

OWNER'S MANUAL

AIR CONDITIONER

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

TYPE : WALL MOUNTED



P/No. MFL67470601

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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:

- Do not cool excessively indoors. This may be harmful for your health and may consume more electricity. (Recommended 24°C is suitable for human body)
- 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 weaken the cooling / dehumidifying functions. (Refer page no. 20 and 21 for details)

For your records

Staple your receipt to this page in case you need it to prove the date of purchase or for warranty purposes. 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.
- Don't use a power cord, a plug or a loose socket which is damaged. It may result in fire or electric shock.
- Do not use a damaged power cord or plug. It may result in electric shock or product failure.
- 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.

4 SAFETY PRECAUTIONS

- 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 it 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 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.

Use

- Be sure to use only those parts which are listed in the svc parts list. Never attempt to modify the equipment. It may result in death, serious injury, 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 or product failure.
- Only use the refrigerant specified on the air conditioner label. It may result in explosion or fire.
- Do not allow water to run 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.

- 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, ventilate sufficiently before using the air conditioner again. 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 result in explosion or product failure.
- 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.
- Do not expose people, animals or plants to the cold or hot wind from the air conditioner. It may result in serious injury.
- Do not drink the water drained from the air conditioner. It may result in serious health complications.

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 result in product failure.
- 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 product failure.
- Install the air conditioner where the noise from the outdoor unit or the exhaust gas will not inconvenience the neighbors. Failure to do so may result in conflict between neighbors.
- 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. It may result in serious injury.

Use

- 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 result in product failure.
- 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.
- Make sure to check if there is a refrigerant leak after you install or repair the air conditioner. Failure to do so may result in product failure.
- Do not place any objects on the air conditioner. It may result in product failure.

- If there is a refrigerant leak during the installation of the air conditioner, ventilate the area immediately. Failure to do so may result in serious injury or 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 product failure.
- Do not recharge or disassemble the batteries. Failure to do so may result in explosion, fire or serious injury.
- Do not dispose of the batteries in fire. It may result in explosion or fire.
- 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 a long time when the humidity is very high or when a door or window has been left open. Failure to do so may result in product failure.
- 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. There is risk of damage or loss of property.

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 serious injury or product failure.
- 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 or product failure.

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PRECAUTION

- Contact the authorized service technician for repair or maintenance of this unit.
- Please install your air-conditioner by company authorised service franchisee / authorised 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.

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.
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

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. only an authorized replacement part.

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.
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

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.

Notice

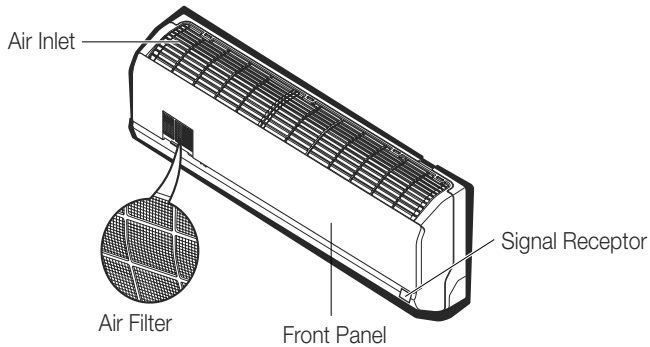
This symbol indicates special notes.

Features

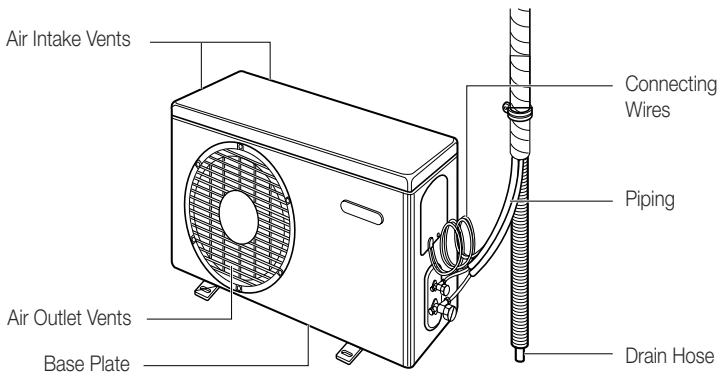
⚠ WARNING

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

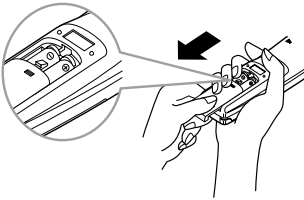
- This appliance must be properly grounded.
To minimize the risk of electric shock, you must always plug into a grounded outlet.
- Do not cut or remove the grounding.
- Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal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

Using the remote control

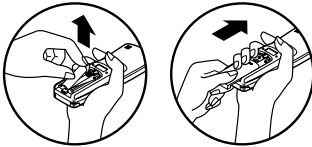
Inserting batteries

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 terminals of the batteries are installed correctly.



- 3 Reattach the battery cover.

! NOTE

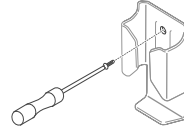
If the display screen of the remote control starts to fade, replace the batteries.

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.

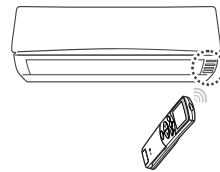


- 4 Slide the remote control into the holder.



Operating method

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



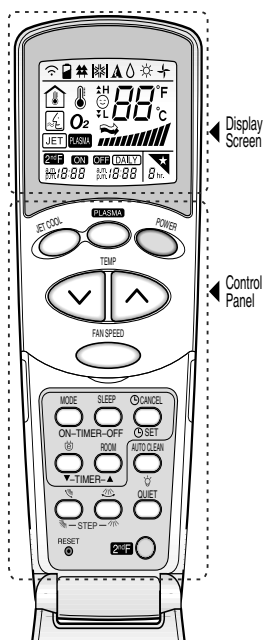
! NOTE

- 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. You will find the buttons for the additional functions under the cover of the remote control.

Wireless remote control



Control panel	Display Screen	Description
POWER		ON/OFF BUTTON Turns the power on/off.
MODE	☼ ▲ ○ ☼ +	OPERATION MODE SELECTION BUTTON Selects the operation mode. Cooling operation (☼) / Auto operation or Auto Changeover (▲) / Healthy Dehumidifying operation (○) / Heating operation (☼) / Air Circulation (+).
TEMP	88°C	ROOM TEMPERATURE SETTING BUTTONS Used to select the room temperature.
FAN SPEED		INDOOR FAN SPEED SELECTION BUTTON Used to select fan speed in four stops - Low, Medium, High and natural wind.
		HORIZONTAL VANE CONTROL BUTTON Used to set the desired vertical airflow direction.
		VERTICAL LOUVER CONTROL BUTTON Used to set the desired horizontal airflow direction.
AUTO CLEAN		AUTO CLEAN BUTTON Used to set auto clean.
ROOM		ROOM TEMPERATURE CHECKING BUTTON Used to check the room temperature.
ON-TIMER-OFF	a.m. 12:00	ON/OFF TIMER BUTTONS Used to start or stop the starting and stopping operation.
▼-TIMER-▲		TIME SETTING BUTTONS Used to adjust the time.
		TIMER SET/CANCEL BUTTON Used to set and to cancel the timer operation.
RESET		RESET BUTTON Used prior to resetting time.
PLASMA	PLASMA	PLASMA BUTTON (Optional) Used to start or stops the plasma-purification.
		DIMMER (Optional) Used to operate Dimmer Function using 2nd F.
SLEEP		SLEEP MODE AUTO BUTTON Used to set sleep mode auto operation.
JET COOL	Po	JET COOL BUTTON Used to start or stop the speed cooling. The Jet Cool operates fan in super high speed in cooling mode.
2nd F	2nd F	2nd F BUTTON Used prior to using modes printed in blue at the bottom of buttons.
	22°C	ENERGY SAVER MODE Used to operate Energy Saver function.
QUIET		QUIET MODE (Optional) Used to operate Quiet Mode function.

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

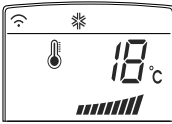
BASIC FUNCTIONS

Cooling your room

(Cooling operation)

- 1 Press POWER to turn on the power.
- 2 Open the remote control cover.
- 3 Press  repeatedly to select the cooling operation.

- Following is the display on the display screen.



- 4 Press  or  to set the desired temperature.

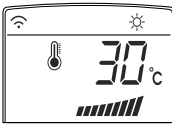
- The temperature range is 18°C - 30°C.

Heating your room

(Heating operation / Heat Pump model only)

- 1 Press POWER to turn on the power.
- 2 Open the remote control cover.
- 3 Press  repeatedly to select the heating operation.

- Following is the display on the display screen.



- 4 Press  or  to set the desired temperature.

- The temperature range is 18°C - 30°C.

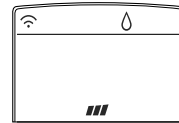
Removing humidity

(Dehumidification operation)

This mode removes excess moisture from an 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 POWER to turn on the power.
- 2 Open the remote control cover.
- 3 Press  repeatedly to select the dehumidifying 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 when set temperature is achieved.

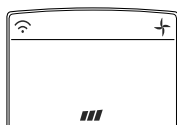
! NOTE

Cooling-only models do not support this function.

Airing your room (Air Circulation operation)

This mode only circulates the indoor air without changing the room temperature. The cooling lamp lights up in air circulation mode.

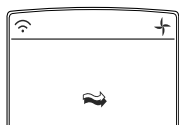
- 1 Press POWER to turn on the power.
- 2 Open the remote control cover.
- 3 Press  repeatedly to select the air circulation operation.
 - Following will be displayed on the display screen.



- 4 Press FAN SPEED to adjust the fan speed.

Adjusting the fan speed

- 1 Press FAN SPEED repeatedly to adjust the fan speed.
- 2 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.

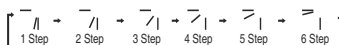
In this mode, the wind blows like a natural breeze by automatically changing fan speed.

Adjusting the air flow direction

Selectable Air Swing (Horizontal) (Optional)

- 1 To adjust the direction of the air flow horizontally.
- 2 Open the remote control cover while the air conditioner is in operation.
- 3 Press the 2ndF Button.
- 4 Press the HORIZONTAL VANE  CONTROL BUTTON.

Each time the button is pressed, the air flow direction is changed in the direction of the arrow.



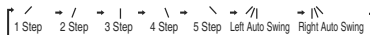
Automatic Air Swing (Horizontal)

To adjust the direction of the air flow automatically, switch OFF 2ndF button and press  button.

Selectable Air Swing (Vertical) (Optional)

- 1 To adjust the direction of the air flow vertically.
- 2 Open the remote control cover while the air conditioner is in operation.
- 3 Press the 2ndF Button.
- 4 Press the VERTICAL LOUVERS  CONTROL BUTTON.

Each time the button is pressed, the air flow direction is changed in the direction of the arrow.



Automatic Air Swing (Vertical)

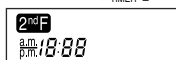
To adjust the direction of the air flow automatically, switch OFF 2ndF button and press  button.

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 Open the remote control cover.
- 2 Press the RESET BUTTON.
- 3 Press 2ndF button and check if icon is on.
- 4 Press the  until the desired time is set.



- 5 Press the TIMER SET/CANCEL BUTTON.

NOTE Check the indicator for a.m. and p.m.

Turning on the air conditioner automatically at a set time

- 1 Open the remote control cover.
- 2 Press 2ndF button and check if icon is on.
- 3 Press  to set the desired ON time.
– The icon below is displayed on the display screen.



- 4 Press  until the desired time is set.
- 5 Press TIMER SET/CANCEL BUTTON to finish.

Turning off the air conditioner automatically at a set time

- 1 Open the remote control cover.
- 2 Press 2ndF button and check if icon is on.
- 3 Press  to set the desired OFF time.
– The icon below is displayed on the display screen.



- 4 Press  until the desired time is set.
- 5 Press TIMER SET/CANCEL BUTTON to finish.

! NOTE

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

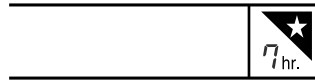
Canceling the timer setting

- 1 Open the remote control cover.
- 2 Check if  icon is off.
- 3 Press the TIMER SET/CANCEL BUTTON aiming the remote controller at the signal receiver.
(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 POWER to turn on the power.
- 2 Press  repeatedly to select the desired mode.
- 3 Press  repeatedly to select the desired number of hours (up to 7 hours).



! 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 healthy dehumidification 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.

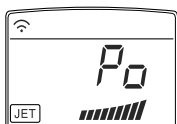
ADVANCED FUNCTIONS

The air conditioner offers some additional advanced functions.

Changing room temperature quickly (Jet Cool)

This mode allows you to cool indoor air quickly in summer or warm it quickly in winter.

- 1 Press POWER to turn on the power.
- 2 Open the remote control cover.
- 3 Press .



- In jet cooling mode, strong air blows out at a temperature of 18°C for 30 minutes.
- In jet heating mode, strong air blows out at a temperature of 30°C for 30 minutes.

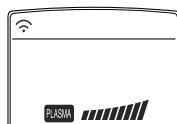
! NOTE

- In Air Circulation, Auto, or Auto Changeover mode, this function cannot be used.
- This function may not be supported, depending on the model.

Air Purification Mode (Optional)

LG Air conditioner come with a variety of filters like Anti-Bacteria filter, Tripple Filter, Virus & Allergy safe filter, Plasma Filter, which enable you to use it as a Built-in Air purifier (Even when you are not using it for cooling, hence minimal electricity consumption).

- 1 Press " " Key. The unit will turn ON, with only the fan operated and Built-in Air purifier function is activated.
 -  is displayed on the display screen.



! NOTE

- In this mode the compressor will not operate, hence saves electricity.
- This function may not be supported, depending on the model.

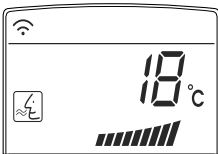
Indoor air purification

Auto Clean operation

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

- 1 Press POWER to turn on the power.
- 2 Open the remote control cover.
- 3 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

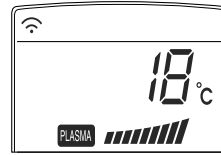
During Auto Clean function:

- "Co" will be displayed on the Unit.
- E-Saver Icon will blink on the Unit.
(E-Saver icon will blink in selected models)

Plasma Purification operation (Optional)

The plasma filter removes microscopic contaminants from the intake air completely to supply clean and fresh air.

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



! NOTE

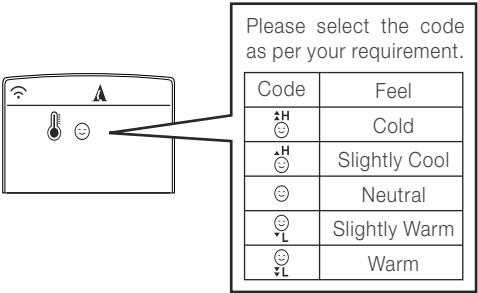
- You can use this function by pressing  without turning the air conditioner on.
- This function may not be supported, depending on the model.

Auto operation (Artificial intelligence)

Cooling-only models

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

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



Please select the code as per your requirement.

Code	Feel
 	Cold
 	Slightly Cool
	Neutral
 	Slightly Warm
 	Warm

! 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.

Quiet Mode Operation (Optional)

This mode minimizes the fan speed of the system hence making the environment more comfortable and silent.

1. Press POWER to turn on the power.
2. Open the remote control cover.
3. Press  mode button.

Quiet Mode Feature :

In quiet mode unit display shows SL.

! NOTE

This mode has Auto Restart feature. This means if during this mode, power goes OFF then unit will restart with the same mode (Quiet mode) when power comes ON.

! NOTE

Quiet mode will be cancelled by pressing quiet mode key again.

e-Saver Mode

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

1. Press POWER to turn on the power.
2. Open the remote control cover.
3. Press  repeatedly to select the cooling operation.
4. Press .

- Following is displayed on the display screen.



! NOTE

In this mode temperature may increase after some time but only upto 26°C.

! NOTE

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

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 2ndF button.
3. Press Dimmer Key to activate/deactivate dimmer function.

! NOTE

Dimmer Mode will be cancelled if any key except 2ndF Key and Room Key is pressed (Power Key will turn OFF the Unit).

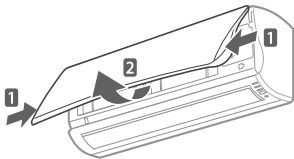
! NOTE

This mode has Auto Restart feature.

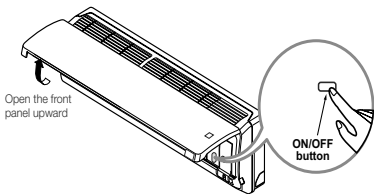
Operating the air conditioner without the remote control (Forced Operation)

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.

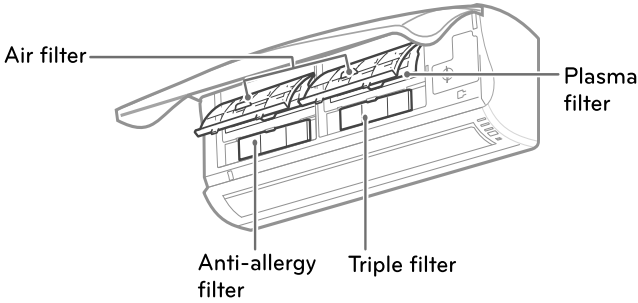
	Cooling Model	Heat pump Model		
		Room Temp. $\geq 24^{\circ}\text{C}$	$21^{\circ}\text{C} \geq \text{Room Temp.} < 24^{\circ}\text{C}$	Room Temp. $< 21^{\circ}\text{C}$
Operating mode	Cooling	Cooling	Healthy Dehumidification	Heating
Indoor FAN Speed	High	High	High	High
Setting Temperature	22°C	22°C	23°C	24°C

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

MAINTENANCE

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

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



Item	Cleaning interval	Cleaning method
Air filter	2 weeks	See "Cleaning air filter."
Anti-allergy filter / Triple filter	3 months	See "Cleaning anti-allergy filter and triple Filter."
Plasma filter*	3 months	See "Cleaning the plasma filter."
Indoor unit surface	Regularly	Use a soft, dry cloth. Do not use bleach or abrasives.
Outdoor unit	Regularly	Use steam 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.

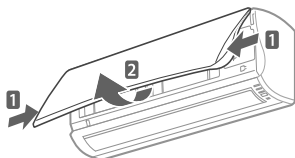
NOTE

- 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 costs.

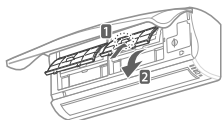
Cleaning the air filter

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

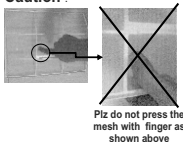
- 1 Turn off the power and unplug the power cord.
- 2 Open the front cover.
 - Lift up both sides of the cover slightly.



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



Caution :

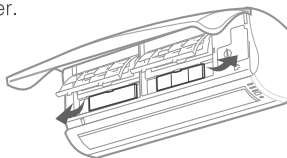


- 4 Clean the filter with a vacuum cleaner or with warm water.
 - If dirt is difficult to remove, wash the filter in lukewarm water with detergent.
- 5 Dry the filter in the shade.

Cleaning the anti-allergy filter and triple 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.



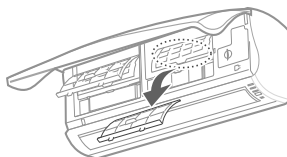
- 4 Dry the filter in direct sunlight for 2 hours.

! 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 in 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

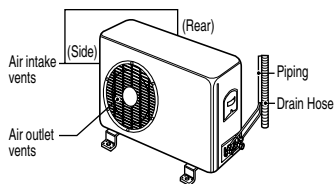
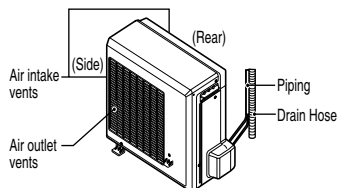
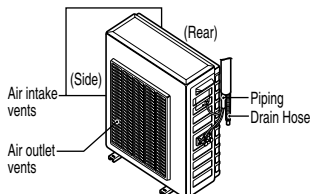
- The location of the filters may differ, depending on the model.
- The plasma filter may not be included in some models.

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.

NOTICE

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 service center.

Before requesting service

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

Problem	Possible causes	Corrective action
There is a burning smell and a strange sound coming from the unit.	-	Turn off the air conditioner, unplug the power cord and contact the service 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 jet 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, jet operation or dehumidifying operation is selected.	In some operation modes, such as the jet 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 jet operation is selected.	In some operation modes, such as the air circulation or jet operation mode, you cannot adjust the temperature. Select an operation mode in which you can adjust the temperature.

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 23) 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 26 for cleaning filters.)
- 2** Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.

For any further information, please contact LGEIL Branches

<u>BRANCH</u>	<u>BRANCH OFFICE ADDRESS</u>	<u>PHONE NO. / FAX NO.</u>
Ahmedabad	LGEIL, 233-234, Platinum Plaza, Nr. Judges Bungalow Cross Road, Bodakdev, Ahmedabad-54	40040013-14
Asansol	LGEIL, Block-E, 1st Floor, P C Chattarjee Market, Rambandhu Tala, GT Road (E) Asansol-713303	3292009/3292010 (Fax) 2215170
Aurangabad	LGEIL, 302 CIDCO No. 3, Opp. Hotel Ramgiri, Jalna Road, Aurangabad-431003	5625705 / (Fax) 2474055/32095436/32095437/32095438
Bangalore	LGEIL, No. 914, 2nd Floor, Shri Venkateshwara Complex, Opp. IBP Petrol Bunk, 80R Road, 6th Block, Koramangala - Bangalore - 560095	41145145/41144750/41144751
Bhopal	LG Electronics India Private Limited, 2nd Floor, Alankar Complex, Plot No. 10, M.P. Nagar, Zone-II, Bhopal-462011	4262847/4229861 (Fax) 4262848
Bhubaneshwar	LGEIL, Plot No. 02, 1st Flr., Bapuji Nagar, Bhubaneshwar-751009	2531430, 2534280
Calcutta	LGEIL, 1, Ho-Chi-Min-Sarani, 6th Floor, Metro Towers, Calcutta-700071	22883254 (51) Fax
Chandigarh	LGEIL, SCO No. 142-143, 3rd Floor, Sector-34A, Chandigarh-160002	508738990 (Fax) 5089107
Chennai	LGEIL, AA11, 2nd Avenue, Fatima Tower, Anna Nagar West, Chennai-600040	65510501-04 (Fax) 26203506
Cochin	LGEIL, 40/1270, Vasudeva Buildings, T.D. Road, Emakulam Cochin-682011	2369765/2369743/2370744/4027444/4027555/2369077 (Fax)
Coimbatore	LGEIL, 250A, Sanganur Main Road, Kannappa Nagar, Coimbatore-641027	2332197, 2332195
Delhi	LGEIL, A-27, Mohan Co-operative, Industrial Estate, New Delhi	26991412/11/13 (Fax) 26991410
Dehradun	LGEIL, M-22, Commercial Motors Compound, Mohabewala Indl. Area, Delhi-Saharanpur Road, Dehradun (Uttarakhand)	2644213/283
Gurgaon	LGEIL, IInd Flr, A Block, Centre Point Bldg, Sushant Lok , Ph-I, Gurgaon-122001	4047461- 62 - 63/4272867, 4047460 (Fax)
Ghaziabad	LGEIL, J-10, RDC Rajnagar, Ghaziabad - 201001	9811354152/3/6/4/65/266
Guwahati	LGEIL, Shantineer Bhawan, C K Aggarwal Path, Chenikurthi, Guwahati-781003	2663895/2666958/2665983/2668984 (Telefax)
Hyderabad	LGEIL, 1st Floor, Survey No. 54, Pulla Reddy Building, Vikaramपुरi, Main Road, Kharkhana, Secunderabad-500009	27207504, 05, 06/27204094 27201462 (Fax)
Hubli	LGEIL, 1 Floor, Above Bellad & Co., Near Bannigida Busstop, Gokul Road, Hubli-580030	4250251/52
Indore	LGEIL, 3rd flr., 304 Bansri Trade Centre, 581/5 M.G. Road, Indore-452003	4065523-24, 4082157 (Fax)
Jaipur	LGEIL, B-71, Sahakar Marg, Lal Kothi Scheme, Jaipur-302015	5111118/5113028/5105392, 5111540 (Fax)
Jammu	LGEIL, Plot No. 52, Yard No. 6, Transport Nagar, Narwal, Jammu-180006	2477420, 2477419, 2474396, 2474384
Jodhpur	LGEIL, 22(1-A)/21(2-B)/2, RIICO Heavy Industrial Area, Jodhpur-342003	2742384, 392 / 5120030 (Fax)
Karnal	LG Electronics India Pvt Ltd, Super Tyre Building, Near New Anaj Mandi, Opp. New World Restauarnt, G.T. Road Karnal, Haryana	2219201, 2219202 (Telefax)
Lucknow	LGEIL, B-537, Hari Kunj, Keshav Nagar, Sitapur Road, Lucknow-226020	2757538, 39, 2759121 (Fax) 2757559
Ludhiana	LGEIL, Village Jhande, Near Badawal Railway Station, Opp. Ferozpur Road, Ludhiana.	2804412 - 19
Mumbai(N & S)	LGEIL, Trade Star, 4th Floor, A Wing, J.B. Nagar, Andheri Kurla Road, Andheri (E) Mumbai-400059	28352882-2887 / 28352889 (Fax)
Nagpur	LGEIL, 5A, Road No.13, Behind Msrtc Workshop, MIDC Hinga, Nagpur-440016	235120, 235122, Fax : 234401
Patna	LGEIL, 2nd Floor, Ankit Chandra Deep Complex, Bander Bageecha, Near Samrat Hotel, Patna-800001.	3298714, 2541845 (Fax)
Pune	LGEIL, 201, 2nd Floor, Plexus Complex, at 134/1, CTS No. 1337/1, Nr. Parihar Chowk, Aundh, Pune-411 007.	020 41474100, 41474111 (Fax)
Rajkot	LGEIL, Sanskriti Apartment, Opp. Dr. Ambedkar Bhawan, Near Atilthi Chowk, Akshar Road , Rajkot - 360004	2481499, 2467692 (Fax)
Raipur	613 to 616 , 6th Floor, Offizo, Magneto - The Mall, GE Road, Raipur - 492001	4053171/4034740 (Fax) 4038426/10/11
Ranchi	LGEIL, 402, Commerce Tower, Opp. Gel Church Complex, Main Road, Ranchi	3294026, 2331815
Surat	LGEIL, 1001-1004, Ascon Plaza, IInd Flr, Anand Mahal Road, Behind Bhulka Bhavan School, Adajan, Surat-395009	2730982/83, 2730984 (Fax)
Thane	LGEIL, Gall Shop No - 206,207, 2nd Floor, Sai Plaza , Above Vijay Sales Opp. Cine Wonder Mall, Ghodbunder Road , Thane(West)-400607	25472633/2637 25472602(Fax)
Varanasi	LGEIL, Pama Complex, DLW, Lahartara Road, Shividaspur, Manduadih, Varanasi, UP-221002	2373432/36/37
Vijaywada	LGEIL, Door No. 32-2/1-7, Ratnamamba Street, Prajasakti Nagar, Vijaywada-520010, Andhra Pradesh	2497283/87, (Fax) 2497284
Warangal	LGEIL, House No. 1-8-598/1, First Floor, Beside HDFC Bank, Nakkalgutta, Hanamakonda-506001 (Warangal)	2551453
Kozhikode	3/568, Thripuri Building, Wayanadu Road, First Floor, Near K.S.F.E, East Nadakkavu, Calicut-673011	2366755, 2366756, 2366678, (Fax) 2766678

Email : serviceindia@lge.com

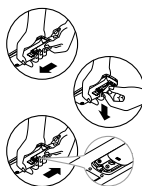


TEST RUNNING

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.

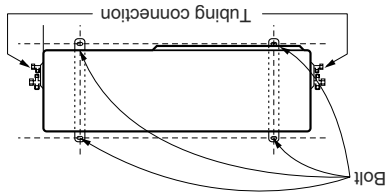


NOTE:

- 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 ø10mm 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.

CAUTION:

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. Be sure to perform Pump Down procedure with the unit cooling mode.

Pump Down Procedure

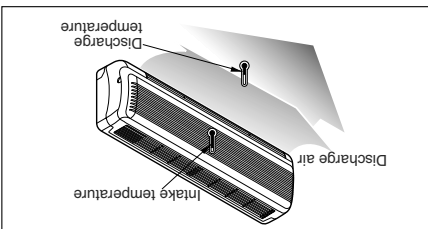
1. Connect a low-pressure gauge manifold hose to the charge port on the gas side service valve.
2. Open the gas side service valve halfway and purge the air from the manifold hose using the refrigerant gas.
3. Close the liquid side service valve(all the way in).
4. Turn on the unit's operating switch 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.

PUMP DOWN

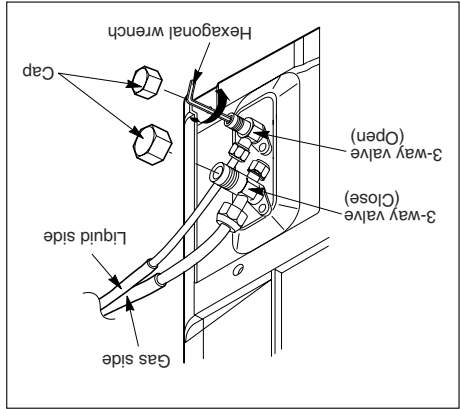
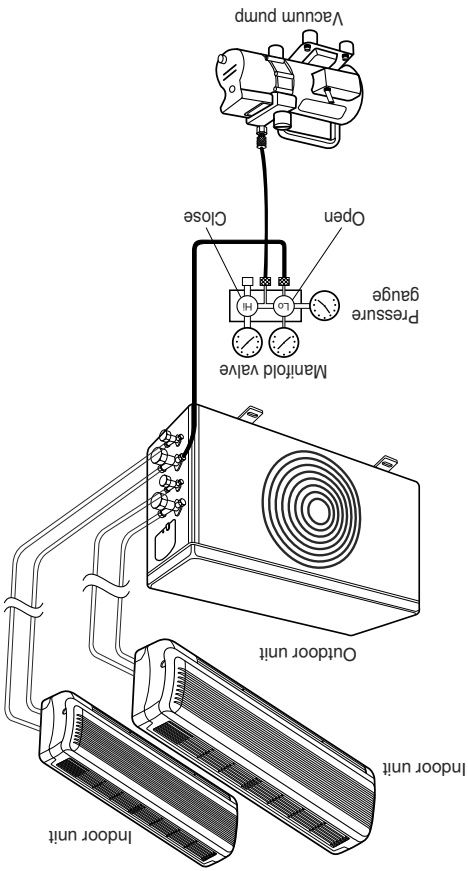
NOTE: If the actual pressure are higher than shown, the system is most likely over-charged, and charge should be removed. If the actual pressure are lower than shown, the system is most likely undercharged, and charge should be added. The air conditioner is now ready for use.

Outside ambient TEMP.	35°C(95°F)	4~5kg/cm ² G(56.8~71.0 P.S.I.G.)
The pressure of the gas side service valve		

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).



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 ga/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 counter-clockwise to fully open the valve.
- Turn the valve stem of gas side valve counter-clockwise 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 completes air purging with a vacuum pump. The 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 noncondensables 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.

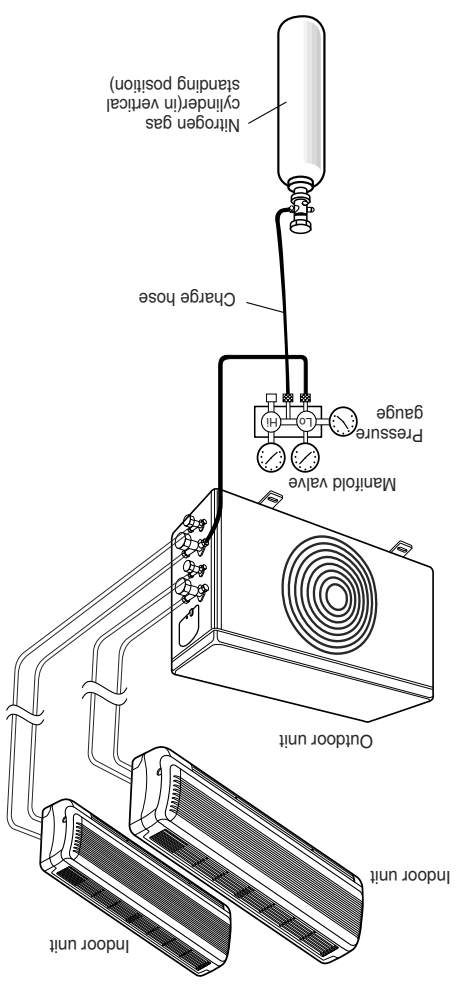
CAUTION

Be sure to use a manifold valve for air purging. If it is not available, use a stop valve for this purpose. The "H" knob of the manifold valve must always be kept close.

- Pressurize the system to no more than 150 P.S.I.G. with dry nitrogen gas and close the cylinder valve when the gauge reading reached 150 P.S.I.G. Next, test for leaks with liquid soap.

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.

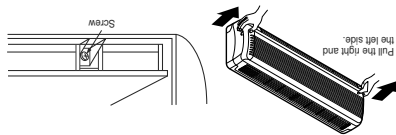


- Do a leak test of all joints of the tubing(both indoor and outdoor) and both gas and liquid side service valves.
- Bubbles indicate a leak. Be sure to wipe off the soap with a clean cloth.
- After the system is found to be free of leaks, relieve the nitrogen pressure by loosening the charge hose connector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

Checking the drainage

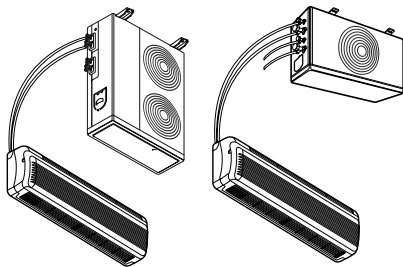
A To remove the front panel from the indoor unit, remove the front panel from the indoor unit cabinet.

- Set the air direction 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. (18K, 24K, 26K Btu models: 3EA)



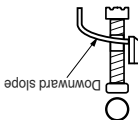
B To check the drainage.

- 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.

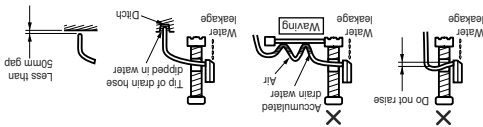


C Drain piping

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



■ Do not make drain piping.



2

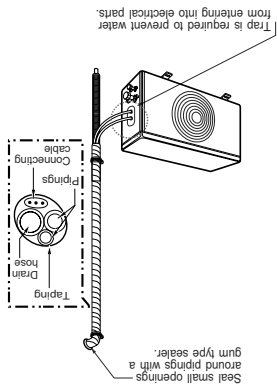
Form the piping

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.

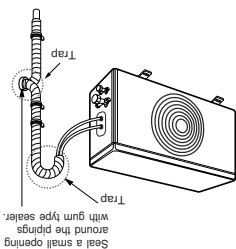
B In cases where the outdoor unit is installed below the indoor unit perform the following.

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



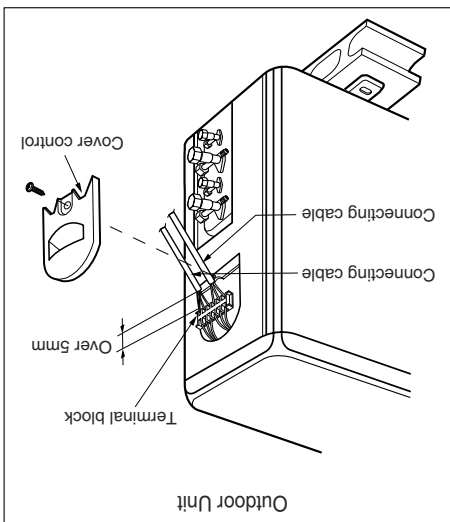
C In cases where the Outdoor unit is installed above the Indoor unit perform the following.

- 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.



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 20Ax2 (24K), 25Ax2 (36K, 48K) between the power source and the unit. A disconnecting device to adequately disconnect all supply lines must be fitted.



CAUTION

After the confirmation of the above conditions, prepare the wiring as follows:

- 1) Never fail to have an individual power circuit specified 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 could cause burn-out of the wires.)
- 3) Specification of power source.
- 4) Confirm that electrical capability is sufficient.
- 5) See to that 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 11))
- 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.

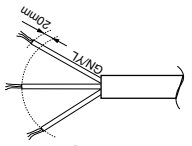
2) Clamping of cables

- 1) Arrange 2 power cables on the control panel.
- 2) First, fasten the steel clamp with a screw to the inner boss of control panel.
- 3) For the cooling model, fix the other side of the clamp with a screw strongly.

WARNING Make sure that the screws of the terminal are free from looseness.

CAUTION

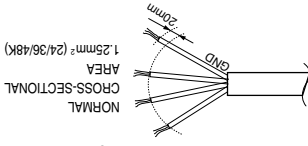
The power cord connected to the outdoor unit should be with the following specifications



24/36/48K BTU/h	2.5 mm ²
Capacity	1 Phase

NORMAL CROSS-SECTIONAL AREA

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



NORMAL CROSS-SECTIONAL AREA

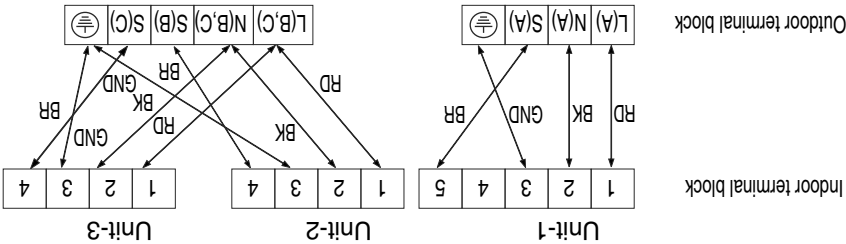
1.25mm² (24/36/48K)

If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer of its service agent.

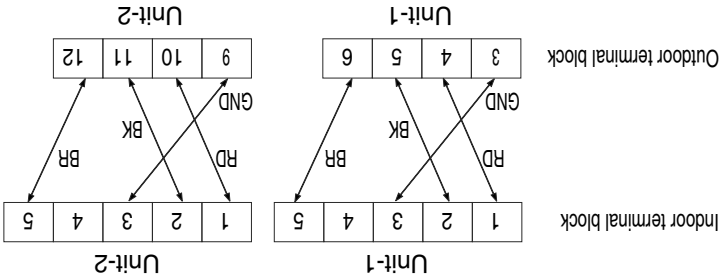
Model	1 Phase	24/36/48K	2.5 mm ²
No of core			4

Wire specification.

Note : GND = Ground Earthing



D) 48K (3 Room)



C) 48K

24/36/48K BTU/h

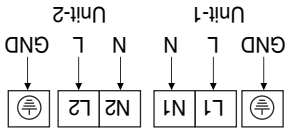
1) Connecting cables to the Indoor Unit

- Connect the wires to the terminals on the control board individually according to the outdoor unit connection.
- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively

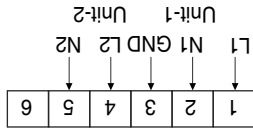
1) Input 1-phase power supply into outdoor & wire specification.

A) 24/36K

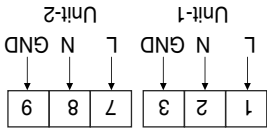
Outdoor terminal block



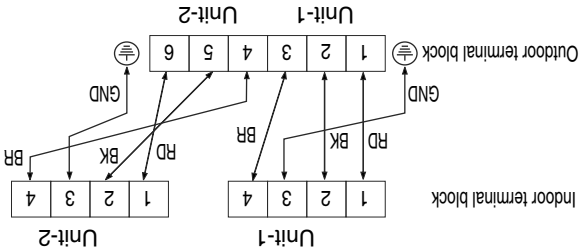
C) 48K (3 Room)



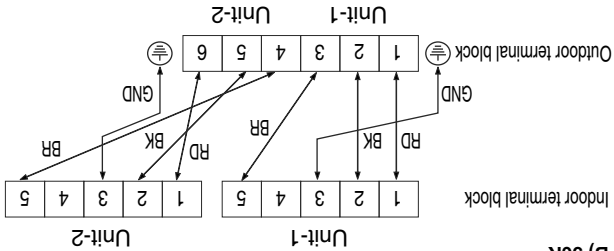
B) 48K



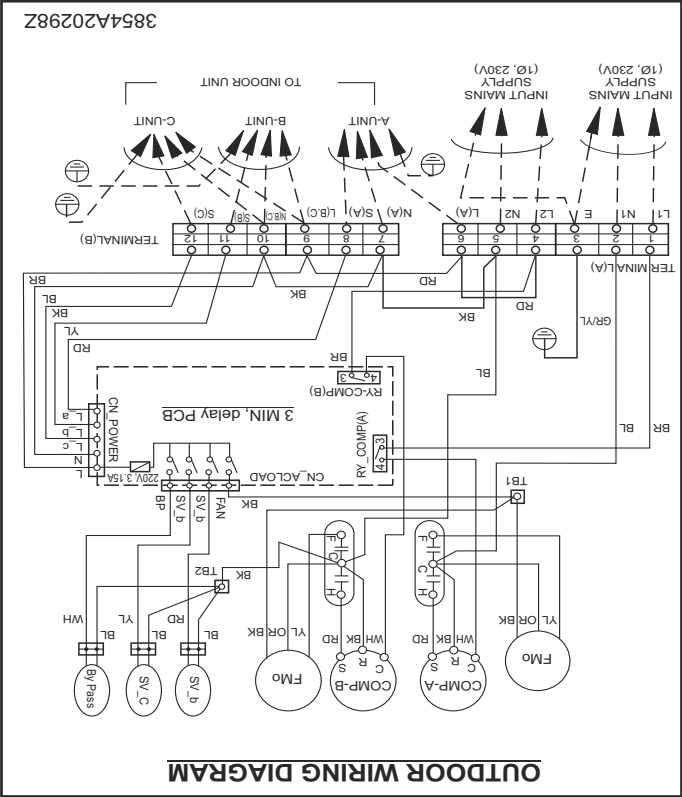
A) 24K



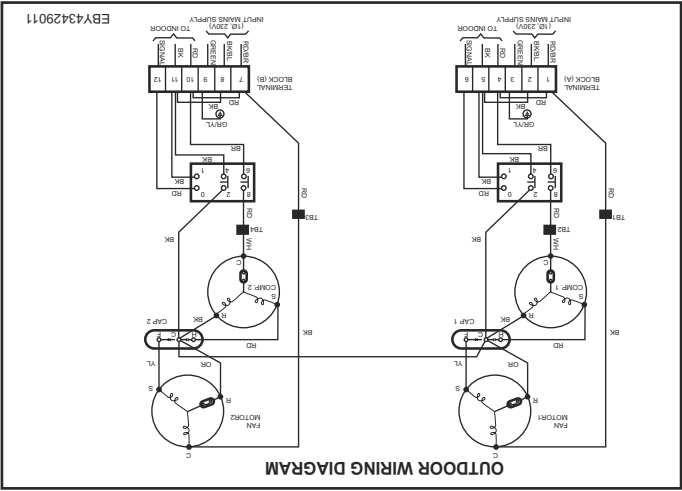
B) 36K



Note : GND = Ground Earthing



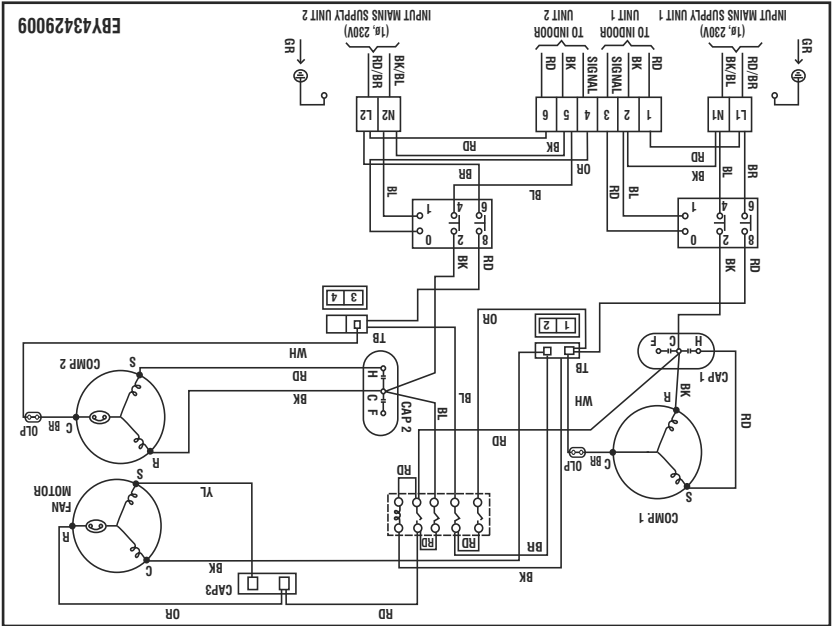
Outdoor Wiring Diagram : 48K (3 Room)



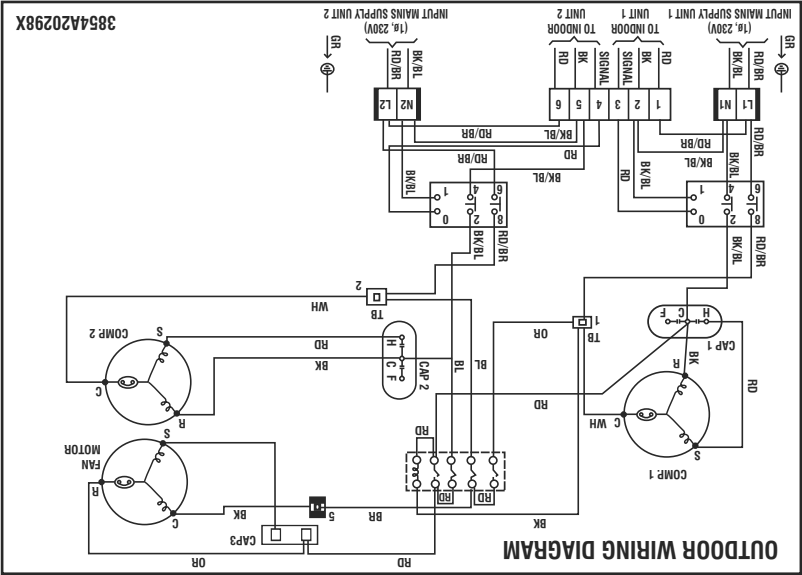
Outdoor Wiring Diagram : 48K

WIRING DIAGRAM

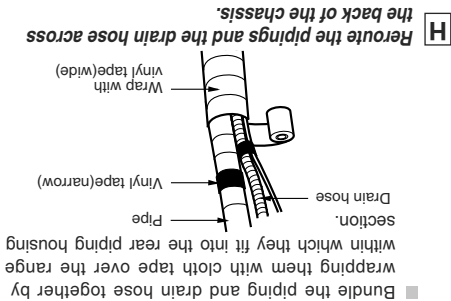
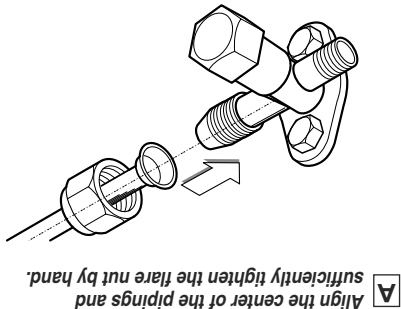
Outdoor Wiring Diagram : 24K



Outdoor Wiring Diagram : 36K

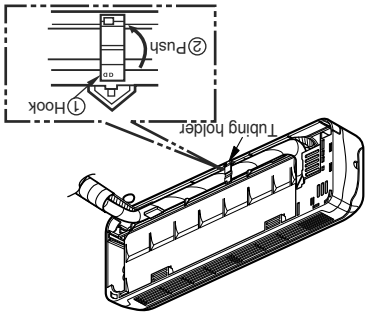


3 Connection of the pipes-Outdoor



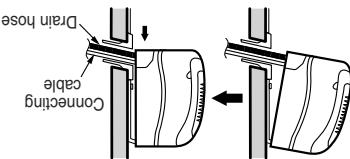
I Set the pipings and the drain hose to the back of the chassis with the tubing holder.

- Hook the edge of tubing holder to tap on chassis and push the bottom of tubing holder to be engaged at the bottom of chassis.

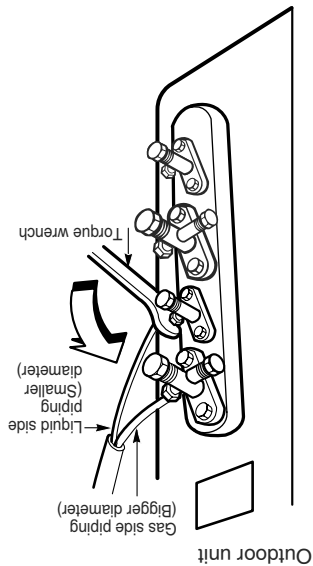


J Indoor unit installation

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

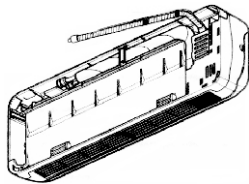


Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).



Capacity (Btu/h)	Pipe Size[Torque]	
	GAS	LIQUID
24K, 36K	1/2"[5.5kg·m]	1/4"[1.8kg·m]
48K	5/8"[6.6kg·m]	1/4"[1.8kg·m]

- 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.



• Connecting cable

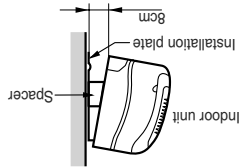
D Tape the drain hose and the connecting cable.

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

C Insert the connecting cable into the indoor unit.

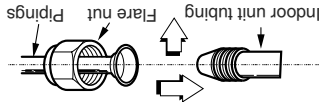
E Indoor unit installation

- 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.

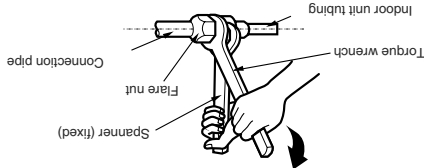


F Connecting the pipings to the indoor unit and the drain hose to drain pipe.

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

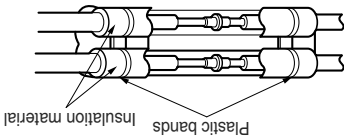


- Tighten the flare nut with a wrench.

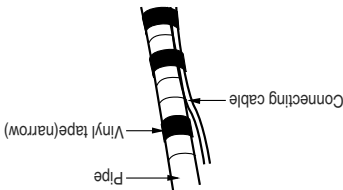
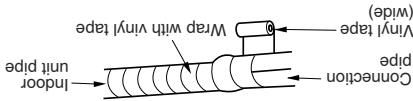


G Wrap the insulation material around the connecting portion.

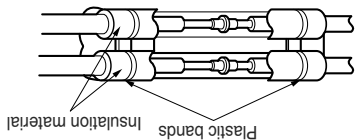
- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.



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

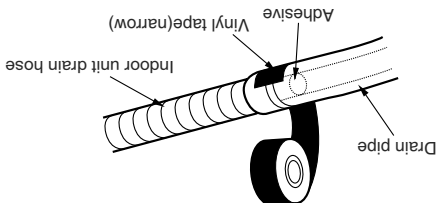


Capacity (Btu/h)	Pipe Size[Torque]	
	GAS	LIQUID
24K, 36K	1/2"[5.5kg·m]	1/4"[1.8kg·m]
48K	5/8"[6.6kg·m]	1/4"[1.8kg·m]



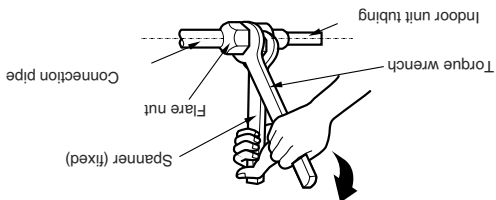
■ Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.

F Wrap the insulation material around the connecting portion.

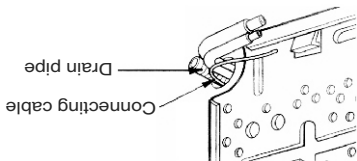


■ When extending the drain hose at the indoor unit, install the drain pipe.

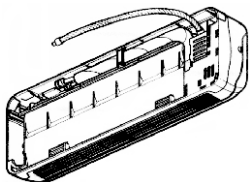
Capacity (Btu/h)	Pipe Size[Torque]	
	GAS	LIQUID
24K, 36K	1/2"[5.5kg·m]	1/4"[1.8kg·m]
48K	5/8"[6.6kg·m]	1/4"[1.8kg·m]



■ Tighten the flare nut with a wrench.

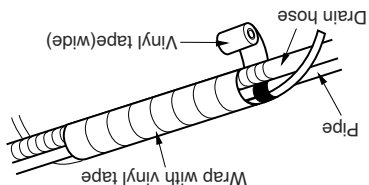


B Insert the piping, drain hose and the connecting cable into the piping hole.

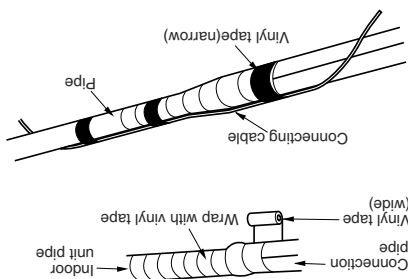


A Route the indoor tubing and the drain hose to the required piping hole position.

For right rear piping



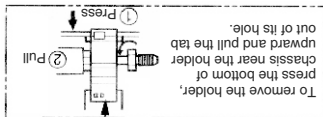
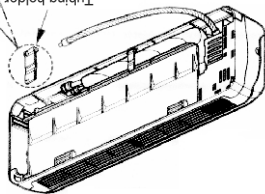
■ Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.



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

--Indoor Connection of piping

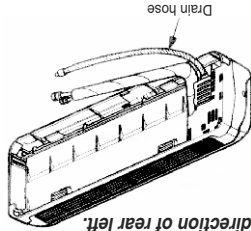
- Preparing the indoor unit's piping and drain hose for installation through the wall.
- Remove the plastic tubing retainer (see illustration below) and pull the tubing and drain hose away from chassis.
- Replace the plastic tubing holder in the original position.



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.

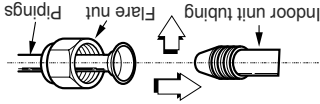
For left rear piping

- 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.

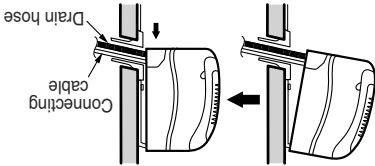
- Do not connect the cable to the indoor unit. Make a small loop with the cable for easy connection later.



- 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.

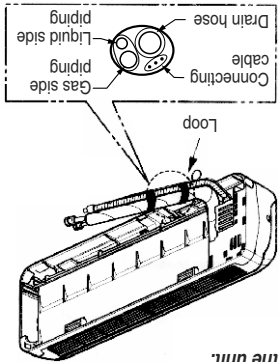
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking-sound).



- 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

NOTE: 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.
*Foamed polyethylene or equivalent is recommended.



- 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.

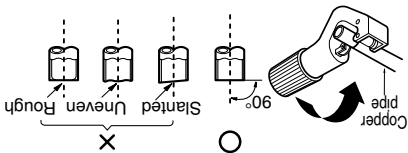


Flaring work

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

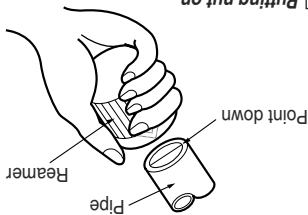
A Cut the pipes and the cable.

- 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 1.5m longer than the pipe length.



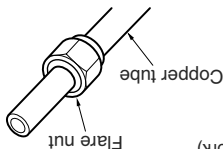
B Burrs removal

- 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)

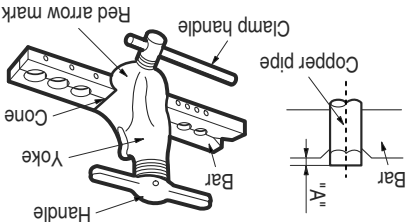


D Flaring work

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

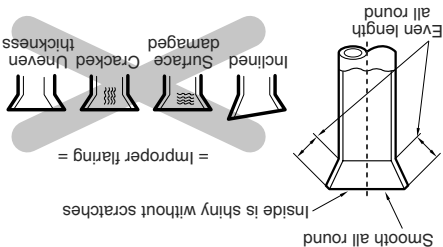
Outside diameter		A	
mm	inch	mm	inch
ø6.35	1/4	0~0.5	0~0.5
ø9.52	3/8	0~0.5	0~0.5
ø12.7	1/2	0~0.5	0~1.0
ø15.88	5/8		

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



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.

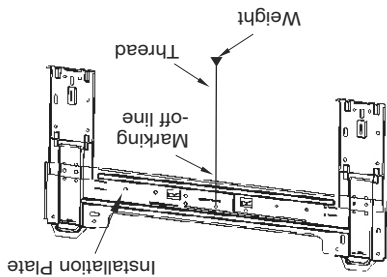


How to fix installation plate

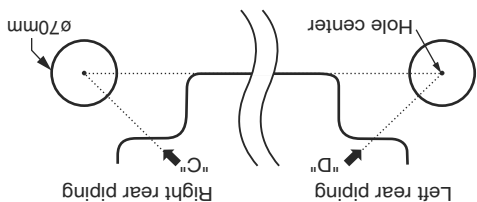
The wall you select should be strong and solid enough to prevent vibration.

- 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.

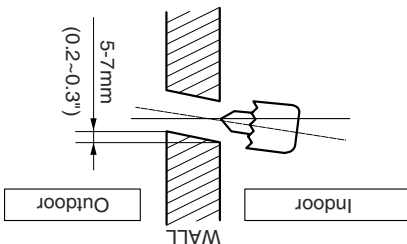


- B** Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate-routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



Drill a hole in the wall

- Drill the piping hole with a $\phi 70\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.



CAUTION

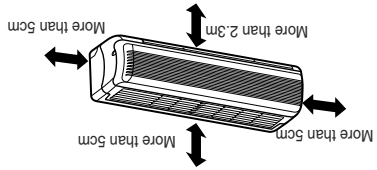
- Make sure that the drilled hole in the wall is properly sealed (using a proper sealant, for example cement, plaster of paris etc.) after passing the installation pipe, drainage pipe and the inter connecting cable.

INSTALLATION OF INDOOR, OUTDOOR UNIT

Read completely, then follow step by step.

Select the best location

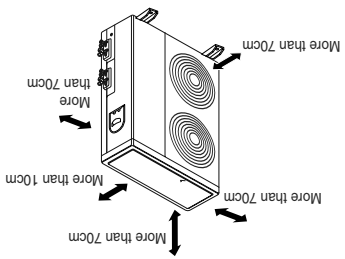
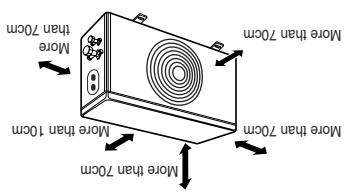
- A Indoor unit**
 - Do not have any heat or steam near the unit.
 - Select a place where there are no obstacles in front of the unit.
 - Make sure that condensation drainage can be conveniently routed away.
 - Do not install near a doorway.
 - Ensure that the space around the left and right of the unit is more than 5cm. The unit should be installed as high on the wall as possible, allowing a minimum of 5cm from ceiling.
 - Use a stud finder to locate studs to prevent unnecessary damage to the wall.



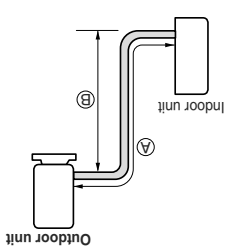
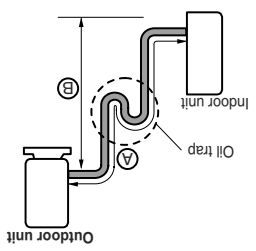
CAUTION
Install the indoor unit on the wall where the height from the floors more than 2.3 meters.

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 10cm. The front of the unit should have more than 70cm 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.



In case more than 5m



2

Piping length and elevation

- Rooftop installations:**
 - 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.

Capacity (Btu/h)	Pipe Size	Standard Length (m)	Max. Elevation B (m)	Max. Refrigerant length A (m)	Additional (g/m)
12K X 2EA (Indoor)	1/2"	5	15	30	15
18K X 2EA (Indoor)	1/2"	5	15	30	15
24K X 2EA (Indoor)	5/8"	5	15	30	20

If gas leaks and accumulates in the area surrounding the unit, it could cause an explosion.

Do not install the unit in a place where an inflammable gas leaks.

If there is a defect in the drainage/piping work, water could leak from the unit and household goods could get wet and be damaged.

Perform the drainage/piping work according to the installation instruction.

CAUTION



Attach the electrical part cover to the indoor unit and the service panel to the outdoor unit securely. If the electrical part cover of the indoor unit and/or the service panel of the outdoor unit are not attached securely, it could result in a fire or electric shock due to dust, water, etc.

Be sure to use the part provided or specified parts for the installation work.

The use of defective parts could cause an injury due to a fire, electric shock, the unit falling, etc.

Use the specified wires to connect the indoor and outdoor units securely and attach the wires firmly to the terminal board connecting sections so the stress of the wires is not applied to the sections. Incorrect connection and fixing could cause fire.

Check that the refrigerant gas does not leak after installation is completed.

Perform electrical work according to the installation manual and be sure to use an exclusive circuit. If the capacity of the power circuit is insufficient or there is incomplete electrical work, it could result in a fire or an electric shock.

Install the unit securely in a place which can bear the weight of the unit. When installed in an insufficiently strong place, the unit could fall causing injury.

Perform the installation securely referring to the installation instruction.

Incorrect installation could cause a personal injury due to fire, electric shock, the unit falling or leakage of water.

Do not install it yourself (customer). Incorrect installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.

WARNING



■ After reading this instructions, be sure to keep it together with the owner's manual in a handy place on the customer's site.

CAUTION



: Could lead to serious injury in particular environments when operated incorrectly.

WARNING



: Could lead to death, serious injury, etc.

■ The indications and meanings are as follows.

■ Be sure to observe the cautions specified here as they include important items related to safety.

■ Be sure to read "THE FOLLOWING SHOULD BE ALWAYS OBSERVED FOR SAFETY" before installing the air conditioner.

THE FOLLOWING SHOULD BE ALWAYS OBSERVED FOR SAFETY

INSTALLATION OVERVIEW

Installation Requirements

The following should be always observed for safety.....3

Installation of indoor, outdoor unit.....4

- ☐ Installation plate
- ☐ Four type "A" screws
- ☐ Connecting cable

Flaring work and connection of piping 6

- ☐ Pipes: Gas side 1/2"
- Liquid side 1/4"
- (Refer to page 4)
- ☐ Insulation materials
- ☐ Additional drain pipe (Outer Diameter.....15.5mm)

Connection of piping(indoor).....7

- For right rear piping
- For left rear piping

Wiring Diagram 11

Connecting the cable between indoor unit and outdoor unit.....13

- ☐ A glass of water
- ☐ Screw driver

Checking the drainage and forming the piping 16

Air purging 17

- ☐ Hexagonal wrench(4mm)
- ☐ Gas-leak detector
- ☐ Vacuum pump
- ☐ Gauge manifold

Test running 19

- ☐ Two type "B" screws

- ☐ Owner's manual
- ☐ Thermometer
- ☐ Holder Remote Control

Required Tools

- ☐ Level gauge
- ☐ Screw driver
- ☐ Electric drill
- ☐ Hole core drill(ø70mm)

- ☐ Flaring tool set
- ☐ Specified torque wrenches 1.8kg·m, 4.2kg·m, 5.5kg·m, 6.6kg·m (different depending on model No.)
- (Refer to page 10)
- ☐ Spanner.....Half union

INSTALLATION MANUAL AIR CONDITIONER

- Please read this installation manual completely before installing the product.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.
- Please retain this installation manual for future reference after reading it thoroughly.

TYPE : MULTI SPLIT WALL MOUNTED