

## SPLIT TYPE ROOM AIR CONDITIONER OPERATION MANUAL



|                 |                 |
|-----------------|-----------------|
| AS07NS1HRA-WF   | AS09NB2HRA      |
| AS09NS1HRA-WF   | AS12NC2HRA      |
| AS12NS1HRA-WF   | AS18ND2HRA      |
| AS15NS1HRA-WF   | AS07NS1HRA-Grey |
| AS18NS1HRA-WF   | AS09NS1HRA-Grey |
| AS24NS1HRA-WF   | AS12NS1HRA-Grey |
| AS15NS1HRA-GREY | AS18NS1HRA-Grey |
| AS09CB1HRA      | AS24NS1HRA-Grey |
| AS12CB1HRA      |                 |
| AS07NS1HRA-GU   |                 |
| AS09NS1HRA-GU   |                 |
| AS12NS1HRA-GU   |                 |
| AS15NS1HRA-GU   |                 |
| AS18NS1HRA-GU   |                 |
| AS24NS1HRA-GU   |                 |
| AS07NS1HRA-WU   |                 |
| AS09NS1HRA-WU   |                 |
| AS12NS1HRA-WU   |                 |
| AS15NS1HRA-WU   |                 |
| AS18NS1HRA-WU   |                 |
| AS24NS1HRA-WU   |                 |

- Please read this operation manual before using the air conditioner.  
Keep this operation manual for future reference.

# Contents

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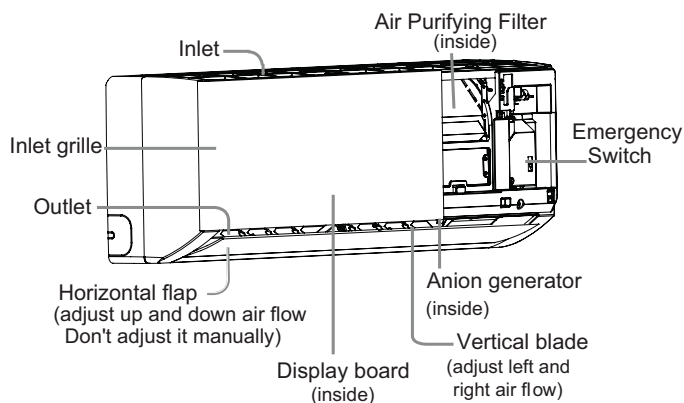
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## WARNING:

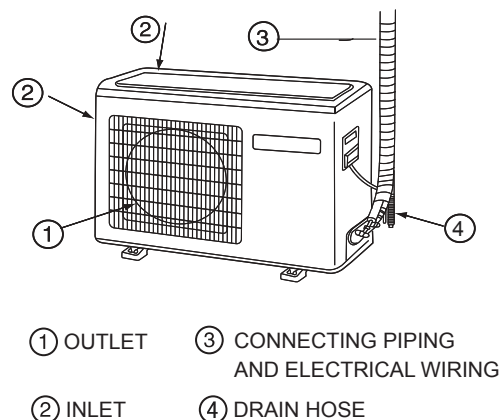
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
  - This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
  - The wiring method should be in line with the local wiring standard.
  - The type of connecting wire is H07RN-F.
  - All the cables shall have got the European authentication certificate. During installation, when the connecting cables break off, it must be assured that the grounding wire is the last one to be broken off.
  - The breaker of the air conditioner should be all-pole switch; and the distance between its two contacts should not be no less than 3mm. Such means for disconnection must be incorporated in the wiring.
  - Make sure installation is done according to local wiring regulation by professional persons.
  - Make sure ground connection is correct and reliable.
  - A leakage breaker must be installed.
-

# Parts and Functions

## Indoor Unit



## Outdoor Unit



Actual inlet grille may vary from the one shown in the manual according to the product purchased

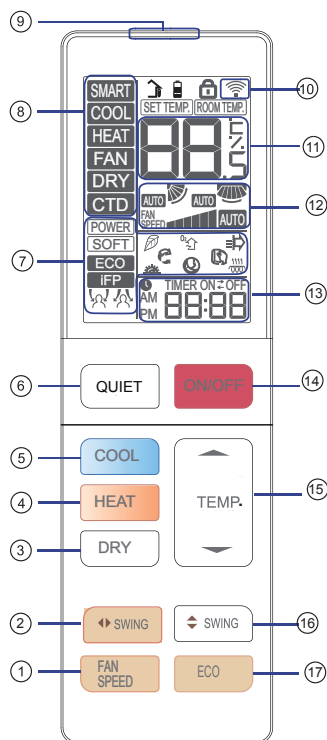
### Display board

- ① Signal receiver hole
- ② Ambient temp. display  
When receiving the remote control signal, display the set temperature.
- ③ COOL display



## Remote controller

### Outer side of the controller

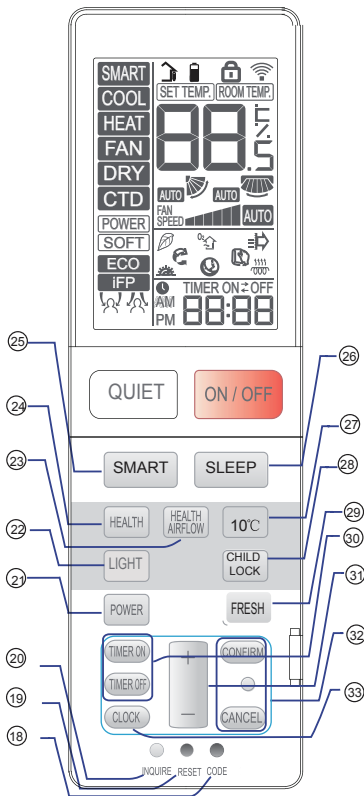


- 5. COOL button  
Used to set COOL operation.
- 6. QUIET button
- 7. Display of each function status
- 8. Operation mode display
- 9. Signal sending end device
- 10. Signal sending display
- 11. TEMP display
- 12. FAN SPEED display  
Swing up/down display  
swing left/right display
- 13. TIMER ON display  
TIMER OFF display  
CLOCK display
- 14. ON / OFF button
- 15. TEMP button  
used to change setting temperature
- 16. SWING UP/DOWN button
- 17. ECO button  
power saving function

- 1. FAN SPEED button  
Used to select fan speed:  
LOW, MED, HI, AUTO
- 2. SWING LEFT/RIGHT button
- 3. DRY button  
Used to set DRY operation.
- 4. HEAT button  
Used to set HEAT operation.  
(Cooling only unit do not have displays and functions related with heating.)

# Operation

## Inner side of the controller



18. CODE button  
Used to select CODE A or b with a press, A or b will be displayed on LCD. Please select A without special explanation.

19. RESET button  
When the remote controller appears abnormal, use a sharp pointed article to press this button to reset the controller normal.

20. INQUIRE button  
Inquire the external environmental temperature and the operating power of the machine. (e.g. when

the panel display "01", the operating power is 100W; when the panel display "02", the operating power is 200W, and so forth)

21. POWER button

22. LIGHT button  
Control the lightening and extinguishing of the indoor LED display board.

23. HEALTH AIRFLOW button

24. HEALTH button

25. SMART button  
Used to set SMART operation. (This function is unavailable on some models.)

26. SLEEP button

27. 10 °C button  
special heating set function: 10 degree heating maintaining (valuable for RS)

28. CHILDLCK button  
If pressed, the other buttons will be disabled. Press it once again, lock will be cancelled.

29. FRESH button

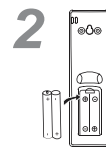
30. TIMER ON / OFF button

31. HOUR button  
used to change clock or timer

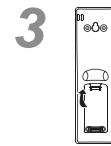
32. CANCEL/CONFIRM button  
Used to confirm timer and clock settings.

33. CLOCK button

The following functions and related displays are not available: ⑳

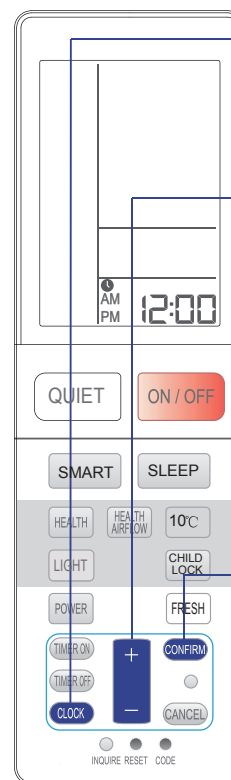


Load the batteries as illustrated. 2 R-03 batteries, resetting key (cylinder); Be sure that the loading is in line with the "+" / "-";



Load the battery, then put on the cover again.

## Clock set



1 Press CLOCK button,



"AM" or "PM" flashes.

2 Press "+" or "-" to set correct time.



Each press will increase or decrease 1min. If the button is kept pressed, time will change quickly.

3 Confirm time.



After time setting is confirmed, press CONFIRM, "AM" and "PM" stop flashing, while clock starts working.

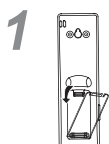
### Note:

The distance between the signal transmission head and the receiver hole should be within 7m without any obstacle as well. When electronic-started type fluorescent lamp or change-over wireless telephone is installed in the type fluorescent lamp or room, the receiver is apt to be disturbed in receiving the signals, so the distance to the indoor unit should be shorter.

Full display or unclear display during operation indicates the batteries have been used up. Please change batteries. If the remote controller can't run normally during operation, please remove the batteries and reload several minutes later.

### Hint:

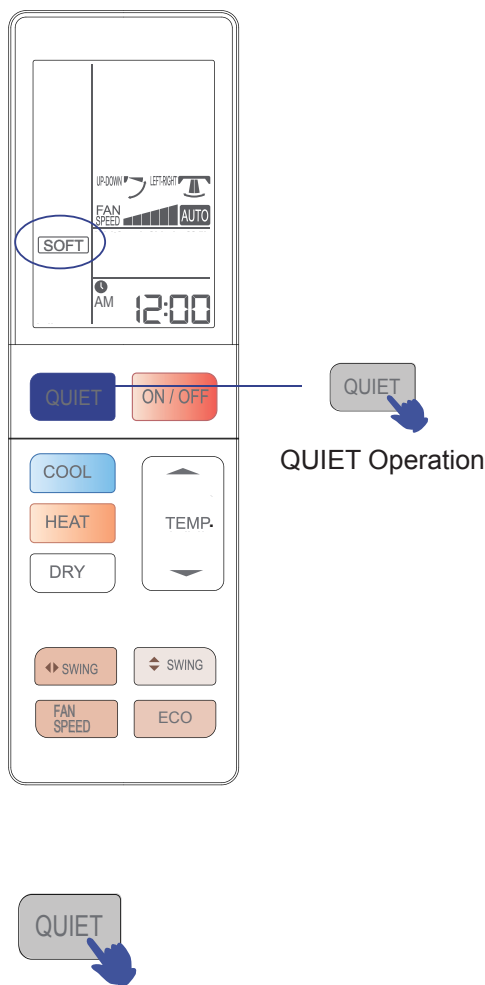
Remove the batteries in case unit won't be in usage for a long period. If there are any display after taking-out, just need to press reset key.



Remove the battery cover;

# Operation

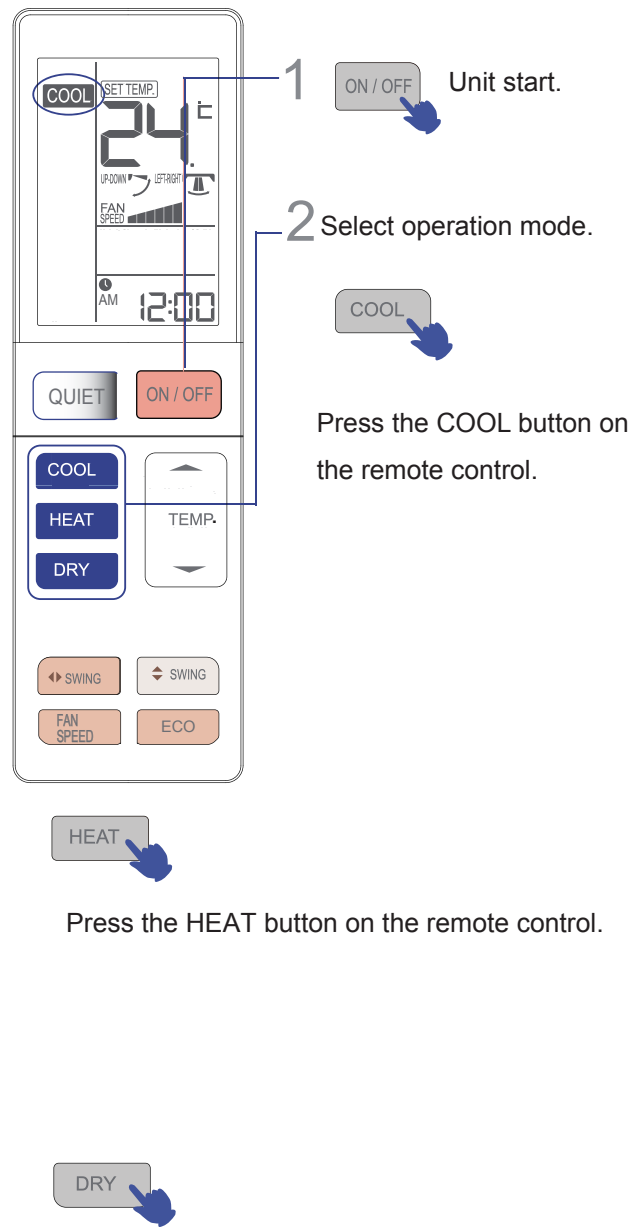
## QUIET Operation



You can use this function when silence is needed for rest or reading.

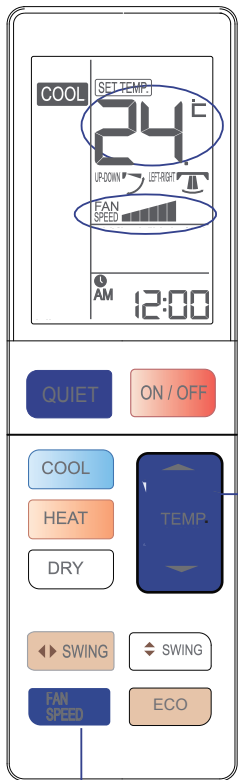
For each press, **SOFT** is displayed Air conditioner starts POWER function operation. In SOFT operation mode, fan speed automatically takes low speed of AUTO fan mode. Press SOFT button again, **SOFT** disappears, the operation stops.

## COOL, HEAT and DRY Operation

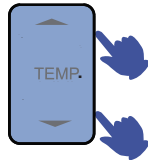


1. In DRY mode, when room temperature becomes lower than temp. setting +2 °C, unit will run intermittently at LOW speed regardless of FAN setting.
2. Remote controller can memorize each operation status. When starting it next time, just press ON/OFF button and unit will run in previous status.

# Operation

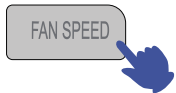


- 1 Press TEMP button.  
 $\Delta$  Every time the button is pressed, temp. setting increases 1 °C.  
 $\nabla$  Every time the button is pressed, temp. setting decreases 1 °C.

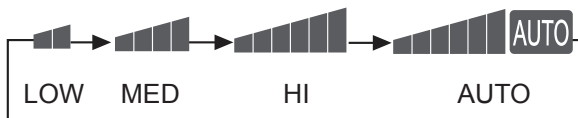


Unit will start running to reach the temp. setting on LCD.

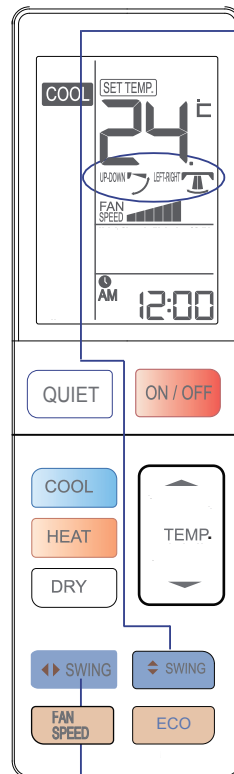
## 2 FAN Operation



Press FAN SPEED button. For each press, fan speed changes as follows:



Unit will run at selected fan speed.



## 1 Up and down air flow direction



For each press of "SWING" button, air flow direction on remote controller displays as follows according to different operation modes:

### COOL/DRY:



### HEAT:



### SMART:



Initial state

## 2 Left and right air flow direction



For each press of "SWING" button, remote controller displays as follows:

remote controller:

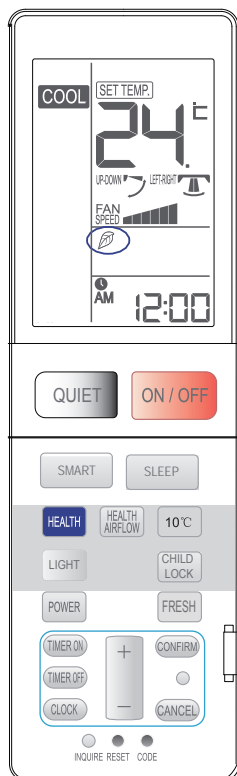


Initial state

- When humidity is high, condensate water might occur at air outlet if all vertical louvers are adjusted to left or right.
- It is advisable not to keep horizontal flap at downward position for a long time in COOL or DRY mode, otherwise, condensate water might occur.
- As cold air flows downward in COOL mode, adjusting air flow horizontally will be much more helpful for a better air circulation.

# Operation


## HEALTH Operation



The water-ion generator in the air conditioner can generate a lot of anion effectively balance the quantity of position and anion in the air and also to kill bacteria and speed up the dust sediment in the room and finally clean the air in the room.



Press HEALTH button

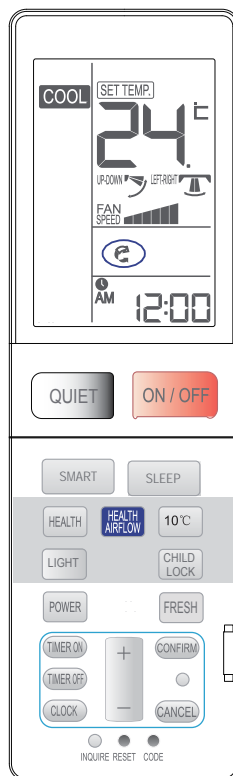
For each press,  is displayed. Air conditioner starts health anion function operation.





Press HEALTH button for twice press, disappears, the operation stops.

When indoor fan motor is running, it has healthy process function. (It's available under any mode)  
When the fan in the indoor unit does not work, the health lamp lights up, but the anion generator does not release anion.

## HEALTH AIRFLOW Operation



The setting of health airflow function

- 1). Press the button of health airflow,  appears on the display. Avoid the strong airflow blows direct to the body.
- 2). Press the button of health airflow again,  appears on the display. Avoid the strong airflow blows direct to the body.



The cancel of the health airflow function



Press the button of health airflow again, both the inlet and outlet grills of the air conditioner are opened, and the unit goes on working under the condition before the setting of health airflow function. After stopping, the outlet grille will close automatically.

### Notice:

Cannot pull direct the outlet grille by hand. Otherwise, the grille will run incorrectly. If the grille is not run correctly, stop for a minute and then start, adjusting by remote controller.

Remote controller can memorize each operation status. when starting it next time, just press ON/OFF button and unit will run in previous status.

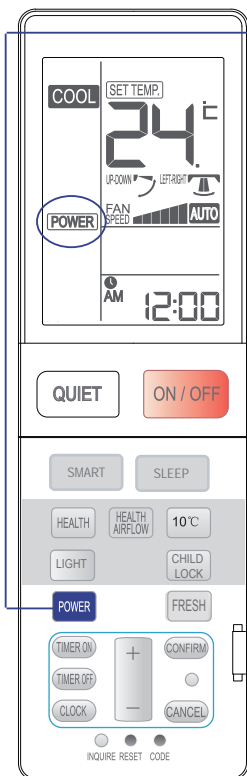
### Note:

1. After setting the health airflow function, the position of inlet and outlet grills is fixed.
2. In heating, it is better to select the  mode.
3. In cooling, it is better to select the  mode.
4. In cooling and dry, using the air conditioner for a long time under the high air humidity, a phenomenon falling drips of water occurs at the outlet grille.
5. Select the appropriate fan direction according to the actual conditions.



# Operation

## POWER Operation



POWER

### POWER Operation

When you need rapid cooling, you can use this function.

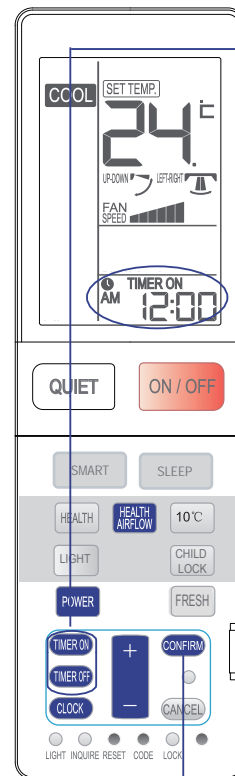
For each press, **POWER** is displayed Air conditioner starts POWER function operation.

In COOL mode, fan speed automatically takes high speed of AUTO fan mode.

Press POWER button again, **POWER** disappears, the operation stops.

## TIMER Operation

Set Clock correctly before starting Timer operation. You can let unit start or stop automatically a following times: Before you wake up in the morning, or get back from outside or after you fall asleep at night.



### 1 Select your desired operation mode.



Select your desired **TIMER ON**.

Remote controller: "**TIMER ON**" will flash.



Select your desired **TIMER OFF**.

Remote controller: "**TIMER OFF**" will flash.

### 2 Time setting.



Every time the button is pressed, time setting increases or decreases

1 min, if kept depressed, it will increase rapidly. It can be adjusted within 24 hours.

### 3 Confirming your setting.



After setting correct time, press CONFIRM button to confirm "**ON**" or "**OFF**" on the remote controller stops flashing.

**TIMER ON** → **OFF** / **TIMER ON** ← **OFF**

press **TIMER ON** button to confirm, follow the same procedure in "Time setting for **TIMER OFF**"

Remote controller: **TIMER ON** → **OFF**

press **TIMER OFF** button to confirm, follow the same procedure in "Time setting for **TIMER ON**"

Remote controller: **TIMER ON** ← **OFF**

#### Hints:

During POWER operation, in rapid COOL mode, the room will show inhomogeneous temperature distribution.

#### To cancel TIMER mode

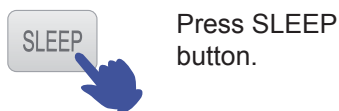
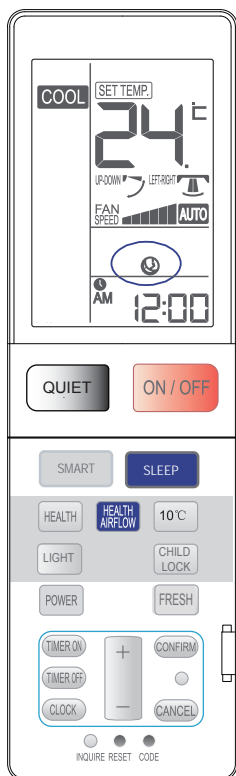
Just press CANCEL button several times until **TIMER**



# Operation

## Comfortable SLEEP

Before going to bed, you can simply press the SLEEP button and unit will operate in SLEEP mode and bring you a sound sleep.



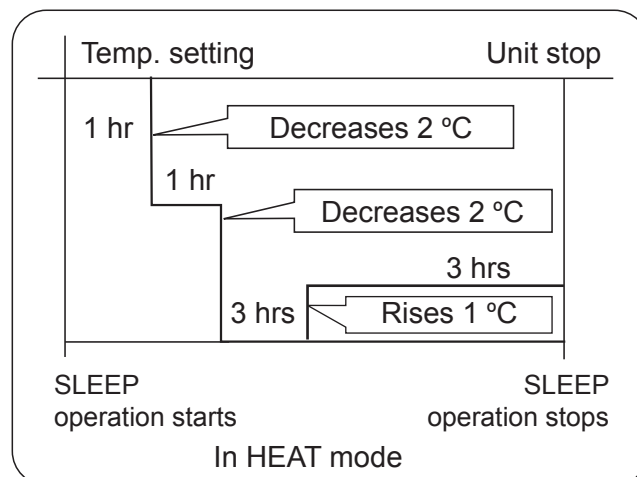
Press SLEEP button.

### Operation Mode

#### 1. In COOL, DRY mode

1 hours after SLEEP mode starts, temp. will become 1 °C higher than temp. setting. After another 1 hours, temp. rises by 1 °C further. The unit will run for further 6 hours then stops Temp. is higher than temp. setting so that room temperature won't be too low for your sleep.

3 hours then stops. Temp. is lower than temp. setting so that room temperature won't be too high for your sleep.



#### 3. In SMART mode

The unit operates in corresponding sleep mode, which adapted to the automatically selected operation mode.

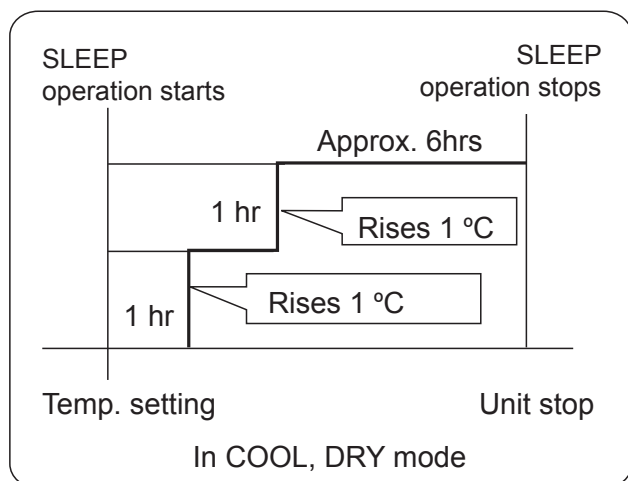
4. When quiet sleeping function is set to 8 hours the quiet sleeping time can not be adjusted. When TIMER function is set, the quiet sleeping function can't be set up. After the sleeping function is set up, if user resets TIMER function, the sleeping function will be cancelled; the machine will be in the state of timing-on, if the two modes are set up at the same time, either of their operation time is ended first, the unit will stop automatically, and the other mode will be cancelled.

### Power Failure Resume Function

If the unit is started for the first time, the compressor will not start running unless 3 minutes have elapsed. When the power resumes after power failure, the unit will run automatically, and 3 minutes later the compressor starts running.

### Note to the power failure resume:

press the sleep button ten times in five seconds and enter function after hearing four sounds. And press the sleep button ten times within five seconds and leave this function after hearing two sounds.

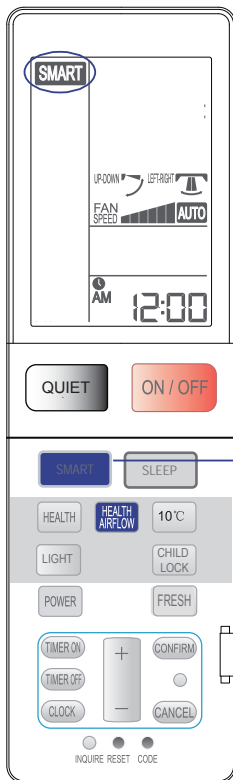


#### 2. In HEAT mode

1 hours after SLEEP mode starts, temp will become 2 °C lower than temp. setting. After another 1 hours, temp decrease by 2 °C further. After more another 3 hours, temp. rises by 1 °C further. The unit will run for further

# Operation

## SMART Operation



(This function is unavailable on some models)

One key can give you a comfortable room!

The air conditioning unit can judge the indoor temperature and humidity, and make the adjustment accordingly.

**SMART** SMART start

Press ON/OFF button, unit starts.  
Press SMART button “**SMART**” is displayed on the remote controller.

- SMART FRESH
- SMART Defrost
- SMART FAN SPEED
- SMART FAN HEALTH
- SMART DRY
- SMART SOFT
- SMART Control temperature

**SMART** or **ON/OFF** SMART stops

Under the cooling, heating and dehumidifying mode, press the smart key to enter the smart function. Under the smart running mode, when the air conditioning is running, it will automatically select cooling, heating, dehumidifying or blowing mode as When the smart function is running, press the “cooling” “heating” or “dehumidifying” key to switch to the other mode, you will exit from the smart function.

## ECO Operation

Automatic adjusting with the environmental temperature, running with power saving.



**ECO**

Press ECONOMY button “**ECO**” is displayed on the remote controller, unit will run in ECONOMY operation.

**ECO**

Press ECONOMY button again, ECONOMY disappears, the operation stops.


- The power saving function only works under the cooling, heating or dehumidifying mode, after the power saving function is set, press the sharp, mute, sleep, or smart key to exit the power saving function.
- After the power saving is set, the host machine will automatically adjust the setting temperature, and automatically control the switch of the compressor, which may be inconsistent with the user's setting.
- The power saving function is more effective after the air conditioning has been running for a long time (more than 2 hours)

# Operation

## FRESH Operation


Exhaust the vitiated air from the room, and inhale fresh air.  
(This function is unavailable on some models.)



Press FRESH button  is displayed on the remote controller and the change-for-fresh-air function operation begins.

Note: Since this model has no fresh air unit installed, there is no change for the operating status.



For twice press, the display  disappears and the change-for-fresh-air function operation is canceled.

### Note:

If the unit didn't install change-for-fresh-air electrical engine, change-for-fresh-air function is not available.

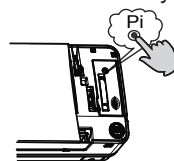
Press "HEALTH" button when operating in heating mode; the display board displays first in red. After pressing "HEALTH" button, it displays in green for 3 seconds, then red for 10 seconds, and green for 3 seconds, repeating this cycle.  
If you press "FRESH" button in heating or health operating mode, a purple display appears in addition to the above red and green display cycle; that is, purple for 3 seconds, red for 10 seconds, green for 3 seconds, purple for 3 seconds, red for 10 seconds, green for 3 seconds, repeating this cycle.

## Emergency operation and test operation

### Emergency Operation:

- Use this operation only when the remote controller is defective or lost, and with function of emergency running, air conditioner can run automatically for a while.
- When the emergency operation switch is pressed, the "Pi" sound is heard once, which means the start of this operation.
- When power switch is turning on for the first time and emergency operation starts, the unit will run automatically in the following modes:

| Room temperature | Designated temperature | Timer mode | Fan speed | Operation mode |
|------------------|------------------------|------------|-----------|----------------|
| Above 24 °C      | 24 °C                  | No         | AUTO      | COOL           |
| Below 24 °C      | 24 °C                  | No         | AUTO      | HEAT           |

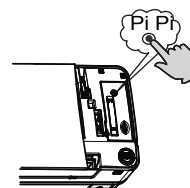


- It is impossible to change the settings of temp. and fan speed, It is also not possible to operate in timer or dry mode.

### Test operation:

Test operation switch is the same as emergency switch.

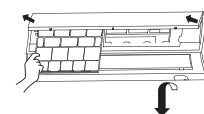
- Use this switch in the test operation when the room temperature is below 16 °C, do not use it in the normal operation.
- Continue to press the test operation switch for more than 5 seconds. After you hear the "Pi" sound twice, release your finger from the switch: the cooling operation starts with the air flow speed "Hi".



## For smart Use of The Air Conditioner

### Air Filter cleaning

- Open the inlet grille by pulling it upward
- Remove the filter  
Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.
- Clean the filter  
Use a vacuum cleaner to remove dust, or wash the filter with water. After washing, dry the filter completely in the shade.
- Attach the filter  
Attach the filter correctly so that the "FRONT" indication is facing to the front. Make sure that the filter is completely fixed behind the stopper. If the right and left filters are not attached correctly, that may cause defects.
- Close the inlet grille



## IMPORTANT INFORMATION REGARDING THE REFRIGERANT USED

|   |   |    |
|---|---|----|
| Contains fluorinated greenhouse gases covered by the Kyoto Protocol |   | A  |
| R410A   |   | B  |
| 1   | = | kg |
| 2   | = | kg |
| 1+2   | = | kg |
| F E   |   | D  |

This product contains fluorinated greenhouse gases covered by the Kyoto Protocol. Do not vent into the atmosphere.

Refrigerant type: R410A

GWP\* value: 1975

GWP=global warming potential

Please fill in with indelible ink,

- 1 the factory refrigerant charge of the product
- 2 the additional refrigerant amount charged in the field and
- 1+2 the total refrigerant charge

on the refrigerant charge label supplied with the product.

The filled out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the stop valve cover).

A contains fluorinated greenhouse gases covered by the Kyoto Protocol

B factory refrigerant charge of the product: see unit name plate

C additional refrigerant amount charged in the field

D total refrigerant charge

E outdoor unit

F refrigerant cylinder and manifold for charging

## EUROPEAN REGULATIONS CONFORMITY FOR THE MODELS

Climate: T1 Voltage: 230V

CE

All the products are in conformity with the following European provision:

- Low Voltage Directive 2006/95/EC

- Electromagnetic Compatibility 2004/108/EC

ROHS

The products are fulfilled with the requirements in the directive 2011/65/EU of the European parliament and of council on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (EU RoHS Directive)

WEEE

In accordance with the directive 2012/19/EU of the European parliament, herewith we inform the consumer about the disposal requirements of the electrical and electronic products.

**DISPOSAL REQUIREMENTS:**



Your air conditioning product is marked with this symbol. This means that electrical and electronic products shall not be mixed with unsorted household waste. Do not try to dismantle the system yourself: the dismantling of the air conditioning system, treatment of the refrigerant, of oil and of other part must be done by a qualified installer in accordance with relevant local and national legislation. Air conditioners must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Please contact the installer or local authority for more information. Battery must be removed from the remote controller and disposed of separately in accordance with relevant local and national legislation.

# Indoor Unit Installation

## Necessary Tools for Installation

- Driver
- Nipper
- Hacksaw
- Hole core drill
- Spanner(17,19 and 26mm)
- Gas leakage detector or soap-and-water solution
- Torque wrench (17mm,22mm,26mm)
- Pipe cutter
- Flaring tool
- Knife
- Measuring tape
- Reamer





## Selection of Installation Place

- Place, robust not causing vibration, where the body can be supported sufficiently.
- Place, not affected by heat or steam generated in the vicinity, where inlet and outlet of the unit are not disturbed.
- Place, possible to drain easily, where piping can be connected with the outdoor unit.
- Place, where cold air can be spread in a room entirely.
- Place, nearby a power receptacle, with enough space around.
- Place where the distance of more than 1m from televisions, radios, wireless apparatuses and fluorescent lamps can be left.
- In the case of fixing the remote controller on a wall, place where the indoor unit can receive signals when the fluorescent lamps in the room are lightened.

## Power Source

- Before inserting power into receptacle, check the voltage without fail.
- The power supply is the same as the corresponding nameplate.
- Install an exclusive branch circuit of the power.
- A receptacle shall be set up in a distance where the power cable can be reached. Do not extend the cable by cutting it.

## Accessory Parts

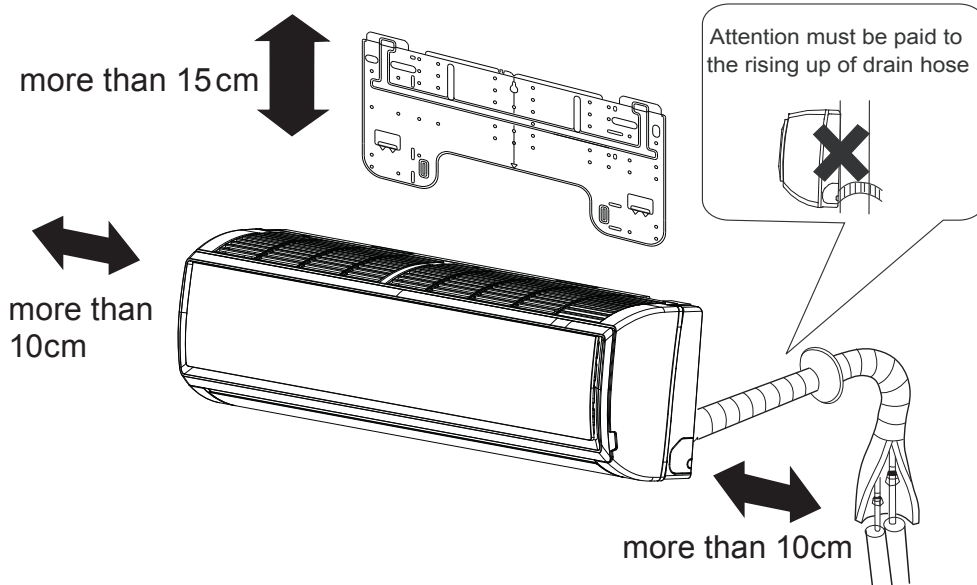
|  |  |
|--|--|
| Remote controller (1)  | Drain hose (1)    |
| R-03 dry battery (2)  | Plastic cap (4) <br>Ø4X25 Screw (4)  |
| Mounting plate (1)   | Air purifying filter(Optional) (1)   |

## Selection of Pipe

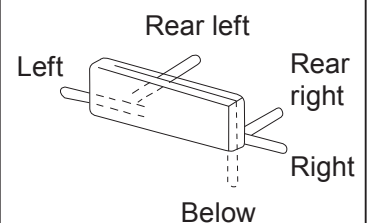
|             |             |               |
|-------------|-------------|---------------|
| FOR 09K 12K | Liquid pipe | Φ 6.35x0.8mm  |
|             | Gas pipe    | Φ 9.52x0.8mm  |
| FOR 18K     | Liquid pipe | Φ 6.35x0.8mm  |
|             | Gas pipe    | Φ 12.7x0.8mm  |
| FOR 24K     | Liquid pipe | Φ 9.52x0.8mm  |
|             | Gas pipe    | Φ 15.88x1.0mm |

## Drawing for the installation of indoor units

The models adopt HFC free refrigerant R410A



### Arrangement of piping directions



The distance between the indoor unit and the floor should be more than 2m.  
Please be subject to the actual product purchased, the above picture is just for your reference.

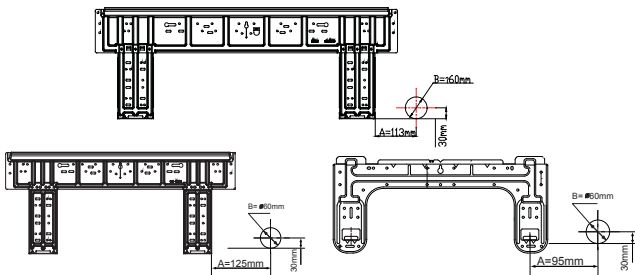


# Indoor Unit Installation

## 1 Fitting of the Mounting Plate and Positioning of the wall Hole

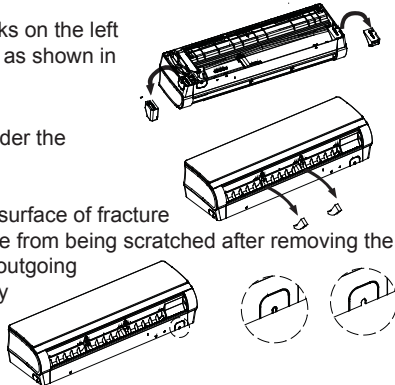
### When the mounting plate is first fixed

1. Carry out, based on the neighboring pillars or lintels, a proper leveling for the plate to be fixed against the wall, then temporarily fasten the plate with one steel nail.
2. Make sure once more the proper level of the plate, by hanging a thread with a weight from the central top of the plate, then fasten securely the plate with the attachment steel nail.
3. Find the wall hole location A using a measuring tape



### Pay attention to the following points before installation of machine:

1. Take out cushion blocks on the left and right angle beads as shown in the following Figure.
2. Remove 2 gaskets under the cross-flow fan.
3. Clean the burr on the surface of fracture to avoid the power wire from being scratched after removing the virtual opening of the outgoing line slot on the case by hands in indoor power-on process.

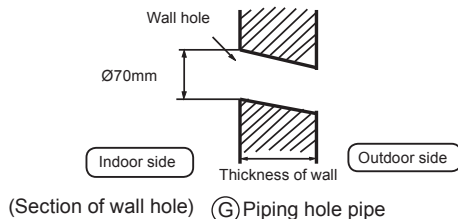


### When the mounting plate is fixed side bar and lintel

- Fix to side bar and lintel a mounting bar, Which is separately sold, and then fasten the plate to the fixed mounting bar.
- Refer to the previous article, " When the mounting plate is first fixed ", for the position of wall hole.

## 2 Making a Hole on the Wall and Fitting the Piping Hole Cover

- Make a hole of 70 mm in diameter, slightly descending to outside the wall
- Install piping hole cover and seal it off with putty after installation



## 3 Installation of the Indoor Unit

### Drawing of pipe

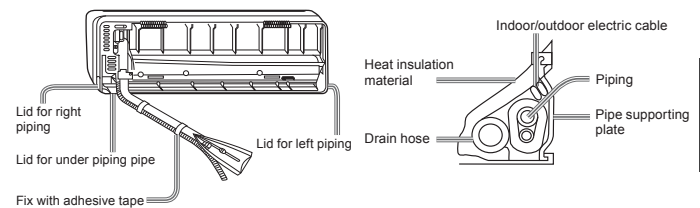
### [ Rear piping ]

- Draw pipes and the drain hose, then fasten them with the adhesive tape

### [ Left • Left-rear piping ]

- In case of left side piping, cut away, with a nipper, the lid for left piping.
- In case of left-rear piping, bend the pipes according to the piping direction to the mark of hole for left-rear piping which is marked on heat insulation materials.

1. Insert the drain hose into the dent of heat insulation materials of indoor unit.
2. Insert the indoor/outdoor electric cable from backside of indoor unit, and pull it out on the front side, then connect them.
3. Coat the flaring seal face with refrigerant oil and connect pipes. Cover the connection part with heat insulation materials closely, and make sure fixing with adhesive tape



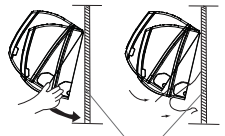
- Indoor/outdoor electric cable and drain hose must be bound with refrigerant piping by protecting tape.

### [ Other direction piping ]

- Cut away, with a nipper, the lid for piping according to the piping direction and then bend the pipe according to the position of wall hole. When bending, be careful not to crash pipes.
- Connect beforehand the indoor/outdoor electric cable, and then pull out the connected to the heat insulation of connecting part specially.

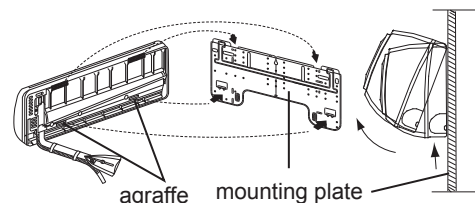
### Fixing the indoor unit body

- Hang surely the unit body onto the upper notches of the mounting plate. Move the body from side to side to verify its secure fixing.
- In order to fix the body onto the mounting plate, hold up the body aslant from the underside and then put it down perpendicularly.



### Unloading of indoor unit body

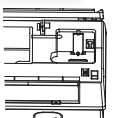
- When you unload the indoor unit, please use your hand to arise the body to leave a grapple, then lift the bottom of the body outward slightly and lift the unit aslant until it leaves the mounting plate.



## 4 Connecting the indoor/outdoor Electric Cable

### Removing the wiring cover

- Remove terminal cover at right bottom corner of indoor unit, then take off wiring cover by removing its screws.



## When connecting the cable after installing the indoor unit

1. Insert from outside the room cable into left side of the wall hole, in which the pipe has already existed.
2. Pull out the cable on the front side, and connect the cable making a loop.

## When connecting the cable before installing the indoor unit

- Insert the cable from the back side of the unit, then pull it out on the front side.
- Loosen the screws and insert the cable ends fully into terminal block, then tighten the screws.
- Pull the cable slightly to make sure the cables have been properly inserted and tightened.
- After the cable connection, never fail to fasten the connected cable with the wiring cover.

Indoor unit

To Outdoor unit

### Note:

When connecting the cable, confirm the terminal number of indoor and outdoor units carefully. If wiring is not correct, proper operation can not be carried out and will cause defect.

|                   |                   |
|-------------------|-------------------|
| Connecting wiring | $\geq 4G0.75mm^2$ |
|-------------------|-------------------|

1. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person. The type of connecting wire is H05RN-F or H07RN-F.
2. If the fuse on PC board is broken please change it with the type of T.3.15A/250VAC (Indoor).
3. The wiring method should be in line with the local wiring standard.
4. After installation, the power plug should be easily reached.
5. A breaker should be incorporated into fixed wiring. The breaker should be all-pole switch and the distance between its two contacts should be not less than 3mm.

## 5 Power Source Installation

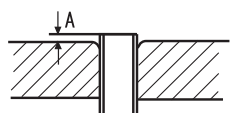
- The power source must be exclusively used for air conditioner.
- In the case of installing an air conditioner in a moist place, please install an earth leakage breaker.
- For installation in other places, use a circuit breaker as far as possible.

## 6 Cutting and Flaring Work of Piping

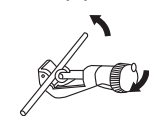
- Pipe cutting is carried out with a pipe cutter and burs must be removed.
- After inserting the flare nut, flaring work is carried out.

|   | Flare tool for R410A | Conventional flare tool |                               |
|---|----------------------|-------------------------|-------------------------------|
|   | Clutch-type          | clutch-type(Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0~0.5mm              | 1.0~1.5mm               | 1.5~2.0mm                     |

Flare tooling die



1.Cut pipe



2.Remove burs



3.Insert the flare nut



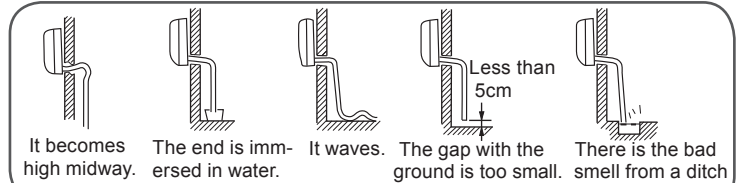
4.Flare pipe



| Correct | Incorrect |                 |       |         |             |
|---------|-----------|-----------------|-------|---------|-------------|
|         |           |                 |       |         |             |
|         | Lean      | Damage of flare | Crack | Partial | Too outside |

## 7 On Drainage

- Please install the drain hose so as to be downward slope without fail.
- Please don't do the drainage as shown below.



- Please pour water in the drain pan of the indoor unit, and confirm that drainage is carried out surely to outdoor.
- In case that the attached drain hose is in a room, please apply heat insulation to it without fail.

## 8 On Drainage

| Code indication | Trouble description                                  | Analyze and diagnose  |
|-----------------|--|---|
| E1              | Room temperature sensor failure                      | Faulty connector connection;<br>Faulty thermistor;<br>Faulty PCB;   |
| E2              | Heat-exchange sensor failure                         |   |
| E4              | Indoor EEPROM error                                  | Faulty EEPROM data;<br>Faulty EEPROM;<br>Faulty PCB;  |
| E7              | Communication fault between indoor and outdoor units | Indoor unit- outdoor unit signal transmission error due to wiring error;<br>Faulty PCB;   |
| E14             | Indoor fan motor malfunction                         | Operation halt due to breaking of wire inside the fan motor;<br>Operation halt due to breaking of the fan motor lead wires;<br>Detection error due to faulty indoor unit PCB; |

## 9 Check for Installation and Test Run

- Please kindly explain to our customers how to operate through the instruction manual.

### Check Items for Test Run

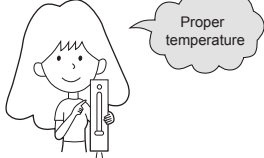
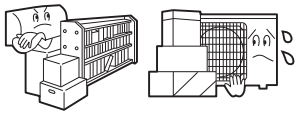


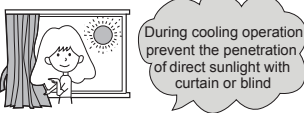
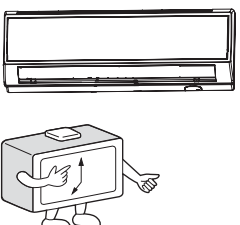




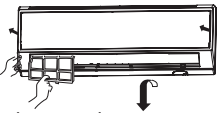
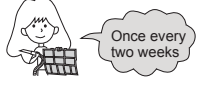
☐ Put check mark ✓ in boxes

- ☐ Gas leak from pipe connecting?
- ☐ Heat insulation of pipe connecting?
- ☐ Are the connecting wirings of indoor and outdoor firmly inserted to the terminal block?
- ☐ Is the connecting wiring of indoor and outdoor firmly fixed?
- ☐ Is drainage securely carried out?
- ☐ Is the earth line securely connected?
- ☐ Is the indoor unit securely fixed?
- ☐ Is power source voltage abided by the code?
- ☐ Is there any noise?
- ☐ Is the lamp normally lighting?
- ☐ Are cooling and heating (when in heat pump) performed normally?
- ☐ Is the operation of room temperature regulator normal?


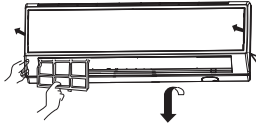

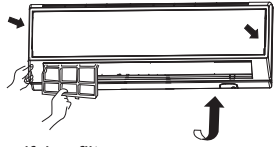


# Maintenance

## For Smart Use of The Air Conditioner

|  |   |   |   |
|--|---|---|---|
| <p>Setting of proper room temperature</p>   | <p>Do not block the air inlet or outlet</p>  | <p>Remote Controller</p>  <p>Do not use water, wipe the controller with a dry cloth. Do not use glass cleaner or chemical cloth.</p>  | <p>Indoor Body</p>  <p>wipe the air conditioner by using a soft and dry cloth. For serious stains, use a neutral detergent diluted with water. Wring the water out of the cloth before wiping, then wipe off the detergent completely.</p> |
| <p>Close doors and windows during operation</p>    | <p>Use the timer effectively</p>             | <p>Do not use the following for cleaning</p>   <p>Gasoline, benzene, thinner or cleanser may damage the coating of the unit. Hot water over 40°C (104°F) may cause discoloring or deformation.</p>   |   |
| <p>If the unit is not to be used for a long time, turn off the power supply main switch.</p>  | <p>Use the louvers effectively</p>         | <p><b>Air Filter cleaning</b></p>  <ol style="list-style-type: none"> <li>1 Open the inlet grille by pulling it upward.</li> <li>2 Remove the filter.<br/>Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward.</li> <li>3 Clean the filter.<br/>Use a vacuum cleaner to remove dust, or wash the filter with water. After washing, dry the filter completely in the shade.</li> <li>4 Attach the filter.<br/>Attach the filter correctly so that the "FRONT" indication is facing to the front. Make sure that the filter is completely fixed behind the stopper. If the right and left filters are not attached correctly, that may cause defects.</li> <li>5 Close the inlet grille.</li> </ol>  |   |

## Replacement of Air Purifying Filter

|  |  |
|--|--|
| <p><b>1. Open the Inlet Grille</b><br/>Prop up the inlet grille by using a small device named grille-support which located in the right side of the indoor unit.</p>  <p><b>2. Detach the standard air filter</b><br/>Slide the knob slightly upward to release the filter, then withdraw it.</p>  <p><b>3. Attach Air Purifying Filter</b><br/>Put air purifying filter appliances into the right and left filter frames.</p>  | <p><b>4. Attach the standard air filter</b><br/>(Necessary installation)</p>  <p><b>ATTENTION:</b><br/>The white side of the photocatalyst air purifying filter face outside, and the black side face the unit. The green side of the bacteria-killing medium air purifying filter face outside, and the white side face the unit.</p> <p><b>5. Close the Inlet Grille</b><br/>Close the Grille surely</p> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>• The photocatalyst air purifying filter will be solarized in fixed time. In normal family, it will be solarized every 6 months.</li> <li>• The bacteria-killing medium air purifying filter will be used for a long time, no need for replacement. But in the period of using them, you should remove the dust frequently by using vacuum cleaner or flapping them lightly, otherwise, its performance will be affected.</li> <li>• Please keep the bacteria-killing medium air purifying filter in the cool and dry conditions, avoid long time directly sunshine when you stop using it, or its ability of sterilization will be reduced.</li> </ul> |
|--|--|

# Cautions

## ⚠ WARNING

Please call Sales/Service Shop for the Installation.

Do not attempt to install the air conditioner by yourself because improper works may cause electric shock, fire, water leakage.

## ⚠ WARNING

When abnormality such as burnt-smell found, immediately stop the operation button and contact sales shop.

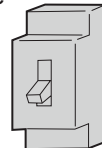


OFF



⚠  
STRICT  
ENFORCEMENT

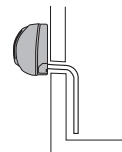
Use an exclusive power source with a circuit breaker



Check proper installation of the drainage securely



⚠  
STRICT  
ENFORCEMENT



Connect power supply cord to the outlet completely



⚠  
STRICT  
ENFORCEMENT

Use the proper voltage



⚠  
STRICT  
ENFORCEMENT

1. Do not use power supply cord extended or connected in halfway
2. Do not install in the place where there is any possibility of inflammable gas leakage around the unit.
3. Do not get the unit exposed to vapor or oil steam.



PROHIBITION

Do not use power supply cord in a bundle.



PROHIBITION

Take care not to damage the power supply cord.



PROHIBITION

Do not insert objects into the air inlet or outlet.



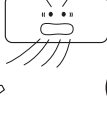
PROHIBITION

Do not start or stop the operation by disconnecting the power supply cord and so on.



PROHIBITION

Do not channel the air flow directly at people, especially at infants or the aged.

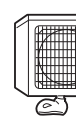


PROHIBITION

Do not try to repair or reconstruct by yourself.



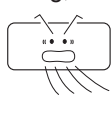
Connect the earth cable.



earthing

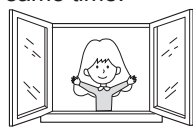
## ⚠ CAUTION

Do not use for the purpose of storage of food, art work, precise equipment, breeding, or cultivation.



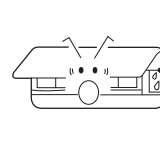
PROHIBITION

Take fresh air occasionally especially when gas appliance is running at the same time.



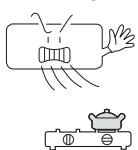
STRICT  
ENFORCEMENT

Do not operate the switch with wet hand.



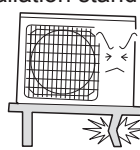
PROHIBITION

Do not install the unit near a fireplace or other heating apparatus.



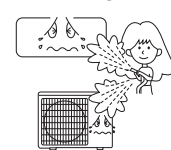
PROHIBITION

Check good condition of the installation stand



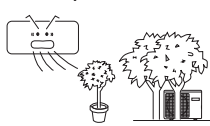
PROHIBITION

Do not pour water onto the unit for cleaning



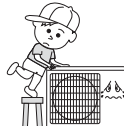
PROHIBITION

Do not place animals or plants in the direct path of the air flow



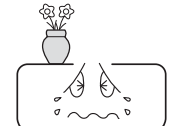
PROHIBITION

Do not place any objects on or climb on the unit.



PROHIBITION






Do not place flower vase or water containers on the top of the unit.



PROHIBITION

# Trouble shooting

Before asking for service, check the following first.

|                               | Phenomenon  | Cause or check points   |
|-------------------------------|---|---|
| Normal Performance inspection | The system does not restart immediately.<br> | <ul style="list-style-type: none"> <li>When unit is stopped, it won't restart immediately until 3 minutes have elapsed to protect the system.</li> <li>When the electric plug is pulled out and reinserted, the protection circuit will work for 3 minutes to protect the air conditioner.</li> </ul>   |
|                               | Noise is heard<br>                           | <ul style="list-style-type: none"> <li>During unit operation or at stop, a swishing or gurgling noise may be heard. At first 2-3 minutes after unit start, this noise is more noticeable. (This noise is generated by refrigerant flowing in the system.)</li> <li>During unit operation, a cracking noise may be heard. This noise is generated by the casing expanding or shrinking because of temperature changes.</li> <li>Should there be a big noise from air flow in unit operation, air filter may be too dirty.</li> </ul> |
|                               | Smells are generated.   | <ul style="list-style-type: none"> <li>This is because the system circulates smells from the interior air such as the smell of furniture, paint, cigarettes.</li> </ul>   |
|                               | Mist or steam are blown out.<br>           | <ul style="list-style-type: none"> <li>During COOL or DRY operation, indoor unit may blow out mist. This is due to the sudden cooling of indoor air.</li> </ul>   |
|                               | In dry mode, fan speed can't be changed.  | <ul style="list-style-type: none"> <li>In DRY mode, when room temperature becomes lower than temp. setting+2 °C, unit will run intermittently at LOW speed regardless of FAN setting.</li> </ul>  |
| Multiple check                |    | <ul style="list-style-type: none"> <li>Is power plug inserted?</li> <li>Is there a power failure?</li> <li>Is fuse blownout?</li> </ul>   |
|                               | Poor cooling<br>                           | <ul style="list-style-type: none"> <li>Is the air filter dirty? Normally it should be cleaned every 15 days.</li> <li>Are there any obstacles before inlet and outlet?</li> <li>Is temperature set correctly?</li> <li>Are there some doors or windows left open?</li> <li>Is there any direct sunlight through the window during the cooling operation? (Use curtain)</li> <li>Are there too much heat sources or too many people in the room during cooling operation?</li> </ul>   |

# Cautions

- Do not obstruct or cover the ventilation grille of the air conditioner. Do not put fingers or any other things into the inlet/outlet and swing louver.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of appliance by person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## Specifications

- The refrigerating circuit is leak-proof.

The machine is adaptive in following situation

1. Applicable ambient temperature range:

|         |                    |  |
|---------|--------------------|--|
| Cooling | Indoor             | Maximum: D.B/W.B 32°C/23°C<br>Minimum: D.B/W.B 21°C/15°C |
|         | Outdoor            | Maximum: D.B/W.B 46°C/26°C<br>Minimum: D.B 18°C          |
| Heating | Indoor             | Maximum: D.B 27°C<br>Minimum: D.B 15°C                   |
|         | Outdoor            | Maximum: D.B/W.B 24°C/18°C<br>Minimum: D.B/W.B -7°C/-8°C |
|         | Outdoor (INVERTER) | Maximum: D.B/W.B 24°C/18°C<br>Minimum: D.B -15°C         |

- If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.
- If the fuse of indoor unit on PC board is broken, please change it with the type of T. 3.15A/ 250V. If the fuse of outdoor unit is broken, change it with the type of T.25A/250V
- The wiring method should be in line with the local wiring standard.
- After installation, the power plug should be easily reached.
- The waste battery should be disposed properly.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- Please employ the proper power plug, which fit into the power supply cord.
- The power plug and connecting cable must have acquired the local attestation.
- In order to protect the units, please turn off the A/C first, and at least 30 seconds later, cutting off the power.