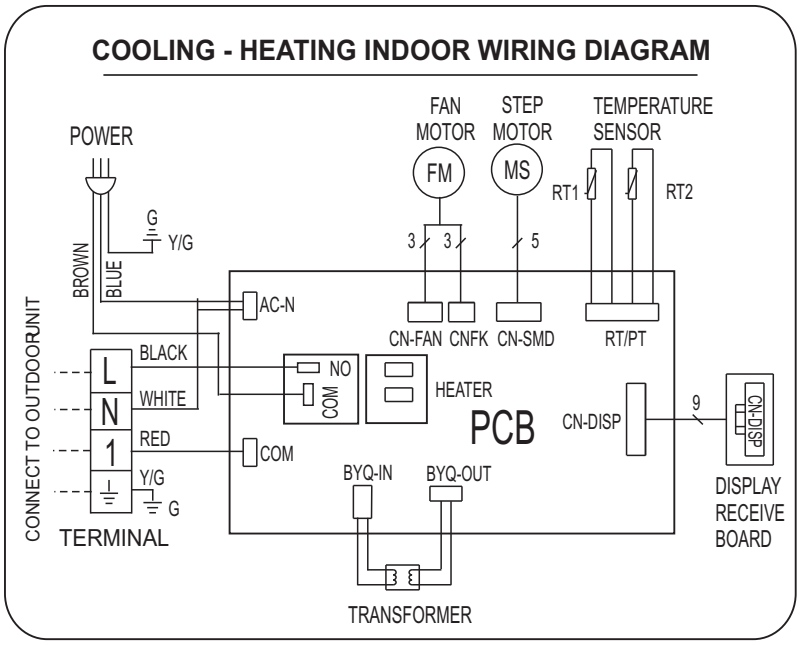
NO.	NAME	Q'TY
1	Top panel	1
2	Back grill	1
3	Outdoor fan	1
4	Condenser	1
5	Handle	1
6	Front grill	1
7	Front panel	1
8	Bottom plate	1
9 *	Condenser heater	1
10	Partition board	1
11	Reactor	1
12	Compressor jacket	1
13	Compressor	1
14*	Crankcase heater	1
15	Reversing valve	1
16	Valve plate	1

NO.	NAME	Q'TY
17	Gas valve	2
18	Liquid valve	2
19	Electronic expansion valve	2
20	Rev valve coil	1
21	Side panel	1
22	Access plate	1
23	Capacitor clips	1
24	Compressor capacitor	1
25	Wire clip	1
26	Electric box	1
27	Fan motor capacitor	1
28	Outdoor PCB	1
29	Module	1
30	Radiator	1
31	Motor bracket	1
32	Outdoor motor	1

Electrical Wiring Diagram

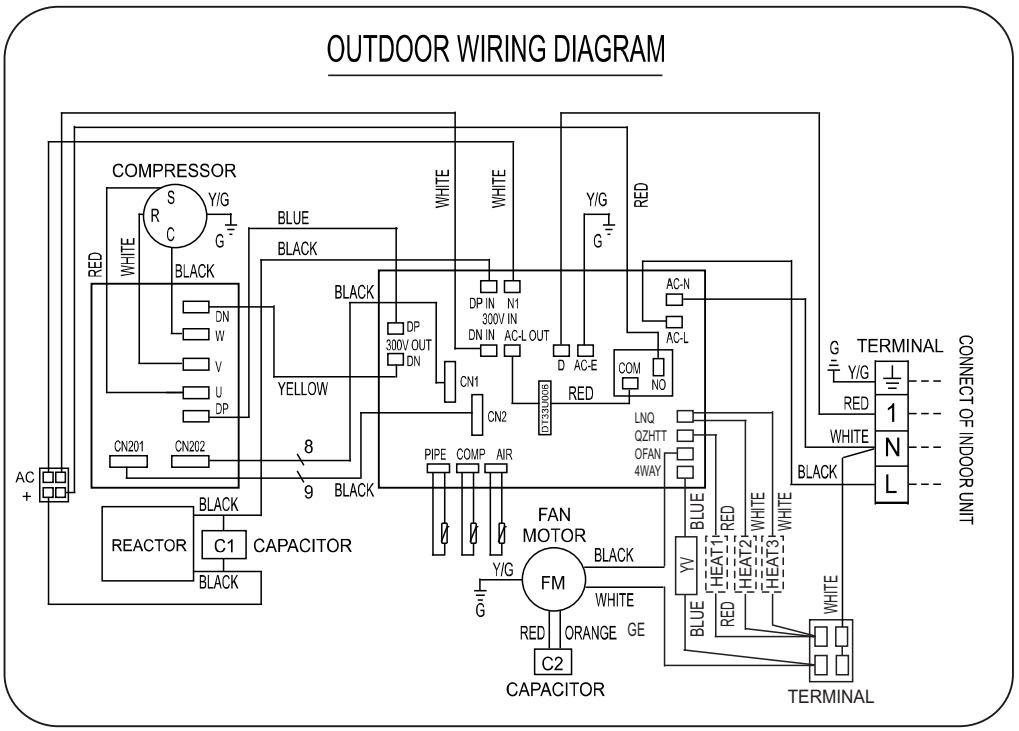
Indoor Unit

SFWH009-DC / SFWH012-DC



Outdoor Unit

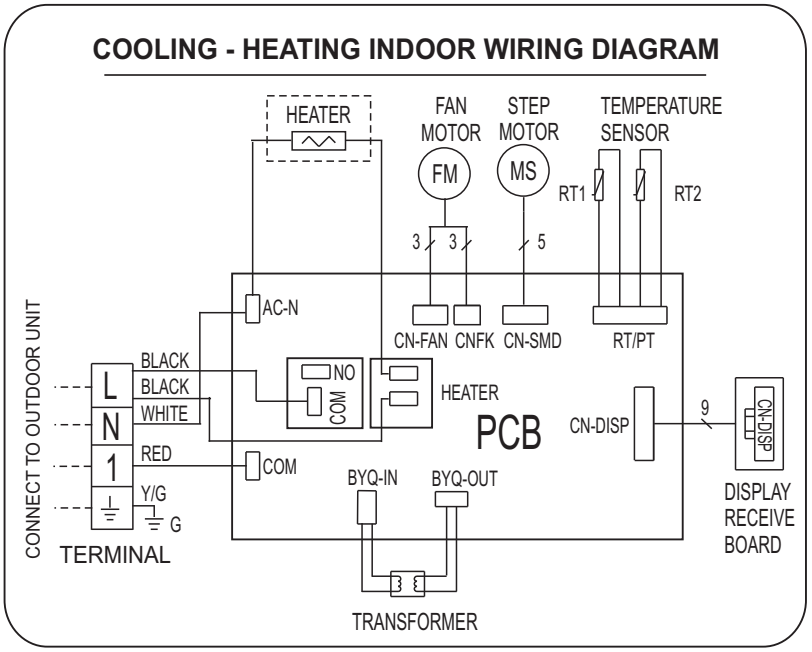
SFWH009-DC / SFWH012-DC



Electrical Wiring Diagram

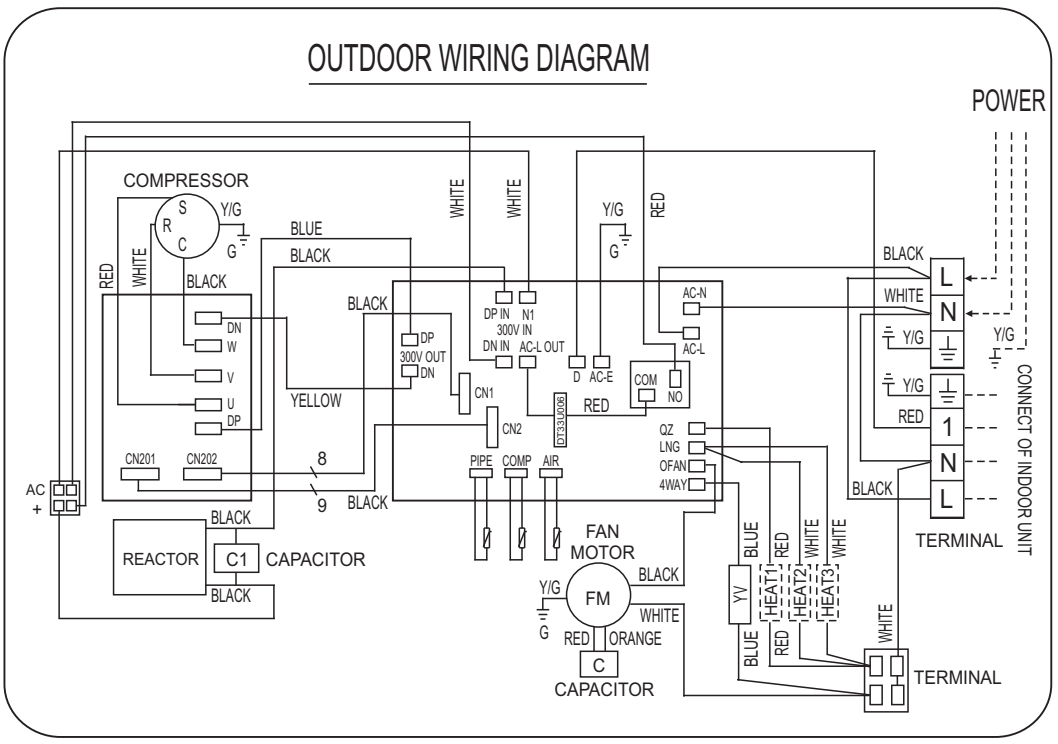
Indoor Unit

SFWH009-DC / SFWH012-DC (With PTC heater)



Outdoor Unit

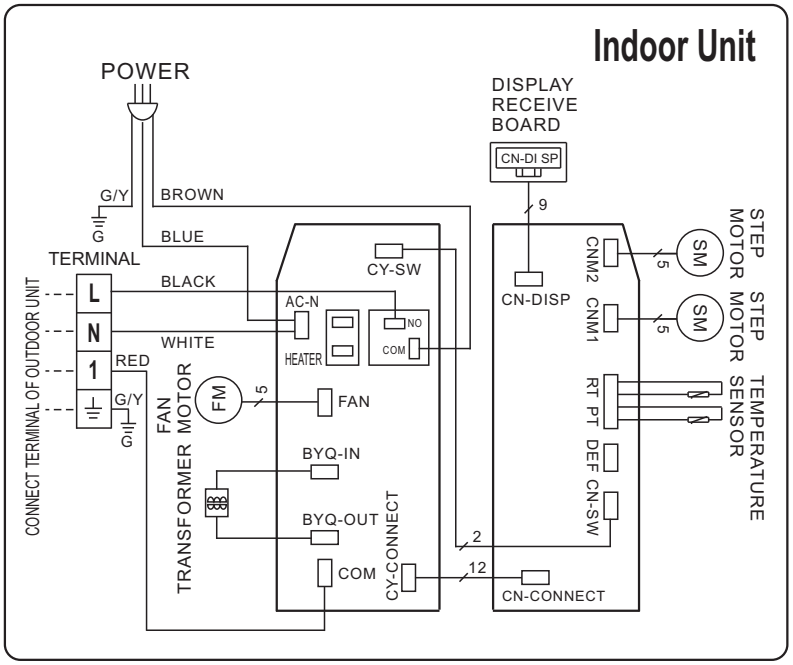
SFWH009-DC / SFWH012-DC (Outdoor unit power supply)



Electrical Wiring Diagram

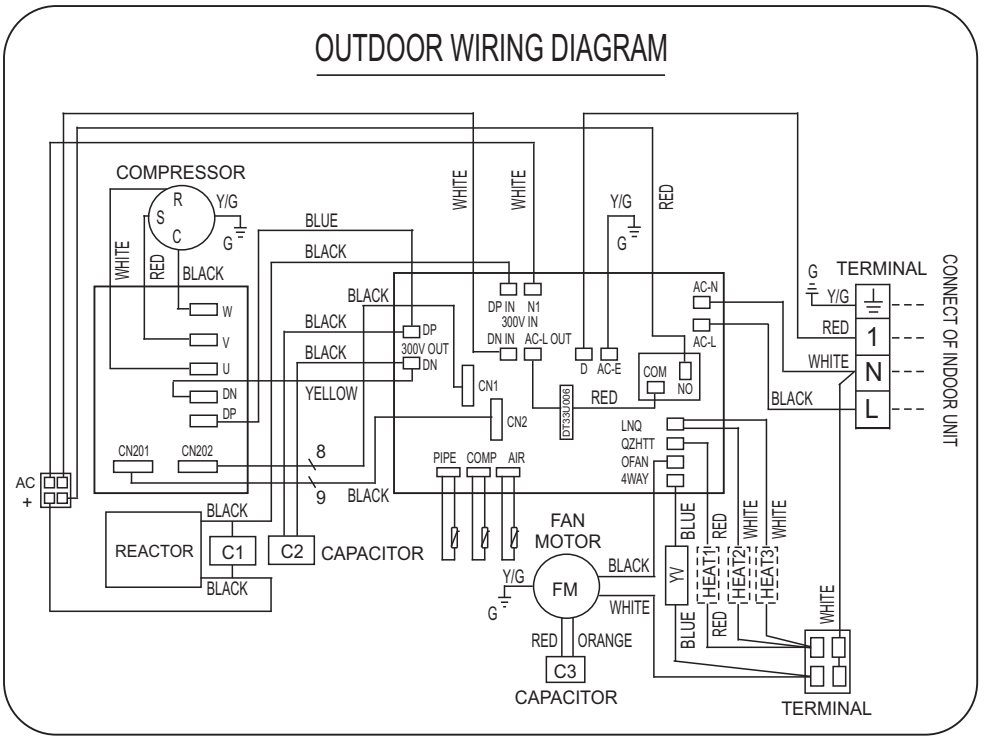
Indoor Unit

SFWH018-DC



Outdoor Unit

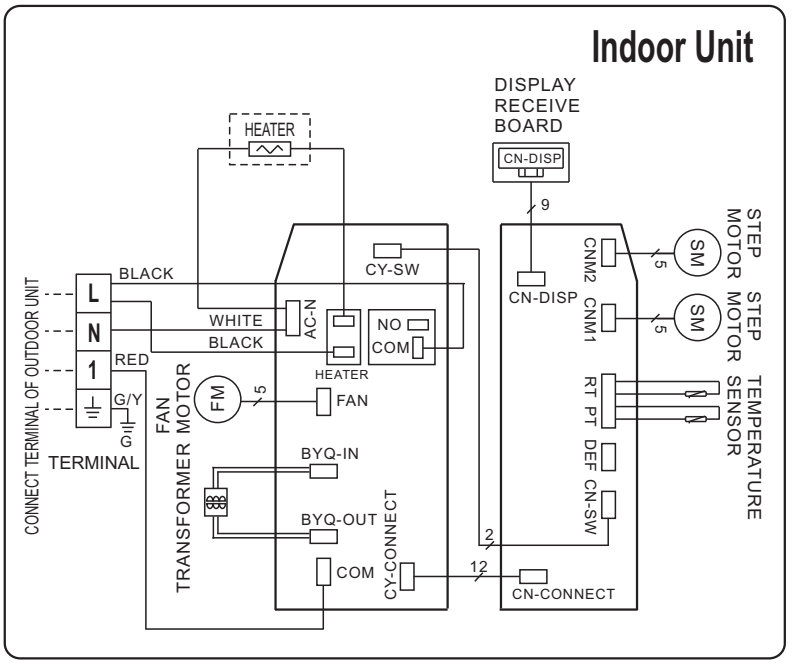
SFWH018-DC



Electrical Wiring Diagram

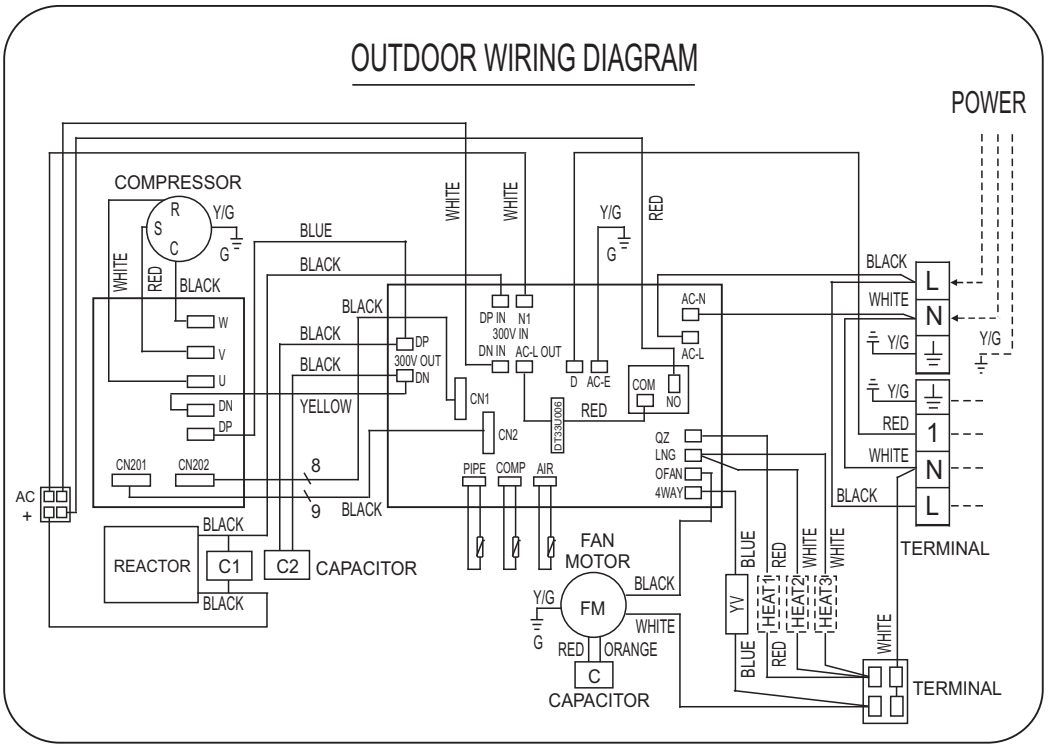
Indoor Unit

SFWH018-DC (With PTC heater)



Outdoor Unit

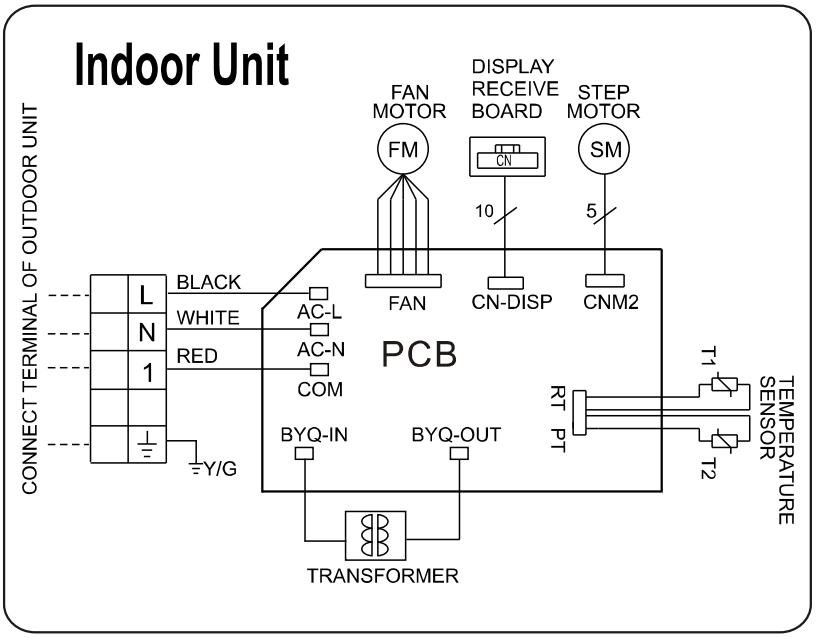
SFWH018-DC (Outdoor unit power supply)



Electrical Wiring Diagram

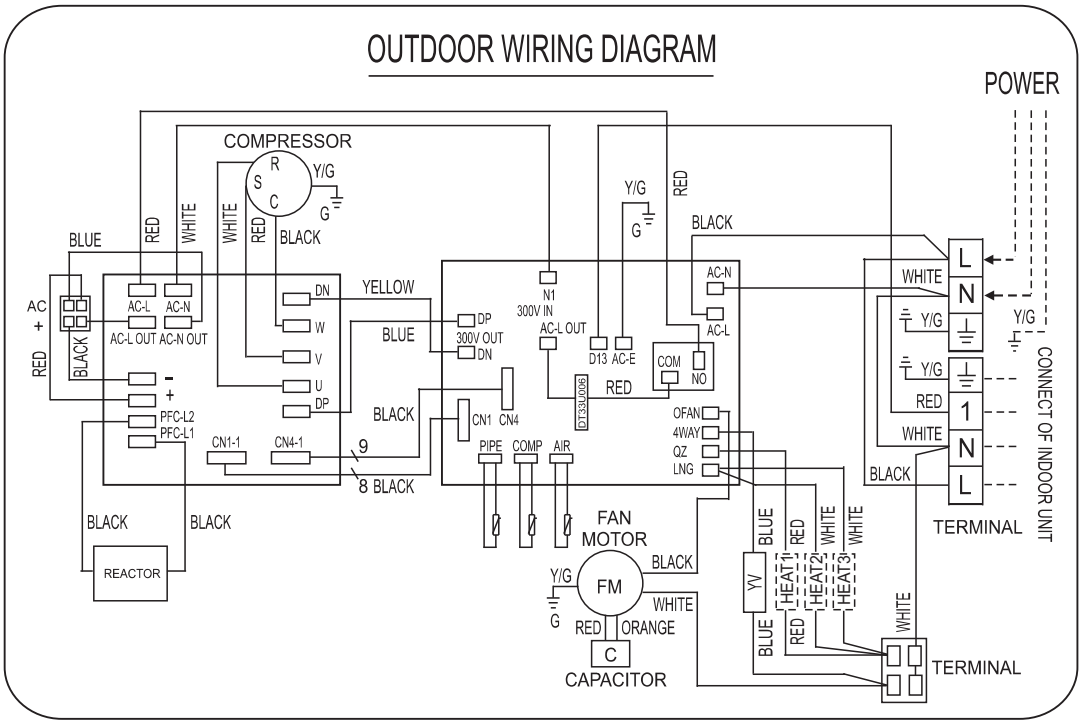
Indoor Unit

SFWH024-DC



Outdoor Unit

SFWH024-DC

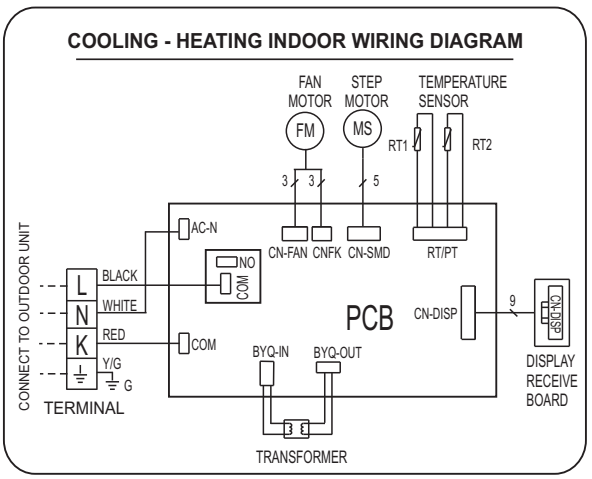


Electrical Wiring Diagram

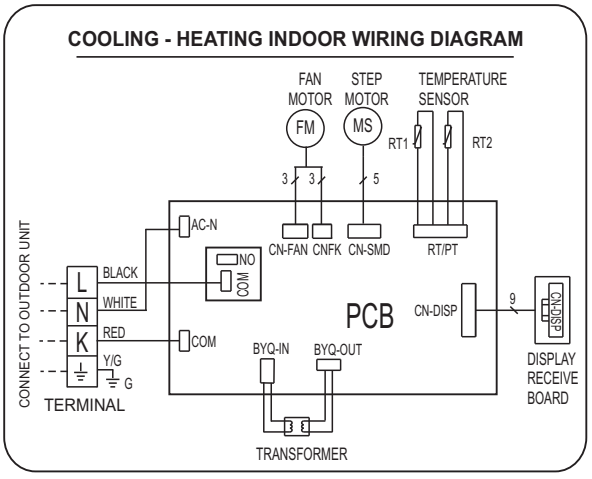
Indoor Unit

SFWH018-DC (9K+9K) / SFWH024-DC (12K+12K)

Indoor Unit A

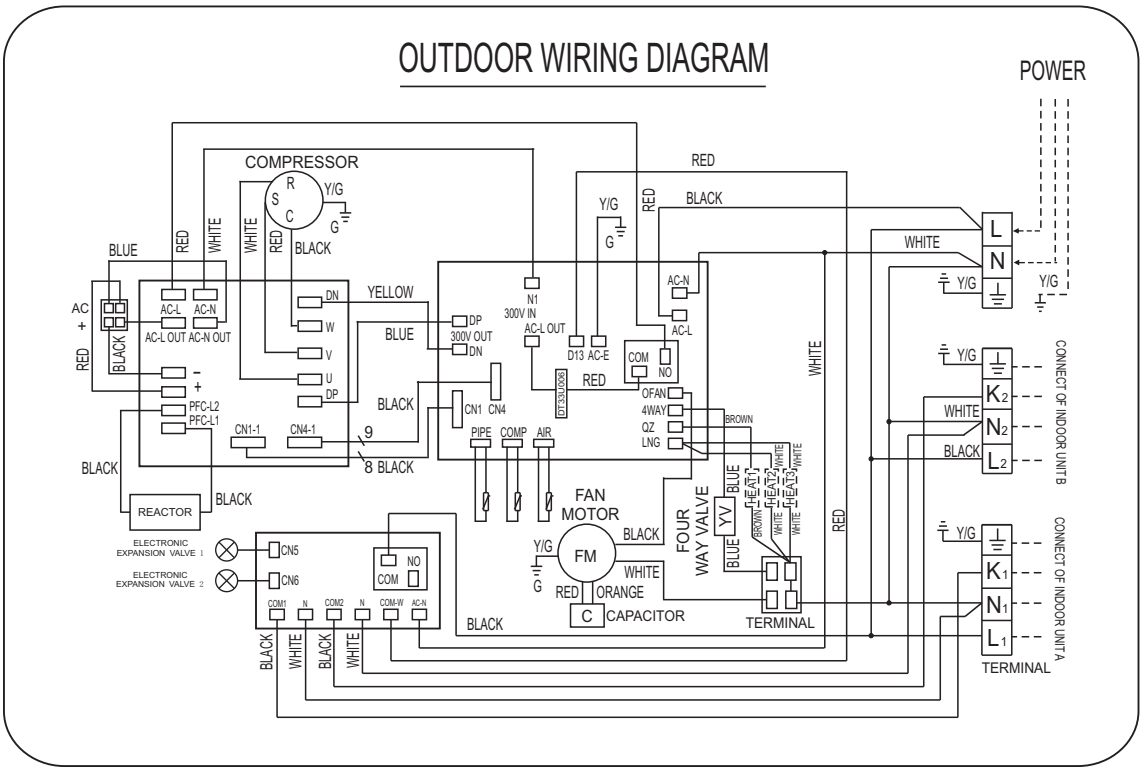


Indoor Unit B



Outdoor Unit

SFWH018-DC (9K+9K) / SFWH024-DC (12K+12K)



NOTE:
This electric wiring diagram is only for reference, the correct diagram is on the machine.