ENGLISH

OWNER'S MANUAL

AIR CONDITIONER

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

TYPE : Multi I Home

MFL72027702
Rev. 02_241024

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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.
- 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.

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 :

SAFETY INSTRUCTIONS

The following symbols are displayed on indoor and outdoor units.

	Read the precautions in this manual carefully before operating the unit.		This appliance is filled with flammable refrigerant (for R32)
	This symbol indicates that the Operation Manual should be read carefully.		This symbol indicates that a service personnel should be handling this equipment with reference to the Installation Manual.

The following safety guidelines are intended to prevent unforeseen risks or damage from unsafe or incorrect operation of the appliance.
The guidelines are separated into 'WARNING' and 'CAUTION' as described below.

⚠ This symbol is displayed to indicate matters and operations that can cause risk. Read the part with this symbol carefully and follow the instructions in order to avoid risk.

⚠ WARNING

This indicates that the failure to follow the instructions can cause serious injury or death.

⚠ CAUTION

This indicates that the failure to follow the instructions can cause the minor injury or damage to the product.

⚠ WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.
- 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.
- Compliance with national gas regulations shall be observed (for R32)
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification. (for R32)

- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants. (for R32)
- Ducts connected to an appliance shall not contain an ignition source. (for R32)
- This equipment shall be provided with a supply conductor complying with the national regulation.
- The refrigerant and insulation blowing gas used in the appliance require special disposal procedures. Consult a service agent or a similarly qualified person before disposing of them.
- This appliance must be properly grounded.
- Do not cut or remove the grounding prong from the power plug.
- Attaching the earth wire to the power outlet cover screw does not ground the appliance unless the cover screw is metal, uninsulated, and the power outlet is rounded through house wiring.
- If you have any doubt whether the air conditioner is properly grounded, have the power outlet and circuit checked by a qualified electrician.

Installation

- Do not use a defective or underrated circuit breaker. Use the correctly rated breaker and fuse.
  - 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 by yourself.
  - There is risk of fire or electric shock.
- Always ground the product as per the wiring diagram. Do not connect the ground wire to gas or water pipes lightening rod or telephone ground wire.
  - 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 due to dust, water etc.
- Use the correctly rated breaker or fuse.
  - There is risk of fire or electric shock.
- 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.
  - There is risk of fire or electric shock.
- For installation, removal or reinstall, always contact the dealer or an Authorized Service Center.
  - There is risk of fire, electric shock, explosion, or injury.
- Do not install the product on a defective installation stand. Be sure that the installation area does not deteriorate with age.
  - It may cause product to fall.
- Never install the outdoor unit on a moving base or a place from where it can fall down.
  - The falling outdoor unit can cause damage or injury or even death of a person.
- In outdoor unit the step-up capacitor supplies high voltage electricity to the electrical components. Be sure to discharge the capacitor completely before conducting the repair work.
  - An charged capacitor can cause electrical shock.
- When installing the unit, use the installation kit provided with the product.
  - Otherwise the unit may fall and cause severe injury.
- 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.

- Safely dispose off the packing materials. Like screws, nails, batteries, broken things etc after installation or svc and then tear away and throw away the plastic packaging bags.
  - Children may play with them and cause injury.
- Be sure to check the refrigerant to be used. Please read the label on the product.
  - Incorrect refrigerant used can prevent the normal operation of the unit.
- Do not touch refrigerant pipe and water pipe or any internal parts while the unit is operating or immediately after operation.
  - It can cause a burn or frostbite.
- Keep any required ventilation openings clear of obstruction.(for R32)
- Mechanical connections shall be accessible for maintenance purposes.(for R32)

Operation

- When the product is soaked (flooded or submerged) in water , contact an Authorized Service Center for repair before using it again.
  - There is risk of fire or electric shock.
- Be sure to use only those parts which are listed in the svc parts list. Never attempt to modify the equipment.
  - The use of inappropriate parts can cause an electrical shock, excessive heat generation or fire.
- Do not touch , operate, or repair the product with wet hands. Hold the plug by hand when taking out.
  - There is risk of electric shock or fire.
- Do not place a heater or other heating appliances near the power cable.
  - There is risk of fire and electric shock.
- Do not allow water to run into electric parts. Install the unit away from water sources.
  - There is risk of fire, failure of the product, or electric shock.
- Do not store or use or even allow flammable gas or combustibles near the product.
  - There is risk of fire.
- Do not use the product in a tightly closed space for a long time. Perform ventilation regularly.
  - Oxygen deficiency could occur and hence harm your health.
- Do not open the front grille of the product during operation. (Do not touch the electrostatic filter, if the unit is so equipped.)
  - There is risk of physical injury, electric shock, or product failure.
- If strange sound, smell or smoke comes from product. Immediately turn the breaker off or disconnect the power supply cable.
  - There is risk of electric shock or fire.
- Ventilate the product room from time to time when operating it together with a stove, or heating element etc.
  - Oxygen deficiency can occur and hence harm your health.

- When the product is not to be used for a long time, disconnect the power supply plug or turn off the breaker.
  - There is risk of product damage or failure, or unintended operation.
- Take care to ensure that nobody especially kids could step on or fall onto the outdoor unit.
  - This could result in personal injury and product damage.
- Take care to ensure that power cable could not be pulled out or damaged during operation.
  - There is risk of fire or electric shock.
- Do not place anything on the power cable.
  - There is risk of fire or electric shock.
- When flammable gas leaks, turn off the gas and open a window for ventilation before turning on the product. Do not use the telephone or turn switches on or off.
  - There is risk of 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.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. (for R32)
- Do not pierce or burn. (for R32)
- Be aware that refrigerants may not contain an odour. (for R32)
- When mechanical connectors are reused indoors, sealing parts shall be renewed.(for R32)
- When flared joints are reused indoors, the flare part shall be re-fabricated.(for R32)
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer of its service agent.

⚠ CAUTION

Installation

- Two or more people must 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.
- Install the drain hose to ensure that the condensed water is drained away properly.
  - A bad connection may cause water leakage.
- Keep level even when installing the product.
  - To avoid vibration or noise.
- Do not install the product where the noise or hot air from the outdoor unit could damage or disturb the neighborhoods.
  - It may cause a problem for your neighbors and hence dispute.

- Always check for gas (refrigerant) leakage after installation or repair of product.
  - Low refrigerant levels may cause failure of product.
- The appliance shall be stored so as to prevent mechanical damage from occurring. (for R32)
- Refrigerant tubing shall be protected or enclosed to avoid damage. (for R32)
- Flexible refrigerant connectors (such as connecting lines between the indoor and outdoor unit) that may be displaced during normal operations shall be protected against mechanical damage. (for R32)
- The installation of pipe-work shall be kept to a minimum. (for R32)
- A brazed, welded, or mechanical connection shall be made before opening the valves to permit refrigerant to flow between the refrigerating system parts. (for R32)
- Pipe-work shall be protected from physical damage.
- Use the deoxidized copper as piping materials to install.
- If anyone other than a licensed Professional installs, repairs, or alters LG Electronics Air Conditioning Products, the warranty is voided.
  - All costs associated with repair are then the full responsibility of the owner.
- Do not insert a drain hose in drain or soil pipe.
  - Bad smells can occur and it results in a corrosion of a heat exchanger or pipe.
- Do not install the unit in potentially explosive atmospheres.

Operation

- 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.
- Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
- Appliance shall be disconnected from its power source during service and when replacing parts.
- Do not block the inlet or outlet of air flow.
  - It may cause product failure.
- Use a soft cloth to clean. Do not use harsh detergents, solvents or splashing water etc.
  - There is risk of fire, electric shock, or damage to the plastic parts of the product.
- Do not touch the metal parts of the product when removing the air filter.
  - There is risk of personal injury.
- Do not step on or put anything on the product. (outdoor units)
  - There is risk of personal injury and failure of product.

- Always insert the filter securely after cleaning. Clean the filter every two weeks or more often if necessary.
  - A dirty filter reduces the efficiency.
- Do not insert hands or other objects through the air inlet or outlet while the product is operating.
  - There are sharp and moving parts that could cause personal injury.
- Be cautious when unpacking and installing the product.
  - Sharp edges could cause injury.
- If the refrigerant gas leaks during the repair, do not touch the leaking refrigerant gas.
  - The refrigerant gas can cause frostbite (cold burn).
- Do not tilt the unit when removing or uninstalling it.
  - The condensed water inside can spill.
- Do not mix air or gas other than the specified refrigerant used in the system.
  - If air enters the refrigerant system, an excessively high pressure results, causing equipment damage or injury.
- If the refrigerant gas leaks during the installation, ventilate the area immediately.
  - Otherwise it can be harmful for your health.
- Dismantling the unit, treatment of the refrigerant oil and eventual parts should be done in accordance with local and national standards.
- Replace the all batteries in the remote control with new ones of the same type. Do not mix old and new batteries or different types of batteries.
  - There is risk of fire or product failure.
- Do not recharge or disassemble the batteries. Do not dispose off batteries in a fire.
  - They may burn or explode.
- If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked.
  - The chemicals in batteries could cause burns or other health hazards.
- 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 and a door or a window is left open.
  - Moisture may condense and wet or damage furniture.
- Do not expose your skin or kids or plants to the cool or hot air draft.
  - This could harm to your health.
- Do not drink the water drained from the product.
  - It is not sanitary and could cause serious health issues.
- Use a firm stool or ladder when cleaning, maintaining or repairing the product at an height.
  - Be careful and avoid personal injury.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).

BEFORE USE

Preparing for operation

Notes for Operation

- Adjust the direction of the airflow vertically to circulate indoor air.
- Speed up the fan to cool or warm indoor air quickly, within a short period of time.
- Turn off the appliance and periodically open windows for ventilation. The indoor air quality may deteriorate if the appliance is used for long periods.
- Clean the air filter once every 2 weeks. Dust and impurities collected in the air filter may block the airflow or reduce the appliance performance.

- Contact an installation specialist for installation.
- Use a dedicated circuit.

Usage

- Being exposed to direct airflow for an extended period of time could be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for extended periods of time.
- Due to the possibility of oxygen deficiency, ventilate the room when used together with stoves or other heating devices.
- Do not use this air conditioner for non-specified special purposes (e.g. preserving precision devices, food, pets, plants, and art objects). Such usage could damage the items.

Cleaning and maintenance

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- 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 accidentally triggered on while cleaning inner parts of the unit.

Service

For repair and maintenance, contact your authorized service dealer

Suggestions for Energy Saving

- Do not over-cool the space. This may be harmful to your health and may consume more electricity.
- Block sunlight with blinds or curtains while you are operating the appliance.
- Keep doors or windows closed tightly while you are operating the appliance.

Wireless Remote Control

- Never mix different types of batteries, or old and new batteries for the remote control.
- Do not recharge or disassemble the batteries.
- Dispose of the batteries in a place where there is no danger of fire.
- Stop using the remote control if there is a fluid leak in the battery. If your clothes or skin is exposed to the leaking battery fluid, wash off with clean water.
- If the leaking battery fluid has been swallowed, rinse the inside of the mouth thoroughly and consult a doctor.
- Never let the indoor unit or the remote control get wet.

Maintenance

- Before cleaning or performing maintenance, disconnect the power supply and wait until the fan stops.
- The fan rotates at a very high speed during operation.
- There is a possibility of injury if the unit's power is accidentally triggered on while cleaning inner parts of the unit.
- Appliance shall be disconnected from its power source during service and replacing parts.

Refrigerant

General

- Follow the standards of the corresponding region or country for handling the refrigerant and the air conditioner and for disassembling the air conditioner.
- Use only the refrigerant specified on the air conditioner label.

- Do not input air or gas into the system except the specified refrigerant.
- Do not touch the leaking refrigerant during installation or repair.
- If the refrigerant gas leaks during the installation, ventilate the area immediately.
- Be sure to check for refrigerant leaks after installing or repairing the product.
- In the case of refrigerant leakage, consult the dealer. When the air conditioner is to be installed in a small room, it is necessary to take proper measures so that the amount of any leaked refrigerant does not exceed the limiting concentration even when it leaks. If the refrigerant leaks exceeding the level of limiting concentration, an oxygen deficiency accident may happen.

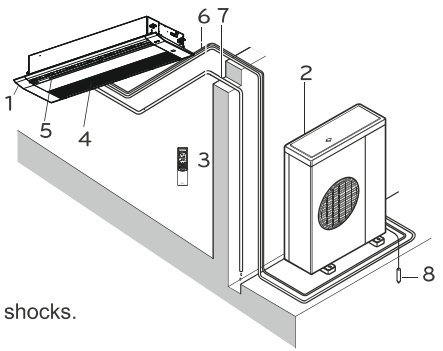
R32 Only



- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Ducts connected to an appliance shall not contain an ignition source.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- Keep any required ventilation openings clear of obstruction.

PRODUCT INTRODUCTION

Name and function of parts

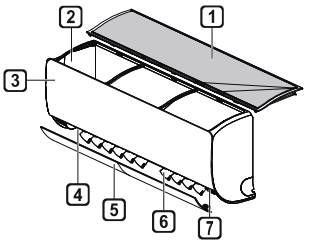


1. Indoor unit
2. Outdoor unit
3. Remote controller
4. Inlet air
5. Discharge air
6. Refrigerant piping, connection electric wire
7. Drain pipe
8. Ground wire
   Wire to ground outdoor unit to prevent electrical shocks.

Product Overviews

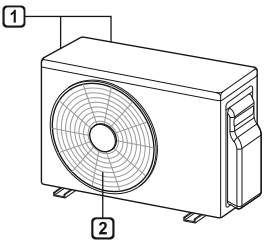
Parts and Functions

Indoor Unit (High Wall)



1 Air Filter
2 Air Intake
3 Front Cover
4 Air Outlet
5 Air Deflector (Horizontal Vane)
6 Air Deflector (Vertical Louver)
7 On/Off Button

Outdoor Unit



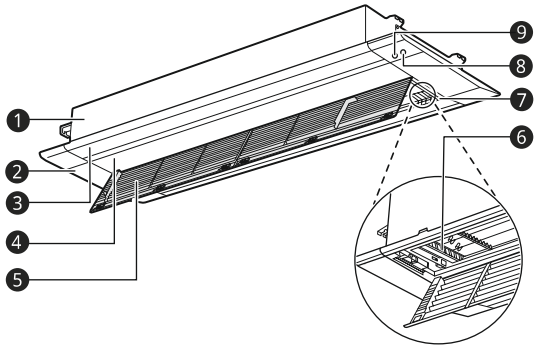
1 Air Intake Vents
2 Air Outlet Vents

NOTE

- The number and location of parts may vary according to the model of the air conditioner.
- The feature may be changed according to the type of model.

Product Overviews

Indoor Unit (1 Way Cassette)



1. Main Body
2. Side Cover
3. Air Discharge
4. Front Panel
5. Air Inlet Grille
6. Air Filter
7. Air Inlet
8. Signal Receiver
9. Lamp

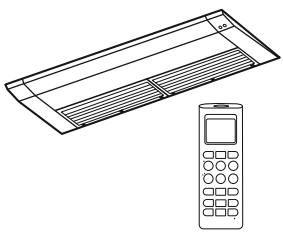
NOTE

- The number and location of operation lamps may vary according to the model of the air conditioner.
- The feature may be changed according to the type of model.

Operating Method

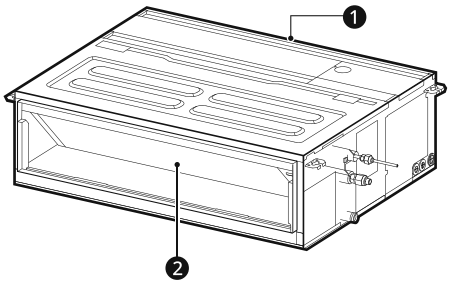
The signal receiver is inside the unit.

- Point the remote control towards the signal receiver at the right side of the air conditioner to operate it.
  - There should not be any obstacles blocking the remote controller.



Product Overview

Duct



❶ Air Intake Vents

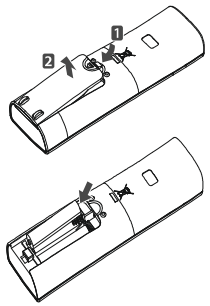
Takes in air from the room.

❷ Air Outlet Vents

Circulates air back into the room at the desired temperature.

How to insert the batteries

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 sliding it back into position.

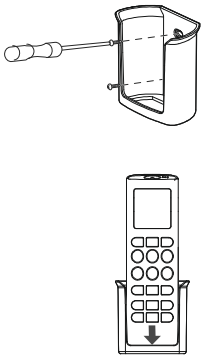


Note

1. Always use/replace both batteries of same type.
2. If the system is not to be used for a long time, remove the batteries to save their working life.
3. If the display screen of remote controller starts fading, replace both of the batteries.

Wireless remote controller maintenance

1. Choose a suitable place where its safe & easy to reach.
2. Fix the holder to wall etc with the supplied screws firmly.
3. Slide the remote controller inside the holder.



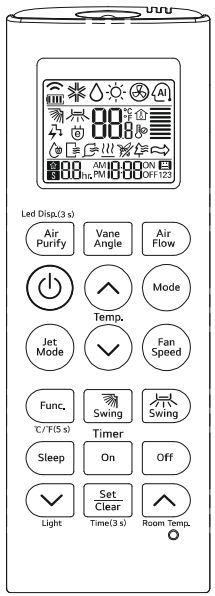
Note

1. Remote controller should never be exposed to direct sunlight.
2. Signal transmitter & receiver should always be clean for proper communication. Use a soft cloth to clean them.
3. In case some other appliances also get operated with remote control, change their position or consult your serviceman.

Operating method

1. The signal receiver is inside the unit.
2. Aim the remote controller towards the unit to operate it. There should not be any blockage in between.

Using Wireless Remote Control - 1 Way Cassette



Part	Description
	LCD
Air Purify	Used to start or stop the air purification function. Smart indicator(Air quality) always on setting (If it press for 3 s)
Vane Angle	Used to set each vane angle.
Air Flow	Used to set airflow.
⏻	Used to turn on/off the unit.
∧ Temp. ∨	Used to select the room temperature.
Mode	Used to select the operation mode.
Jet Mode	Speed cooling(heating) operates super high fan speed.
Fan Speed	Used to set fan speed.
Func.	Used to set or clear additional function. Celsius/Fahrenheit Switching (If it press for 5 s)
Swing	Used to stop or start louver movement and set the desired up/down airflow direction.
Swing	Used to set the desired left/right(horizontal) airflow direction.
Sleep	Used to set the time of sleeping operation.
On	Used to set the time of starting operation.
Off	Used to set the time of stopping operation.
∨ ∧	Used to set the timer. (If it is timer mode) Used to adjust the brightness. (If it is not timer mode) Used to check the room temperature. (If it is not timer mode)
Set Clear	Used to set/clear the timer. Used to set the current time (If it press for 3 s)
○	Used to reset the remote controller.

Accessory



Holder(1 EA)



Fixing screw (2 EA)



Owner's /
Installation manual



AAA(1.5 V)
Batteries(2 EA)

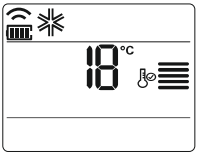
❉ Components and printings may differ depending on the product.

NOTE

- Some functions may not be supported, depending on the model.
- To access Wi-Fi function for the applicable models
  Press and hold the **FAN SPEED** and **JET MODE** button simultaneously for about 3 seconds.

Owner's Instruction

Cooling Mode - Standard Operation



1 Press the ⏻ button to start the unit.

2 Press the Mode button to select Cooling Mode.

3 Set the desired temperature by pressing ∧ ∨ button.

Press the ∧ button to check the room temperature. When setting the desired temperature is higher than room temperature, cooling wind isn't blow out.

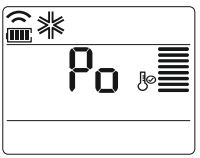
❉ Setting Temp. Range : 18~30 °C(64~86 °F)

∧ Temp. ∨ — To raise the temperature / To lower the temperature

4 You can select the fan speed in five steps - super low, low, medium, high and chaos. Each time the button is pressed, the fan speed mode is shifted.

Fan Speed

Cooling Mode - Power Cooling



1 Press the ⏻ button to start the unit.

2 Press the Mode button to select Cooling Mode.

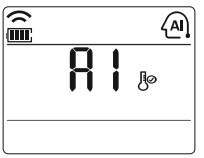
3 Press the Jet Mode button. The unit will operate in super high fan speed in cooling mode.

❉ Wall mounted models operate power cooling mode continuously.

4 To cancel the Power cooling Mode press the Jet Mode button or the fan button or the room temperature setting button again and the unit will operate in high fan speed in cooling mode.

Jet Mode or Fan Speed or ∧ Temp. ∨

Auto Operation Mode



1 Press the ⏻ button to start the unit.

2 Press the Mode button to select Auto Operation Mode.

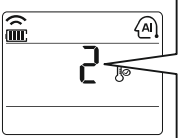
3 Set the desired temperature.

<For Cooling Model>

The temperature and fan speed are automatically set by the electronic controls based on the actual room temperature.

If you feel hot or cold, press the ∧ ∨ buttons for more cooling or heating effect. You cannot switch the indoor fan speed. It has already been set by the Auto Operation Mode rule.

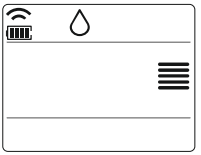
∧ Temp. ∨ — To raise the temperature / To lower the temperature



❉ Please select the code depend on your feeling.

Code	Feel
2	Cold
1	Slightly cool
0	Neutral
-1	Slightly warm
-2	Warm

Dehumidification Mode



1 Press the ⏻ button to start the unit.

2 Press the Mode button to select Dehumidification Mode.

3 You can select the fan speed in five steps - super low, low, medium, high and chaos. Each time the button is pressed, the fan speed mode is shifted.

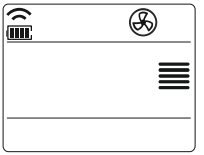


During Dehumidification Mode

If you select the dehumidification mode on the operation selection button, the indoor unit starts to run the dehumidification function, automatically setting the room temp. and air volume to the best condition for dehumidification based on the sensed room temp.
In this case, the setting temp. is not displayed in the Remote Controller and you are not able to control the room temp. either.

During the healthy dehumidification function, the air volume is automatically set according to the algorithm responding to the current room temp. and makes the room condition healthy and comfortable even in the high humidity season.

Fan Mode



1 Press the ⏻ button to start the unit.

2 Press the Mode button to select Fan Mode.

3 You can select the fan speed in five steps - super low, low, medium, high and chaos. Each time the button is pressed, the fan speed mode is shifted.



Natural Wind by the chaos Logic
For more fresh feeling than other fan speed, press the Indoor Fan Speed Selector and set to chaos mode. In this mode, the wind blows like natural breeze by automatically changing fan speed according to the chaos logic.

During Fan Mode
The outdoor compressor doesn't work.
Have a function to circulate the indoor as it sends out the air that doesn't have much temperature difference with indoor.

Temperature Setting / Room Temperature Checking

We can simply adjust the desired temperature.
• Press the buttons to adjust the desired temperature.

Temp. : Increase Temp. per one time pressing

Temp. : Decrease Temp. per one time pressing



Room temp: Indicate the current room temperature
Set temp: Indicate the temperature that user want to set

<Cooling Mode>
The cooling mode doesn't work if desired temperature is higher than room temperature Please lower the desired temperature.

<Heating Mode>
The heating mode doesn't work if desired temperature is lower than room temperature Please increase the desired temperature.

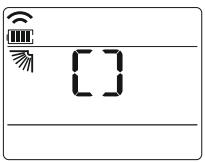
Whenever press the button, the room temperature will be displayed within 5 seconds.
After 5 seconds, it turns to display the desired temperature.
Because of location of remote controller, the real room temperature and the this displayed value can be different.

Individual vane angle control (Optional)

It is the function that can control 4 vane angles individually in the ceiling type 4Way cassette product group.

1 Press the Vane Angle button, Individual vane angle control symbol will blink.

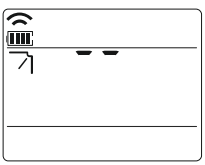
If you press the Vane Angle button 3sec. all vanes are set to standard angle.



2 Set each vane angle by pressing up/down/left/right direction keys.

Every time press the Vane Angle button is pressed, corresponding vane angle and set values are displayed.

When temperature setting button is pressed, the display window appears asof the figure in the right, and the angle can be set to 1~6.



There may be differences between wireless remote controller up/down/left/right buttons and the wind discharge port directions.

Set desired angle with checking the vane angle movement of the product.

The individual vane control function is an additional function of a product, and it may not work in some products.

Comfort Cooling (Optional)

This function is automatically control the cooling strength to maintain the pleasant feeling without turning off the product after the indoor temperature reached the desired temperature.

1 Press the Func. button repeatedly until comfort cooling icon displayed.

2 Press the Set Clear button.

Up/Down Airflow Direction Control (Optional)

The up/down airflow (Vertical Airflow) can be adjusted by using the remote controller.

1 Press the ⏻ button to start the unit.

2 Press the Swing button and the louvers will swing up and down.

Press the Swing button again to set the vertical louver at the desired airflow direction.

Note

If you press the Swing button, the horizontal airflow direction is changed automatically based on the Auto Swing algorithm to distribute the air in the room evenly and at the same time to make the human body feel more comfortable, as if enjoying a natural breeze.

Always use the remote controller to adjust the up/down airflow direction. Manually moving the vertical airflow direction louver by hand, could damage the air conditioner.

When the unit is shut off, the up/down airflow direction louver will close the air outlet vent of the system.

Left/Right Airflow Direction Control (Optional)

The left/right(horizontal) airflow can be adjusted by using the remote control.

1 Press the ⏻ button to start the unit.

2 Press the Swing button and the louvers will swing left and right.

Press the Swing Button again to set the horizontal louver at the desired airflow direction.

Indirect Wind

It adjusts the wind direction to indirect wind.



1 Press the Air Flow button repeatedly until icon displayed.

2 Press the Set Clear button to set this function.

※ To cancel the function, press the Swing button, or press the Vane Angle button to change the vane angle.

Note

The above function may not be supported by some products.

Direct Wind

It adjusts the wind direction to direct wind.



1 Press the Air Flow button repeatedly until icon displayed.

2 Press the Set Clear button to set this function.

※ To cancel the function, press the Swing button, or press the Vane Angle button to change the vane angle.

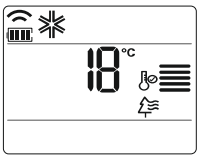
Note

The above function may not be supported by some products.

Sub Function

❊ Sub function may not work in some products.

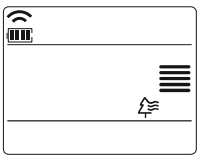
Air Purification (Optional)



1 Press the ⏻ button to start the unit.

2 Press the Air Purify button.
Air Purification will start when the Air Purify button is pressed and stop when the Air Purify button is pressed again.

Air Purification only



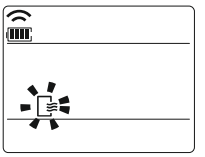
When the Air Purify button is pressed while the unit is stopped, Air Purification will start independently.

Smart Indicator (Air Quality) Always On Setting (Optional)

Press the Air Purify button for 3 seconds, Air quality level will always be displayed on Smart Indicator of the product.

Auto Clean (Optional)

This function operate when the unit is turned off.



1 Press the Func. button repeatedly until Auto Clean icon displayed.

2 Press the Set Clear button to set or cancel the Auto Clean function.
If the Auto Clean function is reserved, whenever the unit is turned off, the indoor fan is still running for about 30 minutes internally without cooling or dehumidification operation. Also the louver is closed.
This dries up any remains of moisture & cleans the unit internally.

Energy Saving Cooling (Optional)

Energy Saving Cooling is the function to adjust the desired temperature during cooling operation to enhance the comfort of the user and improve the energy saving performance.

1 Press the Func. button repeatedly until Energy Saving Cooling icon displayed.

2 Press the Set Clear button to set or cancel the Energy Saving Cooling function.

Note

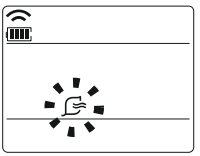
- It can be selected only during the cooling operation.
- When pressing Energy Saving Cooling while cooling at 22 °C or lower, it is automatically set to 22 °C.
- During the Energy Saving Cooling operation, the temperature on the remote control may be displayed differently from the air conditioner display.
- Smart Mode / Energy Saving Cooling / Refresh Mode functions cannot be set at the same time.

Smart Clean (Optional)

The Smart Clean function can be used by setting to manual or automatic.

Auto Smart Clean operation

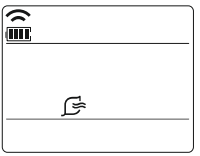
If the accumulated operation time of the product exceeds 30 hours, the Smart Clean automatically starts when the unit is turned off.



1 Press the Func. button repeatedly until Smart Clean icon displayed.

2 Press the Set Clear button to set or cancel the Smart Clean function.
You can set/clear without on or off.

Manual Smart Clean operation



1 When the unit stop, press the Func. button to select Smart Clean.

Smart Clean symbol blinks, then press the Set Clear button.

2 To stop Manual Smart Clean operation, press the Func. button to select Smart clean and press the Set Clear button.

The brush clean a dust from the filter by moving from left to right or from right to left on the filter.

The sucked dust is collected into the dust box.

The operating process of Smart Clean is different from the product type.

Brightness Setting (Optional)

Press the button to turn on/off the LED of the product.

Celsius/Fahrenheit Switching

Press the Func. button for 5 seconds, temperature unit change Celsius to Fahrenheit or Fahrenheit to Celsius.

Whenever press the button in Fahrenheit mode, the temperature will increase/drop 2 °F.

Timer

Setting the Current Time

1 Press the Set Clear button for 3 seconds.

2 Press the ∨ ∧ buttons until the desired time is set. (If you press down the button for a long time, it will change quickly in the units of 10 min.)

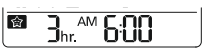
3 Press the Set Clear button.

Note

Check the indicator for A.M. and P.M.

Sleep Timer Setting

1 Press the Sleep button.



Timer Sleep

2 Press the ∨ ∧ buttons until the desired time is set. (7 hours is the maximum setting)

3 Press the Set Clear button.

On Timer Setting

1 Press the On button.



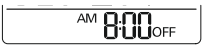
Timer ON

2 Press the ∨ ∧ buttons until the desired time is set.

3 Press the Set Clear button.

Off Timer Setting

1 Press the Off button.



Timer OFF

2 Press the ∨ ∧ buttons until the desired time is set.

3 Press the Set Clear button.

To cancel the Timer Setting

If you wish to cancel all timer setting, press the Set Clear button.

If you wish to cancel each timer setting, press the each timer button to turn timer sleep or on or off as you want.

And then press the Set Clear button aiming the remote controller at the signal receptor.
(The timer lamp on the air conditioner and the display will go off.)

Using the Wi-Fi Pairing Function(Optional)

Once it is connected to the internet through a home Wi-Fi network, you can control the appliance remotely with the application for the smart phone.

- Press and hold the **FAN SPEED** and **JET MODE** button simultaneously for about 3 seconds.

NOTE

- It is not displayed on the wireless remote control.
- For more information, read manual in Wi-Fi module.

Installation Instructions

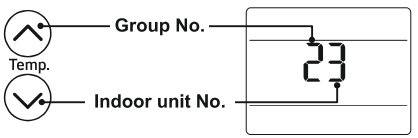
(Applicable for selected models only)

Setting address of central control

1 With the Mode button pressed, press the reset button.



2 By using the ∧ or ∨ button, set the indoor unit address.
- Setting range : 00 ~ FF



3 After setting the address, press the ⏻ button toward the indoor unit 1 time.

4 The indoor unit will display the set address to complete the address setting.
- The address display time and method can differ by the indoor unit type.

5 Reset the remote controller to use the general operation mode.

Checking address of central control

1 With the Air Purify button pressed, press the reset button.



2 Press the ⏻ button toward the indoor unit 1 time, and the indoor unit will display the set address in the display window.
- The address display time and method can differ by the indoor unit type.

3 Reset the remote controller to use the general operation mode.

How to enter installer setting mode

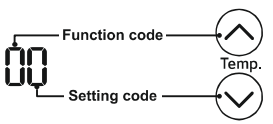
⚠ CAUTION

Installer setting mode is to set the detail function of the remote controller. If the installer setting mode is not set correctly, it can cause problems to the product, user injury or property damage. This must be set by an certificated installer, and any installation or change that is carried out by a non-certificated person should be responsible for the results. In this case, free service cannot be provided.

1 With the Jet Mode button pressed, press the reset button.



2 By using the ∧ or ∨ button, set function code and setting value. (Please refer the installer setting code table.)



3 Press the ⏻ button toward the indoor unit 1 time.

4 Reset the remote controller to use the general operation mode.

Installer setting code table

No.	Function	Function code	Setting value	Remote controller LCD
0	Mode override	0	0 : Set to master	00
			1 : Set to slave	01
1	Ceiling height selection	1	1 : Standard	11
			2 : Low	12
			3 : High	13
			4 : Super high	14
2	Group control	2	0 : Set to master	20
			1 : Set to slave	21
			2 : Check master/slave	22
	Auxiliary heater	2	3 : Set to auxiliary heater	23
			4 : Cancel auxiliary heater	24
			5 : Check auxiliary heater Installation	25

Mode override

This function is only for non-auto changeover H/P model.

Ceiling height selection

Indoor unit connected to wired remote controller operate as wired remote controller setting.

Group control

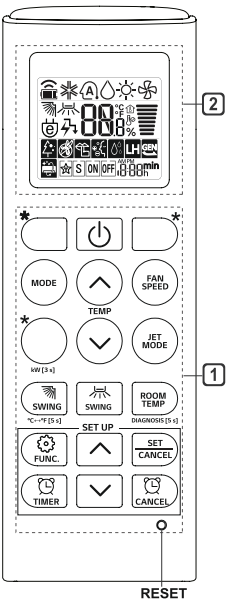
This function is only for group control. Please don't set this function in case of non-group control.
After setting group control of the product, turn off the power then turn it back on after 1 minute.

Auxiliary heater

This function is only applied to models with auxiliary heater function being activated.

Using Wireless Remote Control - High Wall

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

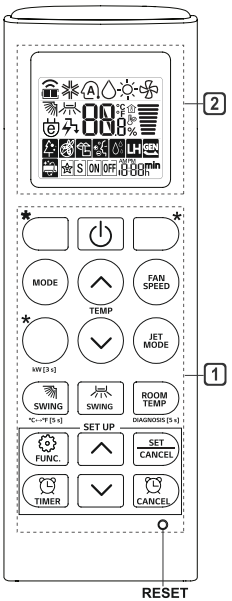


1 Button	2 Display Screen	Description
⏻	-	To turn on/off the air conditioner.
TEMP	88 °C	To adjust the desired room temperature in cooling, heating or auto changeover mode.
MODE	❄	To select the cooling mode.
	☀	To select the heating mode.
	💧	To select the dehumidification mode.
	🌀	To select the fan mode.
	A	To select the auto changeover/auto operation mode.
JET MODE	Po	To change room temperature quickly.
FAN SPEED		To adjust the fan speed.
SWING SWING		To adjust the air flow direction vertically or horizontally.

NOTE

- Some functions may not be supported, depending on the model.
- * buttons may be changed according to the type of model.
- To access Wi-Fi function for the applicable models

  Press and hold the kW(3 s) and **JET MODE** button simultaneously for about 3 seconds.



1 Button	2 Display Screen	Description
TIMER	S ON OFF	To turn on/off air conditioner automatically at desired time.
SET/ CANCEL	-	To set/cancel the special functions and timer.
CANCEL	-	To cancel the timer settings.
∨ ∧	-	To adjust time.
*LIGHT OFF	-	To set the brightness of the display on the indoor unit.
ROOM TEMP		To display the room temperature.
°C↔°F [5 s]	°C °F	To change unit between °C and °F
*COMFORT AIR		To adjust the air flow to deflect wind.
*kW(3 s)	-	To set whether or not to display information regarding energy.
*Diagnosis (5 s)	-	To conveniently check maintenance information of a product.
*ENERGY SAVING		To minimize power consumption.
FUNC.		The Ion generator uses millions of ions to help improve indoor air quality.
		To remove moisture generated inside the indoor unit.
RESET	-	To initialize the remote control settings.

NOTE

- Some functions may not be supported, depending on the model.
- * buttons may be changed according to the type of model.
- Press the **SET/CANCEL** button to operate the selected **FUNC.**

Setting the Current Time

1 Insert batteries.
- The icon below blinks at the bottom of the display screen.



2 Press ⌄ or ⌃ button to select the minutes.

3 Press **SET/CANCEL** button to finish.

NOTE
- The On/Off Timer is available after setting the current time.

Using the °C/°F Conversion Function (Optional)

This function changes unit between °C and °F

- Press and hold SWING [5 s] button about 5 seconds.

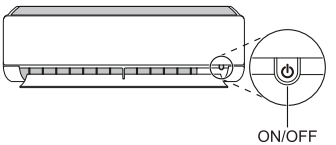
Operating the Air Conditioner without the Remote Control

You can use the **ON/OFF** button of the indoor unit to operate the air conditioner when the remote control is unavailable.

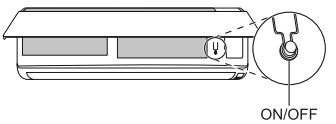
1 Open the front cover (Type2) or horizontal vane (Type1).

2 Press the **ON/OFF** button.

Type1



Type2



NOTE
- The stepping motor may be broken, if the horizontal vane opens rapidly**.**
- The fan speed is set to high.
- The feature may be changed according to the type of model.
- The temperature cannot be altered when using this emergency **ON/OFF** button.
- For cooling & heating models, the temperature is set from 22 °C to 24 °C

Restarting the Air Conditioner Automatically

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

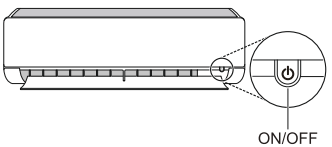
Disabling Auto Restart

1 Open the front cover (Type2) or horizontal vane (Type1).

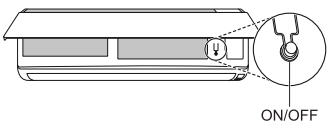
2 Press the **ON/OFF** button and hold it for 6 seconds, then the unit will beep twice and the lamp will blink twice 4 times.

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

Type1



Type2



NOTE

- The feature may be changed according to the type of model.

Using the Mode Function

This function allows you to select the desired function.

❄	Cooling Mode
↓	
Ⓐ	Auto Changeover Mode / Auto Operation(AI) Mode
↓	
💧	Dehumidification Mode
↓	
🌀	Fan Mode

Cooling Mode

1 Turn the appliance on.

2 Press **MODE** button repeatedly to select the Cooling Mode.

- ❄ is displayed on the display screen.

3 Press ∧ or ∨ button to set the desired temperature.

Auto Operation (Artificial Intelligence)

Multi Model

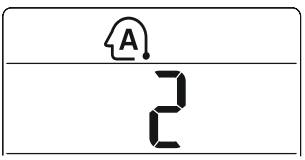
This mode automatically sets the fan speed and temperature depending on the room temperature.

1 Turn the appliance on.

2 Press **Mode** button repeatedly to select the Auto Operation.

- A is displayed on the display screen.

3 Press ^ or v button to select the desired operation code if the temperature is higher or lower than the desired temperature.



Code	Description
2	Cold
1	A little cold
0	Maintain room temperature
-1	A little hot
-2	Hot

NOTE

- In this mode, you cannot adjust the fan speed, but you can set the air deflector to rotate automatically.

Fan Mode

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

1 Turn the appliance on.

2 Press **MODE** button repeatedly to select the Fan Mode.

- is displayed on the display screen.

3 Press **FAN SPEED** button to adjust the fan speed.

Dehumidification Mode

This mode removes excess moisture from a highly humid environment or during the rainy season, in order to prevent mildew from setting in. This mode adjusts the room temperature and the fan speed automatically to maintain the optimal level of humidity.

1 Turn the appliance on.

2 Press **MODE** button repeatedly to select the Dehumidification Mode.

- is displayed on the display screen.

NOTE

- In this mode you cannot adjust the room temperature, it is adjusted automatically.
- The room temperature is not displayed on the display screen.

Using the Jet Mode Function

Changing Room Temperature Quickly

This function allows you to cool indoor air quickly during the summer or warm it quickly during winter.

- The Jet Mode function is available with Cooling, Heating and Dehumidification Mode.

1 Turn the appliance on.

2 Press **MODE** button repeatedly to select the desired mode.

3 Press **JET MODE** button.

- Po is displayed on the display screen.

NOTE

- Jet Heating Mode is not available on some models.
- In Jet Cooling Mode, strong air blows out continuously.
- If you want to change the temperature, Press ^ or v button to set the desired temperature.

Using the Fan Speed Function

Adjusting the Fan Speed

- Press **FAN SPEED** button repeatedly to adjust the fan speed.

Display Screen	Speed
	High
	Medium - High
	Medium
	Medium - Low
	Low
-	Natural Wind

NOTE

- The fan speed of Natural Wind adjusts automatically.



- The fan speed icons are displayed on some indoor units.



- Indoor unit display is displayed only 5 seconds and return to the setting temperature on some models.

Using the Air Flow Direction Function

This function adjusts the direction of the air flow vertically (horizontally).

- Press (SWING)(SWING) button repeatedly and select the desired direction.
  - Select (SWING) to adjust the direction of the air flow automatically.

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 (SWING) or (SWING) button to adjust the direction of the air flow again.
- This function may operate differently from the remote control display.

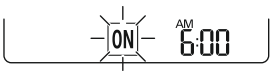
Setting the On/Off Timer

This function sets the air conditioner to turn on/off automatically at desired time.

On/Off Timer can be set together.

Setting the On Timer

1 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.

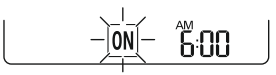


2 Press ▽ or △ button to select the minutes.

3 Press **SET/CANCEL** button to finish.
- After setting the timer, current time and ON icon are displayed on the display screen indicating that the desired time is set.

Canceling the On Timer

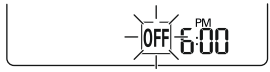
1 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.



2 Press **SET/CANCEL** button to cancel the setting.

Setting the Off Timer

1 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.



2 Press ▽ or △ button to select the minutes.

3 Press **SET/CANCEL** button to finish.
- After setting the timer, current time and OFF icon are displayed on the display screen indicating that the desired time is set.

NOTE
- This function is disabled when you set Simple Timer.

Canceling the Off Timer

1 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.



2 Press **SET/CANCEL** button to cancel the setting.

Canceling the Timer Setting

- Press CANCEL button to cancel all timer settings.

Using the Sleep Function (Optional)

This function turns off the air conditioner automatically when you go to sleep.

1 Turn the appliance on.

2 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.



3 Press ⌄ or ⌃ button to select the hour (up to 7 hours).

4 Press **SET/CANCEL** button to finish.
- ☆ is displayed on the display screen.

NOTE

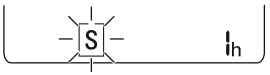
- 1H is displayed on some indoor units.
- Indoor unit display is displayed from 1H to 7H which is displayed only 5 seconds and then return to the setting temperature.
- In the Cooling and Dehumidification Mode, the temperature increases by 1 °C after 30 minutes and additional 1 °C after another 30 minutes for a more comfortable sleep.
- The temperature increases up to 2 °C from the preset temperature.
- Although the remark for fan speed on the display screen may be changed, the fan speed is adjusted automatically.

Using the Simple Timer Function (Optional)

This function turns off the air conditioner automatically when you go to sleep.

1 Turn the appliance on.

2 Press TIMER button repeatedly.
- The icon below blinks at the bottom of the display screen.



3 Press ⌄ or ⌃ button to select the hour (up to 7 hours).

4 Press **SET/CANCEL** button to finish.
- S is displayed on the display screen.

NOTE

- This function is disabled when you set Off Timer.

Using the Energy Display Function (Optional)

This function display the amount of electricity generated on the indoor display as the product operates.

Display the Current Energy Usage

1 Turn the appliance on.

2 Press kW [3 s] button and hold it about 3 seconds.

- The instantaneous power consumption (88 88) is displayed for a while on some indoor units.

NOTE

- It is not displayed on the wireless remote control.
- The unit of the displayed value is kW.
- If it is more than 99 kW, which is the range of expression, maintain it as 99 kW.
- Display wattage under 10 kW with 0.1 kW unit, and display one over 10 kW with 1 kW unit.
- The actual power may differ from the power displayed.
- Some functions may out be supported depending on the model.

Using the Light Off Function (Optional)

Display Screen Brightness

You can set the brightness of the indoor unit displayscreen.

- Press **LIGHT OFF** button.

NOTE

- Turn on/off the Display screen.
- If the brightness of an indoor appliance's display is set to OFF, pressing a button on the remote control automatically turns the display on for 5 seconds.
- This function may operate differently, depending on the model.

Using the Comfort Air Function (Optional)

Comfort Vane Operation

This function conveniently sets the vane to a preset position to deflect the supply air away from blowing directly onto the occupants in the room.

1 Turn the appliance on.

2 Press **COMFORT AIR** button repeatedly and select the desired direction.

- or is displayed on the display screen.

NOTE

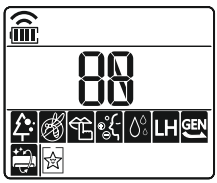
- or is displayed on some indoor units.
- This function is disabled when you press **MODE** or **JET MODE** button.
- This function is disabled and auto swing of vertical direction is set up when you press SWING button.
- When this function is off, the horizontal vane operated automatically depending on the set mode.

Using Special Functions

1 Turn the appliance on.

2 Press **FUNC** button repeatedly to select the desired function.

3 Press **SET/CANCEL** button to finish.



Display Screen	Description
	The Ion generator uses millions of ions to help improve indoor air quality.
	To remove moisture generated inside the indoor unit.

NOTE

- Some functions may not be supported, depending on the model.
- Some functions may operate differently from the remote control display.

Using the Wi-Fi Pairing Function(Optional)

Once it is connected to the internet through a home Wi-Fi network, you can control the appliance remotely with the application for the smart phone.

- Press and hold the ◯ and **JET MODE** button simultaneously for about 3 seconds.

NOTE

- It is not displayed on the wireless remote control.
- For more information, read manual in Wi-Fi module.

Canceling Special Functions

1 Press **FUNC** button repeatedly to select the desired function.

2 Press **SET/CANCEL** button to cancel the function.

Using the Air Purification Function

These functions supply clean and fresh air by ion particles and the filter.

Function	Display	Description
Ionizer		Ion particles from Ionizer reduce the surface bacteria and other harmful substances.
Plasma		It removes microscopic contaminants from the intake air completely to supply clean and fresh air.

NOTE

- You can use this function without turning the air conditioner on.
- Both the plasma lamp and the cooling lamp light up while Smoke Away/Plasma is in operation on some models.
- Do not touch ionizer during operation.
- This function may operate differently from the remote control display.

Using the Auto Clean Function

In the Cooling and Dehumidification Mode, moisture is generated inside the indoor unit. This function removes such moisture.

- is displayed on the display screen.

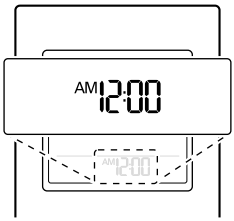
NOTE

- Some functions cannot be used while the Auto Clean function is in operation.
- If you turn off the unit, the fan continues to run for 30 minutes and cleans the inside of the indoor unit.
- Co is displayed on some indoor units, depending on the model.

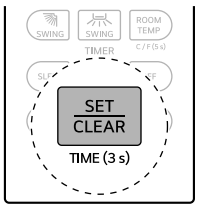
Setting the Current Time on the Wireless Remote Control

1 Insert the batteries.

- The time flashes at the bottom of the display screen.

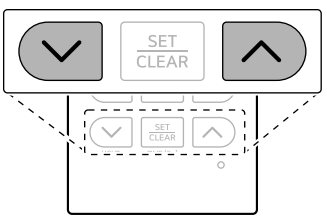


2 Press and hold the **SET/CLEAR** button for about 3 seconds.

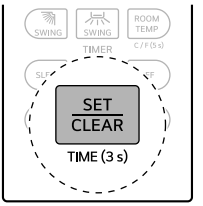


3 Press the ⌄ or ⌃ button to set the desired time .

- Each press increases or decreases the time by 1 minute.
- Holding down either button increases or decreases the time by 10 minutes.



4 Press the **SET/CLEAR** button to set the current time.



NOTE

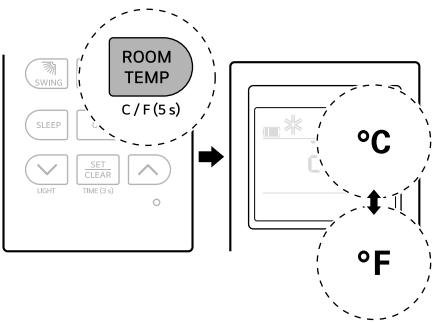
- The **On Timer** and **Off Timer** are available after setting the current time.

Selecting Fahrenheit or Celsius

Set the temperature display to show either Fahrenheit (°F) or Celsius (°C) units.

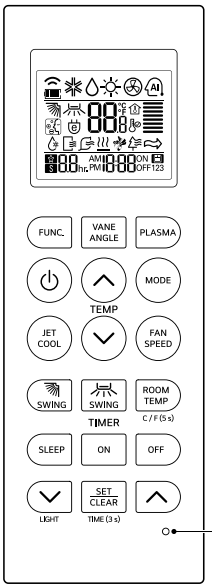
1 Turn the appliance on.

2 Press and hold the **ROOM TEMP (Room Temperature)** button for about 5 seconds to change units between °C and °F.



Using Wireless Remote Control - Low Static Duct

Use the wireless remote control to operate the appliance more conveniently.



Buttons	Description
FUNC.	**FUNC. (Function)** Sets the various function or changes the temperature unit • Each press changes the modes in this order: **Auto Clean**[*1] ⟶ **Energy Saving Cooling**[*1] ⟶ **Smart Clean**[*1] ⟶ **Comfort Cooling**[*1].
VANE ANGLE	**VANE ANGLE** Adjusts the vanes to direct the airflow from the air outlet
PLASMA	**PLASMA**[*1] Supplies clean, fresh air using the filter.
⏻	**Power** ⏻ Turns the appliance on/off
TEMP ^ v	**Temperature Setting** ^, v Adjusts the desired temperature
MODE	**MODE** Selects the desired operating mode • Each press changes the modes in this order: **Cooling** ⟶ **Auto** ⟶ **Dehumidification** ⟶ **Heating**[*1] ⟶ **Fan**.
JET COOL	**JET COOL** Changes the room temperature quickly
FAN SPEED	**FAN SPEED** Adjusts the fan speed
SWING	**SWING (Up-Down Swing)** Adjusts the airflow direction up and down • Press once more **SWING (Up-Down Swing)** button during rotation, the wind direction is fixed at the desired location.
ROOM TEMP C / F (5 s)	**ROOM TEMP (Room Temperature)** Press and hold the ^ button for about 3 seconds to display the room temperature. **℃ / ℉ (5 S)** Press and hold the **ROOM TEMP (Room Temperature)** button for about 5 seconds to set the temperature display to show either Fahrenheit (℉) or Celsius (℃) units.
SLEEP	**SLEEP** Operates the air conditioner in Sleep mode before turning it off automatically at the set time
ON	**ON** Turns on the air conditioner at the set time
OFF	**OFF** Turns off the air conditioner at the set time
^ v LIGHT	**Timer setting** v, ^ Adjust the time on the display **Light**[*1] Press and hold the v button to turn the indoor unit LED display on or off.
SET CLEAR TIME (3 s)	**SET/CLEAR** Sets or cancels the special functions or timer. **TIME(3 s)** Press and hold the Set/Clear button for about 3 seconds to set the current time on the wireless remote control.
	RESET Resets the wireless remote control setting

*1 This feature is only available on some models.

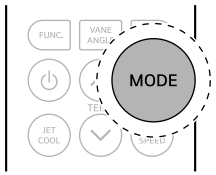
Using Wireless Remote Control

Cooling, Auto, Dehumidification, Heating, Fan Mode

You can change the operating mode when the appliance is turned on.

1 Turn the appliance on.

2 Press the **MODE** button repeatedly to select the desired mode.

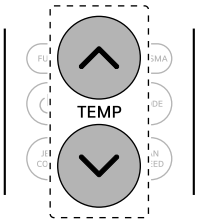


Icon	Description
	Cooling Mode Cool air blows from the air outlets.
AI	**Auto Mode** The product adjusts the airflow automatically.
	Dehumidification Mode This function removes moisture in indoor air.
	Heating Mode*1 Warm air blows from the air outlets.
	Fan Mode This function circulates the air without heating or cooling it.

*1 This feature is only available on some models.

3 Press the ⌃ or ⌄ button to set the desired temperature.

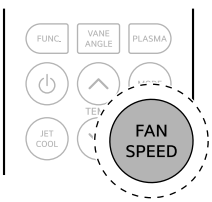
- Cooling Mode: Set the temperature from 18 °C to 30 °C.
- Heating Mode: Set the temperature from 16 °C to 30 °C.
- Auto Mode (Cooling only): Each press changes the temperature as follows: -2 ↔ -1 ↔ 0 ↔ 1 ↔ 2
- Auto Mode (Heat pump): Set the temperature from 18 °C to 30 °C.
- Dehumidification, Fan Mode: There is no temperature control.



Adjusting the Fan Speed

You can adjust the fan speed in 4 steps.

- Press the **FAN SPEED** button repeatedly to select the desired fan speed.



Speed	Wireless Remote Control Icon
Natural	
High	
Medium	
Low	

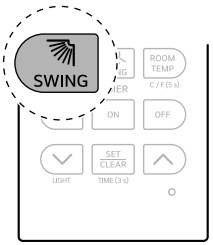
NOTE

- The fan speed may be different according to the model.

Adjusting the Airflow Direction

You can adjust the direction of airflow vertically.

- Press **SWING (Up-Down Swing)** button.



Timer Setting

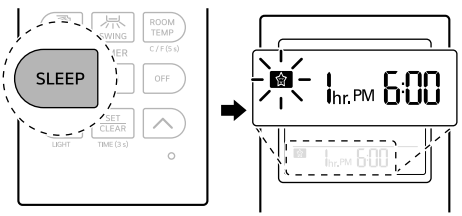
Set the appliance to turn on and off automatically at a desired time.

Setting the Sleep Timer

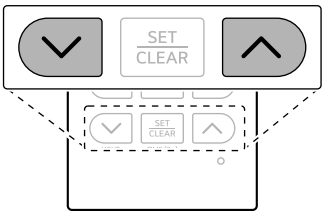
The air conditioner operates in Sleep mode and turns off automatically at the set time.

1 Press the **SLEEP** button while the air conditioner is operating.

- The icon below flashes at the bottom of the display screen.

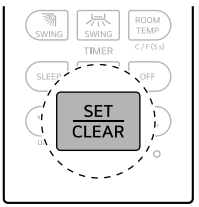


2 Press the ⌄ or ⌃ button to set the desired time.



3 Press the **SET/CLEAR** button.

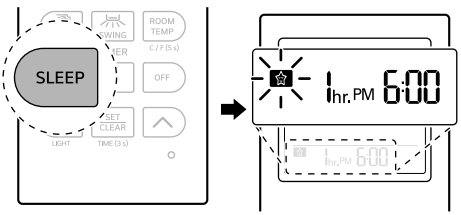
- The air conditioner operates until the set time and then turns off automatically.



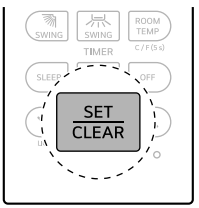
Cancelling the Sleep Timer

1 Press the **SLEEP** button repeatedly.

- The icon below flashes at the bottom of the display screen.



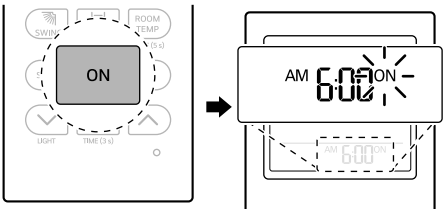
2 Press the **SET/CANCEL** button to cancel the setting.



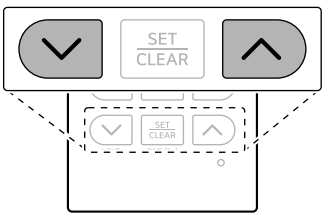
Setting the On Timer

1 Press the **ON** button while the air conditioner is operating.

- The icon below flashes at the bottom of the display screen.

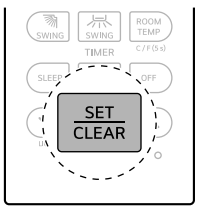


2 Press the ⌄ or ⌃ button to set the desired time.



3 Press the **SET/CLEAR** button.

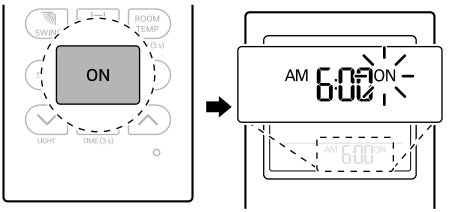
- Turn the air conditioner off. It will turn on automatically at the set time.



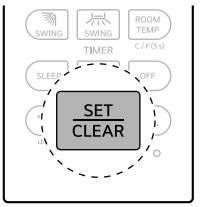
Cancelling the On Timer

1 Press the **ON** button repeatedly.

- The icon below flashes at the bottom of the display screen.



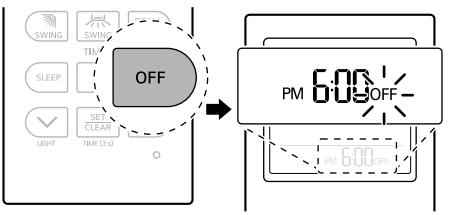
2 Press the **SET/CANCEL** button to cancel the setting.



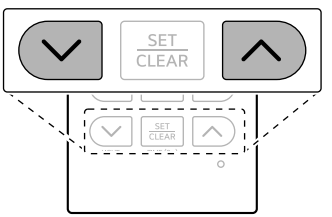
Setting the Off Timer

1 Press the **OFF** button while the air conditioner is operating.

- The icon below flashes at the bottom of the display screen.

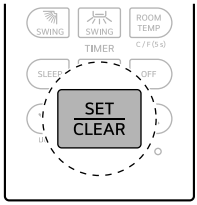


2 Press the ⌄ or ⌃ button to set the desired time.



3 Press the **SET/CLEAR** button.

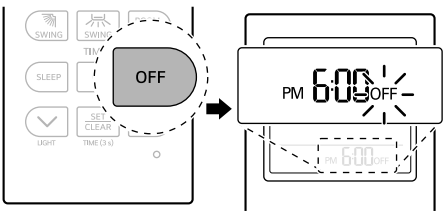
- The air conditioner operates until the set time and then turns off automatically.



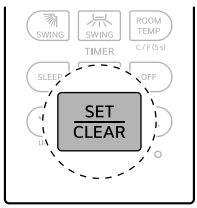
Cancelling the Off Timer

1 Press the **OFF** button repeatedly.

- The icon below flashes at the bottom of the display screen.



2 Press the **SET/CANCEL** button to cancel the setting.



Cancelling the Timer Setting

- Press the **SET/CLEAR** button to cancel all timer settings.

Special Functions

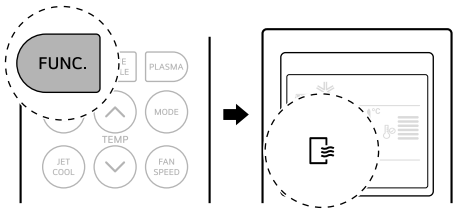
Some function is not available on some models.

Auto Clean (On Some Models)

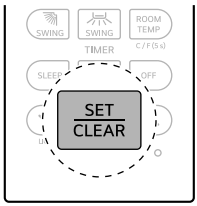
In **Cooling** and **Dehumidification** modes, moisture is generated inside the indoor unit. Use this function to reduce that moisture.

1 Turn the appliance on.

2 Press the **FUNC. (Function)** button repeatedly to select the **Auto Clean** function.



3 Press the **SET/CLEAR** button to set the function.



NOTE

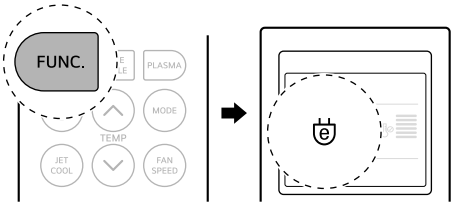
- Some functions cannot be used while the Auto Clean function is in operation.
- If you turn off the appliance, the fan continues to run for 30 minutes to clean the inside of the indoor unit.

Energy Saving Cooling (On Some Models)

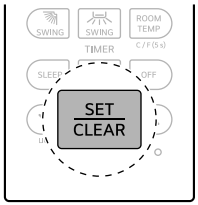
This function adjusts the desired temperature during the cooling operation to enhance the comfort of the user and improve the energy saving performance.

1 Turn the appliance on.

2 Press the **FUNC. (Function)** button repeatedly to select the **Energy Saving Cooling** function.



3 Press the **SET/CLEAR** button to set the function.

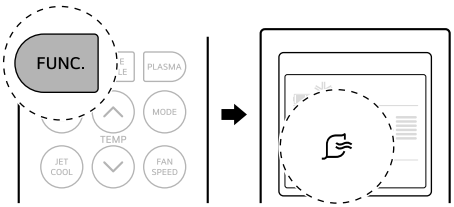


Smart Cleaning (On Some Models)

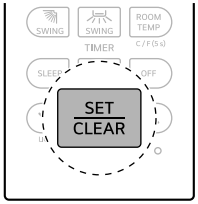
During the Smart Clean operation, a brush moves back and forth across the filter to clean it.

Auto Smart Clean Operation
If the accumulated operation time of the product exceeds 30 hours, the **Smart Clean** automatically starts when the indoor unit is turned off.

1 Press the **FUNC. (Function)** button repeatedly to select the **Smart Clean** function.



2 Press the **SET/CLEAR** button to set the function.

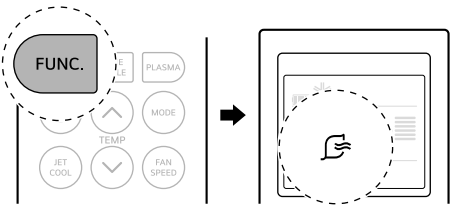


NOTE

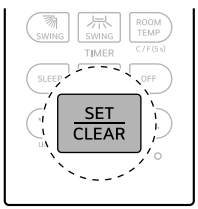
- If the accumulated operation time of the product exceeds 30 hours, the **Smart Clean** automatically starts when the indoor unit is turned off.
- To stop this function, press the **SET/CLEAR** button again.

Manual Smart Clean Operation
You can also manually set **Smart Clean** function.

1 When the indoor unit stops, press the **FUNC. (Function)** button repeatedly to select the **Smart Clean** function.



2 Press the **SET/CLEAR** button to set the function.



NOTE

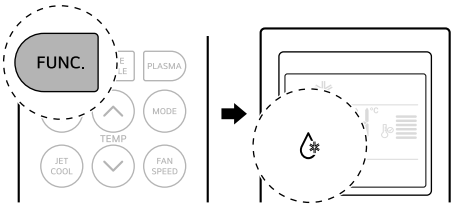
- The cleaning process used in the **Smart Clean** function may vary by product.

- To stop this function, press the **SET/CLEAR** button again.

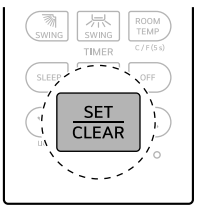
Comfort Cooling (On Some Models)

This function cools until it reaches the set temperature and then automatically controls the cooling level as needed to maintain that temperature.

1 Press the **FUNC. (Function)** button repeatedly to select the **Comfort Cooling** function.



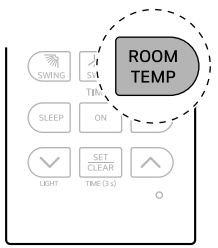
2 Press the **SET/CLEAR** button to set the function.



Checking Room Temperature

Check the current room temperature.

- Press the **ROOM TEMP** button. The current room temperature is briefly displayed on the wireless remote control screen for awhile.



LG ThinQ Application

This feature is only available on models with the or **ThinQ** logo.

The **LG ThinQ** application allows you to communicate with the appliance using a smartphone.

LG ThinQ Application Features

Communicate with the appliance from a smartphone using the convenient smart features.

Smart Diagnosis

If you experience a problem while using the appliance, this smart diagnosis feature will help you diagnose the problem.

Settings

Allows you to set various options on the appliance and in the application.

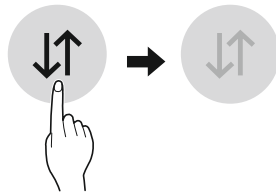
NOTE

- If you change your wireless router, internet service provider, or password, delete the registered appliance from the **LG ThinQ** application and register it again.
- The application is subject to change for appliance improvement purposes without notice to users.
- Functions may vary by model.

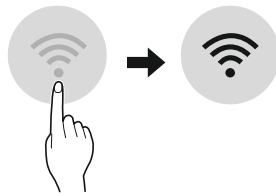
Before Using LG ThinQ Application

1 Check the distance between the appliance and the wireless router (Wi-Fi network).
   - If the distance between the appliance and the wireless router is too far, the signal strength becomes weak. It may take a long time to register or installation may fail.

2 Turn o• the **Mobile data** or **Cellular Data** on your smartphone.



3 Connect your smartphone to the wireless router.



NOTE

- To verify the Wi-Fi connection, check that icon on the control panel is lit.
- The appliance supports 2.4 GHz Wi-Fi networks only. To check your network frequency, contact your Internet service provider or refer to your wireless router manual.
- **LG ThinQ** is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- If the appliance is having trouble connecting to the Wi-Fi network, it may be too far from the router. Purchase a Wi-Fi repeater (range extender) to improve the Wi-Fi signal strength.
- The Wi-Fi connection may not connect or may be interrupted because of the home network environment.
- The network connection may not work properly depending on the Internet service provider.
- The surrounding wireless environment can make the wireless network service run slowly.

- The appliance cannot be registered due to problems with the wireless signal transmission. Unplug the appliance and wait about a minute before trying again.
- If the firewall on your wireless router is enabled, disable the firewall or add an exception to it.
- The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
- Smartphone user interface (UI) may vary depending on the mobile operating system (OS) and the manufacturer.
- If the security protocol of the router is set to **WEP**, you may fail to set up the network. Please change it to other security protocols (**WPA2** is recommended) and register the product again.

Installing the LG ThinQ Application

Search for the **LG ThinQ** application from the Google Play Store or Apple App Store on a smartphone. Follow instructions to download and install the application.

Wireless LAN Module Specifications

Model	LCW-003
Frequency Range	2412 MHz - 2472 MHz
Output Power(Max)	IEEE 802.11b:18.37 dBm IEEE 802.11g:17.67 dBm IEEE 802.11n:17.67 dBm

Open Source Software Notice Information

To obtain the source code that is contained in this product, under GPL, LGPL, MPL, and other open source licenses that have the obligation to disclose source code, and to access all referred license terms, copyright notices and other relevant documents please visit https://opensource.lge.com.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com.

This offer is valid to anyone in receipt of this information for a period of three years after our last shipment of this product.

CAUTION

Caution of handling the Remote Controller

- Aim at the signal receiver on the wired remote controller so as to operate.
- The remote control signal can be received at a distance of up to about 7m.
- Be sure that there are no obstructions between the remote controller and the signal receptor.
- Do not drop or throw the remote controller.
- Do not place the remote controller in a location exposed to direct sunlight, or near the heating unit, or any other heat source.
- Block a strong light over the signal receptor with a curtain or etc. so as to prevent the abnormal operation. (ex:electronic quick start, ELBA, inverter type fluorescent lamp)

NOTE

- The wireless remote controller do not operate the swirl mode.(4Way Type)
- For more details refer to the Wireless Remote Control Accessory manual.
- The actual product can be different from above contents depending upon model type.

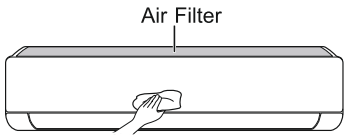
General Maintenance

⚠ WARNING

- Before cleaning or performing maintenance, disconnect the power supply and wait until the fan stops.
- When we remove the air filter, do not touch the metal parts of the indoor unit. Doing so may cause an injury.

If the air conditioner will not be used for an extended period of time, dry the air conditioner to maintain it in best condition. Clean the product regularly to maintain optimal performance and to prevent possible breakdown.

- Dry the air conditioner in Fan mode for 3 to 4 hours and disconnect the power. There may be internal damage if moisture is left in its components.
- Before using the air conditioner again, dry the inner components of the air conditioner in Fan mode for 3 to 4 hours. This will help to remove the odor generated from moisture.



- The feature may be changed according to the type of model.

Type	Description	Interval
Air Filter	Clean with a vacuum or hand wash.	2 weeks
Ionizer (Optional)	Use dry cotton bud to remove any dust.	Every 6 months
Indoor Unit	Clean the indoor unit surface by using a soft, dry cloth.	Regularly
	Have a professional clean the condensate drain pan.	Once a year
	Have a professional clean the condensate drain pipe.	Every 4 months
	Replace the remote control batteries.	Once a year
Outdoor Unit	Have a professional clean the heat exchanger coils and the panel vents. (Consult with technician.)	Once a year
	Have a professional clean the fan.	Once a year
	Have a professional clean the condensate drain pan.	Once a year
	Have a professional verify that all the fan assembly is firmly tightened.	Once a year
	Clean the electric components with air.	Once a year

NOTE

- Never use water that is higher 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.
- Do not wash the micro dust filter with water, because the filter can be damaged (Optional).
- Do not wash the triple filter with water, because the filter can be damaged (Optional).
- Do not wash the allergy filter with water, because the filter can be damaged (Optional).

Clean the Air Filter - High Wall

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

NOTE

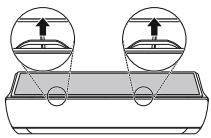
- The air filter can be broken when it is bent.
- When the air filter is not assembled correctly, dust and other substances can enter into the indoor unit.

Type1

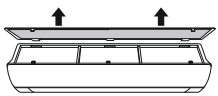
If you look at the indoor unit from above it, can assemble the top filter easily.

1 Turn off the power to the unit.

2 Hold the knobs of the air filter, lift it up slightly.



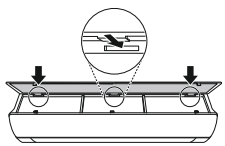
3 Remove it from the indoor unit.



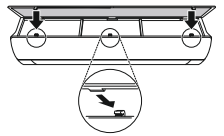
4 Clean the filter with a vacuum cleaner or with lukewarm water with neutral detergent.

5 Dry the filter in the shade.

6 Insert the hooks of the air filter into the front cover.



7 Push down hooks to assemble the air filter.



8 Check the side of the front cover for correct assembly of the air filter.

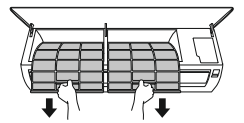
Type2

1 Turn off the power to the unit.

2 Open the front cover.

- Lift up both sides of the cover slightly.

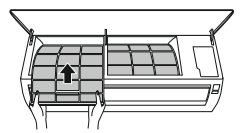
3 Hold the knobs of the air filters, pull them down slightly and remove them from the indoor unit.



4 Clean the filters with a vacuum cleaner or with lukewarm water with neutral detergent.

5 Dry the filters in the shade.

6 Insert the hooks of the air filters into the front cover.



7 Check the side of the front cover for correct assembly of the air filters.

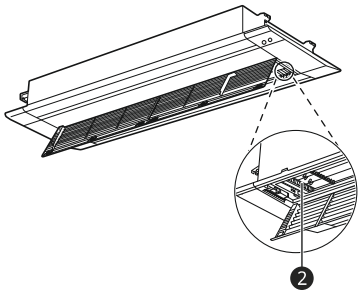
Maintenance and Service - 1 Way Cassette

⚠ WARNING

- Before cleaning or performing maintenance, disconnect the power supply and wait until the fan stops.

If the air conditioner will not be used for an extended period of time, dry the air conditioner to maintain it in best condition. Clean the product regularly to maintain optimal performance and to prevent possible breakdown.

- Dry the air conditioner in Fan mode for 3 to 4 hours and disconnect the power. There may be internal damage if moisture is left in its components.
- Before using the air conditioner again, dry the inner components of the air conditioner in Fan mode for 3 to 4 hours. This will help to remove the odor generated from moisture.



3 Dry the filters in the shade.

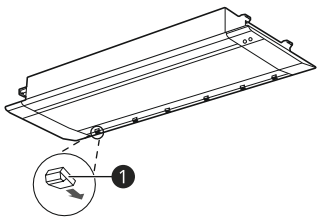
4 Install the Air filter.

1 Rack
2 Air Filter

Clean the Air Filter

1 Remove the air filters from the indoor unit.
- Hold the tab and pull slightly forward to remove the filter.

2 Clean the filters with a vacuum cleaner or with lukewarm water with neutral detergent.



⚠ WARNING

- Turn off the power and unplug the power cord before you perform any maintenance; otherwise it may cause electric shock.
- When the air filter needs to be removed, do not touch the metal parts of the indoor unit otherwise it may cause an injury.

⚠ CAUTION

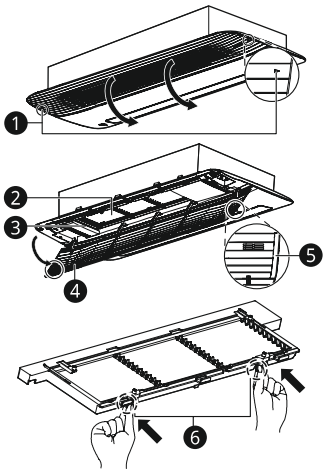
- Never use water that is higher than 40 °C when you clean the filter. It may cause deformation or discoloration.
- Never use volatile substances when you clean the filter. They may damage the surface of the product.

NOTE

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

Cleaning the filter

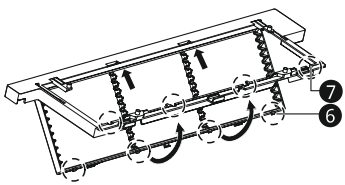
1 Pull on the handles on both ends of the marked rear side of the front panel, then open the front grille and press down on the two hooks and remove the Pre-filter.



2 Clean with a vacuum cleaner or a soft brush.
- If the filter is very dirty, wash using water and a neutral detergent.

3 Allow the filter to dry in the shade until completely dry.

4 Install the filter in the reverse order from which it was removed, then close the front grille.
- When installing the filter, insert the hook in the square hole.



1 Marker
2 Pre-filter
3 Filter case
4 Front intake grille
5 Handle
6 Hook
7 Square hole

⚠ WARNING

- For safety, turn off the main power switch.

⚠ CAUTION

- Make sure that the filter is properly installed in the filter case. (When you insert the filter into the case and push the handle, you will hear a clicking sound when it is secured in place.)
- Be careful not to drop the front grille when removing the filter.
- Do not use volatile liquids or water that is 40 °C or hotter.
- Using the filter when it is not completely dry could cause the product to malfunction.
- Drying the filter near a fire or in direct sunlight may cause damage to the filter.
- When cleaning the filter, be careful not to damage the filter's mesh.

NOTE

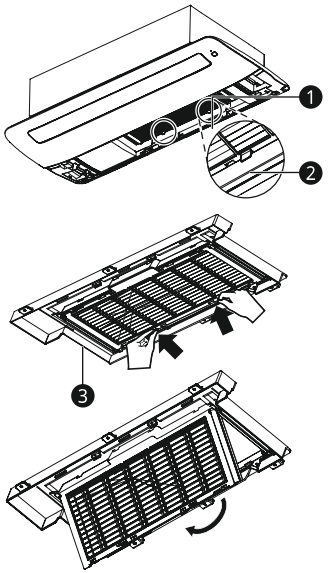
- If dust gets in the filter, there could be a drop in cooling capacity.
- Clean around once every two weeks.
- If you have the filter cleaned at an LG Electronics Service Center, a separate fee may be charged. (paid service)
- The number and type of filters provided may differ depending on the model.
- Product shape and components may differ depending on the model.
- The feature may be changed according to the type of model.
- Some functions may not be supported, depending on the model.

Cleaning the Deodorization Filter/PM1.0 Filter (Optional)

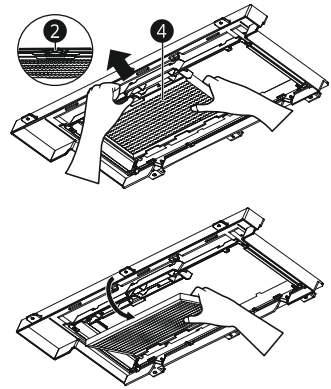
1 Refer to ‘How to Remove the Filter’ when removing the filter.

2 Grab the handle on the filter case holder and pull in the direction of the arrow to remove the PM1.0 filter.

- Do not remove the filter case holder and the intake grille.



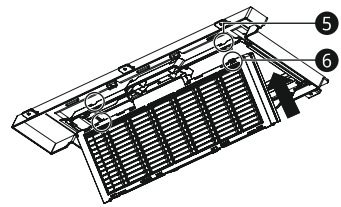
3 As shown in the figure, pull on the handle and remove the deodorization filter.



4 Wash the filter after checking the washing method in ‘Filter Information’.

5 After washing, reinstall the deodorization filter and the PM1.0 filter to their original positions, respectively.

- When installing the PM1.0 filter, insert the hook in the square hole.



1. PM1.0 filter
2. Handle
3. Filter case holder
4. deodorization filter
5. Hook
6. Square hole

⚠ WARNING

- For safety, turn off the main power switch.

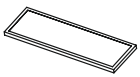
⚠ CAUTION

- Be careful that the filter case is correctly assembled to the filter holder.
- Be careful not to drop the front grille when removing the filter.
- Do not wash the dust filter with hot water over 40 °C or volatile liquids.
- Do not wash the photocatalytic Deodorization filter in water.
- After cleaning the PM1.0 filter, the buzzer sounds 7 times if the water is not completely dry. Dry the filter thoroughly.
- Drying the filter near a fire or in direct sunlight may cause damage to the filter.
- Wear gloves during installation.

NOTE

- The quantity and type of filters provided by each model may differ.
- The feature may be changed according to the type of model.
- Some functions may not be supported, depending on the model.

Filter Information

Filter Name	Filter Description
Deodorization filter 	• Dry for 3 hours in sunlight or under fluorescent light. • It is recommended to clean it every six months. (assuming 8 hours of daily use) • Washing the filter with water could damage or deform it.
PM1.0 filter 	• Clean the filter without disassembling it. • Submerge the PM1.0 filter in water, shaking it several times to clean it. • If the filter is very dirty, soak it for 30 minutes in lukewarm water with mild detergent and rinse thoroughly with clean water. (Do not use acidic detergents such as citric acid.) • It is recommended to clean it every six months. (assuming 8 hours of daily use) • Dry it thoroughly in the shade for about a day. (If there is any remaining moisture, the buzzer will sound 7 times.) Drying with a hot air heater, such as a hair dryer or a heater, could damage or deform the filter. • The inside of the filter is sharp, so do not rub or touch it directly.

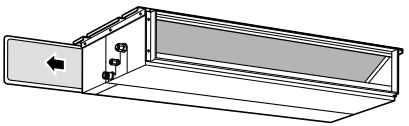
Cleaning the Air Filter

NOTE

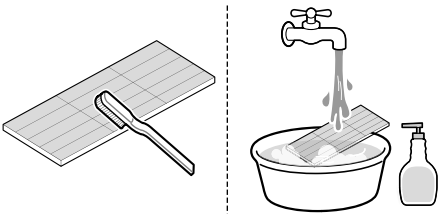
- Do not bend the air filter, as it may break.
- Assemble the air filter properly to prevent dust and other substances from entering the product.

1 Turn off the power to the appliance.

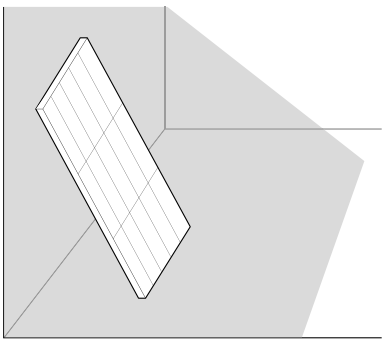
2 Remove the air filter from the air intake.



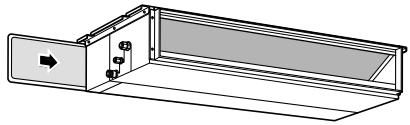
3 Clean the air filter with a vacuum cleaner or wash it with lukewarm water and a mild detergent.



4 Dry the filter in the shade.



5 Insert the air filter in the air intake.



Tips for Maintenance

Before Long Periods of Disuse

1 Operate the air conditioner in the **Fan mode** for 2 to 3 hours.
- This will dry out the internal mechanisms.

2 Turn off the appliance.

3 Turn off the breaker.

After Long Periods of Disuse

1 Clean the air filter and install it in the indoor unit.

2 Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.

3 Check that the ground wire is connected correctly.
- The ground wire may be connected to the side of the indoor unit.

Tips for Maintenance

When the AC is not used for a long time.

1 Operate the air conditioner at the following settings for 2 to 3 hours.
- Type of operation: Fan operation mode.
- This will dry out the internal mechanisms.

2 Turn off the breaker.

⚠ CAUTION

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

NOTE

- Dust and impurities collected in the air filter may block the air flow or reduce the unit performance.

When using the AC again after long period of non usage.

1 Clean the air filter and install it in the indoor unit.

2 Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.

3 Check that the ground wire is connected correctly.
- The ground wire may be connect to the indoor unit side.

Operation Tips

- Do not overcool the room.
  - This is not good for the health and wastes electricity.
- Keep blinds or curtains closed.
  - Do not let direct sunshine enter the room when the air conditioner is in operation.
- Keep the room temperature uniform.
  - Adjust the vertical and horizontal airflow direction to ensure a uniform temperature in the room.
- Make sure that the doors and windows are shut tight.
  - Avoid opening doors and windows as much as possible to keep the cool air in the room.
- Clean the air filter regularly.
  - Blockages in the air filter reduce the airflow and lower cooling and dehumidifying effects. Clean at least once every two weeks.
- Ventilate the room occasionally.
  - Since windows are kept closed, it is a good idea to open them and ventilate the room now and then.

TROUBLESHOOTING

Before Calling for Service

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

NOTE

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

Symptoms	Possible Causes & Solution
The air conditioner does not work normally.	**Burning smell and strange sounds are coming from the unit.** • Turn off the air conditioner, switch OFF, or disconnect the power supply, and contact the service center.
	Water leaks from the indoor unit even when the humidity level is low. • Turn off the air conditioner, switch OFF, or disconnect the power supply, and contact the service center.
	The power cable is damaged or it is generating excessive heat. • Turn off the air conditioner, switch OFF, or disconnect the power supply, and contact the service center.
	A switch, a circuit breaker (safety, ground), or a fuse is not operated properly. • Turn off the air conditioner, switch OFF, or disconnect the power supply, and contact the service center.
	The unit generates an error code from its self-diagnosis. • Turn off the air conditioner, switch OFF, or disconnect the power supply, and contact the service center.
The air conditioner does not work.	**The air conditioner is unplugged.** • Check whether the power cord is plugged into the outlet or the power isolators are switched on.
	A fuse exploded, 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 was turned off automatically at a preset time. • Turn the air conditioner on.
	The battery setting in the remote controller is incorrect. • Make sure that the batteries are inserted correctly in your remote controller. • If the batteries are placed correctly, but the air conditioner still does not operate, replace the batteries and try again.

Symptoms	Possible Causes & Solution
The air conditioner stops during operation.	**The air conditioner is suddenly turned off.** • The Timer Function may have timed out, which turns the unit off. Check the timer settings.
	A power failure has occurred during operation. • Wait for the power to come back. If you have the Auto Restart function enabled, your unit will resume its last operation several minutes after power is restored. **Have you made a mistake in timer operation?** • Set the timer correctly.
The indoor unit is still operating even when the unit has been turned off.	**The Auto Clean function is being operated.** • Allow the Auto Clean function to continue since it removes any remaining moisture inside the indoor unit. If you do not want this feature, you can turn the unit off.
The air conditioner does not emit cool air.	**Air is not circulating properly.** • Make sure that there are no curtains, blinds, or pieces of furniture blocking the front of the air conditioner.
	The air filter is dirty. • Clean the air filter once every 2 weeks. • Refer to the air filter cleaning instructions.
	The room temperature is too high. • In summer, cooling the indoor air fully may take some time. In this case, select the Jet Mode to cool the indoor air quickly.
	Cold air is escaping from the room. • Make sure that no cold air is escaping through the ventilation points in the room.
	The desired temperature is higher than the current temperature. • Set the desired temperature to a level lower than the current temperature.
	There is a heating source nearby. • Avoid using heat generators like electric ovens or gas burners while the air conditioner is in operation.
	Fan Mode is selected. • During Fan Mode, air blows from the air conditioner without cooling or heating the indoor air. • Switch the operation mode to cooling operation.
	Outside temperature is too high. • The cooling effect may not be sufficient. **The room may have been very hot when the room air conditioner was first turned on.** • Allow time for it to cool down.

Symptoms	Possible Causes & Solution
The air conditioner does not emit warm air.	**When Heating Mode starts, the vane is almost closed, and no air comes out, even though the outdoor unit is operating.** • This symptom is normal. Please wait until the unit has generated enough warm air to blow through the indoor unit.
	The outdoor unit is in Defrosting Mode. • In Heating Mode, ice/frost is built up on the coils when the outside temperature falls. This function removes a layer of frost on the coil, and it should finish in approximately 15 minutes.
	Outside temperature is too low. • The heating effect may not be sufficient.
The air outlet on the indoor unit is discharging mist.	**The cooled air from the air conditioner makes mist.** • When the room temperature decreases, this phenomenon will disappear.
Water leaks from the outdoor unit.	**In the heating operations, condensed water drops from the heat exchanger.** • This symptom requires installing a drain hose under the base pan. Contact the installer.
The fan speed cannot be adjusted.	**The Jet mode or Auto Operation mode is selected.** • In some operating modes, you cannot adjust the fan speed. Select an operating mode in which you can adjust the fan speed.
	The airflow generated by the air conditioner may be automatically adjusted during operation. • When the air conditioner reaches the set temperature, it reduces the airflow rate to avoid generating cool airflow when heating, or to minimize energy consumption and indoor humidity change when cooling.
The temperature cannot be adjusted.	**The Fan mode or Jet mode is selected.** • In some operating modes, you cannot adjust the temperature. Select an operating mode in which you can adjust the temperature.
The air conditioner changes generated airflow during operation.	**When the appliance reaches the desired temperature, the airflow rate reduces in order to avoid generating cool airflow during heating, or to minimize energy consumption and indoor humidity change during cooling.** • This symptom is normal.
It seems that condensation is leaking from the air conditioner. **There is noise or vibration.**	**Condensation occurs when the airflow from the air conditioner cools the warm room air.** • This symptom is normal. **A clicking sound can be heard when the appliance starts or stops due to movement of the reversing valve.** **Creaking sound: The plastic parts of the indoor unit creak when they shrink or expand due to sudden temperature changes.** • Noise is normal during or after operation. It is not a sign of malfunction.

Symptoms	Possible Causes & Solution
	Flowing sound: This is the flow of refrigerant through the appliance. **Blowing sound: This sound generates when compressed air is released into the atmosphere.** **This is the sound of the dehumidifying water being processed inside the air conditioning unit.** • These are normal symptoms. The noise will stop.
Crack sound is heard.	**This sound is generated by the expansion or constriction of the front panel, etc. due to changes of temperature.** • These are normal symptoms. The noise will stop.
The indoor unit gives off an odour.	**Odours (such as cigarette smoke) may be absorbed into the indoor unit and discharged with airflow.** • If the smell does not disappear, you need to wash the filter. If this does not work, contact the service centre to clean your heat exchanger.
	Check that this is not a damp smell exuded by the walls, carpet, furniture or cloth items in the room. • If the smell comes out from walls, carpet, furniture or cloth item, clean it.
Remote control display is faint, or no display at all.	**Are the batteries depleted?** • Replace the batteries with a new one.
	Are the batteries inserted in the opposite + and - directions? • Make sure that the + and – terminals of the batteries are oriented correctly.

Wi-Fi

Symptoms	Possible Cause & Solution
Your appliance and smartphone are not connected to the Wi-Fi network.	**The password for the Wi-Fi that you are trying to connect to is incorrect.** • Find the Wi-Fi network connected to your smartphone and remove it, then register your appliance on **LG ThinQ**.
	Mobile data for your smartphone is turned on. • Turn off the **Mobile data** of your smartphone and register the appliance using the Wi-Fi network.
	The wireless network name (SSID) is set incorrectly. • The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
	The router frequency is not 2.4 GHz. • Only a 2.4 GHz router frequency is supported. Set the wireless router to 2.4 GHz and connect the appliance to the wireless router. To check the router frequency, check with your Internet service provider or the router manufacturer.
	The distance between the appliance and the router is too far. • If the distance between the appliance and the router is too far, the signal may be weak and the connection may not be configured correctly. Move the location of the router so that it is closer to the appliance.

NOTE

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

Call the service immediately in the following situations

- Anything abnormal such as burning smell, loud noise etc. happen. Stop the unit and turn the breaker off. Never try to repair by yourself or restart the system in such cases.
- Main power cord is too hot or damaged.
- Error code is generated by self diagnosis.
- Water leaks from indoor unit even if the humidity is low.
- Any switch, breaker (safety, earth) or fuse fails to work properly

User must carry routine checkup & cleaning to avoid unit's poor performance.

In case of special situation, the job must be carried out by service person only.

E-Waste Disposal Guidelines

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 E-Waste Management Rules India published by MoEF & CC, Govt. of India and are meant to be recycled, dismantled, refurbished or disposed off.
2. **Do's**

   a. The product is required to be handed over only to the authorized recycler for disposal.

   b. Keep the product in isolated area, after it becomes non-functional/unrepairable so as to prevent its accidental breakage.

   Don't

   a. The product should not be opened by the user himself/herself, but only by authorized service personnel.

   b. The product is not meant for re-sale to any unauthorized agencies/scrap dealer/kabariwalah.

   c. The product is not meant for mixing into household waste stream.

   d. 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.

   a. The refrigerant used can be combustible at low pressure. The potential health effects of over exposure is dizziness, headache and heart irregularities.

5. This product is compiled with the requirement of Hazardous Substances as specified under E-Waste Management Rules India published by MoEF & CC, Govt. of India.
6. To locate a nearest collection centre or call for pick-up (limited area only) for disposal of this appliance, please contact Tel No. **08069379999** / Toll Free No. **1800-315-9999** for details. All collection centres 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 निपटान (ई-अपशिष्ट नियम के अनुसार)



1. जब इस काटे गए पहिये वाले बिन का चिन्ह किसी उपकरण और इसके ऑपरेटर की पुस्तिका के साथ संलग्न होता है तो इसका मतलब है कि इसे "ई–अपशिष्ट" (प्रबंधन और हथालन) नियम के अंतर्गत सम्मिलित किया गया है, और इसे नवीनीकरण, विघटन और निपटारण के लिए बनाया गया है। MoEF & CC भारत सरकार द्वारा प्रकाशित (भारतीय "ई–अपशिष्ट" (प्रबंधन और हथालन))
2. **करें**

   क. उपकरण को सिर्फ अधिकृत पुनः नवीनीकरणकर्ता को ही निपटारण करने हेतु हस्तांतरित 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/ भंगारवाला/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 पुर्जों को खुले क्षेत्र में न रखें।

3. यदि किसी अनाधिकृत विभाग या व्यक्ति के द्वारा निपटारण किया जाता है तो यह पर्यावरण (सुरक्षा) धारा 1986 के अंतर्गत आता है।
4. दुर्घटना टूट/फूट अव्यवस्थित रख–रखाव से बचें।

   क. रेफ्रिजरेंट कम दबाव पर दहनशील हो सकती है तथा इससे स्वास्थ्य पर दुष्प्रभाव पड़ सकता है जैसे चक्कर आना, सरदर्द और हृदय गति रूकना।
5. यह उत्पाद ई–अपशिष्ट (प्रबंधन और हथालन) नियम के तहत निर्दिष्ट खतरनाक पदार्थों की आवश्यकता का पालन करता है। MoEF & CC भारत सरकार द्वारा प्रकाशित (भारतीय "ई–अपशिष्ट" (प्रबंधन और हथालन))
6. उपरोक्त पदार्थों के निपटारण के लिए नजदीकी निपटारण संस्थान (संकीर्ण क्षेत्र) में कॉल करें। अधिक जानकारी के लिए हमारे टेलीफोन नंबर **08069379999** / टोल फ्री नंबर **1800-315-9999** पर कॉल करें। सभी संग्रहण केंद्र व पिक–अप की सुविधाएं किसी थर्ड पार्टी जो **LG Electronics Pvt. Ltd.** को अपनी सेवाएं प्रदान कर रही हों, से करवाएं। ज्यादा जानकारी के लिए देखें वेब साइट : http://www.lg.com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⚠ WARNING

Use a vacuum pump or Inert (nitrogen) gas when doing leakage test or air purge. Do not compress air or Oxygen and do not use Flammable gases. Otherwise, it may cause fire or explosion.

- There is the risk of death, injury, fire or explosion.

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.

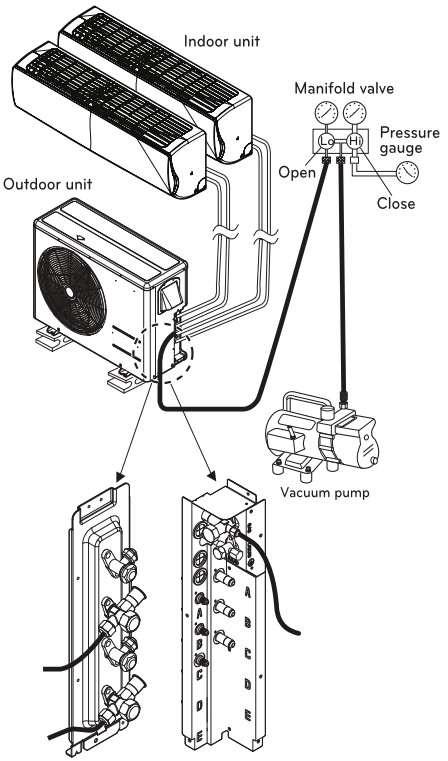
Required time for evacuation when 30 gal/h vacuum pump is used	
If tubing length is less than 10m (33 ft)	If tubing length is longer than 10m (33 ft)
Less than 0.5 Torr	Less than 0.5 Torr

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

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 AND EVACUATION

The 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, after evacuating the system, take a leak test for the piping and tubing between the indoor and outdoor unit.

Checking method

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. Check that both the liquid and the gas side service valves on the outdoor unit are kept closed at this stage.

Leakage test

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

⚠CAUTION

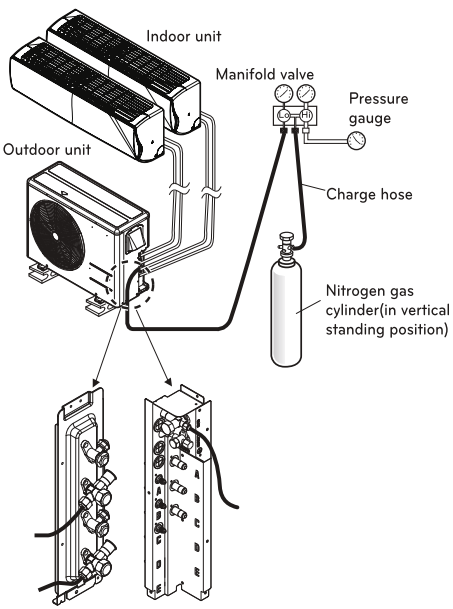
Be sure to use a manifold valve for leakage test. If it is not available, use a stop valve for this purpose. The "Hi" knob of the manifold valve must always be kept close.

- Pressurize the system to no more than 551 P.S.I.G. with dry nitrogen gas and close the cylinder valve when the gauge reading reached 551 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 leakage 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.



TEST RUNNING

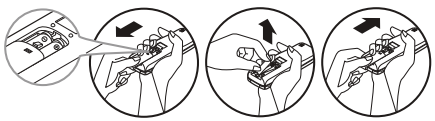
- Check that all tubing and wiring have been properly connected.
- Check that the gas and liquid side service valves are fully open.

Prepare remote control

Remove the battery cover by pulling it according to the arrow direction.

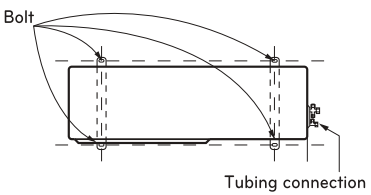
Insert new batteries making sure that the (+) and (–) of battery are installed correctly.

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.



Evaluation of the performance

Operate unit for 15~20 minutes, then check the system refrigerant charge:

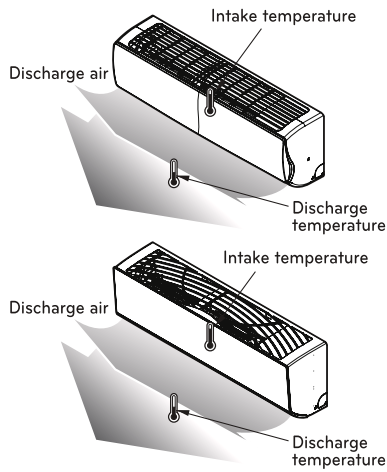
- Measure the pressure of the gas side service valve.
- Measure the temperature of the intake and discharge of air.
- Ensure the difference between the intake temperature and the discharge is more than 8° C.

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

Refrigerant	Outside ambient TEMP.	The pressure of the gas side service valve.
R32	35°C (95°F)	8.5~9.5kg/cm²G (120~135 P.S.I.G.)

NOTE

If the actual pressure are higher than shown, the system is most likely overcharged, 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.



TEST RUNNING

PRECAUTIONS IN TEST RUN

- The initial power supply must provide at least 90 % of the rated voltage.
  Otherwise, the air conditioner should not be operated.

⚠ CAUTION

- For test run, carry out the cooling operation firstly even during heating season. If heating operation is carried out firstly, it leads to the trouble of compressor. Then attention must be paid.
- Carry out the test run more than 5 minutes without fail.
  (Test run will be cancelled 18 minutes later automatically)

- To cancel the test run, press any button.

CHECK THE FOLLOWING ITEMS WHEN INSTALLATION IS COMPLETED

- After completing work, be sure to measure and record trial run properties, and store measured data, etc.
- Measuring items are room temperature, outside temperature, suction temperature, blow out temperature, wind velocity, wind volume, voltage, current, presence of abnormal vibration and noise, operating pressure, piping temperature, compressive pressure.
- As to the structure and appearance, check following items.
  * Is the circulation of air adequate?
  * Is the draining smooth?
  * Is the heat insulation complete (refrigerant and drain piping)?
  * Is there any leakage of refrigerant?
  * Is the remote controller switch operated?
  * Is there any faulty wiring?
  * Are not terminal screws loosened?

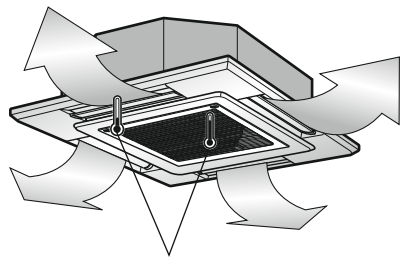
M4.....118 N·cm{12 kgf·cm}
M5.....196 N·cm{20 kgf·cm}
M6.....245 N·cm{25 kgf·cm}
M8.....588 N·cm{60 kgf·cm}

Connection of power supply

- Connect the power supply cord to the independent power supply.
  Circuit breaker is required.
- Operate the unit for 15 minutes or more.

Evaluation of the performance

- Measure the temperature of the intake and discharge air.
- Ensure the difference between the intake temperature and the discharge one is more than 8 °C (Cooling) or reversely (Heating).



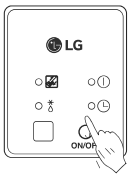
Thermometer

* The figure can be changed according to model.

2	Signal detector: Receives the signal from remote control.
3	Timer lamp (Green): Lights up during the timer operation.
4	Hot start lamp (Orange): Available only for the heat pump models, not cooling only models.
5	System on/off lamp (Red): Lights up during system controller operation.
6	Filter sign lamp (Green): Lights up after 2400 hours from the time of first power on operation.

Test run mode

After installing the product, you must run a test run mode. Press the emergency operation button for 5 seconds, until the LED flickers. Then the indoor unit, duct runs cooling mode for 18 minutes, where the desired temperature is 18 ℃ and the wind strength is high.



Display

- When receiving signals from the wireless remote controller, system on/off LED no.5 LED flickers once.
- When receiving signals in locking mode on all or each of indoor units, system on/off LED flickers 5 times.

Example condition	System on/off LED operation
Receive signals in operation-off	Once flickering
Press forced operation button in central controller locking mode	5 times flickering

After Installation

Air Purge

Air Purge of the Connecting Pipes and the Indoor Unit

The air which contains moisture remaining in the refrigeration cycle may cause a malfunction on the compressor.

1 Confirm that both the liquid side valve and the gas side valve are set to the closed position.

2 After connecting the piping, check the joints for gas leakage with gas leak detector.

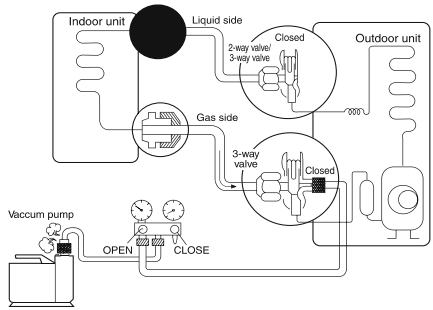
3 Remove the service port nut, and connect the gauge manifold and the vacuum pump to the service port by the charge hose.

4 Vacuum the indoor unit and the connecting pipes until the pressure in them lowers to below 76 cmHg.

5 Remove the valve stem nuts, and fully open the stems of the 2-way and 3-way valves with a hexagon wrench.

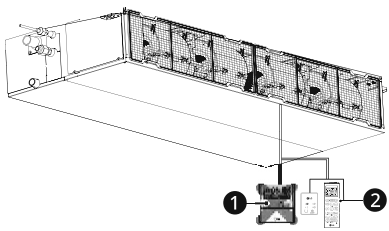
6 Tighten the valve stem nuts of the 2-way valve and 3-way valve.

7 Disconnect the charge hose and fit the nut to the service port. (Tightening torque: 1.8 kg.m)



Operating Instructions

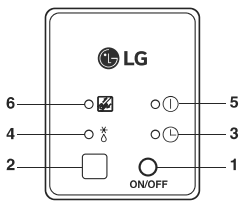
Indoor Unit, Outdoor Unit



❶ Wired remote controller (Optional)

❷ Wireless remote receiver & controller

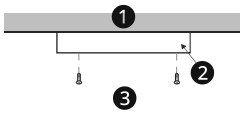
Operation of Indication Lamps



Signal Receiver

1	Emergency operation button: Turns the indoor unit on or off even when remote control is not working.

1 Fix the rear side of the installation board with the screw.
Check the mark Up & Down on bottom case inside.



❶ Ceiling

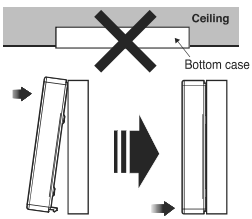
❷ Bottom case

❸ Use the screws for fixing the unit firmly on the ceiling.

⚠ WARNING

- Do not install the IR receiver inside the ceiling. It is not a ceiling concealed type.

2 Now attach the IR PCB assembly at the rear side of installation board.

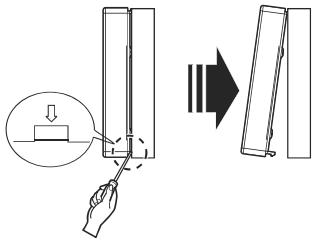


When dissemble he IR receiver from the bottom case, use a driver as shown in the picture and insert it into the hole as indicated with the arrow mark. And when you pull the driver in the front direction, the IR receiver will be separated.

⚠ WARNING

- Do not pull a driver too strongly.

Or else it can touch and hurt the IR PCB.



IR Receiver

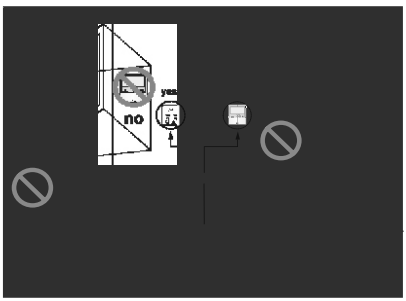
IR Receiver Sensor Installation and Operation

Install the IR remote sensor about 6 feet above the floor in an area with good air circulation at an average temperature.

Do not install IR remote sensor where it can be affected by:

- Drafts, or dead spots behind doors and in corners.
- Hot or cold air from ducts.
- Radiant heat from sun or appliances.
- Concealed pipes and chimneys.
- Uncontrolled areas such as an outside wall behind the remote controller.
- This IR remote sensor is equipped with LED display and ON/OFF button. For proper display of the IR remote sensor.

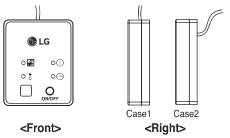
  The IR remote sensor should be installed properly as shown in the figure. (The standard height is 6 feet from floor level.)



Installation

Connecting harness

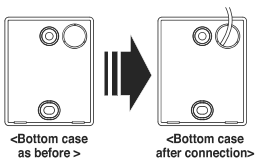
1 Choose the connecting type as indicated Case 1 and Case 2. In Case 2, connect the cable through the knock-out hole on the rear side of the bottom.



NOTE

- In Case 2, the diameter of the hole on the ceiling should be smaller than 18 mm to prevent it from being shown.

2 Connect the IR receiver cable to the CN-DISPLAY connector of main PCB assembly.



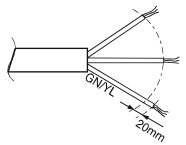
Fixing on the Ceiling

Model	Capacity	1 phase	No of core
ZMNQ24GL6A0	2.0 TR	0.75 mm2	4

NOTE

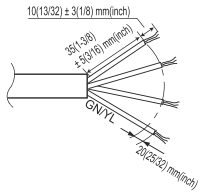
- GND= Ground Earthing (GN/YL)

The power cord connected to the outdoor unit should be with the following specifications
Normal Cross-Section Area



Capacity (K Btu/h)	1 phase
18/24	1.5 mm^2 / 2.5 mm^2

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



Capacity (K Btu/h)	1 phase
18/24	0.75 mm^2

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

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.

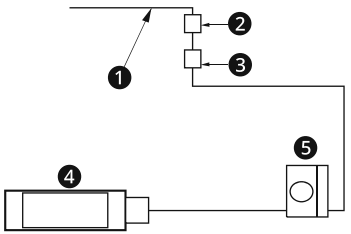
Connecting Cable between Indoor and Outdoor Unit

Perform the electrical wiring work according to the electrical wiring connection.

Circuit breaker detail

- All wiring must comply with local requirements.
- Select a power source that is capable of supplying the current required by the air conditioner.
- Use a recognized circuit breaker between the power source and the unit.

  A disconnect all supply lines must be fitted.



❶ Main power source

❷ Circuit breaker

❸ Switch box

❹ Indoor

❺ Outdoor

- Capacity of circuit breaker

Model	Capacity	1 phase	3 phase
ZMNQ18GL5A0	1.5 TR	16	NA
ZMNQ24GL6A0	20 TR	25	NA

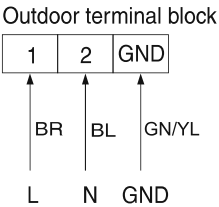
- Warranty will be pull & void if wiring is not as per installation instructions.

Connecting Cable to the Indoor Unit

Connect the wires to the terminals on the control board individually according to the outdoor unit connection.

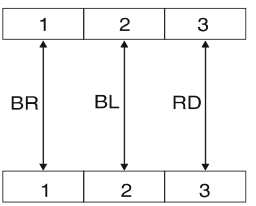
- Please do the interconnection as per interconnection table in wiring diagram.
- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively.

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



Model	Capacity	1 phase
		Mm2*core
ZMNQ18GL5A0	1.5 TR	1.5 mm2*3
ZMNQ24GL6A0	2.0 TR	2.5 mm2*3

For connection between of indoor and outdoor unit & wire specification



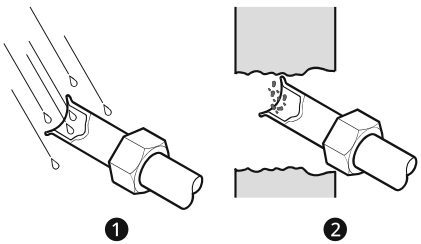
Model	Capacity	1 phase	No of core
ZMNQ18GL5A0	1.5 TR	0.75 mm2	4

carbonic gas) to prevent formation of oxidation file in copper piping; otherwise, the refrigerant circuit will clog. The blowing of nitrogen gas (or carbonic gas) through 3-way valves are described in the following:

8 Refrigerant piping (Flare piping)

When connecting piping, be sure to keep piping dry (keep piping away from water), clean (keep piping away form dust) and airtight (avoid refrigerant leakage).

When connecting piping on rainy days or making a through-hole in wall, take due care to prevent water or plaster from entering piping.



❶ Water enters

❷ Plaster enters

⚠ CAUTION

- This procedure is designed to prevent formation of oxidation file by filling piping with inert gas. Note that excessive gas pressure will generate pinholes at brazed points.

  (Nitrogen gas: Supply pressure 0.05 ~ 0.1 kg/cm^2G)

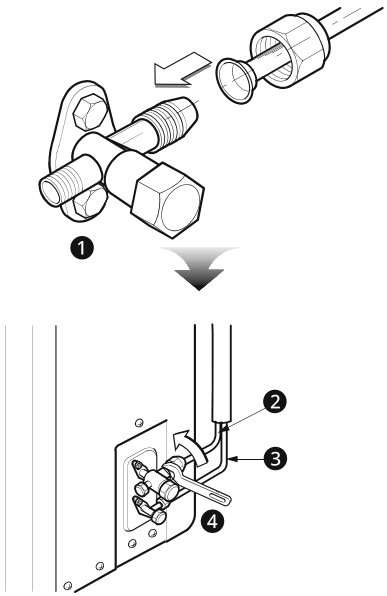
- When supplying inert gas, be sure to open one end of piping.

Connecting Pipes to the Outdoor Unit

1 Align the center of the pipings and sufficiently tighten the flare nut with fingers.

2 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.



❶ Outdoor unit

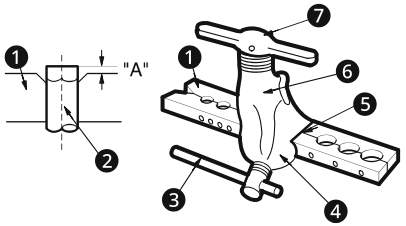
❷ Gas side piping (Bigger Dia.)

❸ Liquid side piping (Smaller Dia.)

❹ Torque wrench

Pipe size (mm/inch)	Torque (kg.m)
6.35 (1/4)	1.8
9.52 (3/8)	4.2
12.7 (1/2)	5.5
15.88 (5/8)	6.6
19.05 (3/4)	6.6

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



1. Bar
2. Copper pipe
3. Clamp handle
4. Red arrow mark
5. Cone
6. Yoke
7. Handle

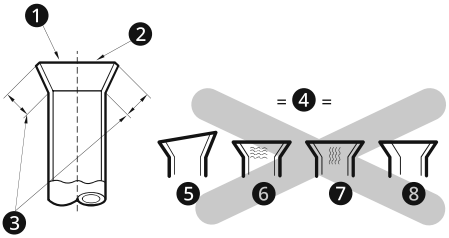
Outside diameter (mm/inch)	"A"
6.35 (1/4)	0 ~ 0.5
9.52 (3/8)	0.5 ~ 0.8
12.7 (1/2)	0.5 ~ 0.8
15.88 (5/8)	0.8 ~ 1.0
19.05 (3/4)	1.0 ~ 1.3

Firmly hold copper tube in a bar (or die) as indicated dimension in the table above.

5 Check

- Compare the flared work with figure.

If flare is noted to be defective, cut off the flared section and do flaring work again.



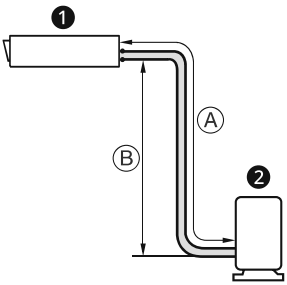
1. Smooth all round
2. Inside is shining without scratches.
3. Even length all round
4. Improper flaring
5. Inclined
6. Surface damaged
7. Cracked
8. Uneven thickness

6 Pipe bending

Annealed copper pipe with small diameter (Ø6.35 or Ø9.52) can be easily bent manually. In this case, secure large R (radius) for the bend section and gradually bend pipe. If annealed copper pipe is large in diameter (Ø12.7, Ø15.88 or Ø19.05), bend pipe with bender. Use bender appropriate for the pipe diameter.

7 Brazing

In refrigerant piping, bending (in particular, acute bending) must be minimized to reduce piping resistance. Bending is, however, necessary in some places by virtue of the installation position of devices or of the building structure, piping distance or finishing appearance. Perform brazing using ready-made elbow. Aside from this function, brazing also serves to connect straight pipes, generally using ready-made sockets. While brazing, protect piping against heat with wet cloth to avoid damaging valve packing or burning thermal insulator with burner heat. While brazing, blow inert gas (nitrogen gas or



❶ Indoor unit

❷ Outdoor unit

Drain Piping

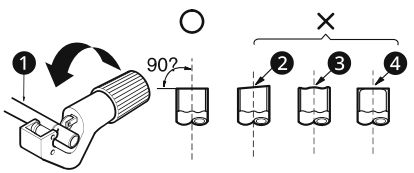
Connecting Pipes to the Indoor Unit

Preparation of Piping

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

1 Cut the pipes and the cable.

- Use the accessory piping kit 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 1.5 m longer than the pipe length.



❶ Copper tube

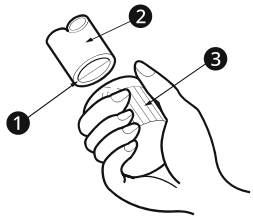
❷ Slanted

❸ Uneven

❹ Rough

2 Burrs removal

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



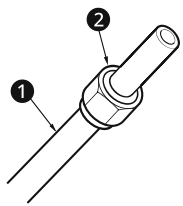
❶ Point down

❷ Pipe

❸ Reamer

3 Putting nut on

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



❶ Copper tube

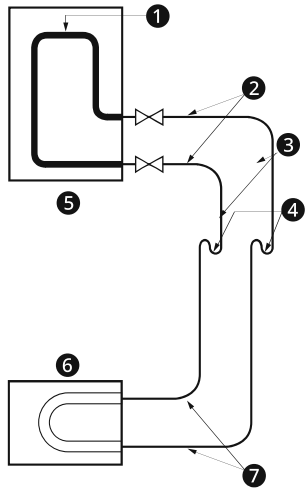
❷ Flare nut

4 Flare work

Pipe length and the eleveation

Model		ZMNQ18GL5A0	ZMNQ24GL6A0
Capacity		**1.5 TR**	**2.0 TR**
Pipe size	Gas	1/2	1/2
	Liquid	1/4	1/4
Length (A meter)	Standard	7.5	7.5
	Max	30	50
Elevation (B meter)	Standard	5	5
	Max	20	30

- Capacity is based on standard length and maximum allowance length is on the basis of reliability.
- Oil trap should be installed every 5 meters.
- If 18 k model is installed at a distance of 15 m, 150 g of refrigerant should be added [(15-5) x 15 g = 150 g].



1. Factory charged gas
2. Flared connection (union)
3. Use seamless pipe
4. U-Trap
5. Outdoor
6. Indoor
7. Flared connection (Service valves)

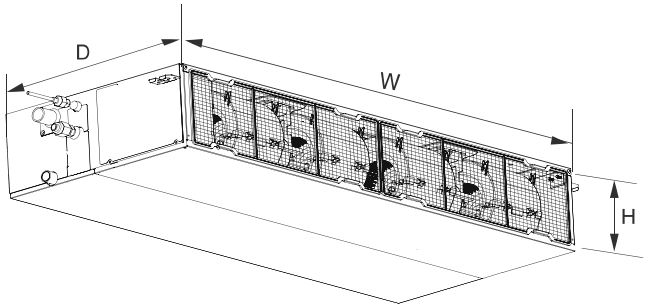
Outdoor Unit Best Location and Piping

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.

Indoor unit



Model		ZMNQ18GL5A0	ZMNQ24GL6A0
Capacity		1.5 TR	2.0 TR
Indoor dimension	W	900	1100
	D	190	190
	H	460	460
Outdoor dimension	W	770	870
	D	288	330
	H	545	650
	L1	560	586
	L2	300	366

tightly fastened. (If they are loose, it could give rise to burn-out of the wires.)

- Specification of power source
- Confirm that electrical capacity is sufficient.
- Be sure that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
- Confirm that the cable thickness is as specified in the power sources specification. (Particularly note the relation between cable length and thickness.)
- Never fail to equip a leakage breaker where it is wet or moist.
- The following troubles would be caused by voltage drop-down.

  Vibration of a magnetic switch, damage on the contact point, fuse breaking, disturbance by the normal function of an overload protection device.

  Proper starting power is not given to the compressor.

Hand Over

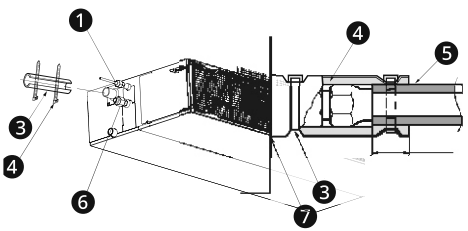
Teach the customer the operation and maintenance procedures, using the operation manual. (Air filter cleaning, temperature control, etc.)

Insulation, Others

Thermal Insulation

All thermal insulation must comply with local requirement.

Indoor unit



❶ Union for liquid pipe

❷ Refrigerant pipe and thermal insulator (Local supply)

❸ Hose clip for thermal insulator (Local supply)

❹ Thermal insulator for refrigerant pipe (Local supply)

❺ Thermal insulator for piping (Local supply)

❻ Union for gas pipe

❼ Make sure that there is no clearance here.

Test and Check

After all workings are finished, check the working and operation.

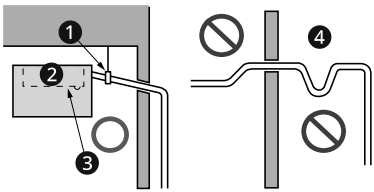
- Air distribution: Is the air circulation good?
- Drain: Is the drainage smoothly and no sweating?
- Gas leakage: Is the piping connection correctly?
- Wiring: Is the wiring connection correctly?
- Lock-bolt: Is the lock-bolt of compressor loosened?
- Insulation: Is the unit fully insulated?
- Ground: Is the unit safely grounded?

Indoor Unit Drain Piping

- Drain piping must have down-slope (1/50 to 1/100): be sure not to provide up-and-down slope to prevent reversal flow.
- During drain piping connection, be careful not to exert extra force on the drain port on the indoor unit.
- The outside diameter of the drain connection on the indoor unit is 32 mm.

  Piing material: Polyvinyl chloride pipe inner diometes Ø25 mm and pipe fittings.
- Be sure to install heat insulation on the drain piping.

  Heat insulation material: Polyethylene foam with thickness more than 8 mm.



❶ Pipe clamp

❷ Indoor unit

❸ Maintenance drain port

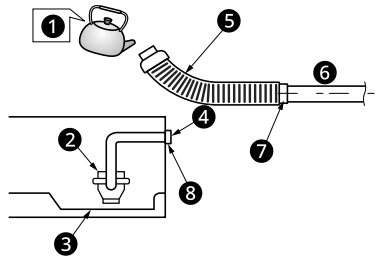
❹ Upward routing not allowed

Drain Test

The air conditioner uses a drain pump to drain water.

Use the following procedure to test the drain pump operation:

- Connect the main drain pipe to the exterior and leave it provisionally until the test comes to an end.
- Feed water to the flexible drain hose and check the piping for leakage.
- Be sure to check the drain pump for normal operation and noise when electrical wiring is complete.
- When the test is complete, connect the flexible drain hose to the drain port on the indoor unit.



❶ Feed water

❷ Drain pump

❸ Drain pan

❹ Drain port

❺ Flexible drain hose (accessory)

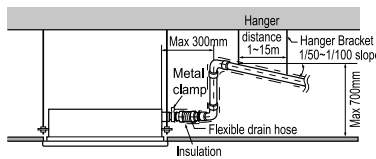
❻ Main drain pipe

❼ Glue the joint

❽ Drain hose connection, Use the clip. (Accessory)

⚠ CAUTION

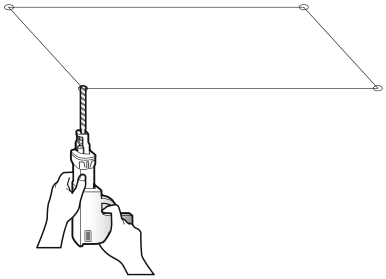
- The supplied flexible drain hose should not be strained. A strained hose may cause leakage of water.



- After the confirmation of the above conditions, prepare the wiring as follows:
  - Never fail to have an individual power specialized for the air conditioner. As for the method of wiring, be guided by the circuit diagram posted on the inside of control box cover.
  - Provide a circuit breaker switch between power source and the unit.
  - The screws 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

Indoor Unit Installation

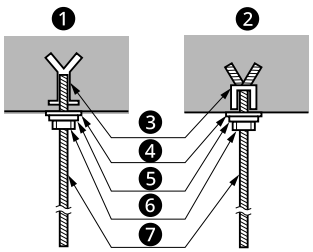
- Select and mark the position for fixing bolts.
- Drill the hole for set anchor on the face of ceiling.



⚠ CAUTION

- Tighten the nut and bolt to prevent unit falling.

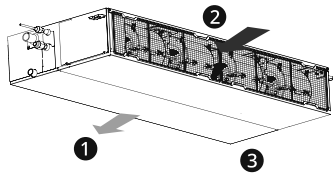
- Insert the set anchor and washer onto the suspension bolts for locking the suspension bolts on the ceiling.
- Mount the suspension bolts to the set anchor firmly.
- Secure the installation plates onto the suspension bolts (adjust level roughly) using nuts, washers and spring washers.



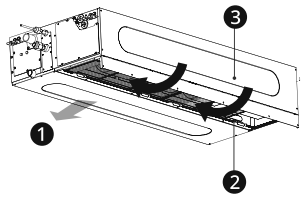
❶ Old building
❷ New building
❸ Set anchor
❹ Plate washer
❺ Spring washer
❻ Nut
❼ Suspension bolts

Part Name and Function

Low static duct type in case of suction from back side



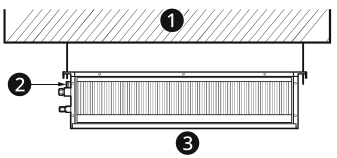
Low static duct type in case of suction from bottom side



❶ Air outlet
❷ Air filter
❸ Panel rear

Front of view

- Install declination of the indoor unit is very important for the drain of the duct type air conditioner.
- Minimum thickness of the insulation for the connecting pipe shall be 5 mm.
- The unit must be horizontal or declined to the drain hose connected when finished installation.

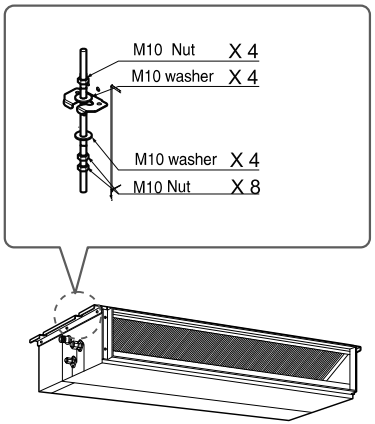


❶ Ceiling
❷ Drainage hole
❸ Drain pump use

Case 2

Install the unit leaning to a drainage hole side as a figure for easy water drainage.

- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.



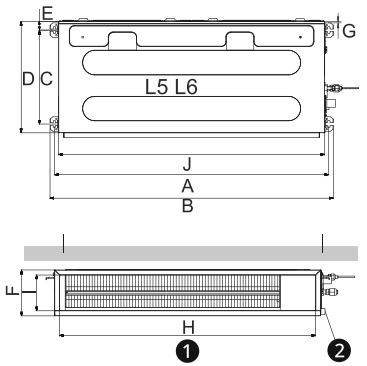
Indoor Unit Installation

Ceiling Dimension and Hanging Bolt Location

Install the unit above the ceiling correctly.

Case 1

Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
Apply a filter accessory at air return hole.



❶ Drain pump use

❷ Drainage hole

Dimension (mm)	Capacity (Btu/h)	
	18k (L5)	24k (L6)
A	933	1133
B	972	1172
C	388	388
D	460	460
E	36	36
F	190	190
G	20	20
H	860	1060
I	148	148
J	900	1100

Number of inspection hole	Distance between False ceiling & Actual ceiling	Remarks
Hole size should be more than the size of IDU.	Less than 20 cm	Minimum height for motor replacement

Name	Quantity	Shape
Wireless Remote	1 EA	
Other		• Owner's manual • Installation manual

Accessories

Name	Quantity	Shape
Drain hose	1 EA	
Clamp metal	2 EA	
Washer for hanging backet	8 EA	
Clamp (Tie wrap)	4 EA	
Insulation for fitting	1 SET	• For gas pipe  • For liquid pipe 
IR receiver	1 EA	

INSTALLATION

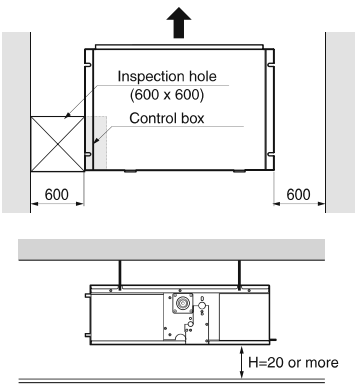
Location Selection

Select the Best Location

Install the air conditioner in the location that satisfies the following conditions

- The place shall easily bear a load exceeding four times the indoor unit's weight.
- The place shall be able to inspect the unit as the figure.
- The place where the unit shall be leveled.
- The place shall easily connect with the outdoor unit.
- The place where the unit is not affected by an electrical noise.
- The place where air circulation in the room will be good.
- There should not be any heat source or steam near the unit.

(Unit: mm)

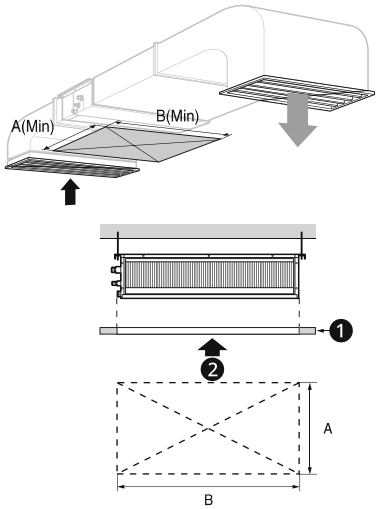


Suitable dimension "H" is necessary to get a slope to drain as as figure.

Low Static Duct Type

Confirm the positional relationship between the unit and suspension bolts.

- Installation the ceiling opening to clean the filter or service under the product.



❶ Ceiling

❷ Service Space

Capacity (Btu/h)	A (mm)	B (mm)
18	600	1000
24	600	1200

Inspection Hole Standard

Number of inspection hole	Distance between False ceiling & Actual ceiling	Remarks
1	More than 100 cm	Sufficient space in the ceiling for servicing
2	20 cm to 100 cm	Insufficient space. Difficult for serving

Manual the decor, air filter Assembly & Disassembly

Disassemble the decor

1 Turn off the power and unplug the power cord.

2 Pull the decor at the bottom of the indoor unit.



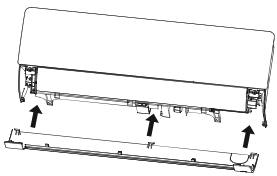
3 Remove the decor from the indoor unit.



Assemble the decor

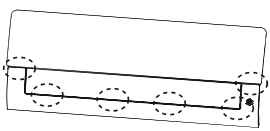
1 Turn off the power and unplug the power cord.

2 Insert 3 or 4 hooks of the decor into gap of the indoor unit certainly.





3 Push the nooks to assemble the decor.



CAUTION

The air filter can be broken when it is bended.

Disassemble the air filter

1 Turn off the power and unplug the power cord.

2 Hold the knob of the air filter, Lift it up slightly.



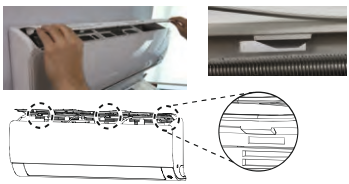
3 Hold the knob of the air filter, lift it up slightly and remove it from the unit.



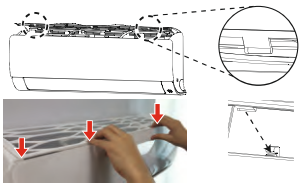
Assemble the air filter

1 Turn off the power and unplug the power cord.

2 Insert the hooks of the air filter into the front grill.



3 Push down hooks to assemble the air filter.



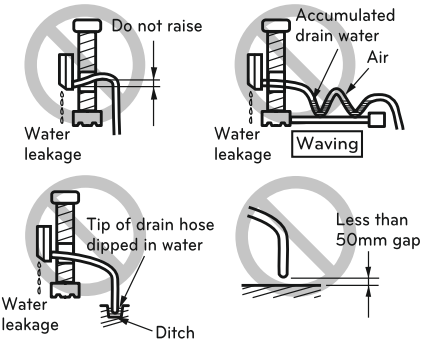
4 Check side of the front grill for the air filter assembled correctly.



NOTE

If the air filter is not assembled correctly, Dust and other substance come into the indoor unit. If look at the indoor unit from higher than it, can assemble the air filter easily.

2 Do not make drain piping like the following.



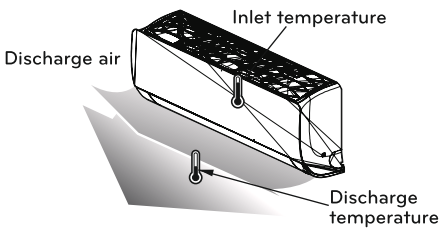
* The feature can be changed according to type of model.

Evaluation of the performance

Operate the unit for 15~20 minutes, then check the system refrigerant charge:

1 Measure the pressure of the gas side service valve.
2 Measure the air temperature from inlet and outlet of air conditioner.
3 Ensure the difference between the inlet and outlet temperature is more than 8 °C.
4 For reference; the gas side pressure at optimum condition is shown on table (cooling)

The air conditioner is now ready to use.



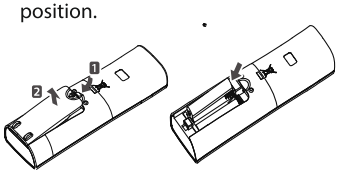
* The feature can be changed according a type of model.

Test Running

- Check that all tubing and wiring are properly connected.
- Check that the gas and liquid side service valves are fully open.

Prepare remote controller

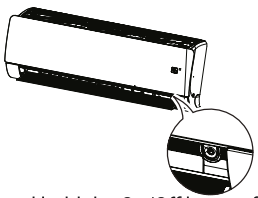
1 Remove the battery cover by pulling it according to the arrow direction.
2 Insert new batteries making sure that the (+) and (–) of battery are installed correctly.
3 Reattach the cover by pushing it back into position.



NOTE

- Use 2 AAA(1.5 V) batteries. Do not use rechargeable batteries.
- Remove the batteries from the remote controller if the system is not used for a long time

Test operation



- 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.

NOTE

If the actual pressure is 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.

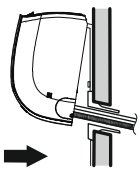
Finishing the indoor unit installation

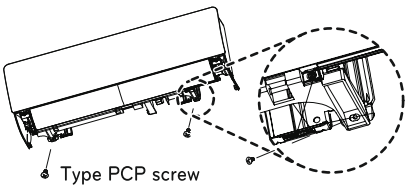
1 Mount the tubing holder in the original position.

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

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

4 Finish the assembly by screwing the unit to the installation plate by using two pieces of type "C" screws. And assemble a chassis cover.





* The feature can be changed according to type of model.

⚠ CAUTION

The indoor unit can be dropped from the wall, the indoor unit is not screwed correct position on the install plate.

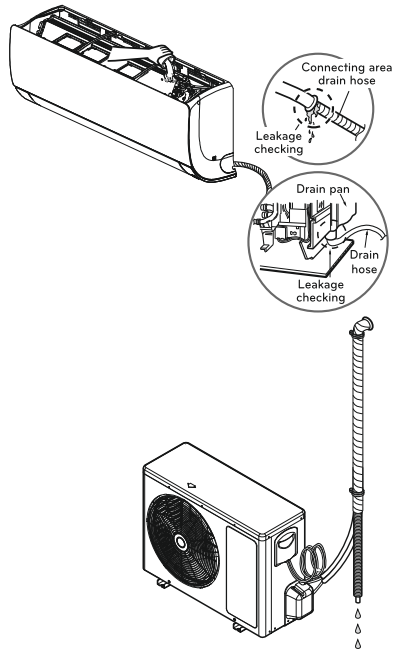
To avoid the gap between the indoor unit and wall , screw the indoor unit to the install plate correctly.

Checking the Drainage

To check the drainage.

1 Pour a glass of water on the evaporator.

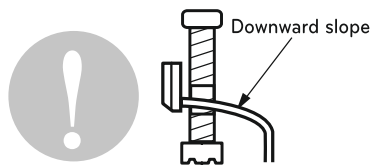
2 Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.



* The feature can be changed according to type of model.

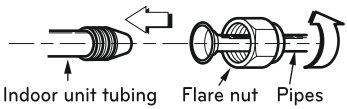
Drain piping

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



Connecting the installation pipe and drain hose to the indoor unit.

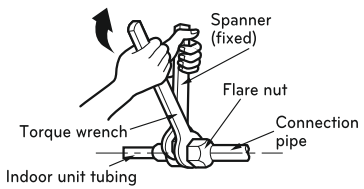
1 Align the center of the pipes and sufficiently tighten the flare nut by hand



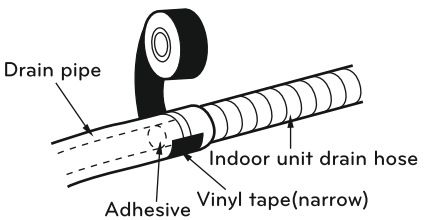
* When Indoor unit (6.6 kW) is connected to the Multi Outdoor unit, use the connector.

2 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

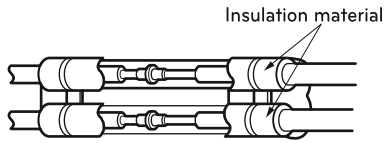


3 When needed to extend the drain hose of indoor unit, assembly the drain pipe as shown on the drawing.

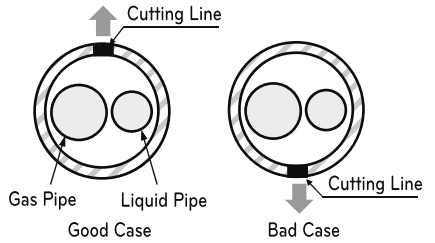


Wrap the insulation material around the connecting portion.

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

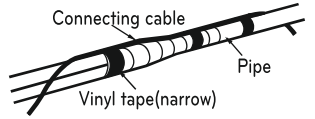


2 Set the tubing cutting line upward. Wrap the area which accommodates the rear piping housing section with vinyl tape.

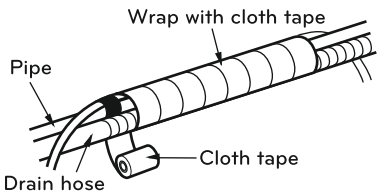


* Tubing cutting line have to be upward.





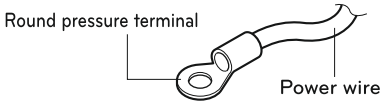
3 For left rear piping, bundle the piping and drain hose together by wrapping them cloth tape over the range within which they fit into the rear piping housing section.



* Wrap the piping of the indoor unit that are visible from the outside with vinyl tape.

Precautions when laying power wiring

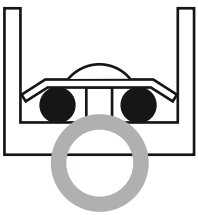
Use round pressure terminals for connections to the power terminal block.



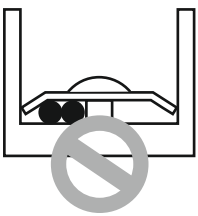
When none are available, follow the instructions below.

- Do not connect wiring of different thicknesses to the power terminal block. (Slack in the power wiring may cause abnormal heat.)
- When connecting wiring which is the same thickness, do as shown in the figure below.

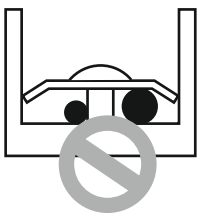
Connect same thickness wiring to both sides.



It is forbidden to connect two to one side.



It is forbidden to connect wiring of different thicknesses.



- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal block.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tighterning impossible.
- Over-tightening the terminal screws may break them.

⚠ CAUTION

According to 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 could cause burn-out of the wires.)
3. Specification of power source.
4. Confirm that electrical capacity is sufficient.
5. See 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.)
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 3 mm in each active(phase) conductors.
10. Open the terminal cover block before connecting the indoor side wire.

Connecting the Cables

Indoor unit

Connect the cable to the indoor unit by connecting the wires to the terminals on the control board individually according to the 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.)

Insert the connecting cable through the bottom side of indoor unit and connect the cable.

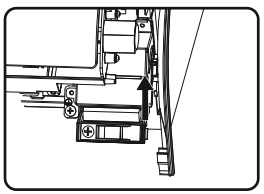
(1) Open the Decor

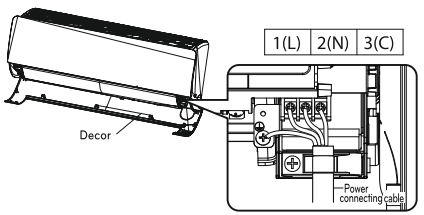
(2) Unscrew the screw of C/Box

(3) Slide up the Metal Plate Cover

(4) Connect the connecting cable

(5) After complete connect the cables, should assemble the Metal Plate Cover by screw.





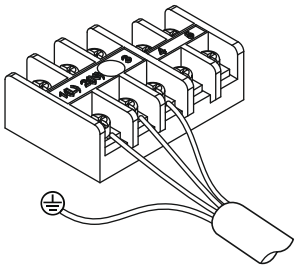
* The feature can be changed according a type of model.

⚠ CAUTION

- The circuit diagram is a subject to change without notice.
- The earth wire should be longer than the common wires.
- When installing, refer to the circuit diagram on the chassis cover.
- Connect the wires firmly so that they may not be pulled out easily.
- Connect the wires according to color codes, referring to the wiring diagram.

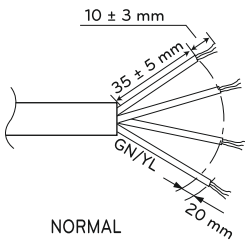
NOTE

The power cord connected to unit should be selected according to the following national wiring regulations. The supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (code designation 60245 IEC 57, H05RN-F)



⚠ CAUTION

The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (This equipment shall be provided with a cord set complying with the national regulation).



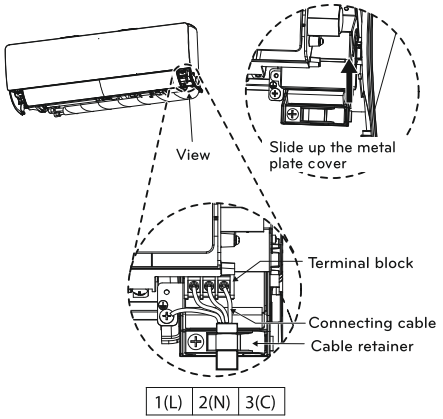
NORMAL
CROSS-SECTIONAL
AREA 1.0 mm^2

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

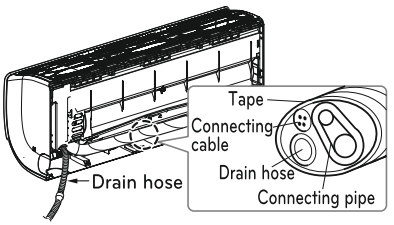
Piping

1 Insert the connecting cable through the bottom side of indoor unit and connect the cable (You can see detail contents in 'Connecting the cables' section)

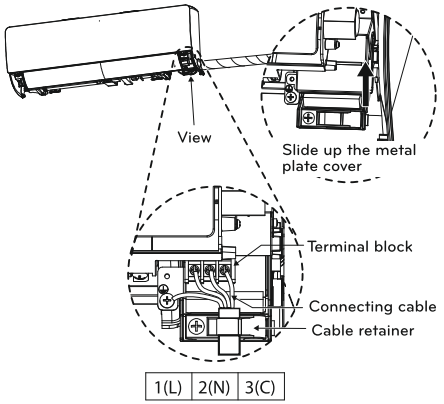
<Left side piping>



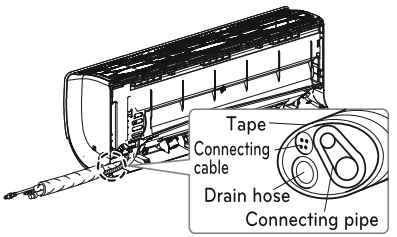
<Left side piping>



<Right side piping>



<Right side piping>

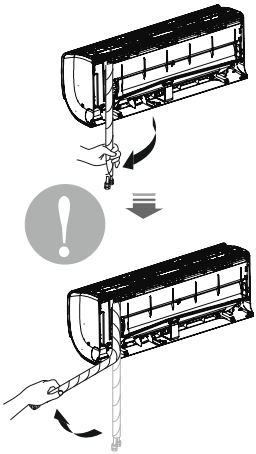


2 Secure the cable onto the control board with the cable retainer.

3 Tape the tubing pipe, drain hose and the connection cable. Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause overflow from the drain pan through the inside of the unit.

Good case

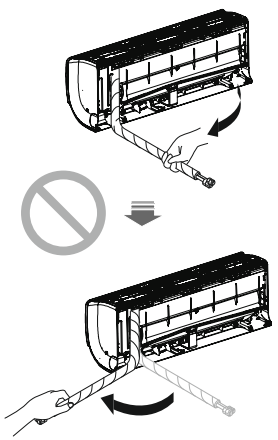
- Press on the tubing cover and unfold the tubing to downward slowly. And then bend to the left side slowly.



* The feature can be changed according to type of model.

Bad case

- Following bending case from right to left directly may cause damage to the tubing.



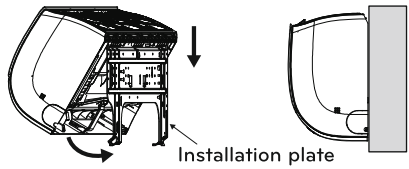
* The feature can be changed according to type of model.

NOTE

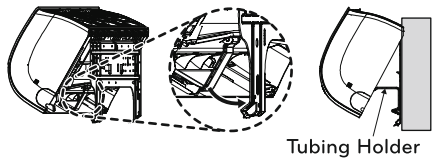
Installation Information. For right piping. Follow the instruction above.

Installation of Indoor Unit

1 Hook the indoor unit onto the upper portion of the installation plate.(engage the three hooks at the 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



2 Unlock the tubing holder from the chassis and mount between the chassis and installation plate in order to separate the bottom side of the indoor unit from the wall.

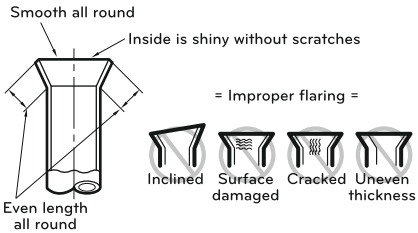


* The feature can be changed according to the type of model.

Check

1 Compare the flared work with the figure by.

2 If a flared section is defective, cut it off and do flaring work again.



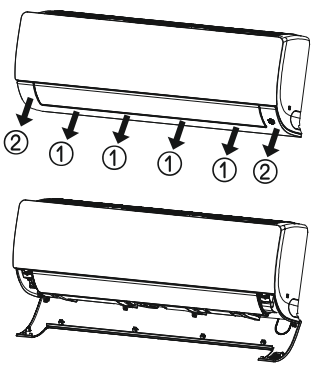
NOTE

- When flared joints are reused indoors, the flare part shall be re-fabricated.

Connecting the Piping

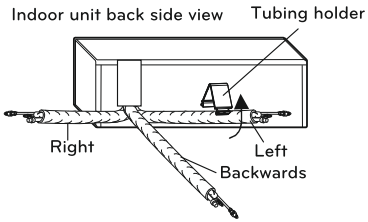
1 Pull the cover at the bottom of the indoor unit. Pull the cover ① → ②.

2 Remove the cover from the indoor unit.



3 Pull back the tubing holder.

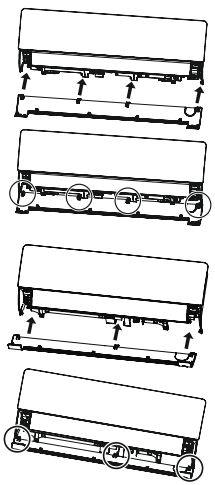
4 Remove pipe port cover and positioning the tubing



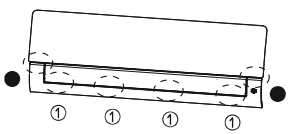
* The feature can be changed according to type of model.

Assembly of chassis cover

1 Insert 4 hooks of the chassis cover into gap of the chassis certainly.



2 Push the 6 point hook to assemble chassis cover. Push the chassis cover ① → ②.



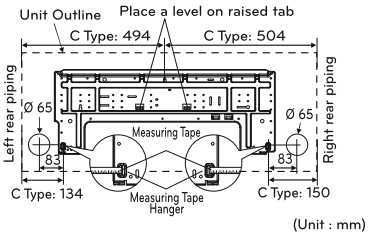
NOTE

To protect the chassis cover bended, assembly chassis cover correctly.

Fixing Installation Plate

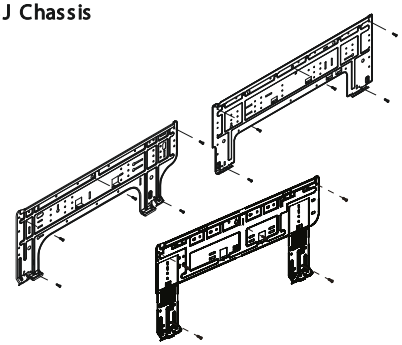
The wall you select should be strong and solid enough to prevent vibration

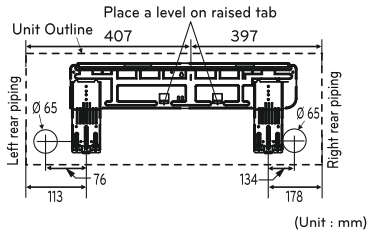
1 Mount the installation plate on the wall with type "A" screws. If mounting the unit on a concrete wall, use anchor bolts.
   - Mount the installation plate horizontally by aligning the centerline using Horizontal meter.



(Unit : mm)

SK/SJ Chassis





(Unit : mm)

The feature can be changed according to type of model.

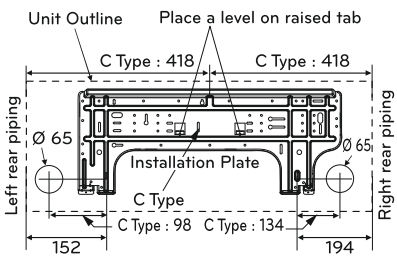
The feature can be changed according to type of model.

2 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.

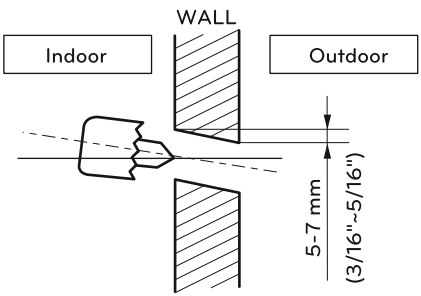
Drill a Hole in the Wall

- Drill the piping hole with a Ø 65 mm hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

SK/SJ Chassis



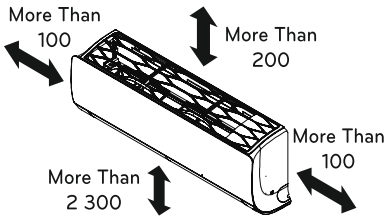
(Unit : mm)



Indoor Unit Installation - High Wall

Select the best Location

- There should not be any heat or steam near the unit.
- Select a place where there are no obstacles around of the unit.
- Make sure that condensation drainage can be conveniently routed away.
- Do not install near a doorway.
- Ensure that the interval between a wall and the left (or right) of the unit is more than 100 mm. The unit should be installed as high as possible on the wall, allowing a minimum of 200 mm from ceiling.
- Use a metal detector to locate studs to prevent unnecessary damage to the wall.



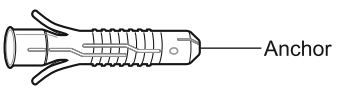
(Unit : mm)

* The feature can be changed according to type of model.

NOTE

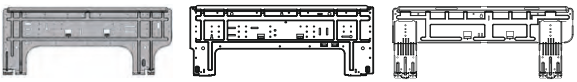
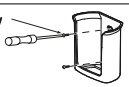
The gap between the indoor unit and ceiling is needed more than 200 mm for disassemble the air filter.

- Do not use nails and/or screws to attach indoor units to sheetrock, drywall, plasterboard, tile, plywood, or similar material types without proper anchors.Indoor units must be securely, and properly mounted and anchored or damage and/or injury may result from improper installation.



Anchor (mm)	Screw (mm)
6 x 30	4 x 50

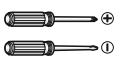
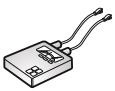
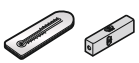
INSTALLATION PARTS

Name	Quantity	Shape
Installation plate	1 EA	 The feature can be changed according to type of model.
Type "A" screw	5 EA	
Type "B" screw	2 EA	
Type "C" screw	2 EA	
Remote control holder	1 EA	Type "B" screw 
Cloth tape	1 EA	
Connector	1 EA (5.2 kW) 1 EA (7.0 kW)	 5.2 kW : ① Ø9.52 (3/8) → Ø12.7 (1/2) 7.0 kW : ① Ø9.52 (3/8) → Ø12.7 (1/2)

Screws for fixing panels are attached to decoration panel.

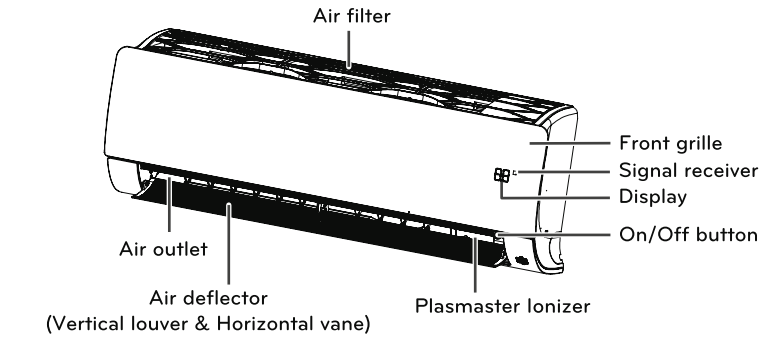
When Indoor unit (5.2/7.0 kW) is connected to the Multi Outdoor unit, use the connector.

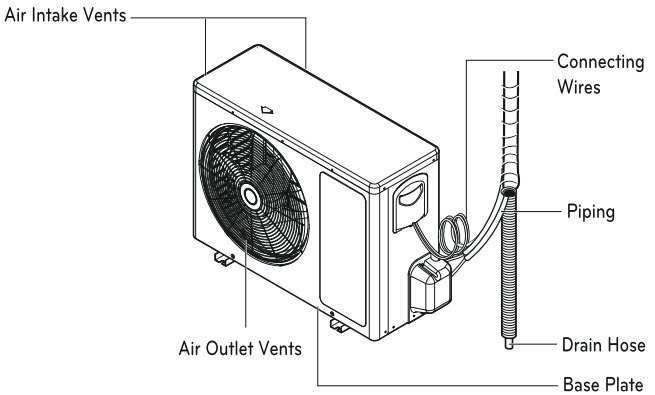
INSTALLATION TOOLS

Figure	Name	Figure	Name
	Screw driver		Multi-meter
	Electric drill		Hexagonal wrench
	Measuring tape, Knife		Ammeter
	Hole core drill		Gas-leak detector
	Spanner		Thermometer, Level
	Torque wrench		Flaring tool set

INTRODUCTION- HIGH WALL

Features





* The feature can be changed according to type of model.

NOTE

• When mechanical connectors are reused indoors, sealing parts shall be renewed.

⚠ CAUTION

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

1 Never fail to have an individual power specialized for the air conditioner. As for the method of wiring, be guided by the circuit diagram pasted on the inside of control box cover.

2 Provide a circuit breaker switch between power source and the unit.

3 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 give rise to burn-out of the wires.)

4 Specification of power source

5 Confirm that electrical capacity is sufficient.

6 Be sure that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.

7 Confirm that the cable thickness is as specified in the power sources specification. (Particularly note the relation between cable length and thickness.)

8 Never fail to equip a leakage breaker where it is wet or moist.

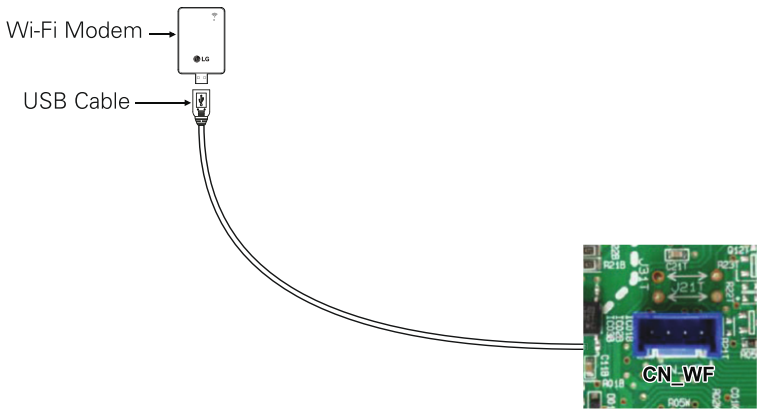
9 The following troubles would be caused by voltage drop-down.

- Vibration of a magnetic switch, damage on the contact point there of fuse breaking, disturbance to the normal function of a overload protection device.
- Proper starting power is not given to the compressor.

WI-FI MODEM INSTALLATION

Installation

1. Check if the indoor unit is turned off and the power of the outdoor unit is turned off.
2. Open the control box of the indoor unit.
3. Connect the USB cable to the indoor unit PCB (CN_WF).
4. Connect the Wi-Fi modem to the USB cable.

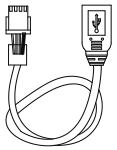
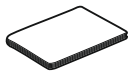


<Installation Example>

WI-FI MODEM INSTALLATION

Components

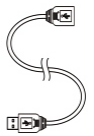
Installation Parts

Name	Quantity	Appearance
Wi-Fi Modem	1	
USB Cable (120 cm)	1	
Manual	1	
Double-sided Tape	2	

Installation Equipment

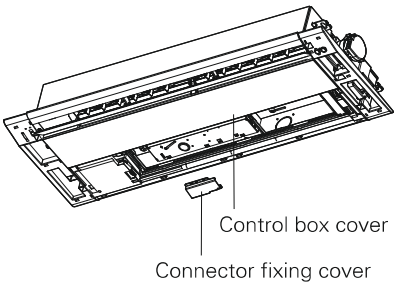
Appearance	Name
	Driver

USB Extension Cable (Sold Separately) Model: PWYREW000

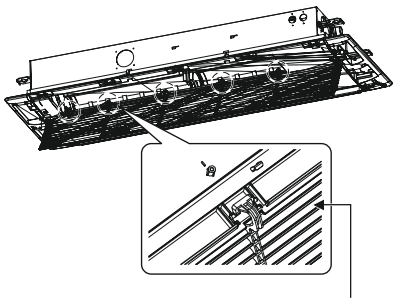
Name	Quantity	Appearance
USB Extension Cable (10m)	1	

※ Use a USB extension cable depending on the installation environment. USB extension cable includes ferrite core.

7 For models with an intermediate connector, fasten the connector fixing cover to the control box cover, and insert the air filter back into the indoor unit. Models without an intermediate connector are connected directly to the housing in the PCB and do not use a fixed cover.



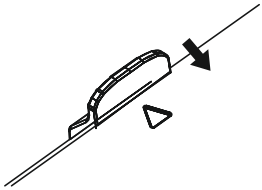
8 Reattach the suction panel to the front panel and close it completely.



⚠ CAUTION

Make sure that the suction panel's hooks are all there and replace any missing hooks.

9 Push on the fixing hook to secure the suction panel.

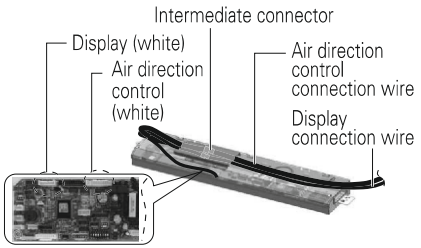


6 Connecting the Panel Connector

- Models with Intermediate Connectors
  Open the connector fixing cover and connect the air direction control/display/suction panel connection wires to the connector. Insert the connector into the designated area until it makes a 'click' sound.
  Being poorly fastened could cause problems with operation.

※ Air direction control connection wires and connector - 10 Pin (white)
Display connection wires and connectors - 8 Pin (white)
Plasma kit connection wires - 4 Pin (blue)

Case1: Models with regular grill



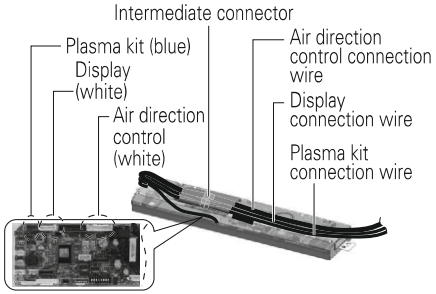
Fastening: Connect the air direction control connection wire and the display connection wire to the intermediate connector

Color: Air direction control connector [white], PCB housing [white]Display connector [white], PCB housing [white]



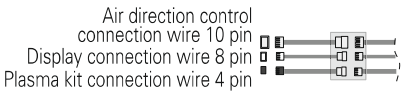
PCB intermediate connector connection wire

Case2: Models with plasma kit



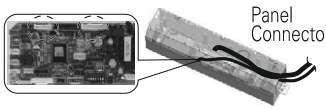
Fastening: Connect the air direction control connection wire, the display connection wire and the plasma kit connection wire to the intermediate connector

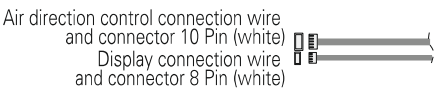
Color: Air direction control connector [white], PCB housing [white]
Display connector [white], PCB housing [white]
Plasma kit connector [white], PCB housing [white]



PCB intermediate connector connection wire

- For models without an intermediate connector, connect the air direction control/display/suction panel connection wires to the housing inside the main PCB.





PCB Panel Connector

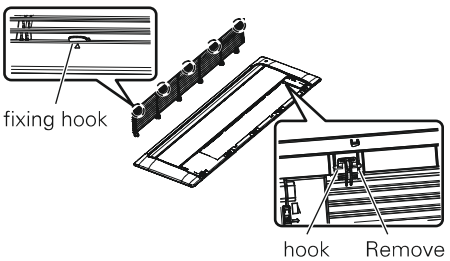
Decorative Panel for 1-Way Type (Type 2)

Front Panel Installation

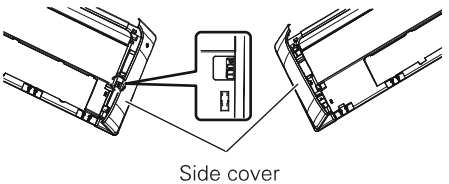
Before installing the front panel, be sure to remove the air filter from the indoor unit.

1 Remove the suction panel.

- Push all of the fixing hooks fitted on the front panel.
- Open the suction panel and push it down to remove it completely.



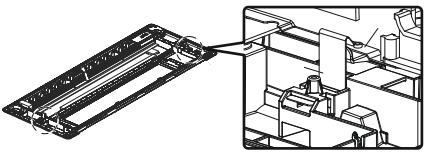
2 Pull on the PULL handle to remove the side covers on both sides of the front panel.



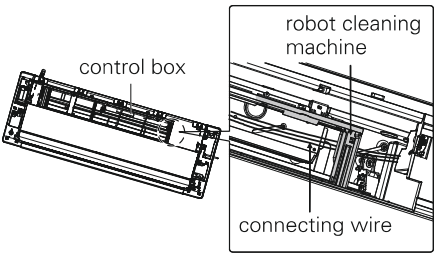
CAUTION

Be careful not to damage the hook.

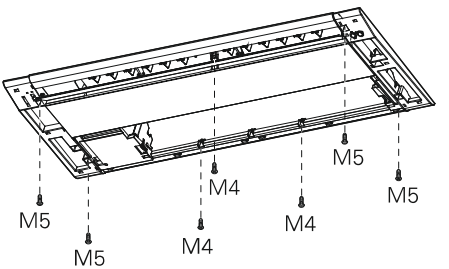
3 Hang the hooks from both ends of the front panel on the body of the indoor unit.



4 Put the front panel's connection wires inside the bottom of the drain pan and pull them out towards the control box.



5 Use the front panel fixing bolts to affix the panel to the indoor unit.



CAUTION

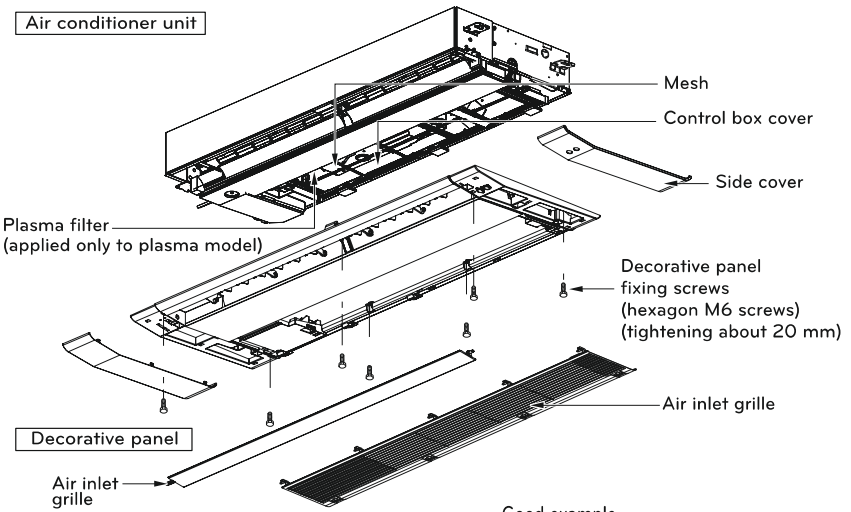
If you do not affix all the fixing screws, the air conditioner may operate abnormally.

INSTALLATION OF DECORATIVE PANEL(ACCESSORY)

Decorative Panel for 1-Way Type (Type 1)

The decoration panel has its installation direction.	Before installing the decoration panel, always remove the paper template.

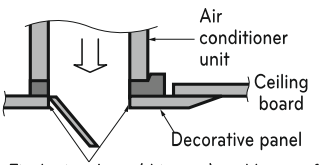
1 Open the air outlet vane, and extract side covers.
2 Remove the air inlet grille from the decoration panel.
3 Hook decoration panel to indoor unit, using hooks attached at the backside of both side of decoration panel.
4 Arrange wires not to get caught between decoration panel and indoor unit.
5 Screw 7 fixing screws.
6 Connect the vane motor connector and display connector. (Plasma connector for plasma model)
7 Install the air inlet grille (including the air filter) and side covers.



⚠ CAUTION

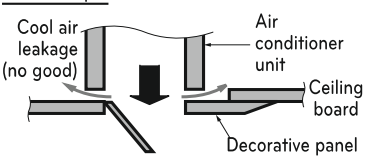
Install certainly the decorative panel.
Cool air leakage causes sweating.
⇨ Water drops fall.

Good example



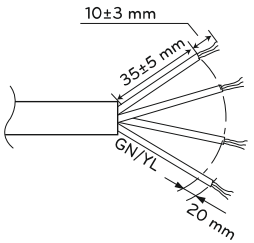
Fit the insulator (this part) and be careful for cool air leakage

Bad example



CAUTION

The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications. (The appliance shall be installed in accordance with national wiring regulations.)



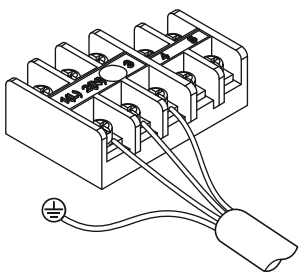
Type	Normal Cross-Sectional Area (mm^2)
1-Way	1.0

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

Pipes and wires should be purchased separately for installation of the product.

CAUTION

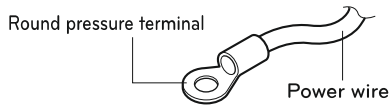
The Power cord connected to the unit should be selected according to the following specifications.



* The figure can be changed according to model.

Precautions when laying power wiring

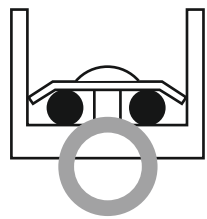
Use round pressure terminals for connections to the power terminal block.



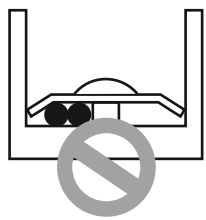
When none are available, follow the instructions below.

- Do not connect wiring of different thicknesses to the power terminal block. (Slack in the power wiring may cause abnormal heat.)
- When connecting wiring which is the same thickness, do as shown in the figure below.

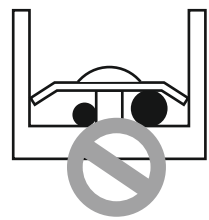
Connect same thickness wiring to both sides.



It is forbidden to connect two to one side.



It is forbidden to connect wiring of different thicknesses.



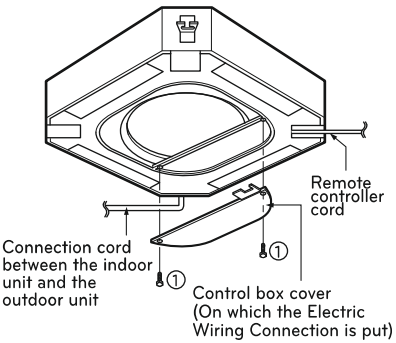
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal block.
- Use an appropriate screwdriver for tightening the terinal screws. A screwdriver with a small head will strip the head and make proper tighterning impossible.
- Over-tightening the terminal screws may break them.

Applies to	Insulation material standard (mm) (besides normal conditions for residential use)		Insulation material Standard (mm) - residential		Insulation material standard (mm) (unfavorable conditions)
			If installed in an air-conditioned place (CASE 1) (ex: bedroom, living room, etc.)	If installed in a non-air-conditioned place (CASE 2) (ex: hallway, outdoors, etc.)	
	Refrigerant piping dimensions (mm)	EPDM	EPDM	EPDM	EPDM
Gas piping	6.35	19	13	19	19
	9.52	19	13	19	25
	12.7	19	13	19	25
	15.88	19	13	19	25
	19.05	19	13	19	25
	22.22	19	13	19	32
	25.40	19	19	19	32
	28.58	19	19	19	32
	31.75	19	19	19	32
	38.1	25	19	25	32
	44.45	25	19	25	32
Liquid piping	6.35 9.52	9	9	9	9
	12.7~ 44.45	13	13	13	13

- Normal conditions: Temperature of 30 °C, relative humidity of 85 %
- Unfavorable conditions: Temperature of 30 °C, relative humidity of 90 % (humid places such as bathrooms, swimming pools, etc.: air supply and exhaust fan installation)

Wiring Connection

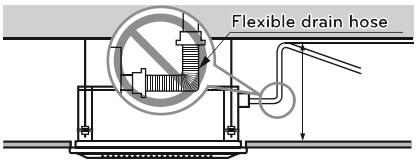
- Open the control box cover and connect the Remote controller cord and Indoor power wires.
- Remove the control box cover for electrical connection between the indoor and outdoor unit.
- Use the cord clamper to fix the cord.



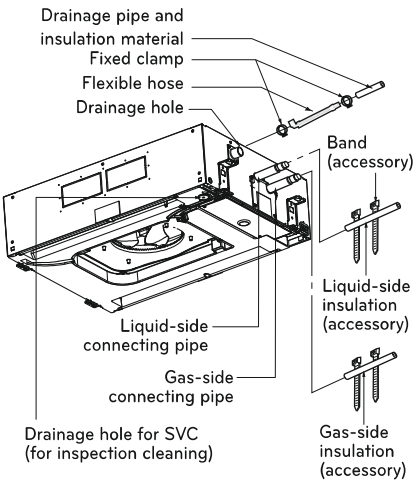
* The figure can be changed according to model.

⚠ CAUTION

The supplied flexible drain hose should not be curved, neither screwed. The curved or screwed hose may cause a leakage of water.



1 Be sure to insulate piping and drainage pipes.
- If condensation forms on the piping, it could cause water leakage.

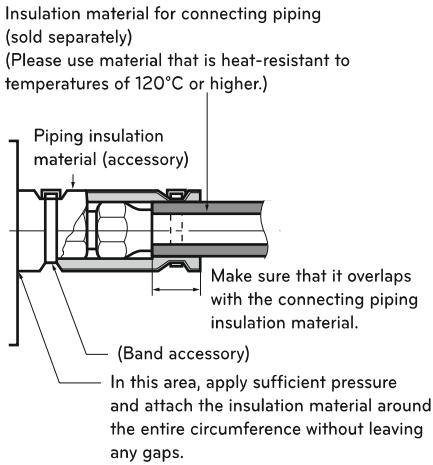


- When transporting the product, be careful not to let the drainage hole or connecting pipe bump into anything.

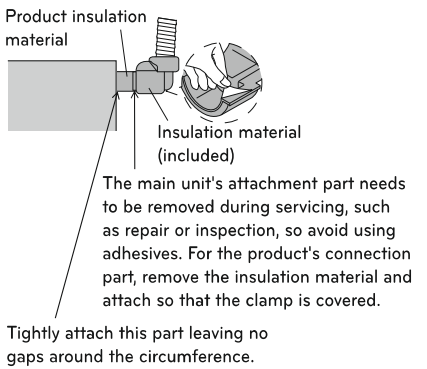
* The figure can be changed according to model.

2 Install insulation for piping and drainage pipes as shown in the figure.

Piping insulation



Drainage pipe insulation



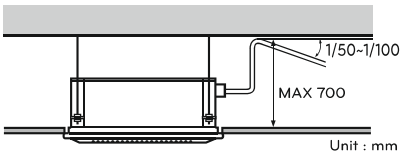
3 Cassette refrigerant piping EPDM insulation material standard thickness

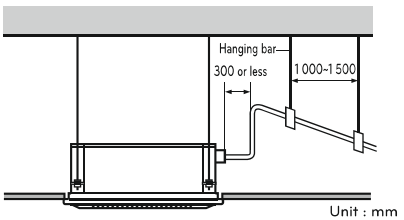
Indoor Unit Drain Piping

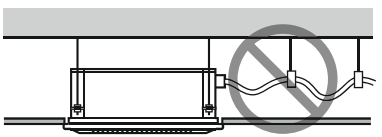
- Drain piping must have down-slope (1/50 to 1/100): be sure not to provide up-and-down slope to prevent reversal flow.
- During drain piping connection, be careful not to exert extra force on the drain port on the indoor unit.
- The outside diameter of the drain connection on the indoor unit is 32 mm.

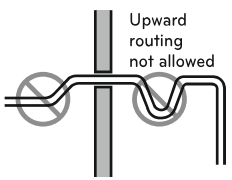
Piping material: Polyvinyl chloride pipe VP-25 and pipe fittings

- Be sure to execute heat insulation on the drain piping.

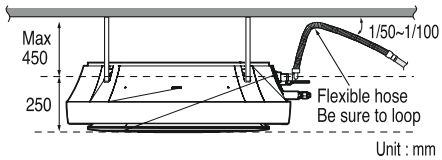


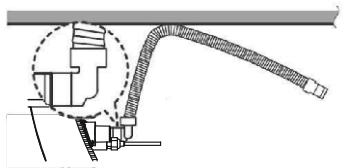




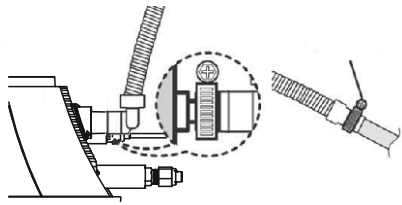


Heat insulation material: Polyethylene foam with thickness more than 8 mm.





1. Connect the elbow connector to the product facing upwards.

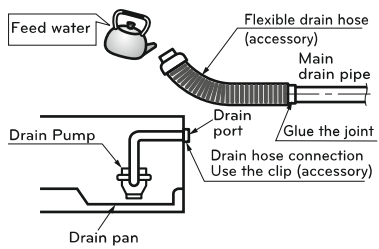


2. Place the bolt of the clamp joint upwards to secure the connector.

Drain test

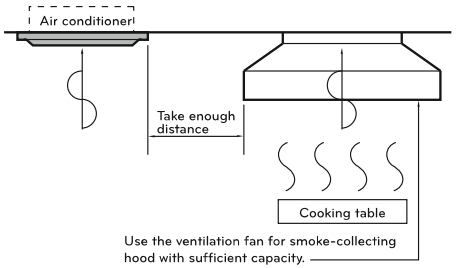
The air conditioner uses a drain pump to drain water.
Use the following procedure to test the drain pump operation:

- Connect the main drain pipe to the exterior and leave it provisionally until the test comes to an end.
- Feed water to the flexible drain hose and check the piping for leakage.
- Be sure to check the drain pump for normal operating and noise when electrical wiring is complete.
- When the test is complete, connect the flexible drain hose to the drain port on the indoor unit.



1 Such places as restaurants and kitchen where considerable amount of oil steam and flour is generated. These may cause heat exchange efficiency reduction, or water drops, drain pump mal-function. In these cases, take the following actions;

- Make sure that ventilation fan is enough to cover all noxious gases from this place.
- Ensure enough distance from the cooking room to install the air conditioner in such a place where it may not suck oily steam.

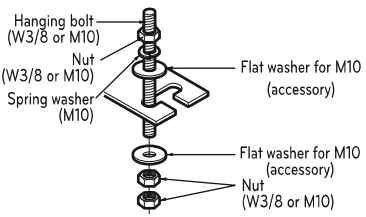


2 Avoid installng air conditioner in such places where cooking oil or iron powder is generated.

3 Avoid places where inflammable gas is generated.

4 Avoid place where noxious gas is generated.

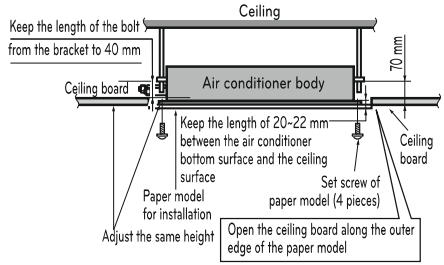
5 Avoid places near high frequency generators.



The following parts is option.
① Hanging Bolt - W 3/8 or M10
② Nut - W 3/8 or M10
③ Spring Washer - M10
④ Plate Washer - M10

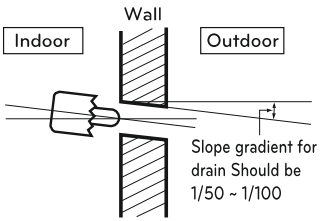
Drill the piping hole on the wall slightly tilted to the outdoor side using a Ø 70 hole-core drill.

<Type : 1-Way>

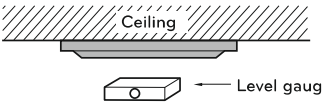


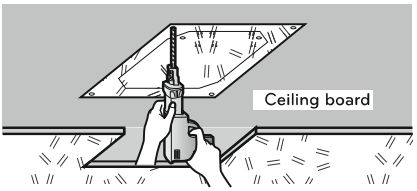
CAUTION

Tighten the nut and bolt to prevent unit falling.



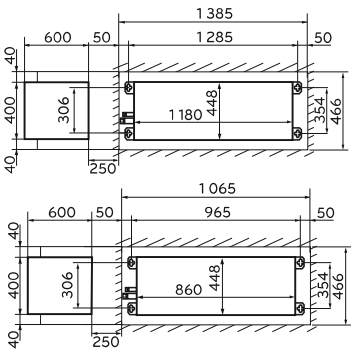
THE INDOOR UNIT INSTALLATION





- Select and mark the position for fixing bolts and piping hole.
- Decide the position for fixing bolts slightly tilted to the drain direction after considering the direction of drain hose.
- Drill the hole for anchor bolt on the wall.

[TT/TU Chassis] (Unit : mm)



CAUTION

- This air-conditioner uses a drain pump.
- Install the unit horizontally using a level gauge.
- During the installation, care should be taken not to damage electric wires.

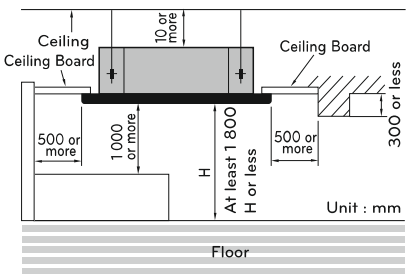
NOTE

Avoid the following installation location.

Indoor Unit Installation- 1 Way Cassette

- There should not be any heat source or steam near the unit.
- There should not be any obstacles to prevent the air circulation.
- A place where air circulation in the room will be good.
- A place where drainage can be easily obtained.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, or other obstacles.
- The indoor unit must keep the maintenance space.

The basic installation for the round type should be in an exposed area.
Do not install at a non exposed installation site such as areas with ceiling texture.



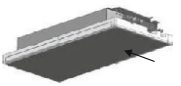
Chassis	H
TU/TT	3 300

* Please use an annexed sheet or the corrugated cardboard on the bottom of packing as installation sheet.



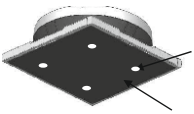
Annexed sheet

Or



Packing corrugated cardboard on the bottom

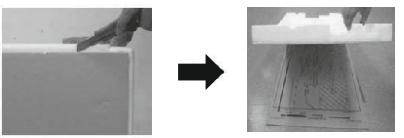
Or



Hanging bolt location

Packing corrugated cardboard on the bottom

* When using the bottom sheet, please use it after separating the installation sheet from packing of the product floor by using a knife etc as a picture below.

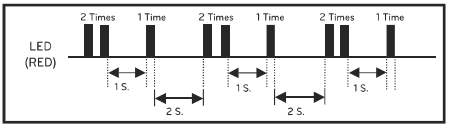


Error Indicator (Outdoor)

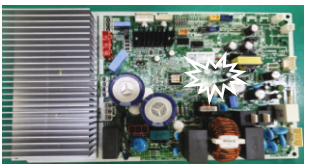
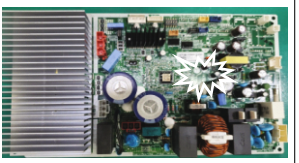
Error code	Description	LED (Red)	LED (Red)	Indoor status
		LED 1 (Red)	LED 2 (Green)	
21	DC Peak (IPM Fault)	2times ◑	1times ◑	OFF
22	Max. CT (CT2)	2times ◑	2times ◑	OFF
23	DC Link low volt.	2times ◑	3times ◑	OFF
26	DC Comp position error	2times ◑	6times ◑	OFF
27	PFC Fault error	2times ◑	7times ◑	OFF
29	Comp over current	2times ◑	9times ◑	OFF
32	D-Pipe high (Inv.)	3times ◑	2times ◑	OFF
35	Low pressure error	3times ◑	5times ◑	OFF
40	CT sensor error (open/short)	4times ◑	0	OFF
41	Inv. D-Pipe sensor error (open/short)	4times ◑	1times ◑	OFF
44	Outdoor air sensor error (open/short)	4times ◑	4times ◑	OFF
45	Cond. Middle pipe sensor error	4times ◑	5times ◑	OFF
51	Capacity over	5times ◑	1times ◑	OFF
53	Communication error (indoor - outdoor)	5times ◑	3times ◑	OFF
60	EEPROM error (outdoor)	6times ◑	0	OFF
61	Cond. Middle pipe high	6times ◑	1times ◑	OFF
62	Heatsink error	6times ◑	2times ◑	OFF
65	Heatsink sensor error (open/short)	6times ◑	5times ◑	OFF
67	BLDC motor fan lock (outdoor)	6times ◑	7times ◑	OFF

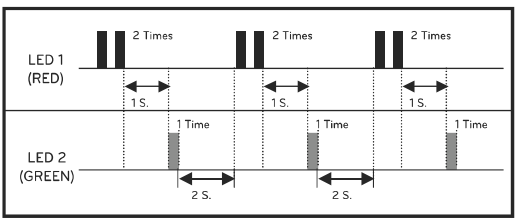
If abnormal voltage is supplied, the protection circuits will turn off the product in order to prevent the component damage. The product will automatically restart after 3 minutes.

SELF-DIAGNOSIS FUNCTION

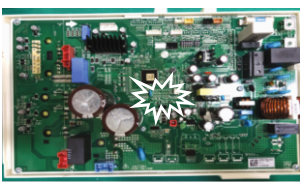


Outdoor Error
Ex) Error 21 (DC Peak)

		
Z2UQ27GFA0/1	Z2UQ32GFA0	Z3UQ37GFA0



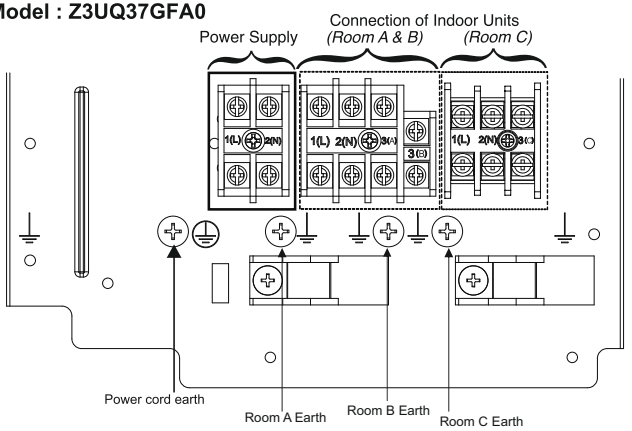
Outdoor Error
Ex) Error 21 (DC Peak)



Z3UQ51GFA0

If abnormal voltage is supplied, the protection circuits will turn off the product in order to prevent the component damage. The product will automatically restart after 3 minutes.

Model : Z3UQ37GFA0



Power Supply

1(L)	Power Cord L
2(N)	Power Cord N

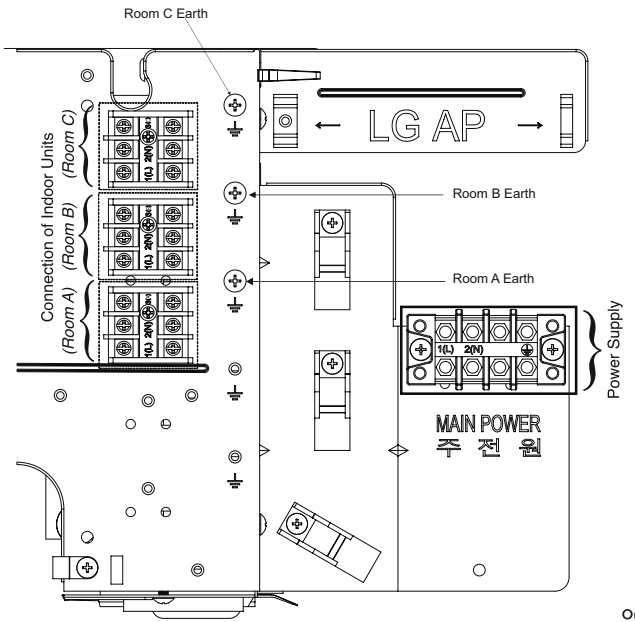
Connection of Indoor Units *(Room A & B)*

1(L)	Room A (L) & Room B (L)
2(N)	Room A (N) & Room B (N)
3(A)	Room A Communication
3(B)	Room B Communication

Connection of Indoor Units *(Room C)*

1(L)	Room C (L)
2(N)	Room C (N)
3(C)	Room C Communication

Model : Z3UQ51GFA0



Power Supply

1(L)	Power Cord L
2(N)	Power Cord N
⏚	Power Cord Earth

Connection of Indoor Units *(Room A)*

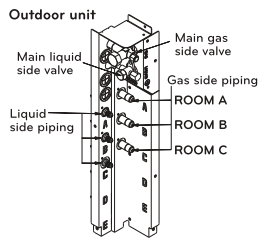
1(L)	Room A (L)
2(N)	Room A (N)
3(A)	Room A Communication

Connection of Indoor Units *(Room B)*

1(L)	Room B (L)
2(N)	Room B (N)
3(B)	Room B Communication

Connection of Indoor Units *(Room C)*

1(L)	Room C (L)
2(N)	Room C (N)
3(C)	Room C Communication



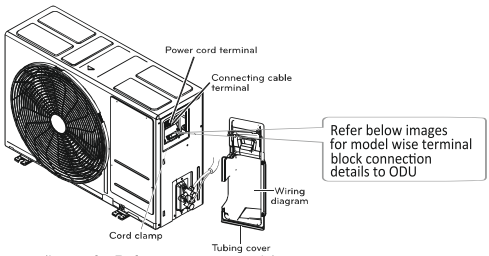
Piping should be consistent with circuit in all models

Connecting the cable to Outdoor Unit

Remove the side panel for wiring connection. Use the cord clamp to fix the cord.

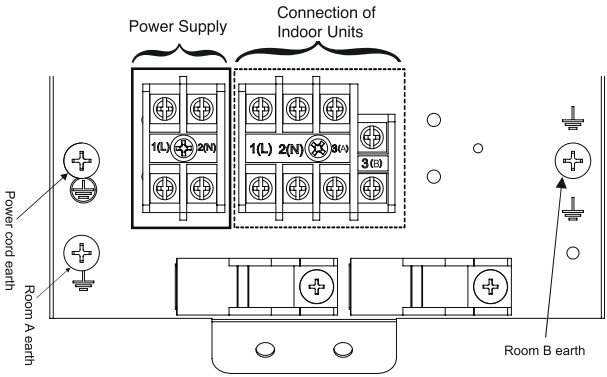
Earthing work

- Connect the cable of diameter more to the earthing terminal provided in the control box and do earthing.



(Image for Reference purpose only)

Model : Z2UQ27GFA0/1



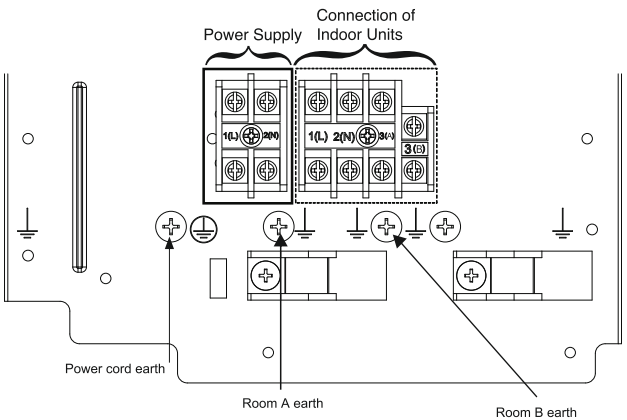
Power Supply

1(L)	Power Cord L
2(N)	Power Cord N

Connection of Indoor Units

1(L)	Room A (L) & Room B (L)
2(N)	Room A (N) & Room B (N)
3(A)	Room A Communication
3(B)	Room B Communication

Model : Z2UQ32GFA0



Power Supply

1(L)	Power Cord L
2(N)	Power Cord N

Connection of Indoor Units

1(L)	Room A (L) & Room B (L)
2(N)	Room A (N) & Room B (N)
3(A)	Room A Communication
3(B)	Room B Communication

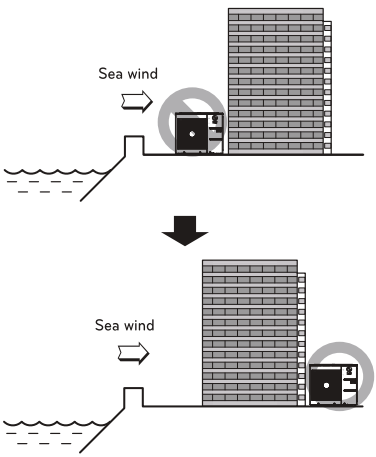
INSTALLATION GUIDE AT THE SEASIDE

⚠CAUTION

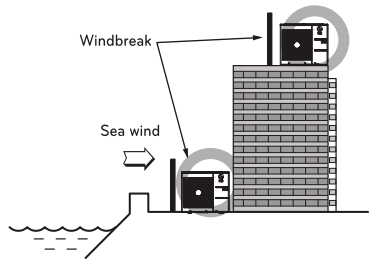
- Air conditioners should not be installed in areas where corrosive gases, such as acid or alkaline gas, are produced.
- Do not install the product where it could be exposed to sea wind (salty wind) directly. It can result corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient performance.
- 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)

If the outdoor unit is to be installed close to the seaside, direct exposure to the sea wind should be avoided. Install the outdoor unit on the opposite side of the sea wind direction.



In case, to install the outdoor unit on the seaside, set up a windbreak not to be exposed to the sea wind.



- It should be strong enough like concrete to prevent the sea wind from the sea.
- The height and width should be more than 150% of the outdoor unit.
- It should be keep more than 70 cm of space between outdoor unit and the windbreak for easy air flow.

Place with fluent water draining

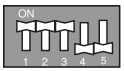
- Install at a place with fluent water draining to prevent damage from localized heavy rain and avoid frequent flooded area.

- Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water.

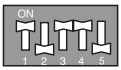
SEASONAL WIND AND CAUTIONS IN WINTER

- Sufficient measures are required in a snow area or severe cold area in winter so that product can be operated well.
- Get ready for seasonal wind or snow in winter even in other areas.
- Install a suction and discharge duct not to let in snow or rain.
- Install the outdoor unit not to come in contact with snow directly. If snow piles up and freezes on the air suction hole, the system may malfunction. If it is installed at snowy area, attach the hood to the system.
- Install the outdoor unit at the higher installation console by 50cm than the average snowfall (annual average snowfall) if it is installed at the area with much snowfall.
- Where snow accumulated on the upper part of the Outdoor Unit by more than 10cm, always remove snow for operation.

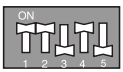
Saving Power Consumption with Mode Lock.



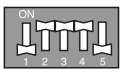
Saving Power Consumption (step 1) + Mode Lock (Cooling)



Saving Power Consumption (step 1) + Mode Lock (Heating)



Saving Power Consumption (step 2) + Mode Lock (Cooling)



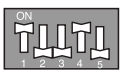
Saving Power Consumption (step 2) + Mode Lock (Heating)

Night Quiet Mode

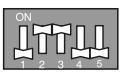
Night Quiet Mode operation lowers the noise level of the outdoor unit by changing the comp frequency and fan speed. This function is operated all night long.

Setting Procedure

1 Set the DIP Switch as follow after shutting the power source down.



Step 1



Step 2

❊ Noise level : Step 1 > Step 2

2 Reset the power.

⚠CAUTION

- If comp frequency and fan speed are down, the cooling capacity may decrease accordingly.
- This function is only available for Cooling Mode.
- If you want to stop the Night Quiet Mode, Change the DIP Switch.
- If operating indoor unit is set by the fan speed "Power", Night Quiet Mode will be stopped until fan speed "Power" is changed.

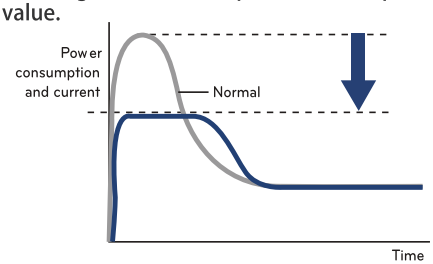
MAX COMBINATION CAPACITY

Model	Max Room No.	Combination Indoor Capacity (kW)	Max Combination (kW)
Z2UQ27GFA0/1	2	3.5 / 5.2	10.5
Z2UQ32GFA0	2	3.5 / 5.2 / 7.0	12.2
Z3UQ37GFA0	3	3.5 / 5.2 / 7.0	14.0
Z3UQ51GFA0	3	3.5 / 5.2 / 7.0	17.4

The combination of indoor unit is to be decided that the sum of indoor unit capacity index must be smaller than the maximum combination capacity of outdoor unit. We recommend to calculate indoor unit capacity like below.

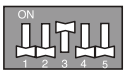
Saving Power Consumption

Saving Power Consumption operation is the function which enables efficient operation by lowering the maximum power consumption value.

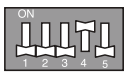


Setting Procedure

1 Set the DIP Switch as follow after shutting the power source down.



Step 1



Step 2

2 Reset the power.

Saving Power Consumption Current level.

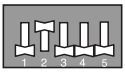
Model	Z2UQ27GFA0/1	Z2UQ32GFA0	Z3UQ37GFA0	Z3UQ51GFA0
Step1 (A)	10	10	10	13
Step2 (A)	7.5	7.5	7.5	12

Wiring Error Check

You can check whether or not the wiring is correct.

Setting Procedure

1 Set the DIP Switch as follow after shutting the power source down.



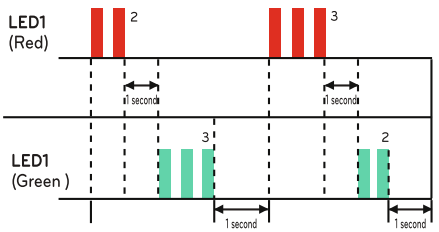
2 Reset the power.

3 Check that the Red and Green LED of PCB are on during work.
(The indoor unit is operated by force.)

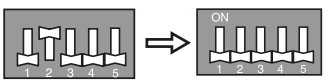
4 If the wiring is correct, the Green LED will light up.
If the wiring is wrong, display as below (Display only wrong connection.)

- Red LED : Piping Number
- Green LED : Wiring Number (Room)

Example)
If the Red LED blinks twice and the Green LED blinks 3 times, 2nd pipe is connected to 3rd room.



5 You should return the DIP Switch to operate normally after finishing wiring error check.

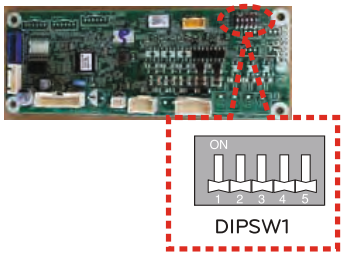


⚠CAUTION

- If Indoor unit doesn't communicate to outdoor Unit, function could not be operated correctly.
- Only the wrong wiring connection is displayed. You should change connection correctly to operate the product.
- If Outdoor and Indoor temperature is too low in winter, the wiring error check function will not be operated.
(Red LED is lighting)

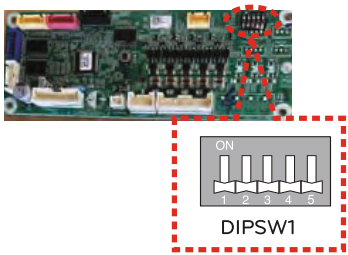
Z2UQ27GFA0/1





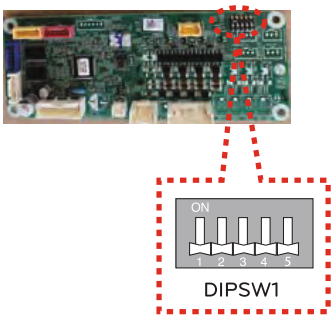
Z3UQ51GFA0





Z2UQ32GFA0 , Z3UQ37GFA0

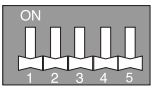


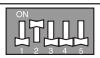
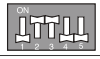
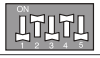
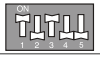
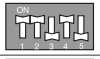
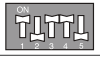


FUNCTION

DIP S/W Setting

If you set the DIP Switch when power is on, the change in setting is not applicable. The changing setting is enabled only when Power is reset.



DIP Switch 1 2 3 4 5	Function
	Normal Operation (No Function)
	Wiring Error Check
	Saving Power Consumption (Step 1)
	Saving Power Consumption (Step 2)
	Night Quiet Mode (Step 1)
	Night Quiet Mode (Step 2)
	Mode Lock (Cooling) + Night Quiet Mode (Step 1)
	Mode Lock (Cooling) + Night Quiet Mode (Step 2)
	Mode Lock (Cooling) + Saving Power Consumption (Step 1)
	Mode Lock (Cooling) + Saving Power Consumption (Step 2)
	Mode Lock (Heating) + Saving Power Consumption (Step 1)
	Mode Lock (Heating) + Saving Power Consumption (Step 2)

⚠ WARNING

When you set the DIP switch, you should turn off the circuit breaker or shut the power source of the product down.

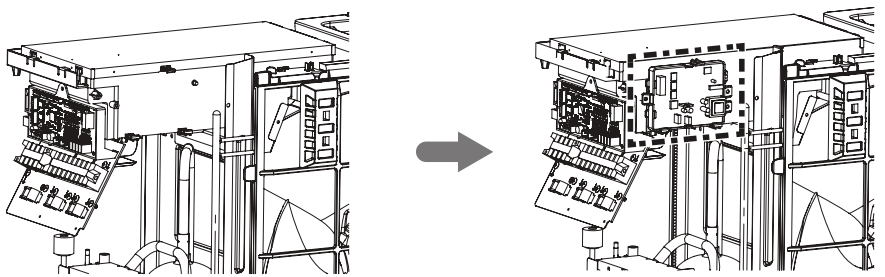
⚠ CAUTION

- Unless the applicable DIP switch is set properly, the product may not work.
- If you want to set a specific function, request that the installer sets the DIP switch appropriately during installation.

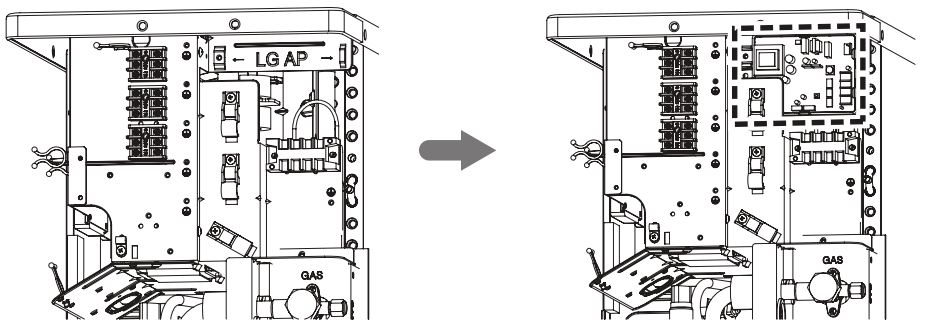
INSTALLATION PI485

Fix the PI485 PCB as shown in Fig.
Detailed installation method refer to PI485 Installation Manual.

Z2UQ32GFA0, Z3UQ37GFA0



Z3UQ51GFA0



FORMING THE PIPING

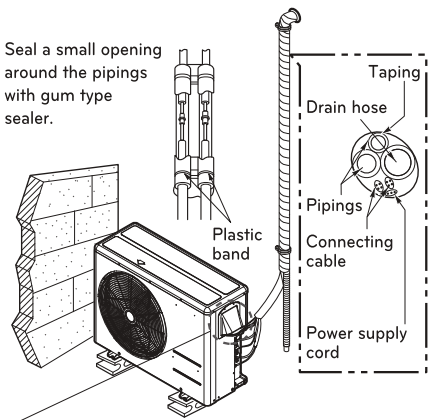
Form the piping by wrapping the connecting portion of the indoor unit with insulation material and secure it with two kinds of vinyl tape.

- 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.

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

1 Tape the piping, drain hose and connecting cable from down to up.

2 Secure the tapped piping along the exterior wall using saddle or equivalent.



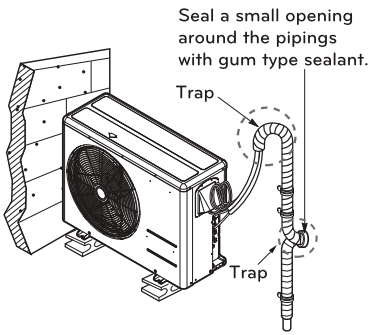
• Trap is required to prevent water from entering into electrical parts.

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

1 Tape the piping and connecting cable from down to up.

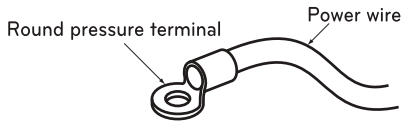
2 Secure the taped piping along the exterior wall. Form a trap to prevent water entering the room.

3 Fix the piping onto the wall by saddle or equivalent.



Precautions when laying power wiring

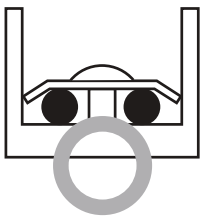
Use round pressure terminals for connections to the power terminal block.



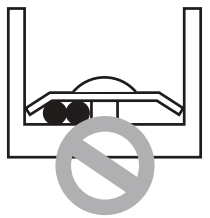
When none are available, follow the instructions below.

- Do not connect wiring of different thicknesses to the power terminal block. (Slack in the power wiring may cause abnormal heat.)
- When connecting wiring which is the same thickness, do as shown in the figure below.

Connect same thickness wiring to both sides.



It is forbidden to connect two to one side.



It is forbidden to connect wiring of different thicknesses.

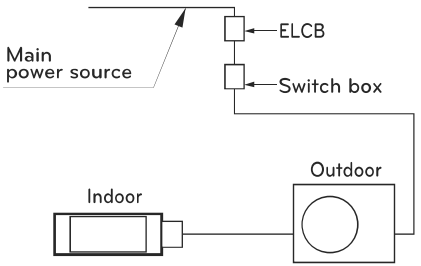


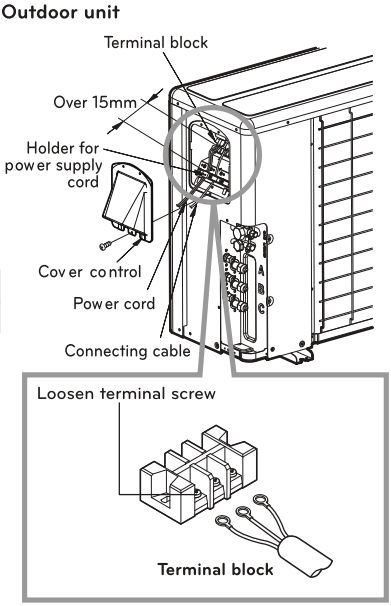
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal block.
- Use an appropriate screwdriver for tightening the **terminal screws. A screwdriver with a small** head will strip the head and make proper tighterning impossible.
- Over-tightening the terminal screws may break them.

Connect the cable to the Outdoor unit

1 Remove the cover control from the unit by loosening the screw. Connect the wires to the terminals on the control board individually as the following.
2 Secure the cable onto the control board with the holder (clamper).
3 Refix the cover control to the original position with the screw.
4 Use a recognized ELCB (Earth Leakage Circuit Breaker)between the power source and the unit. A disconnection device to adequately disconnect all supply lines must be fitted.

Model	Z2UQ27GFA0/1	Z2UQ32GFA0	Z3UQ37GFA0	Z3UQ51GFA0
Circuit Breaker (A)	25	25	25	32





⚠ 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 Firmly tighten the terminal screws to prevent them loosening. After tightening, pull the wires lightly to confirm that they do not move. (If they are loose the unit, the unit will not operate normally or it can cause burn-out of the wires.)
3 Specification of power source.
4 Confirm that electrical capacity 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.)
7 Do not 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.
10 The Power cord connected to the unit should be selected according to the following specifications.

CONNECTING THE CABLE BETWEEN INDOOR UNIT AND OUTDOOR UNIT

(Common for all models)

Connect the cable to the Indoor unit

Connect the cable to the indoor unit by connecting the wires to the terminals on the control board individually according to the 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.)
The earth wire should be longer than the common wires.
The circuit diagram is not subject to change without notice.
When installing, refer to the circuit diagram behind the panel front of Indoor Unit the wiring diagram on the Control Cover Inside Outdoor Unit.

⚠CAUTION

- The circuit diagram is not subject to change without notice.
- Be sure to connect wires according to the wiring diagram.
- Connect the wires firmly, so that not to be pulled out easily.
- Connect the wires according to color codes by referring the wiring diagram.

⚠CAUTION

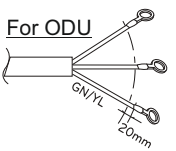
Provide a circuit breaker between power source and the unit as shown below.

⚠CAUTION

The power cord connected to the outdoor unit should be complied with the following specifications (Cable type approved by HAR or SAA).

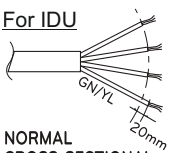
Model	Z2UQ27GFA0/1	Z2UQ32GFA0	Z3UQ37GFA0	Z3UQ51GFA0
NORMAL CROSS SECTIONAL AREA	2.5 sqmm			4 sqmm
Cable Type	H07RN-F			

For ODU



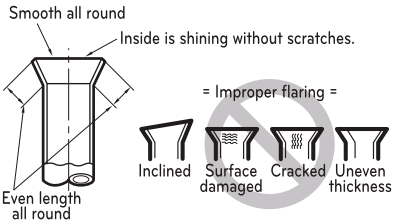
If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer of its service agent.

For IDU



NORMAL CROSS-SECTIONAL **AREA 1.0mm²**
H07RN-F

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.



Connection of piping - Outdoor

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

Connecting pipe order

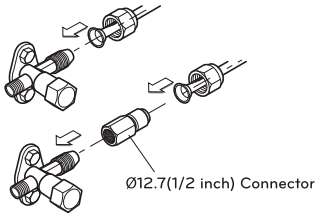
1) ROOM **A~C** gas side pipe

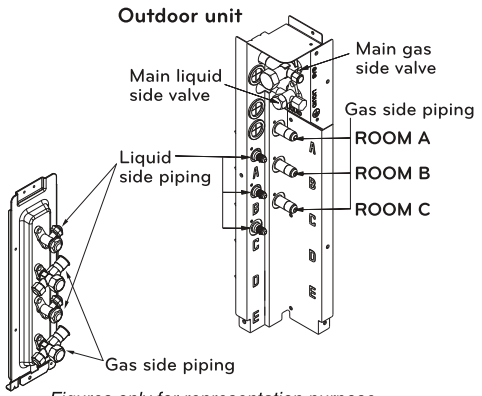
2) ROOM **A~C** liquid side pipe

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.

Outside diameter		Torque
mm	inch	N·m
Ø6.35	1/4	16±2
Ø9.52	3/8	38±4
Ø12.7	1/2	55±6
Ø15.88	5/8	75±7





Figures only for representation purpose

Model	Model Name	Multi Home ODU SVC Valve Size	Interconnecting Pipe Size	Accessory
12k High Wall	S3NZ12JM3*A / ZMNQ12GSJA0	L:6.35mm G:9.52mm	L:6.35mm G:9.52mm	NA
18k High Wall	S3NZ18KM3*A / ZMNQ18GSKA0	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B
24k High Wall	S3NZ24KM3*A / ZMNQ24GSKA0	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B
12k 1 Way CST	ZMNQ12GTU*0.APUNE	L:6.35mm G:9.52mm	L:6.35mm G:9.52mm	NA
18k 1 Way CST	ZMNQ18GTT*0.APUNE	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B
24k 1 Way CST	ZMNQ24GTT*0.APUNE	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B
18k Low Static Duct	ZMNQ18GL5A0.APUNE	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B
24k Low Static Duct	ZMNQ24GL6A0.APUNE	L:6.35mm G:9.52mm	L:6.35mm G:12.7mm	G: 9.52→12.7mm **Part No:** 5162A20010B

For High Wall Only ("*"=F:-Wi-Fi, R:- Plasmaster) For 1-Way CST Only ("*"= A:- No Feature, L:- Wi-Fi + Ionizer, C:- Ionizer, W:- Wi-Fi)

Flaring Work and Connection of Piping

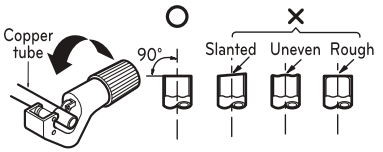
(Common for all models)

Preparation of Piping

- Main cause of gas leakage is defect in flaring work. Carry out correct flaring work in the following procedure.
- Use the de-oxidized copper as piping materials to install.

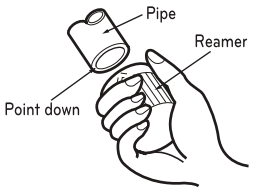
Cut the pipes and the cable

- 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.



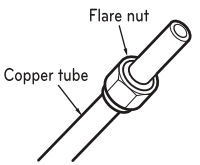
Burrs removal

- 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.



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)

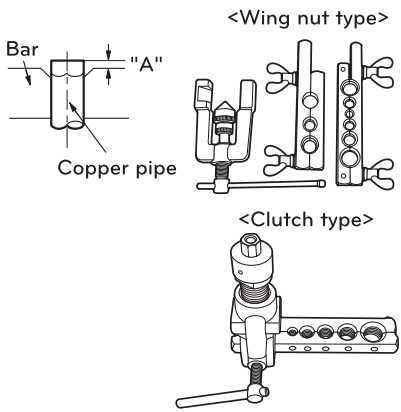


Flaring work

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

Pipe diameter Inch (mm)	A inch (mm)	
	Wing nut type	Clutch type
Ø 1/4 (Ø 6.35)	0.04~0.05 (1.1~1.3)	0~0.02 (0~0.5)
Ø 3/8 (Ø 9.52)	0.06~0.07 (1.5~1.7)	
Ø 1/2 (Ø 12.7)	0.06~0.07 (1.6~1.8)	
Ø5/8 (Ø15.88)	0.06~0.07 (1.6~1.8)	

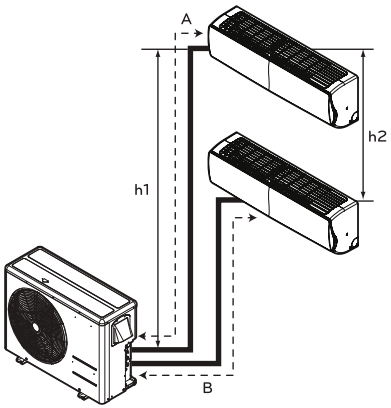
Firmly hold copper tube in a bar(or clamp) as indicated dimension in the table above.



Piping length and elevation

(Unit: m)

Model	Total Length	Max Length (A/B)	Max Elevation (h1)	In-In Elevation(h2)
Z2UQ27GFA0/1	50	25	15	7.5
Z2UQ32GFA0	50	25	15	7.5
Z3UQ37GFA0	60	25	15	7.5
Z3UQ51GFA0	70	25	15	7.5



Multiple Piping Type

⚠ CAUTION

Capacity is based on standard length and maximum allowance length is on the basis of reliability. If outdoor unit is at higher elevation than the indoor units, after 24m of vertical height, 1 oil trap is required.

Refrigerant charge

The calculation of the additional charge should be taken in account for the length of extra pipe.

(Unit: m)

Model	Standard Length	Max Piping for one room	Max Total Piping Length	Chargeless Length	Additional Charge(g/m)
Z2UQ27GFA0/1	7.5	25	50	30	20
Z2UQ32GFA0	7.5	25	50	30	20
Z3UQ37GFA0	7.5	25	60	30	20
Z3UQ51GFA0	7.5	25	70	40	20

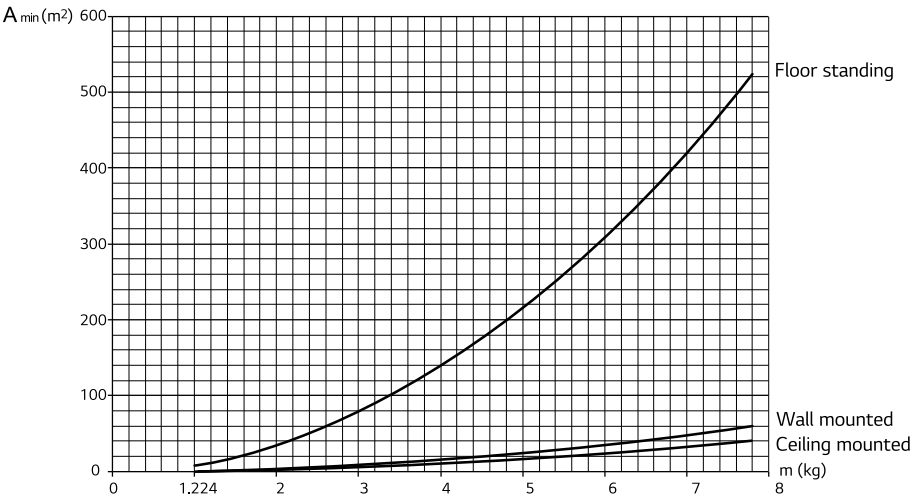
- Multiple Piping Models

  Additional charge (g) = (A Room Installation Length + B Room Installation Length - Chargeless Length) x 20g/m

Minimum Floor Area

Required Floor Area for R32 Unit

- The appliance must be installed, operated and stored in a room with a floor area larger than the minimum area.
- Use the graph and table to determine the minimum area.



- m : Total refrigerant amount in the system
- Total refrigerant amount : Factory refrigerant charge + Additional refrigerant amount
- A_{min} : Minimum area for installation

Floor standing	
m (kg)	Amin (m^2)
< 1.224	-
1.224	12.9
1.4	16.82
1.6	21.97
1.8	27.80
2	34.32
2.2	41.53
2.4	49.42
2.6	58.00
2.8	67.27
3	77.22
3.2	87.86
3.4	99.19
3.6	111.20
3.8	123.90
4	137.29
4.2	151.36
4.4	166.12

Floor standing	
m (kg)	Amin (m^2)
4.6	181.56
4.8	197.70
5	214.51
5.2	232.02
5.4	250.21
5.6	269.09
5.8	288.65
6	308.90
6.2	329.84
6.4	351.46
6.6	373.77
6.8	396.76
7	420.45
7.2	444.81
7.4	469.87
7.6	495.61
7.8	522.04

Wall mounted	
m (kg)	Amin (m^2)
< 1.224	-
1.224	1.43
1.4	1.87
1.6	2.44
1.8	3.09
2	3.81
2.2	4.61
2.4	5.49
2.6	6.44
2.8	7.47
3	8.58
3.2	9.76
3.4	11.02
3.6	12.36
3.8	13.77
4	15.25
4.2	16.82
4.4	18.46

Wall mounted	
m (kg)	Amin (m^2)
4.6	20.17
4.8	21.97
5.2	25.78
5.4	27.80
5.6	29.90
5.8	32.07
6	34.32
6.2	36.65
6.4	39.05
6.6	41.53
6.8	44.08
7	46.72
7.2	49.42
7.4	52.21
7.6	55.07
7.8	58.00

Ceiling Mounted	
m (kg)	Amin (m^2)
< 1.224	-
1.224	0.956
1.4	1.25
1.6	1.63
1.8	2.07
2	2.55
2.2	3.09
2.4	3.68
2.6	4.31
2.8	5.00
3	5.74
3.2	6.54
3.4	7.38
3.6	8.27
3.8	9.22
4	10.21
4.2	11.26
4.4	12.36

Ceiling Mounted	
m (kg)	Amin (m^2)
4.6	13.50
4.8	14.70
5.2	17.26
5.4	18.61
5.6	20.01
5.8	21.47
6	22.98
6.2	24.53
6.4	26.14
6.6	27.80
6.8	29.51
7	31.27
7.2	33.09
7.4	34.95
7.6	36.86
7.8	38.83

INSTALLATION OF OUTDOOR UNIT

Read completely, then follow step by step.

You need to select adequate installation location considering the following conditions, and make sure to acquire the consent of the user.

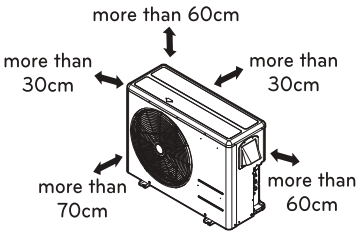
Select the best location

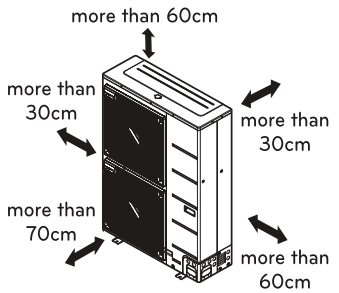
Outdoor unit

1 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.
2 Ensure that the spaces indicated by arrows around front, back and side of the unit.
3 Do not place animals and plants in the path of the warm air.
4 Take the air conditioner weight into account and select a place where noise and vibration are minimum.
5 Select a place so that the warm air and noise from the air conditioner do not disturb neighbors.
6 Place that can sufficiently endure the weight and vibration of the outdoor unit and where even installation is possible.
7 Place that has no direct influence of snow or rain.
8 Place with no danger of snowfall or icicle drop.
9 Place without weak floor or base such as decrepit part of the building or with a lot of snow accumulation.
10 Sufficient ventilation is secured.

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.





- 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 and a door or a window is left open. Moisture may condense and wet or damage furniture.
- Do not expose your skin or kids or plants to the cool or hot air draft. This could harm to your health.
- Do not drink the water drained from the product. It is not sanitary and could cause serious health issues.
- Use a firm stool or ladder when cleaning, maintaining or repairing the product at an height. Be careful and avoid personal injury.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- The installation of pipe-work shall be kept to a minimum
- When mechanical connectors are reused indoors, sealing parts shall be renewed.
- When flared joints are reused indoors, the flare part shall be refabricated.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and Understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision

- Use a soft cloth to clean. Do not use harsh detergents, solvents or splashing water etc. There is risk of fire, electric shock, or damage to the plastic parts of the product.
- Do not touch the metal parts of the product when removing the air filter. There is risk of personal injury.
- Do not step on or put anything on the product. (outdoor units) There is risk of personal injury and failure of product.
- Always insert the filter securely after cleaning. Clean the filter every two weeks or more often if necessary. A dirty filter reduces the efficiency.
- Do not insert hands or other objects through the air inlet or outlet while the product is operating. There are sharp and moving parts that could cause personal injury.
- Be cautious when unpacking and installing the product. Sharp edges could cause injury.
- If the refrigerant gas leaks during the repair, do not touch the leaking refrigerant gas. The refrigerant gas can cause frostbite (cold burn).
- Do not tilt the unit when removing or uninstalling it. The condensed water inside can spill.
- Do not mix air or gas other than the specified refrigerant used in the system. If air enters the refrigerant system, an excessively high pressure results, causing equipment damage or injury.
- If the refrigerant gas leaks during the installation, ventilate the area immediately. Otherwise it can be harmful for your health.
- Dismantling the unit, treatment of the refrigerant oil and eventual parts should be done in accordance with local and national standards.
- Replace the all batteries in the remote control with new ones of the same type. Do not mix old and new batteries or different types of batteries. There is risk of fire or product failure.
- Do not recharge or disassemble the batteries. Do not dispose off batteries in a fire. They may burn or explode.
- If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked. The chemicals in batteries could cause burns or other health hazards.

- Dismantling the unit, treatment of the refrigerant oil and eventual parts should be done in accordance with local and national standards.

⚠ CAUTION

Installation

- Two or more people must 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.
- Install the drain hose to ensure that the condensed water is drained away properly. A bad connection may cause water leakage.
- Keep level even when installing the product. To avoid vibration or noise.
- Do not install the product where the noise or hot air from the outdoor unit could damage or disturb the neighborhoods. It may cause a problem for your neighbors and hence dispute.
- Always check for gas (refrigerant) leakage after installation or repair of product. Low refrigerant levels may cause failure of product.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.
- Wear adequate personal protection equipment (PPE) when installing, maintaining or servicing the product.

Operation

- 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.
- Do not block the inlet or outlet of air flow. It may cause product failure.

- Do not allow water to run into electric parts. Install the unit away from water sources. There is risk of fire, failure of the product, or electric shock.
- Do not store or use or even allow flammable gas or combustibles near the product. There is risk of fire.
- Do not use the product in a tightly closed space for a long time. Perform ventilation regularly. Oxygen deficiency could occur and hence harm your health.
- Do not open the front grille of the product during operation. (Do not touch the electrostatic filter, if the unit is so equipped.) There is risk of physical injury, electric shock, or product failure.
- If strange sound, smell or smoke comes from product.Immediately turn the breaker off or disconnect the power supply cable. There is risk of electric shock or fire.
- Ventilate the product room from time to time when operating it together with a stove, or heating element etc. Oxygen deficiency can occur and hence harm your health.
- When the product is not to be used for a long time, disconnect the power supply plug or turn off the breaker. There is risk of product damage or failure, or unintended operation.
- Take care to ensure that nobody especially kids could step on or fall onto the outdoor unit. This could result in personal injury and product damage.
- Take care to ensure that power cable could not be pulled out or damaged during operation. There is risk of fire or electric shock.
- Do not place anything on the power cable. There is risk of fire or electric shock.
- When flammable gas leaks, turn off the gas and open a window for ventilation before turning on the product. Do not use the telephone or turn switches on or off. There is risk of 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.
- Periodic (more than once/year) cleaning of the dust or salt particles stuck on the heat exchanger by using water.
- Do not install the air conditioner in a place where flammable liquids or gases such as gasoline, propane, paint thinner, etc., are stored.
- Install dedicated electric outlet and earth leakage breaker before using the appliance.

- Use a vacuum pump or Inert (nitrogen) gas when doing leakage test or air purge. Do not compress air or Oxygen and do not use Flammable gases. Otherwise, it may cause fire or explosion.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater)
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- Do not pierce or burn refrigerant cycle part.
- Be aware that refrigerants may not contain an odour.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Refrigerant tubing shall be protected or enclosed to avoid damage.
- Flexible refrigerant connectors (such as connecting lines between the indoor and outdoor unit) that may be displaced during normal operations shall be protected against mechanical damage.
- A brazed, welded, or mechanical connection shall be made before opening the valves to permit refrigerant to flow between the refrigerating system parts.
- Mechanical connections shall be accessible for maintenance purposes.

Operation

- When the product is soaked (flooded or submerged) in water , contact an Authorized Service Center for repair before using it again. There is risk of fire or electric shock.
- Be sure to use only those parts which are listed in the svc parts list. Never attempt to modify the equipment. The use of inappropriate parts can cause an electrical shock, excessive heat generation or fire.
- Do not touch , operate, or repair the product with wet hands. Hold the plug by hand when taking out. There is risk of electric shock or fire.
- Do not place a heater or other heating appliances near the power cable. There is risk of fire and electric shock.

- Always ground the product as per the wiring diagram. Do not connect the ground wire to gas or water pipes lightening rod or telephone ground wire. 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 due to dust, water etc.
- Use the correctly rated breaker or fuse. There is risk of fire or electric shock.
- 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. There is risk of fire or electric shock.
- For installation, removal or reinstall, always contact the dealer or an Authorized Service Center. There is risk of fire, electric shock, explosion, or injury.
- Do not install the product on a defective installation stand. Be sure that the installation area does not deteriorate with age. It may cause product to fall.
- Never install the outdoor unit on a moving base or a place from where it can fall down. The falling outdoor unit can cause damage or injury or even death of a person.
- In outdoor unit the step-up capacitor supplies high voltage electricity to the electrical components. Be sure to discharge the capacitor completely before conducting the repair work. An charged capacitor can cause electrical shock.
- When installing the unit, use the installation kit provided with the product. Otherwise the unit may fall and cause severe injury.
- 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.
- Safely dispose off the packing materials. Like screws, nails, batteries, broken things etc after installation or svc and then tear away and throw away the plastic packaging bags. Children may play with them and cause injury.
- Be sure to check the refrigerant to be used. Please read the label on the product. Incorrect refrigerant used can prevent the normal operation of the unit.
- Do not turn on the breaker or power under condition that front panel, cabinet, top cover, control box cover are removed or opened. Otherwise, it may cause fire, electric shock, explosion or death.

IMPORTANT SAFETY INSTRUCTIONS

	Read the precautions in this manual carefully before operating the unit.		This appliance is filled with flammable refrigerant (R32)
	This symbol indicates that the Operation Manual should be read carefully.		This symbol indicates that a service personnel should be handling this equipment with reference to the Installation Manual.

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.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.
- 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.
- Compliance with national gas regulations shall be observed.

Installation

- Do not use a defective or underrated circuit breaker. Use the correctly rated breaker and fuse. 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 by yourself. There is risk of fire or electric shock.

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ENGLISH

INSTALLATION MANUAL

AIR CONDITIONER

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

MFL72027702
Rev. 02_241024

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