

OWNER'S MANUAL

ROOM AIR

CONDITIONER

Please read this manual carefully before operating your set and retain it for future reference.

TYPE : WALL MOUNTED

For Split AC Domestic Models



MFL39754865

P/No. MFL39754865_V3

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CAUTION

- Contact the authorized service technician for repair or maintenance of this unit.
- Please install your air-conditioner by company authorized service franchisee / authorized service and sales dealer.
- The air conditioner is not intended for use by young children or invalids without supervision.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- When the power cord is to be replaced, replacement work shall be performed by authorized personnel only, using only genuine replacement parts.

15 ADVANCED FUNCTIONS

- Changing room temperature quickly
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We recommend usage of voltage stabilizer with high / low voltage cut off in areas having voltage fluctuations.

AC TONNAGE	STABILIZER KVA (3-STEP STABILIZER)
1.0	3
1.5	4
2.0	5

TIPS FOR SAVING ENERGY

Here are some tips that will help you minimize the power consumption when you use the air conditioner. You can use your air conditioner more efficiently by referring to the instructions below:

- Avoid excessive cooling. This may be harmful for your health and may consume more electricity.
- Block sunlight with blinds or curtains while you are operating the air conditioner.
- Keep doors or windows closed tightly while you are operating the air conditioner.
- Adjust the direction of the air flow vertically or horizontally to circulate indoor air.
- Speed up the fan to cool or warm indoor air quickly, in a short period of time.
- Open windows regularly for ventilation as the indoor air quality may deteriorate if the air conditioner is used for many hours.
- Clean the air filter once every 2 weeks. Dust and impurities collected in the air filter may block the air flow or reduce the cooling / dehumidification functions.
(Refer page no. 19 and 20 details of owner's manual).

For your records

Staple your receipt to this page in case you need it to prove the date of purchase or for warranty purpose. Write the model number and the serial number here:

Model number : _____

Serial number : _____

You can find them on a label on the side of each unit.

Dealer's name : _____

Date of purchase : _____

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product



WARNING

It can result in serious injury or death when the directions are ignored.



CAUTION

It can result in minor injury or product damage when the directions are ignored.



WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Power

- Unplug the power plug immediately in the event of a blackout or thunderstorm. Failure to do so may result in fire or electric shock.
- Always use a power plug and socket with a ground terminal. Failure to do so may result in electric shock or product failure.
- Install a dedicated electric outlet and circuit breaker before you use the air conditioner. Failure to do so may result in electric shock or product failure.
- Do not connect the ground wire to a gas pipe, a lightning rod or a telephone ground wire. It may result in electric shock or product failure.
- Use a standard circuit breaker and fuse conforming with the rating of the air conditioner. Failure to do so may result in electric shock or product failure.
- Make sure to check that the power cable plug is not dirty, loose or broken and then only insert the plug completely. It may result in electric shock or product failure.
- Do not modify or extend the power cable. If the power cable or cord has scratches or skin peeled off or deteriorated then it must be replaced. It may result in fire or electric shock.
- Do not touch, operate or repair the air conditioner with wet hands. It may result in electric shock or product failure.
- Make sure that the power plug is not damaged when you move the air conditioner. Failure to do so may result in electric shock or product failure.

- Do not place a heater or other heating appliances near the power cable. It may result in fire, electric shock, or product failure.
- Make sure that the power cord is not pulled or damaged while the air conditioner is operating. Failure to do so may result in fire, electric shock, or product failure.
- Do not place any objects on the power cord. It may result in electric shock or product failure.

Installation

- **Do not install the air conditioner on an unstable surface or where there may be a danger of unit falling. It may result in death, serious injury, or product failure.**
- Contact an authorized service center when you install or relocate the air conditioner. Failure to do so may result in serious injury or product failure.
- Indoor/outdoor wiring connections must be secured tightly and the cable should be routed properly so that there is no force pulling the cable from the connection terminals. Improper or loose connections can cause heat generation or fire.
- Install the panel and the cover of the control box safely. Failure to do so may result in explosion or fire.
- Do not install the air conditioner near a place with a danger of explosion or fire. It may result in explosion or fire.
- Make sure that the pipe and the power cable that connect the indoor unit and the outdoor unit are not pulled tight when you install the air conditioner. Failure to do so may result in electric shock or product failure.
- Do not mix air or any gas in the system except for the specific refrigerant. If air enters the refrigerant system, it may result in an excessively high pressure that causes injury or damage to the equipment.

Dos and Don'ts

- **Be sure to use only those parts which are listed in the service parts list. Never attempt to modify the equipment. It may result in death, serious injury, effect on product performance or product failure.**
- Do not pull the power cord when you remove the power plug. It may result in death or electric shock.
- Discard the batteries where there is no danger of fire. Failure to do so may result in explosion or fire.
- Contact an authorized service center when the air conditioner is submerged into water due to flooding. Failure to do so may result in explosion or fire.
- **Only use components that are approved by the manufacturer and do not repair or modify them. Failure to do so may result in electric shock, effect on product performance or product failure.**
- **Only use the refrigerant specified on the air conditioner label. Failure to do so may result in explosion or fire.**
- Do not allow water to enter into the air conditioner. It may result in explosion or fire.
- Do not leave flammable substances such as gasoline, benzene and thinner near the air conditioner. It may result in explosion or fire.
- Do not use the air conditioner for an extended period of time in a small place without ventilation. Ventilate the place regularly. Failure to do so may result in explosion or fire.
- Do not touch the electrostatic filter after opening the front grille. Failure to do so may result in electric shock or product failure.
- Unplug the power plug if there is a noise, smell or smoke coming from the air conditioner. Failure to do so may result in explosion or fire.
- Make sure to ventilate sufficiently when this air conditioner and a heating appliance such as a heater are used simultaneously. Failure to do so may result in fire, serious injury, or product failure.

6 SAFETY INSTRUCTIONS

- Make sure that children do not climb up the outdoor unit or impact it. Failure to do so may result in death or product failure.
- Do not turn **ON** or **OFF** the air conditioner by plugging in or unplugging the power plug. It may result in fire or electric shock.
- When there is a gas leak, before using air conditioner again contact authorized service person for verification and repair. Failure to do so may result in explosion or fire.
- Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer air conditioner, not a precision refrigeration system. It may result in death, fire or electric shock.
- Do not block the inlet or outlet of air flow. It may effect product performance.
- Do not insert hands or other objects through the air inlet or outlet while the air conditioner is operating. It may result in electric shock or serious injury.
- Do not expose people, animals or plants to the cold or hot wind from the air conditioner. It may result in serious injury or health complications.
- Do not drink the water drained from the air conditioner. It may result in serious health complications.
- For inner cleaning, contact an **Authorized Service Center** or a dealer. Do not use harsh detergent that causes corrosion or damage on the unit. Harsh detergent that causes failure or product, fire or electronic shock

Maintenance

- Turn the main power off and unplug the power plug when you clean or repair the air conditioner. Failure to do so may result in death, serious injury, or product failure.

CAUTION

Installation

- Do not install the air conditioner where there is direct sunlight. It may effect product performance.
- Safely dispose of packing materials such as screws, nails or batteries in a packing bag after installation or repair. It may result in serious injury.
- Do not install the air conditioner where it will be exposed to sea wind (salt spray) directly. It may result in product failure.
- Install the drain hose properly for smooth drainage of condensed water. Failure to do so may result in water leakage or product failure.
- Install the air conditioner where the noise from the outdoor unit or the exhaust gas will not cause inconvenience to neighbours. Failure to do so may result in conflict between neighbours.
- Be cautious when you unpack or install the air conditioner. Failure to do so may result in serious injury or product failure.
- Do not touch the refrigerant leakage during installation or repair. It may result in product failure.
- When transporting the equipment, there should be at least 2 or more people, or a forklift, Failure to do so may result in serious injury.

Dos & Don'ts

- Remove the batteries when the remote control is not in use for an extended period of time. Failure to do so may result in product failure.
- Make sure that the filter is installed before you operate the air conditioner. Failure to do so may effect product performance.
- Unplug the power plug when the air conditioner is not used for an extended period of time. Failure to do so may result in product failure.

- Follow the standards of the corresponding region or country for handling the refrigerant and the air conditioner, and for disassembling the air conditioner. Failure to do so may result in product failure.
- Do not mix the batteries for the remote control with other types of batteries or mix new batteries with used batteries. Failure to do so may result in remote failure.
- Do not recharge or disassemble the batteries. Failure to do so may result in explosion, fire or serious injury.
- Stop using the remote control if there is a battery fluid leak. If your cloth or skin is exposed to the battery fluid from a leak, wash it off with clean water. Failure to do so may result in serious injury.
- If you swallow the battery fluid from a leak, wash out the inside of your mouth thoroughly and then consult a doctor. Failure to do so may result in serious health complications.
- Do not let the air conditioner run for long time when the humidity is very high or when a door or window has been left open. Failure to do so may effect product performance or result in product failure.

Maintenance

- Do not use strong cleaning agents or solvents when you clean the air conditioner, or spray water. Use a smooth cloth. It may result in serious injury or product failure.
- Never touch the metal parts of the air conditioner when you remove the air filter. It may result in electric shock or serious injury.
- Use a sturdy stool or ladder when you clean, maintain or repair the air conditioner at a height. Failure to do so may result in serious injury.

Disposal of your old appliance (as per e-waste Rules)



1. When this crossed out wheeled bin symbol is depicted on the product and its operator's manual, it means the product is covered by the e-waste Management and Handling Rules, 2011 and are meant to be recycled, dismantled, refurbished or disposed off.

2. Dos

- The product is required to be handed over only to the authorized recycler for disposal.
 - Keep the product in isolated area, after it becomes non-functional/un-repairable so as to prevent its accidental breakage.
- Don't**
- The product should not be opened by the user himself/herself, but only by authorized service personnel.
 - The product is not meant for re-sale to any unauthorized agencies/scrap dealer/ kabariwalah.
 - The product is not meant for mixing into household waste stream.
 - Do not keep any replaced spare part(s) from the product in exposed area.
3. Any disposal through unauthorized agencies/person will attract action under Environment (Protection) Act 1986.
4. Hazards of improper handling or accidental breakage
- If batteries are disposed incorrectly, it can greatly harm the environment. The chemical by-products are hazardous. The metals and chemicals found in batteries can mix into soil which may be hazardous to humans, plants and animals. If thrown in fire, they can cause blast and release toxic gases which may be harmful for health.
 - The refrigerant (R-22) used can be combustible at low pressure. The potential health effects of over exposure is dizziness, headache and heart irregularities.
5. To locate a nearest collection centre or call for pick-up (limited area only) for disposal of this appliance, please contact Toll Free No. **1800-180-9999** for details. All collection centre and pick up facilities are done by third parties with **LG Electronics India Pvt. Ltd.** merely as a facilitator.
- For more detailed information, please visit : <http://www.lg.com>

अपने पुराने उपकरण का निपटारा (ई-अपशिष्ट नियम के अनुसार)



१. जब इस काटे गये पहिये वाले बिन का चिह्न किसी उपकरण और इसके ओपरेटर की पुस्तिका के साथ संलग्न होता है तो इसका मतलब है कि इसे "ई-अपशिष्ट" (प्रबंधन और हथालन) नियम २०११ के अन्तर्गत सम्भलित किया गया है, और इसे नवीनीकरण, विघटन और निपटारा के लिए बनाया गया है।

२. करें-

क- उपकरण को सिर्फ अधिकृत पुनः नवीनीकरणकर्ता को ही निपटारण करने हेतु हस्तान्तरित करें।

ख- जब उपकरण कार्यरत न हो इसे अलग क्षेत्र में रखें ताकि उपकरण से होने वाली दुर्घटनाओं से बचा जा सके।

ना करें-

क- इस उपकरण को स्वयं/खुद नहीं खोलना चाहिए! उपकरण को केवल अधिकृत अधिकारी के द्वारा ही खोला जाना चाहिए।

ख- इस उपकरण को पुनः बिक्री के लिए किसी भी कबाड़ीवाला/मंगार वाला/अनाधिकृत संस्था को न दें।

ग- इस उपकरण को किसी घरेलू अपशिष्ट सामान के साथ मिलाकर न रखें।

घ- उपकरण के बदले हुए या आंतरिक घटकों को खुले क्षेत्र में न रखें।

3. यदि किसी अनाधिकृत विभाग या व्यक्ति के द्वारा निपटारा किया जाता है तो यह पर्यावरण (सुरक्षा) धारा १९८६ के अन्तर्गत आता है।

४. दुर्घटनाग्रस्त टूट/फूट तथा अव्यवस्थित रख-रखाव से बचे।

क- यदि बैटरियों का निपटारा अशुद्ध रूप से कर रहे हैं, तो यह वातावरण को बहुत नुकसान पहुँचा सकता है। रासायनिक उपकरण खतरनाक होते हैं। जो रसायन और धातु बैटरियों में पाए जाते हैं, इसे मिट्टी में मिलाने पर यह मनुष्यों, पौधों और पशुओं के लिए खतरनाक हो सकती है। यदि इसे आग में फेंकते हैं तो ये विस्फोट कर सकते हैं और ये जहरीली गैसें दे सकते हैं जो स्वास्थ्य के लिए हानिकारक हैं।

ख- रेफ्रिजेंट (R-22) कम दबाव पर दहनशील हो सकती है तथा इससे स्वास्थ्य पर दुसभाव पड़ सकता है जैसे चक्कर आना, सिर दर्द और हृदय गति रुकना।

५. उपरोक्त पदार्थों के निपटारण के लिए नजदीकी निपटारण संस्थान (संकीर्ण क्षेत्र) में कॉल करें। अधिक जानकारी के लिए हमारे टोल फ्री नम्बर **१८००-१८०-९९९९** पर कॉल करें। सभी संग्रहण केन्द्र व पिक-अप की सुविधाएं थर्ड-पार्टी से जो "LG Electronics India Pvt. Ltd." को अपनी सेवाएं प्रदान कर रही हैं, से करवाएं।

अधिक जानकारी के लिए देखें वेबसाइट : <http://www.lg.com>

BEFORE USE

Prior to Operation

Preparing for Operation

1. Contact an installation specialist for installation.
2. Plug in the power plug properly.
3. Use a dedicated circuit breaker.
4. Do not use an extension cord.
5. Do not start/stop operation by plugging/unplugging the power cord.
6. If the cord/plug is damaged, replace it with only an authorized replacement part.

Usage

1. Being exposed to direct airflow for a long time may be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for a long time.
2. Due to the possibility of oxygen deficiency, ventilate the room when using the appliance together with stoves or other heating devices.
3. Do not use this air conditioner for non-specified special purpose (e.g. preserving precision devices, food, pets, plants, or art objects). Such use may damage your properties.

Cleaning and Maintenance

1. Do not touch the metal parts of the unit when removing the filter. Injury can occur.
2. Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to electric shock or effect product performance.
3. When cleaning the unit, first make sure that the power and breaker are turned off. The fan rotates at a very high speed during operation. There is a possibility of injury if the unit's power is triggered while cleaning inner parts of the unit.

Service

For repair and maintenance, contact your authorized service dealer.

Components

Symbols used in this Manual



This symbol alerts you to the risk of electric shock.



This symbol alerts you to hazards that may cause harm to the air conditioner.



NOTE This symbol indicates special notes.

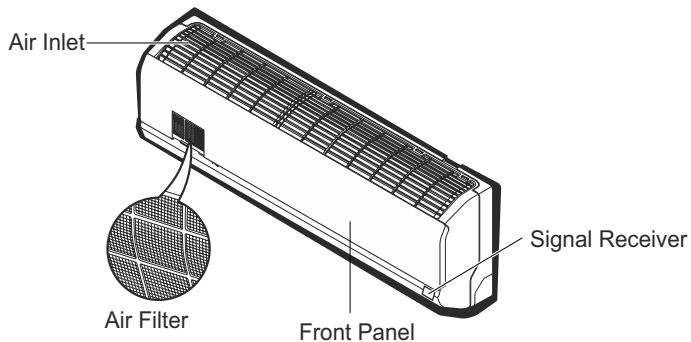
Features



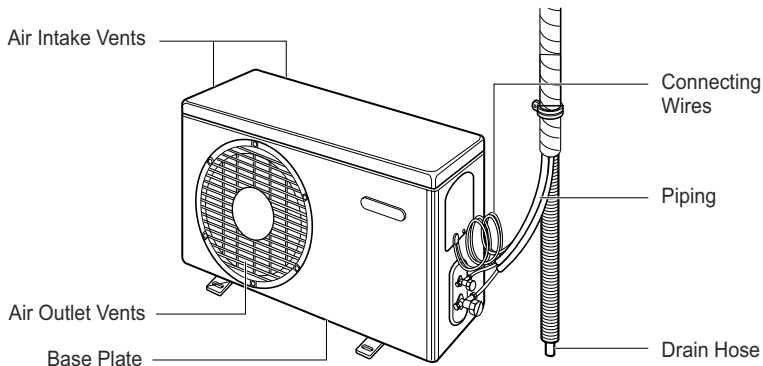
WARNING

This appliance should be installed in accordance with national wiring regulations. This guide acts as a guide to help to explain product features.

Indoor unit



Outdoor unit



Electrical Safety

⚠ WARNING

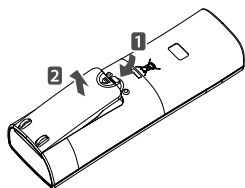
- This appliance must be properly grounded.
To minimize the risk of electric shock, you must always plug into a grounded outlet.
- Do not cut or remove the grounding.
- Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal and not insulated, and the wall receptacle is grounded through the house wiring.
- If you have any doubt whether the air conditioner is properly grounded, check the wall receptacle and circuit checked by a qualified electrician.

Using the remote control

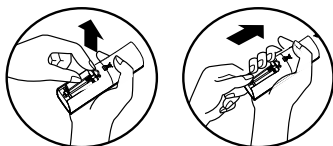
Inserting batteries

Insert batteries before using the remote control. The battery type used is AAA (1.5 V).

- 1 Remove the battery cover.



- 2 Insert the new batteries and make sure that the end terminals of the batteries are installed correctly.



- 3 Re-attach the battery cover.

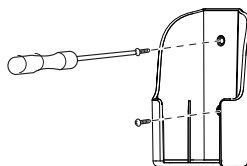
! NOTE

If the display screen of the remote control starts to fade, replace the batteries.

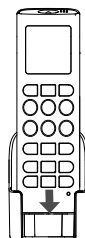
Installing the remote control holder

Install the holder where there is no direct sunlight to protect the remote control.

- 1 Choose a safe and easily-accessible place.
- 2 Remove the adhesive sticker protection film from the back of the holder before attaching it to the wall.
- 3 Fix the holder by fastening the 2 screws firmly with a screwdriver.

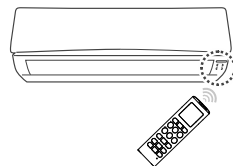


- 4 Slide the remote control into the holder.



Operating method

Point the remote control towards the signal receiver at the bottom of the air conditioner to operate it.



! NOTE

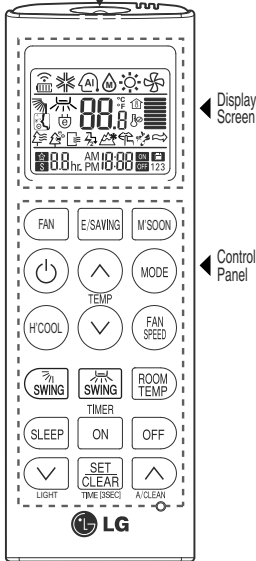
- The remote control may operate other electronic devices if pointed towards them. Make sure to point the remote control towards the signal receiver of the air conditioner.
- For proper operation, use a soft cloth to clean the signal transmitter and receiver.

Using the remote control

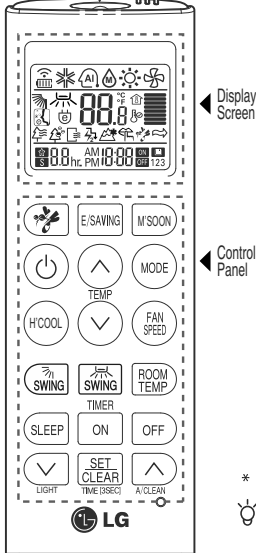
You can operate the air conditioner more conveniently with the remote control.

Wireless remote control

Signal Transmitter



Signal Transmitter



Control panel	Display screen	Description
		Air Circulation button :Used to circulate the room air without cooling or heating.
		Mosquito Away operation button* :Used to start or stop Mosquito Away operation
		Sleep mode auto button : Sets the sleep mode auto operation.
		Temperature adjustment buttons : Adjusts the desired temperature when cooling and heating.
	-	ON/OFF button : Turns the air conditioner ON/OFF
		Indoor fan speed button : Adjusts the fan speed.
		Operation mode selection button* : Selects the operation mode. Cooling operation (❄️) / Auto operation or auto changeover (🔄) / Heating - operation (🔥) / Air circulation* (🌀)
		Monsoon mode selection button : Use to remove excess moisture.
		H'COOL button : Cools down the indoor temperature within a short period of time
		Air flow direction button* :Adjusts the air flow direction.
		Temperature Display : Display the room temperature.
		Timer button : Sets the current time and the start / end time
		Functions button : Adjusts the time and sets the special functions. 🔄: Auto clean / 🕒: Operates energy saving cooling / 🏠: Turn indoor unit display ON or OFF.
	-	Set/clear button : Sets or cancels functions and set current time.
	-	Reset button : Initialize the remote controller settings.

* Some functions may not be supported, depending on the model.

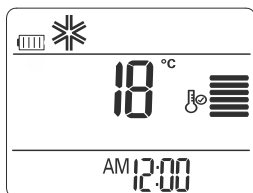
🏠 Symbol is for indoor unit display ON/OFF not remote controller.

BASIC FUNCTIONS

Cooling your room

(Cooling operation)

- 1 Press  to turn on the power.
- 2 Press  repeatedly to select the cooling operation.
- * is displayed on the display screen.

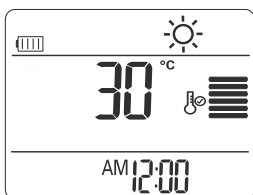


- 3 Press  or  to set the desired temperature.
- The temperature range is 18°C - 30°C

Heating your room

(Heating operation)

- 1 Press  to turn on the power.
- 2 Press  repeatedly to select the heating operation.
-  is displayed on the display screen.



- 3 Press  or  to set the desired temperature.
- The temperature range is 16°C - 30°C

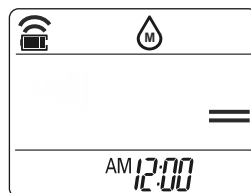
! NOTE

Cooling-only models do not support this function.

Removing humidity (Cooling Mode Only) (Monsoon operation)

This mode removes excess moisture from environment with high humidity or in the rainy season, in order to prevent mold from setting in. This mode adjusts the room temperature and the fan speed automatically to maintain the optimal level of humidity.

- 1 Press  to turn on the power.
- 2 Press  to select the monsoon operation.
-  is displayed on the display screen.



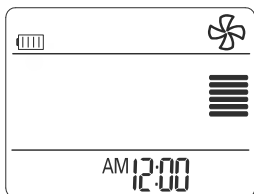
! NOTE

- In this mode you cannot adjust the room temperature, as it is adjusted automatically. Also, the room temperature is not displayed on the display screen.
- In this mode indoor unit fan and outdoor unit will be OFF intermittently.
- To Exit from Monsoon mode press  key or  key or  key

Airing your room (Air Circulation operation)

This mode only circulates the indoor air without changing the room temperature.

- 1 Press  to turn on the power.
- 2 Fan button : Press  turn on the air circulation operation.
-  is displayed on the display screen.



- 3 Press  to adjust the fan speed.

Adjusting the fan speed

- 1 Press  repeatedly to adjust the fan speed.
- Select  if you want natural air.
The fan speed adjusts automatically.

Natural wind (CHAOS Logic)

For fresher feeling, press the INDOOR FAN SPEED SELECTION BUTTON and set to Natural wind mode ().
In this mode, the wind blows like a natural breeze by automatically changing fan speed.

Adjusting the air flow direction

- 1 To adjust the direction of the flow vertically, press  change the air flow direction automatically.
- This function is apply for only turn SWING On/Off.
- 2 To adjust the direction of the flow horizontally, press  change the air flow direction automatically.
- This function is apply for only turn SWING On/Off.

NOTE

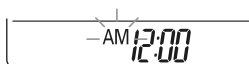
- Adjusting the air flow direction horizontally may not be supported, depending on the model.
- Adjusting the air deflector arbitrarily may cause product failure.
- If you restart the air conditioner, it starts to operate with the previously set direction of air flow, so the air deflector may not match the icon displayed on the remote control. When this occurs, press  or  to adjust the direction of the air flow again.

Setting the timer

You can use the timer function to save energy and to use the air conditioner more efficiently.

Setting the current time

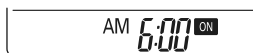
- 1 Press  and hold it for longer than 3 seconds.
- The AM/PM icon flickers at the bottom of the display screen.



- 2 Press or to select desired time.
- 3 Press to finish.

Turning ON the air conditioner automatically at a set time

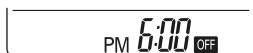
- 1 Press
 - The icon below flickers at the bottom of the display screen.



- 2 Press or to select desired time.
- 3 Press to finish.
- 4 When setting the timer, current time and ON icon are displayed on the display screen indicating that the ON TIMER is set.

Turning OFF the air conditioner automatically at a set time

- 1 Press
 - The icon below flickers at the bottom of the display screen.



- 2 Press or to select desired time.
- 3 Press to finish.
- 4 When setting the timer, current time and OFF icon are displayed on the display screen indicating that the OFF TIMER is set.

! NOTE

- This function may not be supported, depending on the model.
- This mode does not have auto restart feature.

Canceling the timer setting

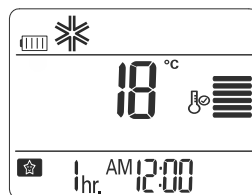
- 1 Press or to select the timer setting to cancel.
- 2 Press
 - To cancel all timer settings, press (The timer lamp on the air conditioner and the display will go off.)

Setting sleep mode

Use the sleep mode to turn OFF the air conditioner automatically when you go to sleep.

The fan speed is set to low in sleep mode.

- 1 Press to turn on the power.
- 2 Press .
- 3 Press or to select the hour (up to 7 hours).
- 4 Press to finish.
 - is displayed on the display screen in sleep mode.



! NOTE

- The sleep mode will operate indoor fan at super low speed in cooling mode and at low speed in heating mode for pleasant sleep
- In cooling mode or Monsoon mode:**
The setting temperature will rise automatically two times by 1°C over next consecutive 30 minutes (Maximum 2°C) for a comfortable sleep.
This will be the final setting temperature as long as sleep mode is functioning.
After completion of set time unit will switch OFF automatically.

ADVANCED FUNCTIONS

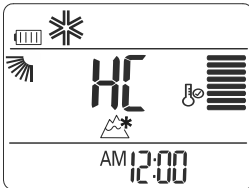
The air conditioner offers some additional advanced functions.

Changing room temperature quickly

H'COOL(Himalaya)Mode

This mode allows you to cool indoor air quickly in summer

- 1 Press  to turn on the power.
- 2 Press .



-In H'COOL(Himalaya)mode,30 minutes strong focused air blows out for faster cooling.

NOTE

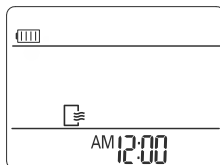
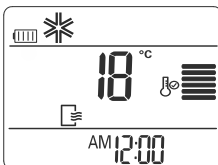
- In Air Circulation, Auto, or Auto Changeover mode, this function cannot be used.
- During & after H'COOL mode swing function will be ON by default.
- To OFF swing function Press respective swing key.
- This function may not be supported, depending on the model.
- This mode does not have auto restart feature.

Indoor air purification

Auto Clean operation

In the cooling and monsoon operations, moisture is generated inside the indoor unit. Use the auto cleaning function to remove such moisture.

- 1 Press  to turn on the power.
- 2 Press 
 -  is displayed on the display screen.



- If you turn off the power, the fan operates for 30 minutes and cleans the inside of the indoor unit.

NOTE

Some buttons cannot be used while the auto cleaning function is in operation.

NOTE

During Auto Clean function, "Co" will be displayed on the unit.

NOTE

Power saving lamp blink depending on the model.

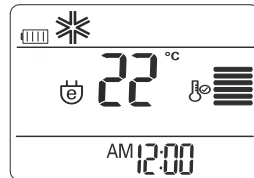
Energy saving cooling mode

This mode minimizes power consumption during cooling and increases the set temperature to the optimal level for a more comfortable environment.

The temperature automatically sets at 22°C if ambient temperature is below 22°C.

The temperature maintains if ambient temperature is above 22°C

- 1 Press  to turn the power on.
- 2 Press  repeatedly to select the cooling operation.
- 3 Press 
 -  is displayed on the display screen.



NOTE

This function may not be supported, depending on the model. In Energy Saving Cooling Mode, temperature on the display of the remote controller and air conditioner can be different.

NOTE

- This function may not be supported, depending on the model.
- This mode does not have auto restart feature.

Auto operation (Optional) (Artificial intelligence)

Cooling-only models

In this mode, the fan speed and the temperature adjust automatically, based on the room temperature.

- 1 Press  to turn on the power.
- 2 Press  repeatedly to select auto operation.
- 3 Press  or  to select the desired operation code if the temperature is higher or lower than the desired temperature.

Code	Description
2	Cool
1	Cool slightly
0	Maintain room temperature
-1	Heat slightly
-2	Heat

NOTE

- In this mode, you cannot adjust the fan speed, but you can set the air deflector to rotate automatically.
- This function may not be supported, depending on the model.

Dimmer (Optional)

In Dimmer Mode Unit Display will be turned OFF completely but system will be in running state.

1. Make sure that remote & Air conditioner are ON.
2. Press  () to activate/deactivate dimmer function.

NOTE

Dimmer Mode will be cancelled if any key except  is pressed (Power Key will turn OFF the Unit).

NOTE

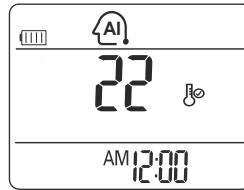
This function may not be supported by Auto Restart feature (depending on selected models).

Auto Changeover (Optional)

Heat pump models

This operation is basically heating or cooling function of the air conditioner. But during this operation the controller change the operation mode automatically to keep the temperature within $\pm 2^{\circ}\text{C}$ with respect to the setting temperature.

- 1 Press  to turn on the power.
 - 2 Press  repeatedly to select auto operation.
-  is displayed on the display screen.



- 3 Press  or  to set the desired temperature.
- The temperature range is $18^{\circ}\text{C} - 30^{\circ}\text{C}$
- 4 Press  repeatedly to select the fan speed.

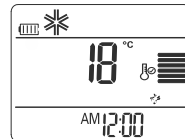
NOTE

- This function may not be supported, depending on the model.

Mosquito Away* Operation (Optional)

Mosquito Away is a device to radiate frequency which mosquitoes don't like.

- 1 Press  to start Mosquito Away function.



- 2 Press  again to finish

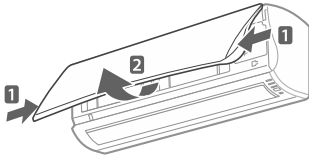
NOTE

- You can use this function by pressing  without turning the air conditioner ON. (In this case, Fan speed can not be changed).
At this time horizontal vane will be at default position & the fan speed will be low.
 - This function can be used with other function like timer, monsoon.
 - This function may not be supported depending on the model.
 - The Mosquito Away performance can be different depending on the customer's environment.
- * For detail refer Disclaimer.

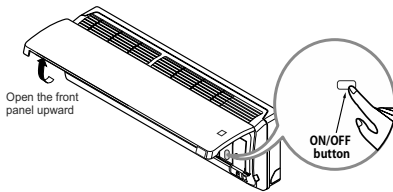
Operating the air conditioner without the remote control (Forced Operation)

You can use the ON/OFF button of the indoor unit to operate the air conditioner when the remote control is unavailable. However, the fan speed is set to high.

- 1 Open the front cover.
 - Lift up both sides of the cover slightly.



- 2 Press the On/Off button.



- For cooling and heating models, the operation mode changes, depending on the room temperature.

	Cooling Model	Heat pump Model*		
		Room Temp. ≥ 24°C	21°C ≤ Room Temp. < 24°C	Room Temp. < 21°C
Operating mode	Cooling	Cooling	Healthy Dehumidification	Heating
Indoor FAN Speed	High	High	High	High
Setting Temperature	22°C	22°C	23°C	24°C

If you want to stop the unit, re-press the power button.

! NOTE

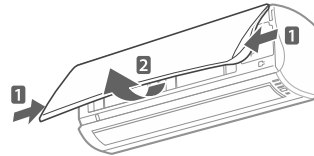
- This function may not be supported, depending on the model.

Restarting the air conditioner automatically

When the air conditioner is turned on again after a power failure, this function restores the previous settings. This function is a factory default setting.

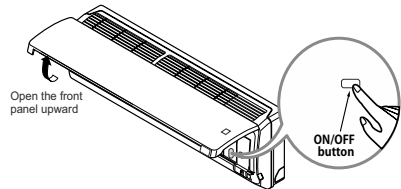
Disabling auto restart (Optional)

- 1 Open the front cover.
 - Lift up both sides of the cover slightly.



- 2 Press the On/Off button and hold it for 6 seconds.

- The unit will beep twice and the lamp will blink 8 times.



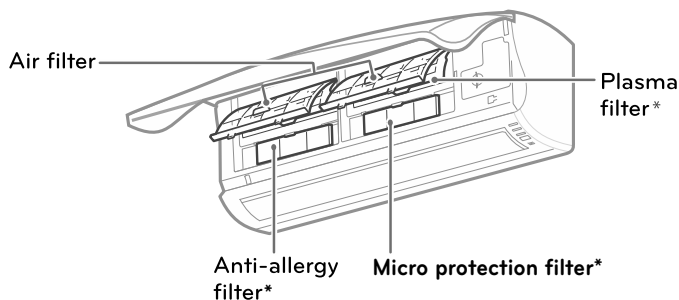
- To re-enable the function, press the On/Off button and hold it for 6 seconds. The unit will beep twice and the blue lamp will blink 4 times.

! NOTE

If you press and hold the On/Off button for 3 – 5 seconds instead of 6 seconds, the unit will switch to the test operation. In the test operation, the unit blows out strong air for cooling for 18 minutes and then returns to the factory default settings.

MAINTENANCE

Clean the product regularly to maintain optimal performance and to prevent possible breakdown.



Item	Cleaning interval	Cleaning method
Air filter	2 weeks	See "Cleaning air filter."
Anti-allergy filter*	3 months	See "Cleaning anti-allergy filter."
Plasma filter*	3 months	See "Cleaning the plasma filter."
Micro Protection filter*	1 month	See "Cleaning the Micro Protection filter."
Indoor unit surface	Regularly	Use a soft, dry cloth. Do not use bleach or abrasives.
Outdoor unit	Regularly	Use soap solution to clean the heat exchanger coils and the panel vents (consult with technician).

! CAUTION

- Turn OFF the power and unplug the power cord before you perform any maintenance; otherwise it may cause electric shock.
- Never use water that is hotter than (40°C) when you clean the filters. It may cause deformation or discoloration.
- Never use volatile substances when you clean the filters. They may damage the surface of the product.

! NOTE

- The location and shape of the filters may differ, depending on the model.
- Make sure to clean the heat exchanger coils of the outdoor unit regularly, as dirt collected in the coils may decrease the operational efficiency or increase energy consumption.

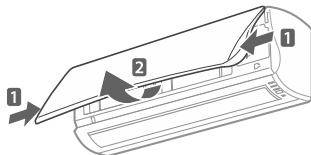
! NOTE

- This may not be provided, depending on the model.

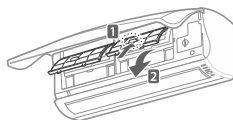
Cleaning the air filter

Clean the air filter once every 2 weeks or more if necessary.

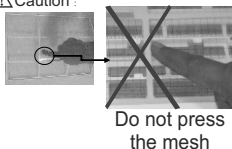
- 1 Turn off the power and unplug the power cord.
- 2 Open the front cover.
- Lift up both sides of the cover slightly.



- 3 Hold the knob of the air filter, lift it up slightly and remove it from the unit.



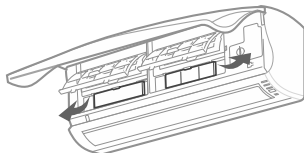
⚠ Caution :



- 4 Clean the filter with a vacuum cleaner or with warm water.
- If dirt is difficult to remove, wash the filter in lukewarm water with detergent.
- 5 Dry the filter in the shade.

Cleaning the anti-allergy filter

- 1 Turn off the power and unplug the power cord.
- 2 Open the front cover and remove the air filter (see "Cleaning air filter").
- 3 Pull out the anti-allergy filter and the triple filter.



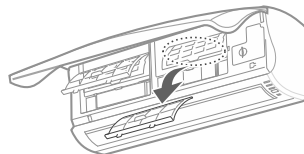
- 4 Dry the filter in direct sunlight for 2 hours.

! NOTE

The location and shape of the filters may differ, depending on the model.

Cleaning the plasma filter

- 1 Turn off the power and unplug the power cord.
- 2 Open the front cover and remove the air filter (see "Cleaning air filter").
- 3 Remove the plasma filter after 10 seconds.



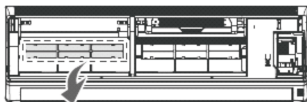
- 4 Use a vacuum cleaner to remove any dirt.
- If dirt is difficult to remove, wash the filter with lukewarm water.
- 5 Dry the filter in the shade.

! NOTE

- The location of the filters may differ, depending on the model.
- The plasma filter may not be included in some models.

Cleaning the Micro Protection Filter (Optional)

- 1 Turn off the power and unplug the power cord.
- 2 Open the front cover and remove the air filter (see "Cleaning air filter").
- 3 Remove the **Micro Protection Filter**.



- 4 Use a vacuum cleaner to remove dirt,
 - Do not wash the Micro Protection Filter with water because the filter can be damaged.
- 5 Dry the filter in the shade.

! NOTE

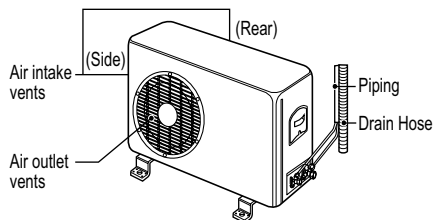
- We suggest changing the Micro Protection Filter every 6 months.
- The location of the filters may differ, depending on the model.
- For more filters, Please contact the LG service center. (Refer to the warranty card.)
- The feature can be changed according to type of model.

Outdoor Unit

The heat exchanger coils and panel vents of the outdoor unit should be checked regularly. If clogged with dirt or soot, the heat exchanger and panel vents may be professionally steam cleaned.

! NOTE

Dirty or clogged coils will reduce the operating efficiency of the system and cause higher operating costs.



TROUBLESHOOTING

Self-diagnosis function

This product has a built-in self-diagnosis function. If an error occurs, the lamp of the indoor unit will blink in 2 second intervals. If this occurs, contact your local dealer or **call center**.

Before requesting service

Please check the following before you contact the **call center**. If the problem persists, contact your local **call center**.

Problem	Possible causes	Corrective action
There is a burning smell and an abrupt sound coming from the unit.	-	Turn off the air conditioner, unplug the power cord and contact the call center .
Water leaks from the indoor unit even when the humidity level is low.		
The power cord is damaged or generating excessive heat.		
A switch, a circuit breaker (safety, ground) or a fuse is not operated properly.		
The air conditioner does not work.	The air conditioner is unplugged.	Check whether the power cord is plugged into the outlet.
	A fuse is blown or the power supply is blocked.	Replace the fuse or check if the circuit breaker has tripped.
	A power failure has occurred.	Turn off the air conditioner when a power failure occurs. When the power is restored, wait 3 minutes, and then turn on the air conditioner.
	The voltage is too high or too low.	Check if the circuit breaker has tripped.
	The air conditioner turned off automatically at a preset time.	Press the power button again.

Problem	Possible causes	Corrective action
The air conditioner does not generate cool air.	Air is not circulating properly.	Make sure that there are no curtains, blinds or furniture blocking the front of the air conditioner.
	The air filter is dirty.	Clean the air filter once every 2 weeks. See "Cleaning Air Filter" for more information.
	The room temperature is too high.	In summer, it may take some time to cool indoor air. In this case, select the H'COOL operation to cool indoor air quickly.
	Cold air is escaping from the room.	Make sure that no cold air is escaping through ventilation points in the room.
	The desired temperature is higher than the set temperature.	Set the desired temperature to a level lower than the current temperature.
	There is a heating source nearby.	Avoid using a heat generator such as an electric oven or a gas burner while the air conditioner is in operation.
	Air circulation operation is selected.	In the air circulation operation, air blows from the air conditioner without cooling or heating the indoor air. Switch the operation mode to the cooling operation.
It is not possible to adjust the fan speed.	The auto operation, H'COOL operation or dehumidifying operation is selected.	In some operation modes, such as the H'COOL or dehumidifying operation modes, you cannot adjust the fan speed. Select an operation mode in which you can adjust the fan speed.
It is not possible to adjust the temperature.	The air circulation operation or H'COOL operation is selected.	In some operation modes, such as the air circulation or H'COOL mode, you cannot adjust the temperature. Select an operation mode in which you can adjust the temperature.
Tak-tak noise from indoor unit	Contraction or expansion of plastic components due to change in temperature	It is a natural phenomenon, and can only be reduced but not overcome completely

Operation ranges

For Heat & Cool model, heating operation range follows the below table.

Heating Operation range	Outdoor temperature
	0~24°C

* When the outdoor temperature drops below 0°C, heating capacity may drop slightly depending on the operation condition.

When the air conditioner is not going to be used for a long time.

When air conditioner is not going to be used for a long time.

- 1** Operate the air conditioner on Air circulation mode (Refer to page 13) for 2 to 3 hours.
 - This will dry out the internal mechanisms.
- 2** Turn off the circuit breaker, and disconnect the plug.

CAUTION

Turn off the circuit breaker when the air conditioner is not going to be used for a long time.
Dirt may collect and may cause a fire.

- 3** Remove the batteries from the remote control.

When the air conditioner is to be used again.

- 1** Clean the air filter and install it in the indoor unit.
(Refer to page 19 for cleaning filters.)
- 2** Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.

DISCLAIMER

IMPORTANT: Long term effect not tested and mosquitoes may become resistant. Mosquito species used in the test below may differ from the mosquito species of your region. This product is one of the ways to manage mosquitoes and not intended to replace other protective devices against mosquitoes.

Test Details:

- A:** Tested by International Institute of Biotechnology and Toxicology (IIBAT), India, According to LG internal testing method.
- Test conducted, three times at temperature of $27\pm 2^{\circ}\text{C}$ and humidity of $60\pm 10\%$
 - Test used two chambers size $3.5\text{m} \times 2.6\text{m} \times 2.2\text{m}$, the chamber with the LG air conditioner assumed to be inside ("inside chamber") and the chamber without the LG conditioner assumed to be outside ("outside chamber").
 - Cages (25cm^3) are placed inside each chamber, connected using netted sleeves to enable the movement of the mosquitoes from one cage to another.
 - One person is placed inside the chamber to attract mosquitoes
 - For each test, 50 lab cultured 3-5 days old mosquitoes were placed in the cage in outside chamber; number of mosquitoes coming into the cage in inside chamber was counted every 10 minutes for 90 minutes under 2 settings:
 - * Control setting (low fan ON + mosquito repelling ultrasonic OFF)
 - * Treatment setting (low fan ON + mosquito repelling ultrasonic ON)

Test Result:

Found to repel on average 81.1% of *Aedes aegypti* mosquitoes. Repel rate shows percentage of mosquitoes prevented from entering the inside chamber after 90 minutes of Treatment setting compared to Control setting. Represented average of 81.1% derived from 76.9%, 84.6%, 81.8%.

- B:** Tested by Intertek, Korea, According to LG internal testing method.
- Test conducted, three times at temperature of $27\pm 2^{\circ}\text{C}$ and humidity of $60\pm 10\%$
 - Test used two chambers size 33m^3 and 19m^3 connected by a channel made of white sheet, small chamber assumed to be outside ("outside chamber") and the large chamber to be inside with the LG air conditioner ("inside chamber")
 - One person is placed inside the inside chamber to attract mosquitoes
 - For each test, 50 lab cultured 3-5 days old mosquitoes were released into outside chamber; number of mosquitoes coming into the inside chamber was counted every 10 minutes for 90 minutes under 2 settings:
 - * Control setting (low fan ON + mosquito repelling ultrasonic OFF)
 - * Treatment setting (low fan ON + mosquito repelling ultrasonic ON)

Test Result:

Found to repel on average 72.5% of *Aedes aegypti* mosquitoes. Repel rate shows percentage of mosquitoes prevented from entering the inside chamber after 90 minutes of Treatment setting compared to Control setting. Represented average of 72.5% derived from 73.1%, 64.3%, 80.0%.

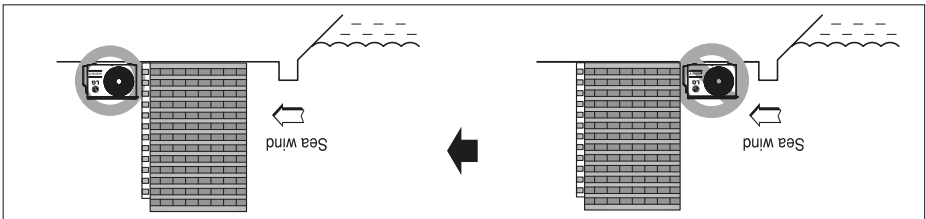
Results may vary in other settings, including but not limited to temperature, humidity, location, space, mosquito species, number of mosquitoes, number of persons, and operation time.



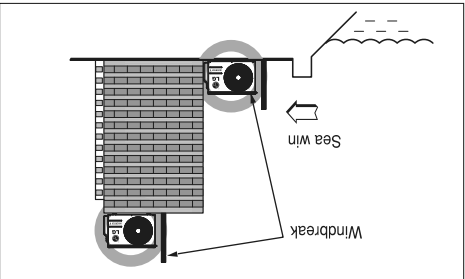
1. Air conditioners should not be installed in areas where corrosive gases, such as acid or alkaline gas, are produced.
2. Do not install the product where it could be exposed to sea wind (salty wind) directly. It can result corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient performance.
3. If outdoor unit is installed close to the seaside, it should avoid direct exposure to the sea wind. Otherwise it needs additional anticorrosion treatment on the heat exchanger.

Selecting the location(Outdoor Unit)

- 1) If the outdoor unit is to be installed close to the seaside, then direct exposure to the sea wind should be avoided.



- 2) In case, to install the outdoor unit on the sea-side, set up a windbreak so that outdoor unit not exposed to the sea wind.



- 3) Select a well-drained place.

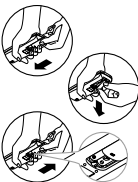
1. If you can't meet above guide line in the seaside installation, please contact LG Electronics for the additional anticorrosion treatment.
2. Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water.
- Do not use sea water for this purpose.

TEST RUNNING

1. Check that all tubing and wiring have been properly connected.
2. Check that the gas and liquid side service valves are fully open.

A Prepare remote control

1. Remove the battery cover by pulling it according to the arrow direction.
2. Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
3. Reattach the cover by pushing it back into position.

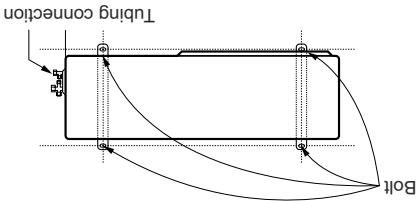


NOTE-1

- Use 2 AAA(1.5volt) batteries. Do not use rechargeable batteries.
- Remove the batteries from the remote control if the system is not going to be used for a long time.

B Settlement of outdoor unit

- Anchor the outdoor unit with a bolt and nut $\phi 10\text{mm}$ tightly and horizontally on a concrete or rigid mount.
- When installing on the wall, roof or rooftop, anchor the mounting base securely with a nail or wire assuming the influence of wind and earthquake.
- In the case when the vibration of the unit is conveyed to the hose, secure the unit with an anti-vibration rubber.



C Evaluation of the performance

- Operate unit for 15~20 minutes, then check the system refrigerant charge:
1. Measure the pressure of the gas side service valve.
 2. Measure the temperature of the intake and discharge of air.

PUMP DOWN

CAUTION:
Be sure to perform Pump Down procedure with the unit cooling mode.
This is performed when the unit is to be relocated or the refrigerant circuit is serviced. Pump Down means collecting all refrigerant in the outdoor unit without loss in refrigerant gas.

Pump Down Procedure

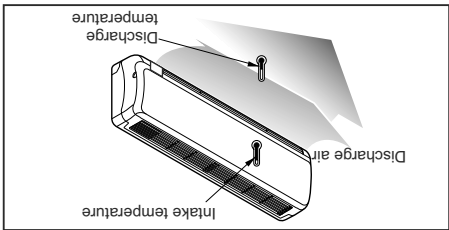
1. Connect low-pressure gauge manifold hose to the charge port on the gas side service valve.
2. Open the gas side service valve halfway and purge the air from the manifold hose using the refrigerant gas.
3. Close the liquid side service valve(all the way in).
4. Turn on the unit's operating switch and start the cooling operation.
5. When the low-pressure gauge reading becomes 1 to 0.5kg/cm²G(14.2 to 7.1 P.S.I.G.), fully close the gas side valve stem and then quickly turn off the unit. At that time, Pump Down has been completed and all refrigerant gas will have been collected in the outdoor unit.

NOTE-1

If the actual pressure is higher than shown, the system is most likely over-charged, and charge should be removed. If the actual pressure is lower than shown, the system is most likely undercharged, and charge should be added.

Refrigerant	Outside ambient TEMP.	The pressure of the gas side service valve.
R22	35°C (95°F)	4~5kgf/cm ² (56.8~71.0 P.S.I.G.)
R410A	35°C (95°F)	8.5~9.5 kgf/cm ² (120~135 P.S.I.G.)

4. For reference, the gas side pressure of optimum condition is as below (Cooling).



3. Ensure the difference between the intake temperature and the discharge is more than 8°C (Cooling) or reversely (Heating).

AIR PURGING

Soap water method

- (1) Remove the caps from the 2-way and 3-way valves.
- (2) Remove the service-port cap from the 3-way valves.
- (3) To open the 2-way valve turn the valve stem counterclockwise approximately 90°, wait for about 2~3 sec, and close it.
- (4) Apply a soap water or a liquid neutral detergent on the indoor unit connection or outdoor unit connections by a soft brush to check for leakage of the connecting points of the piping.
- (5) If bubbles come out, the pipes have leakage.

C Evacuation

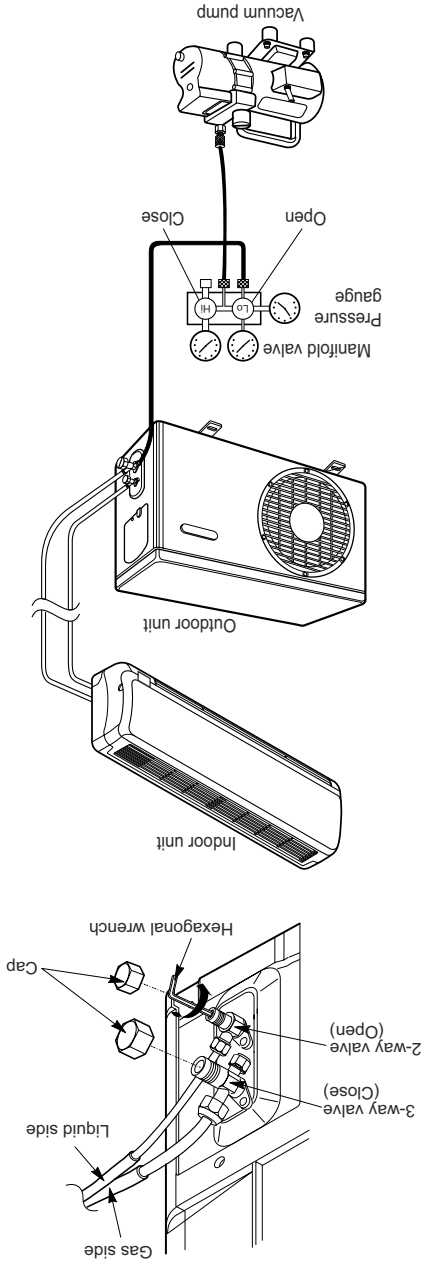
- Connect the charge hose end described in the preceding steps to the vacuum pump to evacuate the tubing and indoor unit.
- Confirm the "Lo" knob of the manifold valve is open. Then, run the vacuum pump.
- The operation time for evacuation varies with tubing length and capacity of the pump. The following table shows the time required for evacuation.

Required time for evacuation when 30 gal/h vacuum pump is used	
If tubing length is less than 10m (33 ft)	10 min. or more
If tubing length is longer than 10m (33 ft)	15 min. or more

- When the desired vacuum is reached, close the "Lo" knob of the manifold valve and stop the vacuum pump.

D Finishing the job

- With a service valve wrench, turn the valve stem of liquid side valve counterclockwise to fully open the valve.
 - Turn the valve stem of gas side valve counterclockwise to fully open the valve.
 - Loosen the charge hose connected to the gas side service port slightly to release the pressure, then remove the hose.
 - Replace the flare nut and its bonnet on the gas side service port and fasten the flare nut securely with an adjustable wrench. This process is very important to prevent leakage from the system.
 - Replace the valve caps at both gas and liquid side service valves and fasten them tight.
- This air conditioner is now ready to test run.



AIR PURGING

Air purging

Air and moisture remaining in the refrigerant system have undesirable effects as indicated below.

- Pressure in the system rises.
 - Operating current rises.
 - Cooling(or heating) efficiency drops.
 - Moisture in the refrigerant circuit may freeze and block capillary tubing.
 - Water may lead to corrosion of parts in the refrigeration system.
- Therefore, the indoor unit and tubing between the indoor and outdoor unit must be leak tested and evacuated to remove any non condensable gas and moisture from the system.

Air purging with vacuum pump

A Preparation

- Check that each tube(both liquid and gas side tubes) between the indoor and outdoor units have been properly connected and all wiring for the test run has been completed. Remove the service valve caps from both the gas and the liquid side on the outdoor unit. Note that both the liquid and the gas side service valves on the outdoor unit are kept closed at this stage.

B Leak test

- Connect the manifold valve(with pressure gauges) and dry nitrogen gas cylinder to this service port with charge hoses.

CAUTION

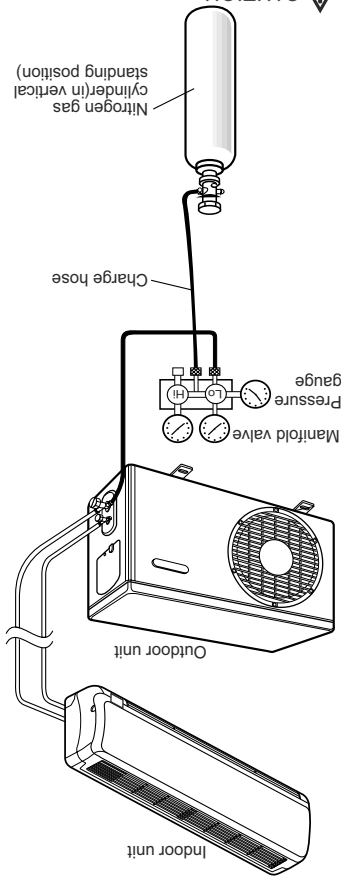
Be sure to use a manifold valve for air purging. If it is not available, use a stop valve for this purpose. The 3-way valve must always be kept close.

- Pressurize the system to maximum 250 P.S.I.G.(R-22 model) or 400 P.S.I.G.(R-410A model) with dry nitrogen gas and close the cylinder valve when the gauge reading reached 250 P.S.I.G.(R-22 model) or 400 P.S.I.G.(R-410A model). Next, step

CAUTION

To avoid nitrogen entering the refrigerant system in a liquid state, the top of the cylinder must be higher than its bottom when you pressurize the system. Usually, the cylinder is used in a vertical standing position.

- Do a leak test of all joints of the tubing(both indoor and outdoor) and both gas and liquid side service valves.
- Bubbles indicate a leak. Be sure to wipe off the soap with a clean cloth.
- After the system is found to be free of leaks, relieve the nitrogen pressure by loosening the charge hose connector at the nitrogen cylinder. When the system pressure is reduced to normal, disconnect the hose from the cylinder.



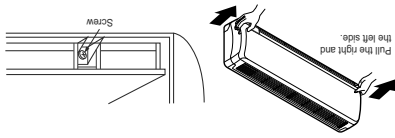
CAUTION

There is a risk of fire and explosion. - Inert gas (nitrogen) should be used when you check plumbing leaks, cleaning or repairs of pipes etc. If you are using combustible gases including oxygen, product may have the risk of fires and explosions.

CHECKING THE DRAINAGE AND FORMING THE PIPING

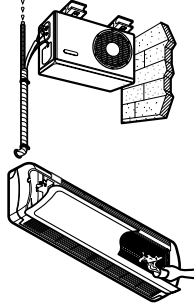
Checking the drainage

- A** To remove the front panel from the indoor unit cabinet:
- Set the air direction of louvers up-and-down to the position (horizontally) by hand.
 - Remove the securing screws that retain the front panel. Pull the lower left and right sides of the grille toward you and lift it off. (1TR, 1.5TR, 2TR)



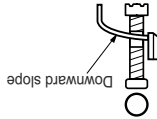
B To check the drainage.

- Pour a glass of water on the evaporator.
- Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.

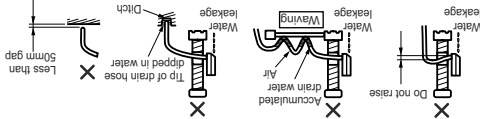


C Drain piping

- The drain hose should point downward for easy drain flow.



■ Do not make drain piping.

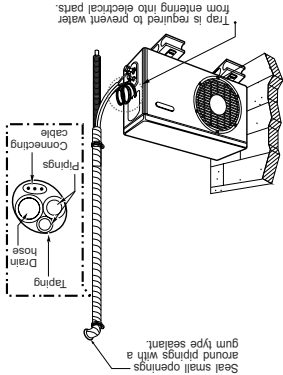


Form the piping

- A** Form the piping by wrapping the connecting portion of the indoor unit with insulation material and secure it with two kinds of vinyl tapes.
- If you want to connect an additional drain hose, the end of the drain outlet should be routed above the ground. Secure the drain hose appropriately.

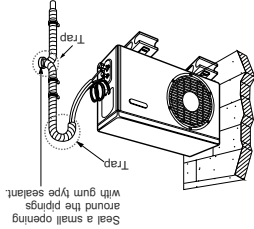
B In cases where the outdoor unit is installed below the indoor unit perform the following.

- Tape the piping, drain hose and connecting cable from down to up.
- Secure the taped piping along the exterior wall using saddle or equivalent.



C In cases where the Outdoor unit is installed above the Indoor unit perform the following.

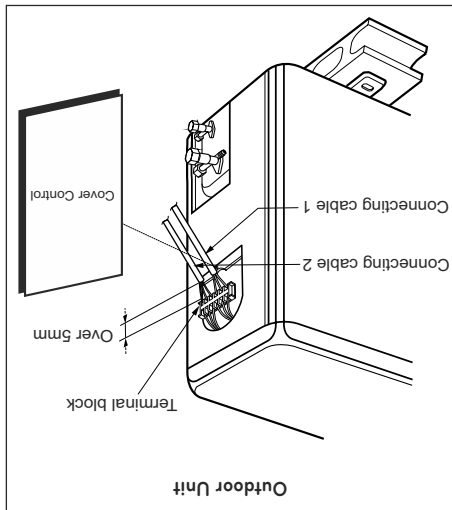
- Tape the piping, and connecting cable from down to up.
- Secure the taped piping along the exterior wall. Form a trap to prevent water entering the room.
- Fix the piping onto the wall by saddle or equivalent.



CONNECTING THE CABLE BETWEEN INDOOR & OUTDOOR UNIT

Connect the cable to the outdoor unit

- A Remove the control cover from the unit by loosening the screw.
- Connect the wires to the terminals on the control board individually.
- B Secure the cable onto the control board with the cord clamp.
- C Refix the control cover to the original position with the screw.
- D Use a recognized circuit breaker 20A (12K,18K), 25A (24K) between the power source and the unit. A disconnecting device to adequately disconnect all supply lines must be fitted.



Connecting Cable 1 each (Cooling only)
Connecting cable 2 each (Heat pump only)

CAUTION

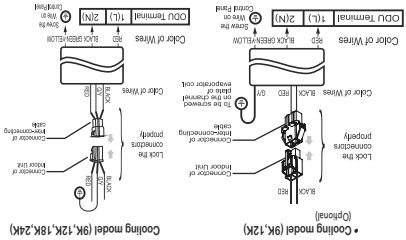
- After the confirmation of the above conditions, prepare the wiring as follows:
- 1) Never fail to have an individual power circuit specifically for the air conditioner. As for the method of wiring, be guided by the circuit diagram posted on the inside of control cover.
 - 2) The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it may cause burn-out of the wires.)
 - 3) Specification of power source.
 - 4) Confirm that electrical capability is sufficient.
 - 5) The starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
 - 6) Confirm that the cable thickness is as specified in the power source specification. (Particularly note the relation between cable length and thickness. (Refer to page 15))
 - 7) Always install an earth leakage circuit breaker in a wet or moist area.
 - 8) The following would be caused by voltage drop.
 - Vibration of a magnetic switch, which will damage the contact point, fuse breaking, disturbance of the normal function of the overload.
 - 9) The means for disconnection from a power supply shall be incorporated in the fixed wiring and have an air gap contact separation of at least 3mm in each active(phase) conductors.

CONNECTING THE CABLE BETWEEN INDOOR & OUTDOOR UNIT

Connect the cable from Indoor to outdoor unit.

■ Connect the cable to the indoor unit by

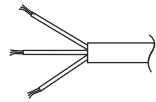
connecting the indoor and outdoor housing connector (male - female housing matching).
Outdoor Unit connection.
(Ensure that the color of the wires of the outdoor unit and the terminal no. are the same as those of the indoor unit.)



CAUTION

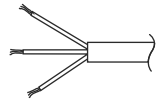
The power cord connected to the indoor unit should be complied with the following specifications

Capacity (Blu/h)	NORMAL CROSS
9K, 12K	1.0mm ²
18K	1.5mm ²
24K	2.5mm ²



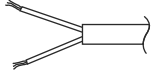
The power connecting cable connected to the indoor and outdoor unit should be complied with the following specifications

Capacity (Blu/h)	NORMAL CROSS
9K, 12K	1.0mm ²
18K (4.5 Star)	1.5mm ²
18K (2.3 Star)	2.5mm ²



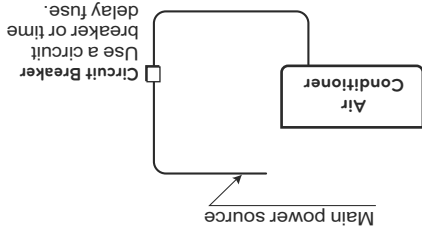
The connecting signal cable connected to the indoor and outdoor unit should be complied with the following specifications

NORMAL CROSS-SECTIONAL AREA 0.75mm²



CAUTION

If a power plug is not to be used, provide a circuit breaker between power source and the unit as shown below.

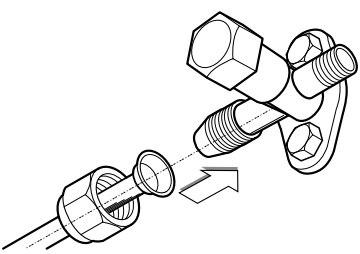


FLARING WORK AND CONNECTION OF PIPING

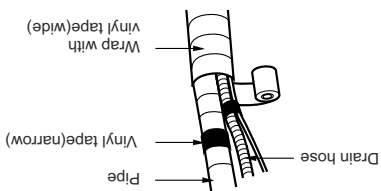
Connection of the piping-Outdoor

A

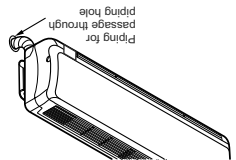
Align the center of the pipings and sufficiently tighten the flare nut by hand.



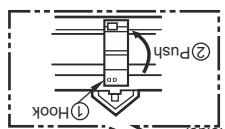
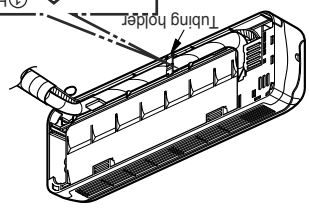
- Bundle the piping and drain hose together by wrapping them with cloth tape over the range within which they fit into the rear piping housing section.



- H** Reroute the pipings and the drain hose across the back of the chassis.

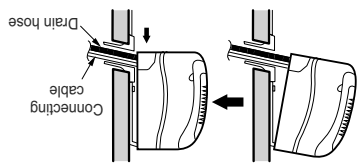


- I** Set the pipings and the drain hose to the back of the chassis with the tubing holder.

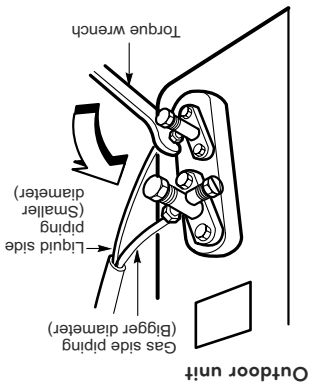


- J** Indoor unit installation

- Remove the spacer.
- Ensure that the hooks are properly seated on the installation plate by moving it left and right.



Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).



Outside diameter		Torque	
mm	inch	kgf.cm	N.m
Ø6.35	1/4	180~250	17.6~24.5
Ø9.52	3/8	340~420	33.3~41.2
Ø12.7	1/2	550~660	53.9~64.7
Ø15.88	5/8	630~820	61.7~80.4
Ø19.05	3/4	990~1210	97~118.6

- B** Finally, tighten the flare nut with torque wrench until the wrench clicks.
- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

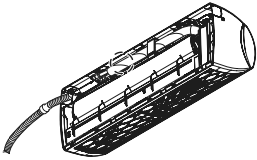
FLARING WORK AND CONNECTION OF PIPING

C Insert the connecting cable into the indoor unit.

- Don't connect the cable to the indoor unit.
- Make a small loop with the cable for easy connection later.

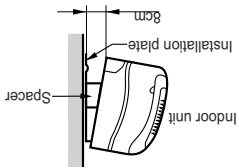
D Tape the drain hose and the connecting cable.

• Connecting cable



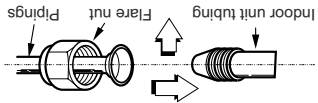
E Indoor unit installation

- Hang the indoor unit from the hooks at the top of the installation plate.
- Insert the spacer etc. between the indoor unit and the installation plate and separate the bottom of the indoor unit from the wall.

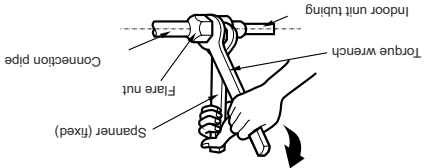


F Connecting the pipings to the indoor unit and the drain hose to drain pipe.

- Align the center of the pipings and sufficiently tighten the flare nut by hand.

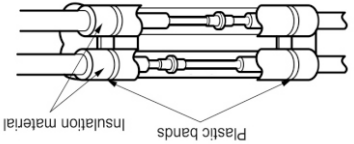


■ Tighten the flare nut with a wrench.

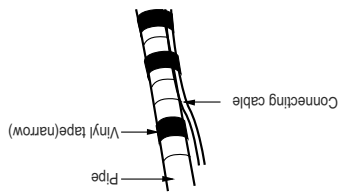
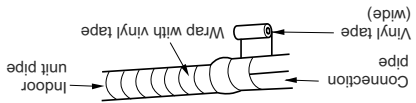


G Wrap the insulation material around the connecting portion.

- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.

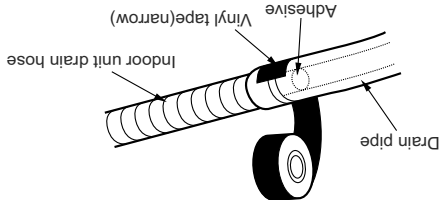


■ Wrap the area which accommodates the rear piping housing section with vinyl tape.



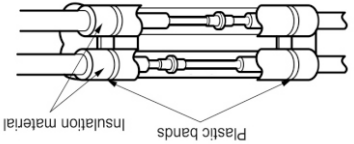
Torque		kgf.cm		N.m	
Outside diameter	inch	mm	Outside diameter	inch	mm
Ø6.35	1/4	16.5	Ø6.35	1/4	16.5
Ø9.52	3/8	24.5	Ø9.52	3/8	24.5
Ø12.7	1/2	33.3~41.2	Ø12.7	1/2	33.3~41.2
Ø15.88	5/8	53.9~64.7	Ø15.88	5/8	53.9~64.7
Ø19.05	3/4	63.0~82.0	Ø19.05	3/4	63.0~82.0
		97~118.6			97~118.6

- When extending the drain hose at the indoor unit, install the drain pipe.

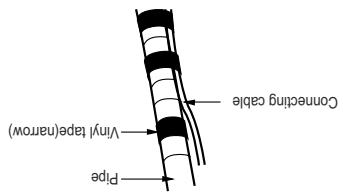
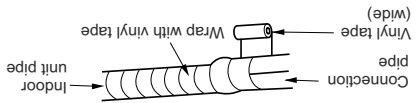


Wrap the insulation material around the connecting portion.

- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.

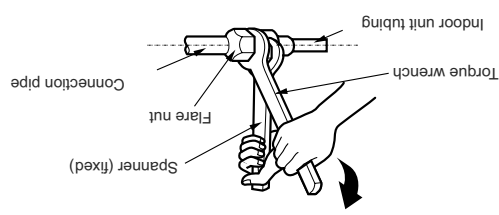


■ Wrap the area which accommodates the rear piping housing section with vinyl tape.



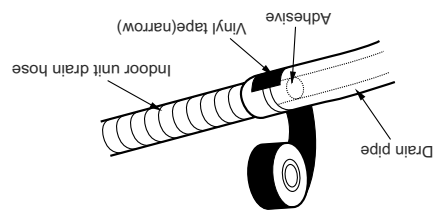
FLARING WORK AND CONNECTION OF PIPING

■ Tighten the flare nut with a wrench.



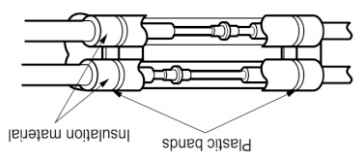
Outside diameter		Torque	
mm	inch	kgf.cm	N.m
Ø6.35	1/4	180~250	17.6~24.5
Ø9.52	3/8	340~420	33.3~41.2
Ø12.7	1/2	550~660	53.9~64.7
Ø15.88	5/8	630~820	61.7~80.4
Ø19.05	3/4	990~1210	97~118.6

■ When extending the drain hose at the indoor unit, install the drain pipe.

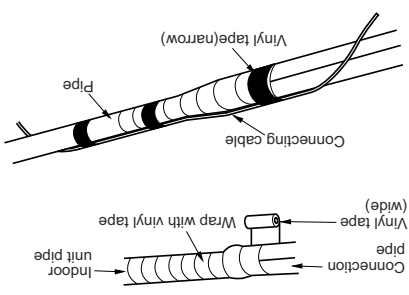


F Wrap the insulation material around the connecting portion.

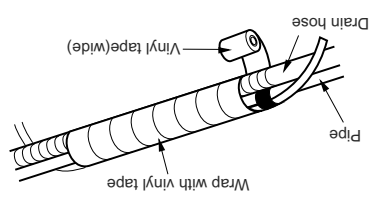
■ Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.



■ Wrap the area which accommodates the rear piping housing section with vinyl tape.

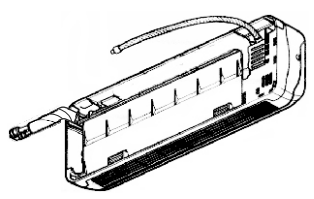


■ Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.

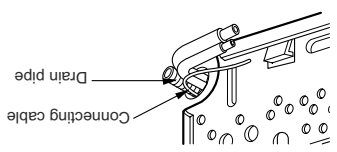


For right rear piping

A Route the indoor tubing and the drain hose to the required piping hole position.



B Insert the piping, drain hose and the connecting cable into the piping hole.

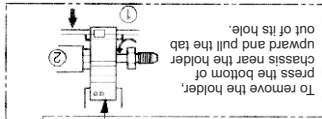
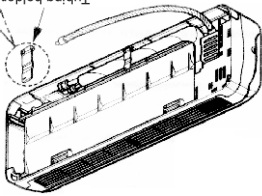


FLARING WORK AND CONNECTION OF PIPING

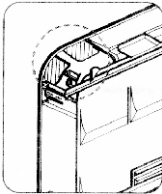
Indoor

Connection of piping-

- Preparing the indoor unit's piping and drain hose for installation through the wall.
- Remove the plastic tubing retainer (see illustration below) and pull the tubing and drain hose away from chassis.
- Replace the plastic tubing holder in the original position.

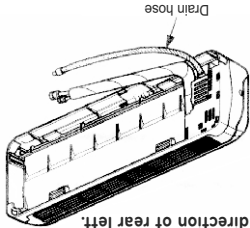


CAUTION
When install, make sure that the remaining parts must be removed clearly so as not to damage the piping and drain hose, especially power cord and connecting cable.



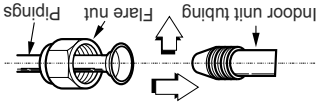
For left rear piping

- A** Route the indoor tubing and the drain hose in the direction of rear left.



- B** Insert the connecting cable into the indoor unit from the outdoor unit through the piping hole.

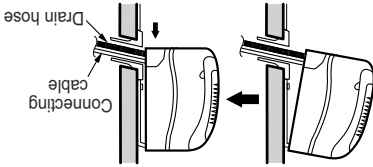
- Do not connect the cable to the indoor unit. Make a small loop with the cable for easy connection later.



- Align the center of the piping and sufficiently tighten the flare nut by hand.

- E** Connecting the piping to the indoor unit and drain hose to drain pipe.

Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking-sound).

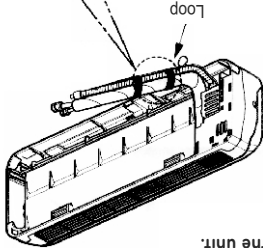
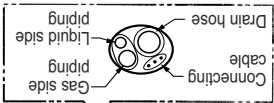


- Hook the indoor unit onto the upper portion of the installation plate. (Engage the two hooks of the rear top of the indoor unit with the upper edge of the installation plate.) Ensure that the hooks are properly seated on the installation plate by moving it left and right

- D** Indoor unit installation

Foamed polyethylene or equivalent is recommended. If the drain hose is routed inside the room, insulate the hose with an insulation material so that dripping from "sweating"(condensation) will not damage furniture or floors.

NOTE



- C** Tape the tubing, drain hose and the connecting cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.

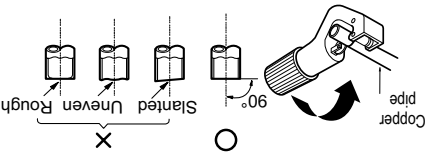
FLARING WORK AND CONNECTION OF PIPING

Flaring work

Main cause for gas leakage is due to defect in flaring work. Carry out correct flaring work in the following procedure.

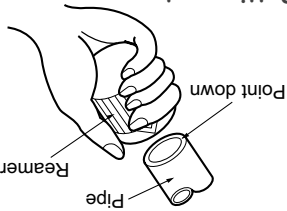
A Cut the pipes and the cable

- Use the piping kit accessory or the pipes purchased locally.
- Measure the distance between the indoor and the outdoor unit.
- Cut the pipes a little longer than measured distance.
- Cut the cable 1500mm longer than the pipe length.



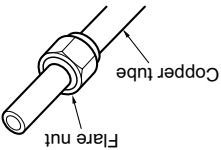
B Burrs removal

- Completely remove all burrs from the cut cross section of pipe/tube.
- Put the end of the copper tube/pipe in a downward direction as you remove burrs in order to avoid dropping burrs into the tubing.



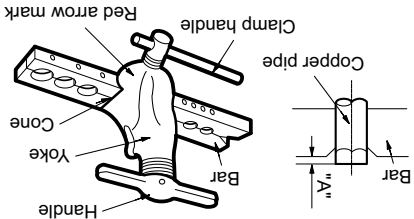
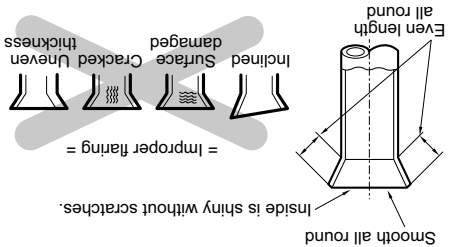
C Putting nut on

- Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal.
- (not possible to put them on after flaring work)



E Check

- Compare the flared work with figure below. If flare is noted to be defective, cut off the flared section and do flaring work again.



Outside diameter	A	Thickness
mm	inch	mm
ø19.05	3/4"	1.9~2.1
ø15.88	5/8"	1.6~1.8
ø12.7	1/2"	1.6~1.8
ø9.52	3/8"	1.5~1.7
ø6.35	1/4"	1.1~1.3
0.8		0.8
1.0		1.0

Firmly hold copper pipe in a die in the dimension shown in the table above.

D Flaring work

- Carry out flaring work using flaring tool as shown below.

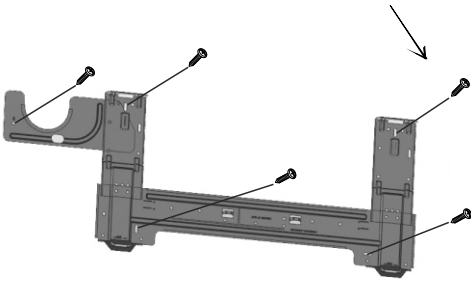
INSTALLATION OF INDOOR & OUTDOOR UNIT

How to fix installation plate

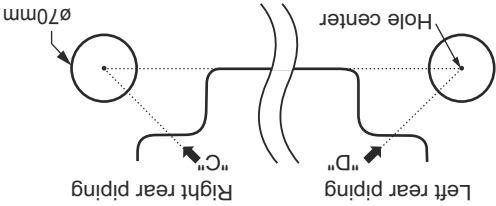
The wall you select should be strong and solid enough to prevent vibration.

- A** Mount the installation plate on the wall with four type "A" screws. If mounting the unit on a concrete wall, use anchor bolts.

- Mount the installation plate horizontally by aligning the centerline using a level.

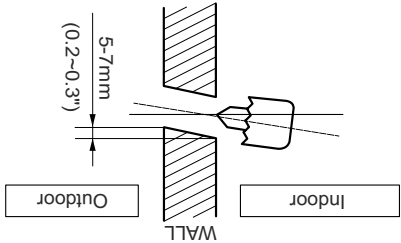


B Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate-rout of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



Drill a hole in the wall

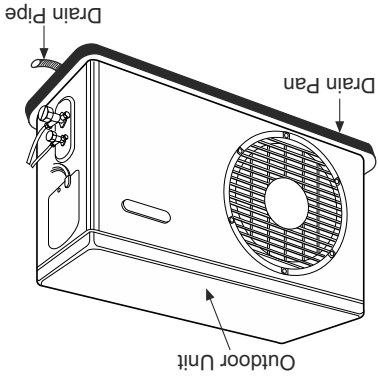
- Drill the piping hole with a ø70mm hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.



- Make sure that the drilled hole in the wall is properly sealed (using a proper sealant, for example cement, plaster of paris etc.) after passing the installation pipe, drainage pipe and the inter connecting cable.

Usage of Drain Pan (Heat Pump)

Drain pan along with drain pipe (as shown below) can be used to drain the water accumulated in the outdoor during the Heat Mode.



INSTALLATION OF INDOOR & OUTDOOR UNIT

Select the best location

Read completely, then follow step by step.

A Indoor Unit

- Do not have any heat or steam near the unit.

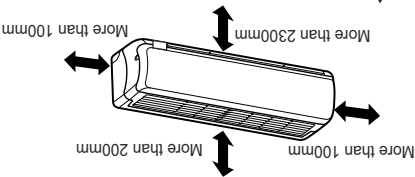
- Select a place where there are no obstacles in front of the unit.

- Make sure that condensation drainage can be conveniently routed away.

- Do not install near a doorway.

- Ensure that the space around the left and right of the unit is more than 100mm. The unit should be installed as high on the wall as possible, allowing a minimum of 200mm from ceiling.

- Use a stud finder to locate studs to prevent unnecessary damage to the wall.

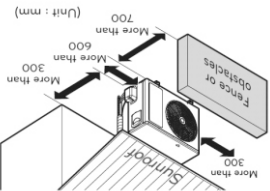


CAUTION

Install the indoor unit on the wall where the height from the floors more than 2300 mm.

B Outdoor Unit

- If an awning is built over the unit to prevent direct sunlight or rain exposure, make sure that heat radiation from the condenser is not restricted.
- Ensure that the space around the back and sides is more than 300mm. The front of the unit should have more than 700mm of space.
- Do not place animals and plants in the path of the warm air.
- Take the air conditioner weight into account and select a place where noise and vibration are minimum.
- Select a place so that the warm air and noise from the air conditioner do not disturb neighbors.

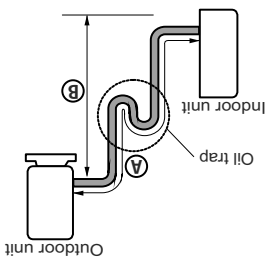


Piping length and elevation

Capacity (Btu/h)	Pipe Size	Standard Length (m)	Max. Length (m)	Additional Refrigerant (g/m)	Cooling & Heat Pump		
					GAS	LIQUID	
9K	3/8"	1/4"	3 to 5	20	18K (2.3 star)	1/2"	1/4"
9K, 12K, 18K Heat Pump	1/2"	1/4"	3 to 5	20	24K Cooling	5/8"	1/4"
24K	5/8"	3/8"	3 to 5	20	24K Heat Pump	3/8"	3/8"
30							

Rooftop Installation

If the outdoor unit is installed on a roof structure, be sure to level the unit. Ensure the roof structure and anchoring method are adequate for the unit location. Consult local codes regarding rooftop mounting.



CAUTION

- Capacity is based on standard length and maximum allowance length is on the basis of reliability.
- Oil trap should be installed every 5~7 meters.

Installation Tools

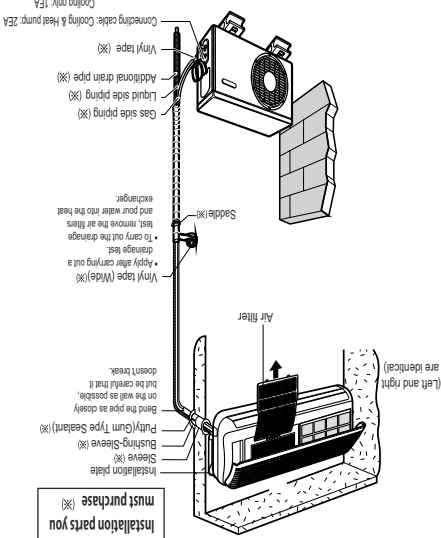
S.No.	Required Tools
1	Level Gauge
2	Screw Driver
3	Electric Drill
4	Hole Core Drill (Dia-70mm)
5	Flaring Tool Set
6	Specified torque wrenches 1.8kg.m, 4.2kg.m, 5.5kg.m, 6.6kg.m (Different depending on model no.)
7	Spanner (Half Union)
8	Hexagonal Wrench
9	Gas-Leak Detector
10	Vacuum Pump
11	Gauge Manifold
12	Thermometer

INSTALLATION PARTS

Installation parts provided with the unit

Name	Quantity	Shape	Others
Type 'A' Screw	5		• Owner's Manual • Installation Manual
Installation Plate	1	 The actual part can be changed according to the type of model.	
Type 'B' Screw	2		
Holder Remote Control	1		

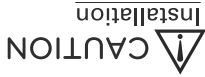
Installation parts you must purchase

Name	Shape	Others
Saddle		• Owner's Manual • Installation Manual
Sleeve		
Bushing Sleeve		
Putty (Gum type sealant)		
Vinyl tape (Wide)		
Gas side piping		
Liquid side piping		
Additional drain pipe		
Vinyl tape		
Saddle		

Operation

- Do not install the product on a defective installation stand.
- It may cause injury, accident, or damage to the product.
- Be sure the installation area does not deteriorate with age.
- If the base collapses, the air conditioner could fall with it, causing property damage, product failure, and personal injury.

- Do not store or use flammable gas or combustibles near the product.
- There is risk of fire or failure of product.



Installation

- Always check for gas (refrigerant) leakage after installation or repair of product.
- Low refrigerant levels may cause failure of product or may effect product performance.
- Install the drain hose to ensure that water is drained away properly.
- A bad connection may cause water leakage.
- Keep level even when installing the product.
- To avoid vibration or water leakage.
- Install the air conditioner where the noise from the outdoor unit or the exhaust gas will not cause inconvenience to neighbours. Failure to do so may result in conflict between neighbours.
- Use two or more people to lift and transport the product.
- Avoid personal injury.
- Do not install the product where it will be exposed to sea wind (salt spray) directly.
- It may cause corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product



WARNING

It can result in serious injury or death when the directions are ignored.



CAUTION

It can result in minor injury or product damage when the directions are ignored.



WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Installation

- Do not use a defective or underrated circuit breaker. Use this appliance on a dedicated circuit.
- There is risk of fire or electric shock.
- For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.
- Do not disassemble or repair the product. There is risk of fire or electric shock.
- Always ground the product.
- There is risk of fire or electric shock.
- Install the panel and the cover of control box securely.
- There is risk of fire or electric shock.
- Always install a dedicated circuit and breaker.
- Improper wiring or installation may cause fire or electric shock.
- Use the correctly rated breaker or fuse.
- There is risk of fire or electric shock.
- Do not modify or extend the power cable.
- There is risk of fire or electric shock.
- Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open.
- Moisture may condense and wet or damage furniture.
- Be cautious when unpacking and installing the product.
- Sharp edges could cause injury. Be especially careful of the case edges and the fins on the condenser and evaporator.
- For installation, always contact the dealer or an Authorized Service Center.
- There is risk of fire, electric shock, explosion, or injury.

TIPS FOR SAVING ENERGY

Here are some tips that will help you minimize the power consumption when you use the air conditioner. You can use your air conditioner more efficiently by referring to the instructions below:

- Avoid excessive cooling. This may be harmful for your health and may consume more electricity.
 - Block sunlight with blinds or curtains while you are operating the air conditioner.
 - Keep doors or windows closed tightly while you are operating the air conditioner.
 - Adjust the direction of the air flow vertically or horizontally to circulate indoor air.
 - Speed up the fan to cool or warm indoor air quickly, in a short period of time.
 - Open windows regularly for ventilation as the indoor air quality may deteriorate if the air conditioner is used for many hours.
 - Clean the air filter once every 2 weeks. Dust and impurities collected in the air filter may block the air flow or reduce the cooling/ dehumidification functions.
- (Refer page no. 19 and 20 details of owner's manual).

For your records

Staple your receipt to this page in case you need it to prove the date of purchase or for warranty purpose. Write the model number and the serial number here:

Model number :

Serial number :

You can find them on a label on the side of each unit.

Dealer's name :

Date of purchase :

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INSTALLATION MANUAL ROOM AIR CONDITIONER

Please read this installation manual completely before installing the product and retain it for future reference.

TYPE : WALL MOUNTED

For Split AC Domestic Models



MFL39754865

P/No. MFL39754865_V3