

OWNER'S MANUAL AIR CONDITIONER

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

TYPE : MULTI SPLIT WALL MOUNTED

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FOR YOUR RECORDS

Write the model and serial numbers here:

Model # _____

Serial # _____

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

Dealer's Name _____

Date Purchased _____

- Staple your receipt to this page in the event you need it to prove date of purchase or for warranty issues.



READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventive care on your part can save you a great deal of time and money over the life of your air conditioner. You'll find many answers to common problems in the chart of troubleshooting tips. If you review our chart of **Troubleshooting Tips** first, you may not need to call for service at all.



PRECAUTION

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

We recommend usage of voltage stabilizer with high / low voltage cut off in areas having voltage fluctuations.



Safety Precautions

To prevent the injury of the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

⚠ WARNING This symbol indicates the possibility of death or serious injury.

⚠ CAUTION This symbol indicates the possibility of injury or damage to properties only.

- The meanings of the symbols used in this manual are as shown below.

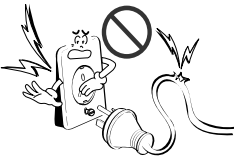
	Be sure not to do.
	Be sure to follow the instruction.

⚠ WARNING

■ Installation

Do not use damaged power cords, plugs, or a loose socket.

- There is risk of fire or electric shock.



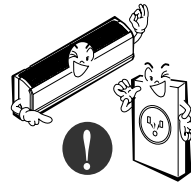
For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.

- There is risk of fire or electric shock.



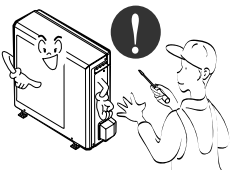
Always use the power plug and socket with the ground terminal.

- There is risk of electric shock.



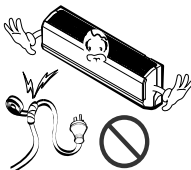
Install the panel and the cover of control box securely.

- There is risk of fire or electric shock.



Do not modify or extend the power cord.

- There is risk of fire or electric shock.



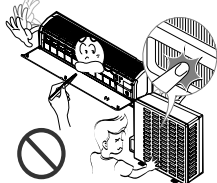
Do not install, remove, or re-install the unit by yourself (customer).

- There is risk of fire, electric shock, explosion, or injury.



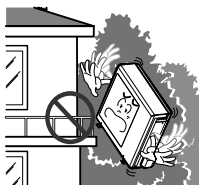
Be cautious when unpacking and installing the product.

- Sharp edges could cause injury. Be especially careful of the case edges and the fins on the condenser and evaporator.



Be sure the installation area does not deteriorate with age.

- If the base collapses, the air conditioner could fall with it, causing property damage, product failure, and personal injury.



For installation, always contact the dealer or an Authorized Service Center.

- There is risk of fire, electric shock, explosion, or injury.



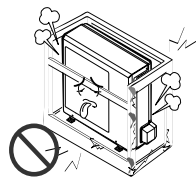
Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open.

- Moisture may condense and wet or damage furnishings.



Do not install the product on a defective installation stand.

- It may cause injury, accident, or damage to the product.



■ Operation

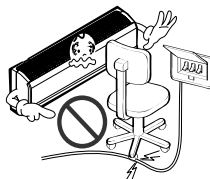
Take care to ensure that power cords could not be pulled out or damaged during operation.

- There is risk of fire or electrical shock.



Do not place anything on the power cord.

- There is risk of fire or electric shock.



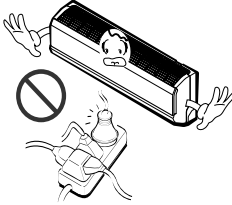
Do not turn the air-conditioner ON or OFF by plugging or unplugging the power plug.

- There is risk of fire or electrical shock.



Use a dedicated outlet for this appliance.

- There is risk of fire or electrical shock.



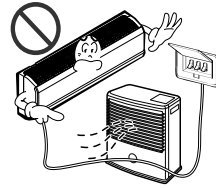
Grasp the plug to remove the cord from the outlet. Do not touch it with wet hands.

- There is risk of fire or electrical shock.



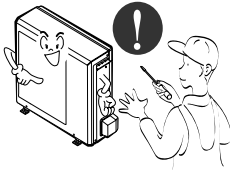
Do not place a heater or other appliances near the power cable.

- There is risk of fire and electric shock.



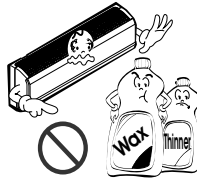
Do not allow water to run into electric parts.

- It may cause There is risk of fire, failure of the product, or electric shock.



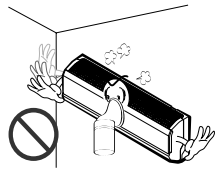
Do not store or use flammable gas or combustibles near the air conditioner.

- There is risk of fire or failure of product.



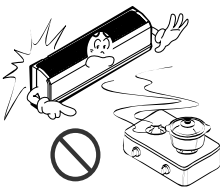
Do not use the product in a tightly closed space for a long time.

- Oxygen deficiency could occur.



When flammable gas leaks, turn off the gas and open a window for ventilation before turn the product on. DO NOT use the telephone or turn switches on or off.

- There is risk of explosion or fire.



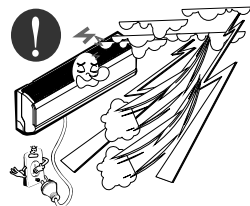
Unplug the unit if strange sounds, odors, or smoke comes from it.

- There is risk of electrical shock or fire



Stop operation and close the window in storm or hurricane. If possible, remove the air conditioner from the window before the hurricane arrives.

- There is risk of property damage, failure of product, or electric shock.



Do not open the inlet grill 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.



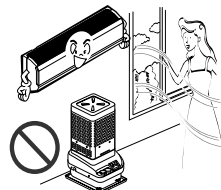
When the product is soaked (flooded or submerged), contact an Authorized Service Center.

- There is risk of fire or electric shock.



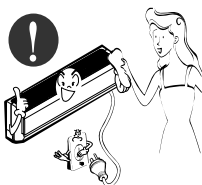
Ventilate the product from time to time when operating it together with a stove, etc.

- There is risk of fire or electrical shock.



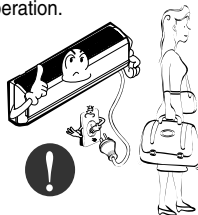
Unplug the appliance before performing cleaning or maintenance.

- There is risk of electrical shock.



When the product is not 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 could step on or fall onto the outdoor unit.

- This could result in personal injury and product damage.

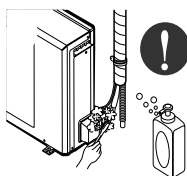


⚠ CAUTION

■ Installation

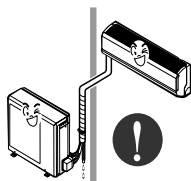
Always check for gas (refrigerant) leakage after installation or repair of product.

- Low refrigerant levels may cause failure of product.



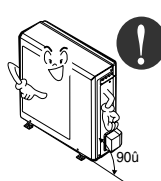
Install the drain hose to ensure that water is drained away properly.

- A bad connection may cause water leakage.



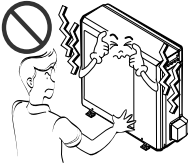
Keep level even when installing the product.

- To avoid vibration or water leakage.



Do not install the product where the noise or hot air from the outdoor unit could damage the neighborhoods.

- It may cause a problem for your neighbors.



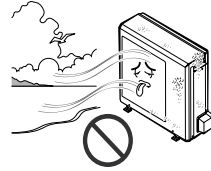
Use two or more people to lift and transport the air conditioner.

- Avoid personal injury.



Do not install the product where it will be exposed to sea wind (salt spray) directly.

- It may cause corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.



■ Operation

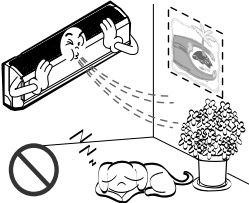
Do not direct airflow at room occupants. (Don't sit in the draft.)

- This could damage your health.



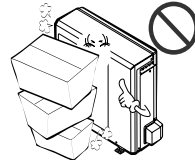
Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer air conditioner, not a precision refrigeration system.

- There is risk of damage or loss of property.



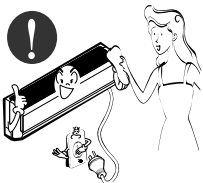
Do not block the inlet or outlet of air flow.

- It may cause product failure.



Use a soft cloth to clean. Do not use harsh detergents, solvents, etc.

- There is risk of fire, electric shock, or damage to the plastic parts of the product.



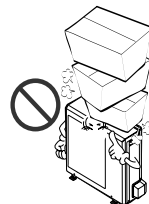
Do not touch the metal parts of the product when removing the air filter. They are very sharp!

- There is risk of personal injury.



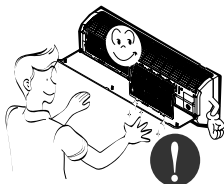
Do not step on or put anything on the product. (outdoor units)

- There is risk of personal injury and failure of product.



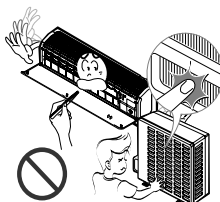
Always insert the filter securely. Clean the filter every two weeks or more often if necessary.

- A dirty filter reduces the efficiency of the air conditioner and could cause product malfunction or damage.



Do not insert hands or other objects through the air inlet or outlet while the air conditioner is plugged in.

- There are sharp and moving parts that could cause personal injury.



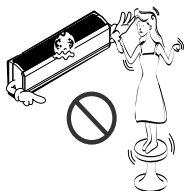
Do not drink the water drained from the unit.

- It is not sanitary and could cause serious health issues.



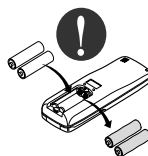
Use a firm stool or ladder when cleaning or maintaining the air conditioner.

- Be careful and avoid personal injury.



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 explosion



■ Disuse

Do not recharge or disassemble the batteries. Do not dispose of 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.



Prior to Operation

Preparing for Operation

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

Usage

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

Cleaning and Maintenance

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

Service

For repair and maintenance, contact your authorized service dealer.

Introduction

Symbols used in this Manual



This symbol alerts you to the risk of electric shock.



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

NOTICE

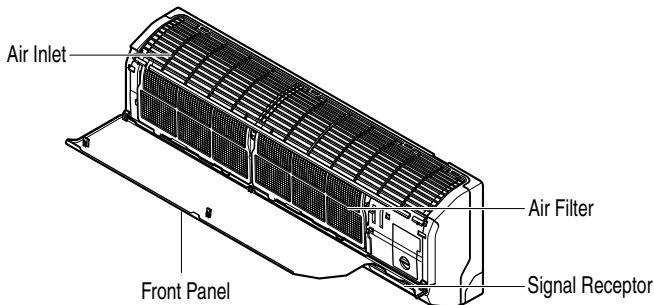
This symbol indicates special notes.

Features

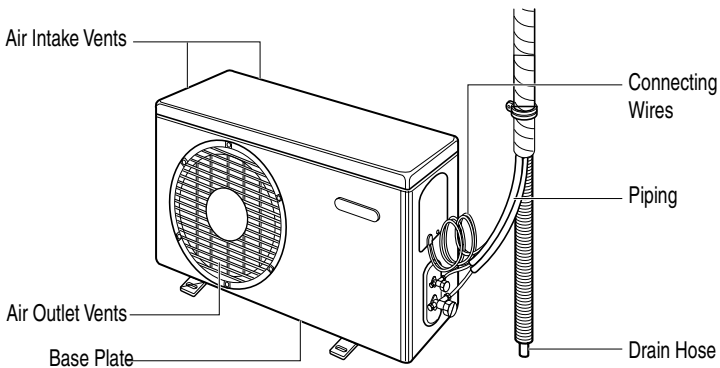
⚠ WARNING

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

Indoor

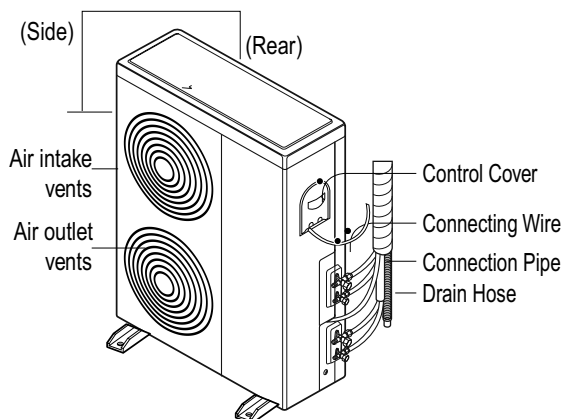


Outdoor



Features

Outdoor



Electrical Safety

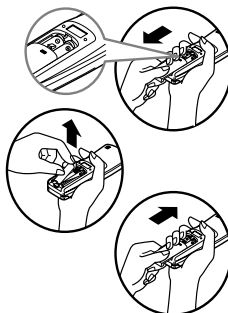
⚠ WARNING

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

Operating Instructions

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.

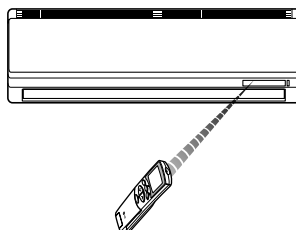
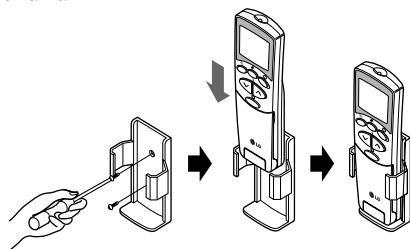


NOTICE

Use 2 AAA(1.5volt) batteries.
Do not use rechargeable batteries.

Storage and Tips for using the Remote Controller

- The remote controller may be stored by mounting it on a wall.
- To operate the room air conditioner, aim the remote controller at the signal receptor.

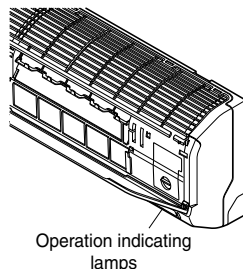


Signal Receptor

Receives the signals from the remote control. (Signal receiving sound: two short beeps or one long beep.)

Operation Indication Lamps

- | | | |
|--------|-------------------------------|--|
| ⓘ | On/Off | : Lights up during the system operation. |
| ★ | Sleep Mode | : Lights up during Sleep Mode Auto operation. |
| ⌚ | Timer | : Lights up during Timer operation. |
| ✱
⊖ | Defrost Mode | : Lights up during Defrost Mode or *Hot Start operation (Heat pump model only) |
| ⊠ | OUTDOOR UNIT OPERATION | : Lights up during outdoor unit operation. (Cooling model only) |
| ⚡ | Power Display (Inverter only) | : Indicates the setting temperature and the operating frequency of compressor. (5 steps) |
| ⬮ | Plasma | : Lights up during Plasma Operation. |



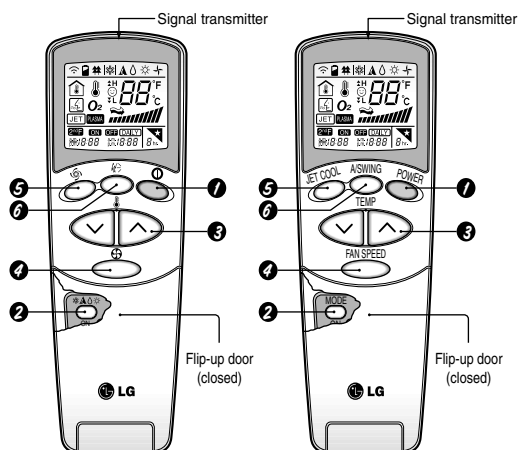
***Hot Start operation:** Stops the indoor fan in Heating Operation to prevent cold air from blowing out from unit.

Remote Control Operations

The remote control transmits the signals to the system.



Features of the Remote Control- Door Closed



TYPE A

TYPE B

- 1 START/STOP BUTTON**
Operation starts when this button is pressed and stops when the button is pressed again.

- 2 OPERATION MODE SELECTION BUTTON**
Used to select the operation mode.

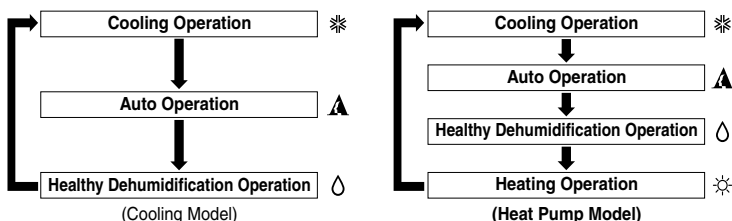
- 3 ROOM TEMPERATURE SETTING BUTTONS**
Used to select the room temperature.

- 4 INDOOR FAN SPEED SELECTOR**
Used to select fan speed in four steps: low, medium, high, or CHAOS.

- 5 JET COOL**
Used to start or stop the speed cooling. (Speed cooling operates super high fan speed in cooling mode).

- 6 AIR SWING BUTTON**
Used to stop or start louver movement and set the desired up/down airflow direction.

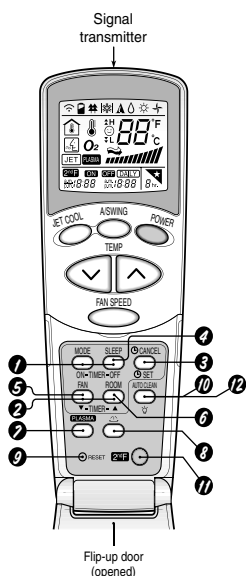
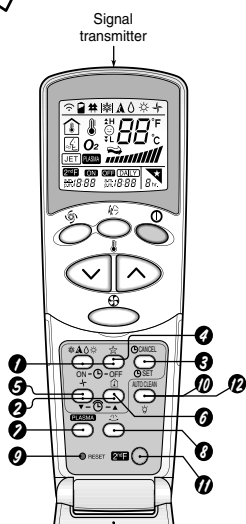
Operation Mode



* Your unit shall have either Type A or Type B Remote Control.

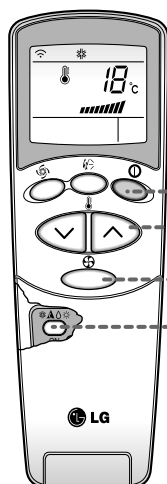


Features of the Remote Control- Door Opened



- 1 ON/OFF TIMER BUTTON**
Used to set the time of starting and stopping operation.
- 2 TIME SETTING BUTTONS**
Used to adjust the time, (See page 22)
- 3 TIMER SET/CANCEL BUTTONS**
Used to set the timer when the desired time is obtained and to cancel the Timer operation. (See page 22)
- 4 SLEEP MODE AUTO BUTTON**
Used to set Sleep Mode Auto operation. (See page 22)
- 5 AIR CIRCULATION BUTTON**
Used to circulate the room air without cooling or heating. (See page 23)
- 6 ROOM TEMPERATURE CHECKING BUTTON**
Used to check the room temperature.
- 7 NEO PLASMA (OPTIONAL)**
Used to start or stop the plasma-purification function. (See page 20)
- 8 HORIZONTAL AIRFLOW DIRECTION CONTROL BUTTON (OPTIONAL)**
Used to set the desired horizontal airflow direction. (See page 23)
- 9 RESET BUTTON**
Used prior to resetting time or after replacing batteries.
- 10 AUTO CLEAN (OPTIONAL)**
Used to set Auto Clean mode.
- 11 2ndF BUTTON**
Used prior to using modes printed in blue at the bottom of buttons. (See page 21)
- 12 DIMMER (OPTIONAL)**
Used to operate Dimmer Function using 2ndF. (See page 24)

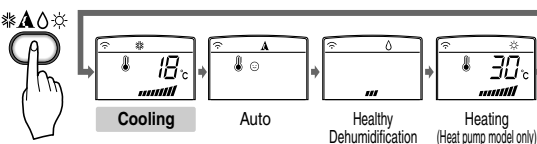
Cooling operation



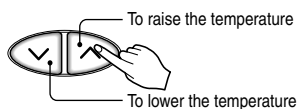
- 1** Press the Start/Stop button.
The unit will respond with a beep.



- 2** Open the door of the remote controller. To select **Cooling Operation**, press the Operation Mode Selection button. Each time the button is pressed, the operation mode is shifted in the direction of the arrow.



- 3** Close the door of the remote controller. Set the temperature lower than the room temperature. The temperature can be set within a range of 18°C~30°C at intervals of 1°C.



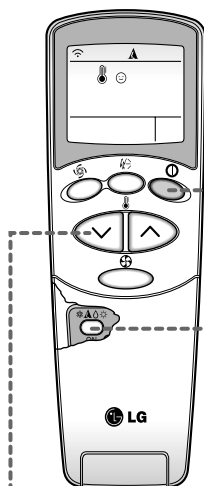
- 4** Set the fan speed again with the door of the remote controller still closed. You can select the fan speed in four steps-low, medium, high and CHAOS. Each time the button is pressed, the fan speed mode is shifted.



Natural wind by the CHAOS logic

- ☐ For fresher feeling, press the Indoor fan speed selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

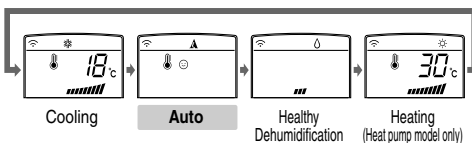
Auto operation (Optional)



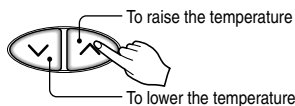
- 1 Press the Start/Stop button.
The unit will respond with a beep.



- 2 Open the door of the remote controller. To select **Auto Operation**, press the operation mode selection button. Each time the button is pressed, the operation mode is shifted in the direction of the arrow.



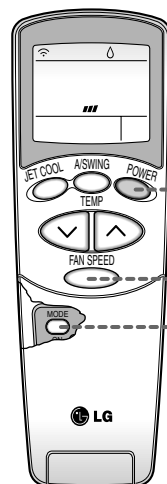
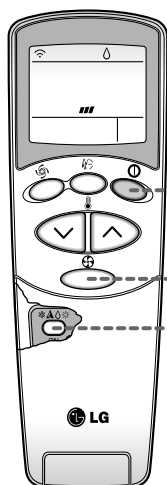
- 3 The temperature and fan speed are automatically set by the electronic controls based on the actual room temperature. If you want to change the set temperature, press the Room Temperature Setting buttons. The cooler or warmer you feel, the more times (up to two times) you should press the button. The set temperature will be changed automatically.



During Auto Operation

- ☐ You cannot control the indoor fan speed. It has already been set by the Fuzzy rule.
- ☐ If the system is not operating as desired, manually switch to another mode. The system will not automatically switch from the cooling mode to the heating mode, or from heating mode to cooling mode, it must be done by manually resetting.
- ☐ During Auto Operation, pressing the chaos swing button makes the horizontal louvers swing up and down automatically. If you want to stop auto-swing, press the chaos swing button again.

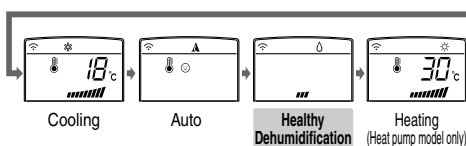
Healthy dehumidification operation



- 1** Press the Start/Stop button.
The unit will respond with a beep.



- 2** Open the door of the remote controller. To select **Healthy Dehumidification Operation**, press the Operation Mode Selection button.
Each time the button is pressed, the operation mode is shifted in the direction of the arrow.



- 3** Set the fan speed again with the door of the remote controller still closed.
You can select the fan speed in four steps-low, medium, high, or CHAOS. Each time the button is pressed, the fan speed mode is shifted.



Natural wind by the CHAOS logic

- ☐ For fresher feeling, press the Indoor Fan Speed Selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

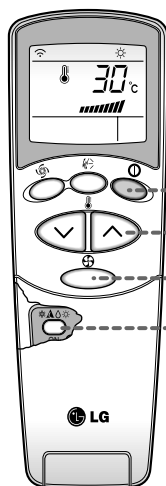
During Healthy Dehumidification Operation

- ☐ If you select the dehumidification mode on the operation selection button, the product starts to run the dehumidification function. It automatically sets the room temp. and airflow volume to the best condition for dehumidification, based on the sensed current room temp.

In this case, however, the setting temp. is not displayed on the remote controller and you are not able to control the room temp. either.

- ☐ During the healthy dehumidification function, the airflow volume is automatically set according to the optimization algorithm responding to the current room temp. status, so that the room condition is kept healthy and comfortable even in the very humid season.

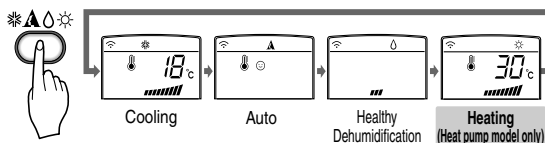
Heating operation (Heat pump model only)



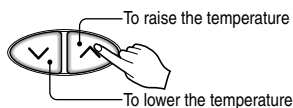
- 1 Press the Start/Stop button.
The unit will respond with a beep.



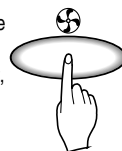
- 2 Open the door of the remote controller. To select **Heating Operation**, press the Operation Mode Selection button. Each time the button is pressed, the operation mode is shifted in the direction of the arrow.



- 3 Close the door of the remote controller. Set the temperature higher than the room temperature. The temperature can be set within a range of 16°C~30°C at intervals of 1°C.



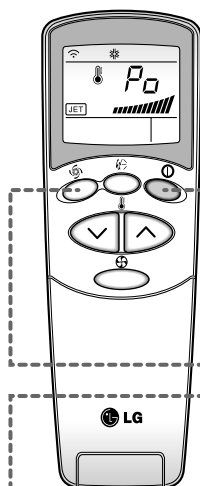
- 4 Set the fan speed again with the door of the remote controller still closed. You can select the fan speed in four steps –low, medium, high and CHAOS. Each time the button is pressed, the fan speed mode is shifted.



Natural wind by the CHAOS logic

- ☐ For fresher feeling, press the Indoor Fan Speed Selector and set to CHAOS mode. In this mode, the wind blows like a natural breeze by automatically changing fan speed according to the CHAOS logic.

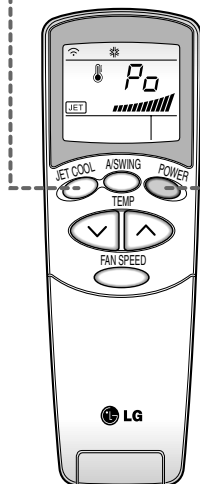
Jet cool operation



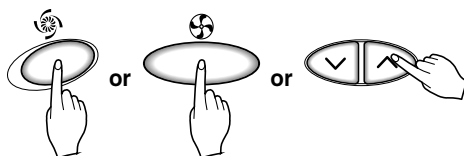
- 1 Press the Start/Stop button.
The unit will respond with a beep.



- 2 Press the **Jet Cool** button to operate the speed cooling mode and the unit will operate at super high fan speed on cooling mode for 30 minutes.



- 3 To cancel the **Jet Cool** mode, press the **Jet Cool** button, the fan speed button or the room temperature setting button again and the unit will operate at high fan speed on cooling mode.



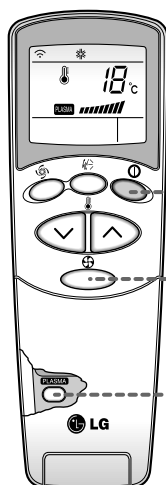
NOTICE

- During the JET COOL function at any moment, the A/C starts to blow the cool air at extremely high speed for 30 minutes setting the room temp. automatically to 18° C. It is especially used to cool the room temp. quickly in a hot summer.

In heat pump mode or auto changeover mode, however, the JET COOL function is not available.

- In order to return to the normal cooling mode from the JET COOL mode, just press the operation mode selection button, airflow volume selection, temp. setting button or the JET COOL button again.

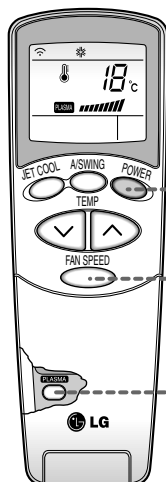
NEO PLASMA purification operation(Optional)



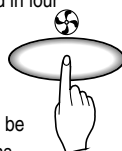
- 1 Press the Start/Stop button.
The unit will respond with a beep.



- 2 Open the door of the remote controller. Press the PLASMA button.
Operation will start when the button is pressed and stop when the button is pressed again.

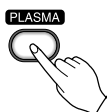
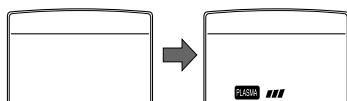


- 3 Set the fan speed again with the door of the remote controller closed. You can select the fan speed in four steps-low, medium, high or CHAOS. Each time the button is pressed, the fan speed mode is shifted.



* Air purifying operation (NEO PLASMA) can be with cooling, Heating or any other operations.

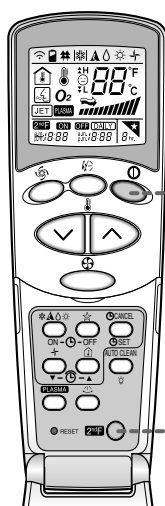
NEO PLASMA Air Purifying Operation only



If you press the only PLASMA button, only PLASMA purification function operates. Then, fan speed is low. You can select the fan speed in four steps-low, medium, high or CHAOS.

Each time the Indoor Fan Speed Selector button is pressed, the fan speed mode is shifted.

2ndF 2nd F operation



- 1 Press the Start/Stop button.
The unit will respond with a beep.

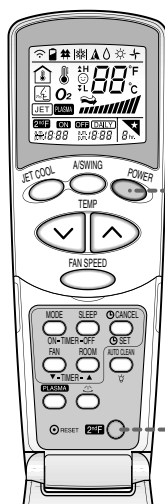


- 2 Open the door of the remote controller and press the 2nd Function button to operate functions printed blue color under buttons.
(Check the indication of 2nd function on the display of the remote controller.)



- 3 2nd function disappears in a short time automatically or when the button is pressed again.

For more details, refer to functions next pages.



Additional Features

★ Sleep mode

1. Press the Sleep Mode Auto button to set the time you want the unit to stop automatically.
2. The Timer is programmed in one-hour increments by pressing the Sleep Mode Auto button 1 to 7 times. The sleep mode is available for 1 to 7 times. To alter the time period in steps of 1 hour, press the Sleep Mode Button while aiming at air conditioner.
3. Make sure the Sleep Mode Auto LED lights up.
To cancel the Sleep Mode, press the sleep Mode Auto button several times until the star (★) disappears from the operation display.

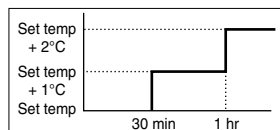


NOTICE

The Sleep Mode will be operated at slow fan speed (cooling) or medium fan speed (heat pump only) for a comfortable sleep.

In cooling mode or healthy dehumidification mode:

The setting temperature will automatically rise by 1°C over the next 30 minutes and by 2°C in 1 hour for a comfortable sleep.



🕒 Setting the time

1. Time can be set only when you press the Reset button. Having replacing the batteries, you should press the reset buttons to reset the time. Press the Start/Stop button.
2. Press 2nd F button and check if 2nd F icon is on.
3. Press the Time Setting buttons until the desired time is set.
4. Press the Timer SET button.



NOTICE

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

🕒 Delay start/Pre-set stop

1. Make sure the time is set correctly on the display of the remote controller.
2. Press 2nd F button.
3. Press the ON/OFF Timer buttons to turn Timer on or off.
4. Press the Time Setting buttons until the desired time is set.
5. To set the selected time, press the Timer setting button aiming the remote controller at the signal receptor.



To cancel the timer setting

Check if 2nd F icon is off.

Press the Timer Cancel button aiming the remote controller at the signal receptor.
(The timer lamp on the air conditioner and the display will go out.)



NOTICE

Select one of the following four types of operation.

with the unit running



Delay OFF Timer



Delay ON Timer



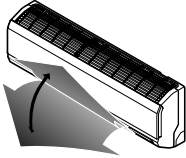
Delay OFF and ON Timer



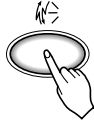
Delay ON and OFF Timer

Vertical Airflow Direction Control

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



1. Press the Start/Stop button to start the unit.
2. Press Chaos Swing button and the louvers will swing up and down. Press the Chaos Swing button again to set the vertical louver at the desired airflow direction.



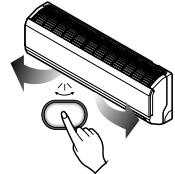
NOTICE

- ❑ If you press the Chaos Swing button, the horizontal airflow direction is changed automatically based on the CHAOS algorithm to distribute the air in the room evenly and at the same time to make the human body feel most comfortable, as if enjoying a natural breeze.
- ❑ Always use the remote control 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.
- ❑ **Do not change the louver position by hand. This may result in high air cutting noise.**

Horizontal Airflow Direction Control (Optional)

The left/right(Horizontal Airflow) can be adjusted by using the remote control. Press the Start/Stop button to start the unit.

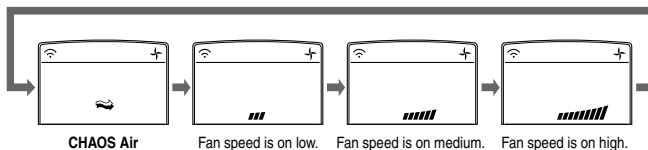
Open the door on the remote control. Press the Horizontal Airflow Direction button and the louvers will swing left and right. Press the Horizontal Airflow Direction Control Button again to set the horizontal louver at the desired airflow direction.



Air circulation mode

Circulates the room air without cooling or heating.

1. Press the Start/Stop button. the unit will respond with a beep.
2. Open the door on the remote control. Press the Air Circulation button. Close the door on the remote control. Now each time that you press the Indoor Fan Speed Selector button, the fan speed is shifted from low to CHAOS and back to low again.



NOTICE

CHAOS Air economizes power consumption and prevents overcooling. The fan speed is automatically changed from high to low or vice versa, depending on the ambient temperature.

Auto clean (Optional)

AUTO CLEAN



1. Whenever you press the AUTO CLEAN button, Auto Clean Function will be reserved and cancelled.
2. Auto Clean function works before and after cooling or dehumidification mode. For details, refer to the below points.
3. When the unit is started after the reservation of Auto Clean ,the Cool Start function operates and indoor Fan is started after 20 seconds.
4. When you press Start/Stop button to turn off the unit after the you have reserved Auto Clean function, the air-conditioner circulates the indoor air in the Auto Clean mode with no more Cooling or Dehumidification operation. It lasts for 30 minutes.
5. If you press the AUTO CLEAN button again during the product operation , Auto Clean function will be cancelled.

NOTICE

- ❑ During Auto Clean function, moisture left in indoor units after Cooling Operation or Healthy Dehumidification Operation can be removed.
- ❑ During Auto Clean function, only Start/Stop button, Plasma button and AUTO CLEAN button are available.
- ❑ During Auto Clean function, “ ☆ ” icon will blink and “ Ⓒ ” (not blinking) will be displayed.

Dimmer (Optional)

How to operate

1. Make sure that remote & Air conditioner are ON.
2. Press 2ndF button.
3. Press Dimmer Key to activate/deactivate dimmer function.

Dimmer Features

1. In Dimmer Mode Display will be turned OFF except Icon/Text of Mode in which the Unit is running.
2. If User selects the Dimmer Function then it remains activated during the Auto Restart Operation (when Power fails and resumes).

NOTICE

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

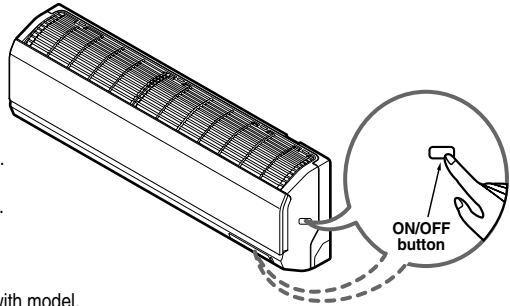


Forced operation

Please follow the step 1 to step 5 for forced operation.

1. Turn ON the unit using power button.
2. Turn OFF the unit using power button.
3. Switch OFF the mains supply to the unit.
4. Switch ON the mains supply to the unit.
5. Turn ON the unit using the power button.

After turning ON the unit will operate according to the table below :



Note : Forced operation button location varies with model.

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

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

Test operation

During the TEST OPERATION, the unit operates in cooling mode at high speed fan, regardless of room temperature and unit will stop after 18 minutes.

During test operation, if remote controller signal is received, the unit operates as remote controller sets.

If you want to use this operation, Press and hold the ON/OFF button for 3-5 seconds, then the buzzer sound 1 "beep".

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



Twin Temperature Logic

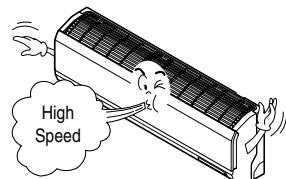
1. Display on Indoor Unit shows the desired set Temperature for 5 seconds and then automatically shifts to the Room Temperature.
2. Pressing any key (except Room/Power) Display will show Set Temperature for 5 sec and then automatically shifts to the Room Temperature.
3. Room Temperature on Display and Remote might be different.

Helpful information

Fan speed and cooling capacity.

The cooling capacity indicated in the specification is the value when the fan speed is set to high, and the capacity will be lower at low or medium fan speed.

High fan speed is recommended when you wish to cool the room quickly.



Maintenance and Service

⚠ CAUTION

Before performing any maintenance, turn off the main power to the system.

Indoor Unit

Grille, Case, and Remote Control

Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

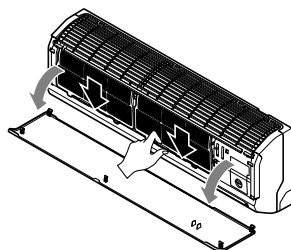
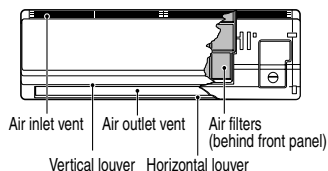
NOTICE

Supply power must be disconnected before cleaning the indoor unit.

Air filters

The air filters behind the front grille should be checked and cleaned once in every 2 weeks or more often if necessary.

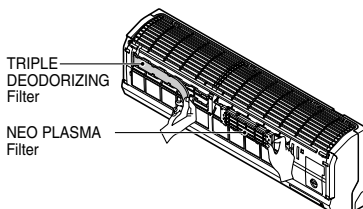
1. Pull the both sides and remove front panel.
2. Pull the filter tab slightly forward to remove the filter.
3. Clean the filter with a vacuum cleaner or warm, soapy water.
 - If dirt is conspicuous, wash with a solution of detergent in lukewarm water.
 - If hot water (40°C or more) is used, it may be deformed.
4. After washing with water, dry well in the shade.
5. Re-install the air filter.



NEO PLASMA filter (Optional)

The NEO PLASMA filter behind the air filters should be checked and cleaned once in every 3 months or more often if necessary.

1. After removing the air filters, pull slightly forward to remove the NEO PLASMA filter.
2. Clean NEO PLASMA filter with the vacuum cleaner. If it is very dirty, wash it with water.
3. Note the cuts of electric discharge lines.
4. Re-install the NEO PLASMA filter to the original position.



TRIPLE DEODORIZER filter (Optional)

1. After removing the air filters, pull slightly forward to remove the TRIPLE DEODORIZER filter.
2. Dry in the sunlight for two hours.
3. Re-install the TRIPLE DEODORIZER filter to the original position.

⚠ CAUTION

Don't touch this NEO PLASMA Filter within 10 seconds after opening the inlet grille, it may cause an electric shock.

Never use any of the followings:

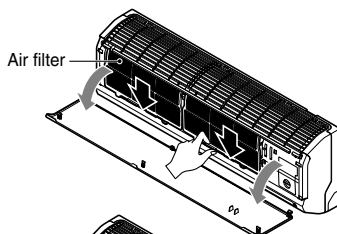
- Water hotter than 40°C
Could cause deformation and/or discoloration.
- Volatile substances
Could damage the surfaces of the air conditioner.



Replacement of purifying filter (Optional)

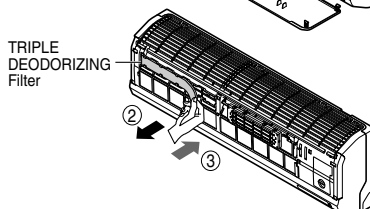
Recommended use period : About 2 years

1. Remove front panel and air filters.

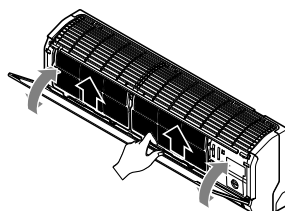


2. Remove air purifying filters.

3. Insert new air purifying filters.



4. Reinsert air filters and close front panel.

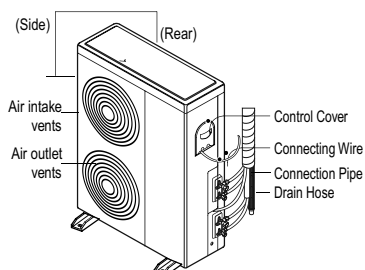
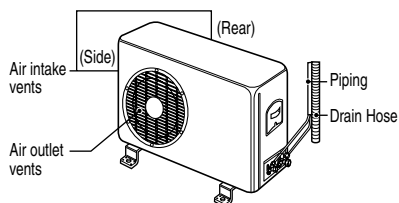


Outdoor Unit

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

NOTICE

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



Common Problems and Solutions

Before calling for service

If you have problems with your air conditioner, read the following information and try to solve the problem. If you cannot find a solution, turn off the air conditioner and contact your dealer.

Air conditioner does not operate

1. Ensure that the air conditioner is plugged into a proper outlet.
2. Check the fuse or circuit breaker.
3. Check whether the voltage is unusually high or low.

Air does not feel cold enough on the cooling setting

1. Ensure that the temperature settings are correct.
2. Check to see if the air filter is clogged with dust. If so, replace the filter.
3. Ensure that the air flow from the outside is not obstructed and that there is a clearance of over 20" between the back of the air conditioner and the wall or fence behind it.
4. Close all doors and windows and check for any source of heat in the room.



Before calling for service, please review the following list of common problems and solutions.

The air conditioner is operating normally when:

- You hear a pinging noise. This is caused by water being picked up by the fan on rainy days or in highly humid conditions. This feature is designed to help remove moisture in the air and improve cooling efficiency.
- You see water dripping from the rear of the unit. Water may be collected in the base pan in highly humid conditions or on rainy days. This water overflows and drips from the rear of the unit.
- You hear the fan running while the compressor is silent. This is a normal operational feature.

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

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

1 Operate the air conditioner on Air circulation mode (Refer to page 23) for 2 to 3 hours.

- This will dry out the internal mechanisms.

2 Turn off the circuit breaker, and disconnect the plug.



CAUTION

Turn off the circuit breaker when the air conditioner is not going to be used for a long time.

Dirt may collect and may cause a fire.

3 Remove the batteries from the remote control.

When the air conditioner is to be used again.

1 Clean the air filter and install it in the indoor unit.
(Refer to page 26 for cleaning filters.)

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

Operation Tips

Do not overcool the room.

This is not good for the health and wastes electricity.

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.

Keep blinds or curtains closed.

Do not let direct sunshine enter the room when the air conditioner is in operation.

Clean the air filter regularly.

Blockages in the air filter reduces the airflow and lowers the cooling and dehumidifying effects. Clean at least once in every two weeks.

Keep the room temperature uniform.

Adjust the vertical and horizontal airflow direction to ensure a uniform temperature in the room.

Ventilate the room occasionally.

Since windows are kept closed, it is a good idea to open them and ventilate the room now and then.

Before you call for service...



Troubleshooting Tips! Save time and money!

Check the following points before requesting repairs or service.... If the fault persists, please contact your dealer or service center.

Case	Explanation	See page
The air conditioner does not operate.	• Have you made a mistake in timer operation?	22
	• Has the fuse blown or has the circuit breaker been tripped?	-
The room has a peculiar odor.	• Check that this is not a damp smell exuded by the walls, carpet, furniture, or cloth items in the room.	-
It seems that condensation is leaking from the air conditioner.	• Condensation occurs when the airflow from the air conditioner cools the warm room air.	-
Air conditioner does not operate for about 3 minutes when restarted.	• This is the protector of the mechanism. • Wait about three minutes and operation will begin.	-
Does not cool or heat effectively.	• Is the air filter dirty? See air filter cleaning instructions.	26
	• Has the temperature been set incorrectly?	15
	• Are the indoor unit's air inlet or outlet vents obstructed?	-
The air conditioner operation is noisy.	• For a noise that sounds like water flowing. -This is the sound of freon flowing inside the air conditioner unit. • For a noise that sounds like the compressed air releasing into atmosphere. -This is the sound of the dehumidifying water being processed inside the air conditioning unit.	-
Remote control display is faint, or no display at all.	• Are the batteries depleted? • Are the batteries inserted in the opposite (+) and (-) directions?	12
Crack sound is heard.	• This sound is generated by the expansion/constriction of the front panel, etc. due to changes of temperature.	-

NOTE

WATER RESISTANT: The outdoor side of this appliance is WATER RESISTANT.

The indoor side is not water resistant and should not be exposed to excess water.

For any further information, please contact LGEIL Branches

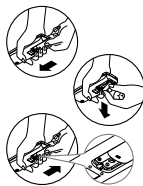
BRANCH	BRANCH OFFICE ADDRESS	PHONE NO. / FAX NO.
Ahmedabad	LGEIL, 233-234, Platinum Plaza, Nr. Judges Bungalow Cross Road, Bodakdev, Ahmedabad-54	40040013-14
Asansol	LGEIL, Block-E, 1st Floor, P C Chattarjee Market, Rambandhu Tala, GT Road (E) Asansol-713303	3292009/3292010 (Fax) 2215170
Aurangabad	LGEIL, 302 CIDCO No. 3, Opp. Hotel Ramgiri, Jalna Road, Aurangabad-431003	5625705 / (Fax) 2474055/32095436/32095437/32095438
Bangalore	LGEIL, No. 914, 2nd Floor, Shri Venkateshwara Complex, Opp. IBP Petrol Bunk, 80ft Road, 6th Block, Koramangala - Bangalore - 560095	41145145/41144750/41144751
Bhopal	LG Electronics India Private Limited, 2nd Floor, Alankar Complex, Plot No. 10, M.P. Nagar, Zone-II, Bhopal-462011	4262847/4229861 (Fax) 4262848
Bhubaneshwar	LGEIL, Plot No. 02, 1st Flr., Bapuji Nagar, Bhubaneshwar-751009	2531430, 2534280
Calcutta	LGEIL, 1, Ho-Chi-Min-Sarani, 6th Floor, Metro Towers, Calcutta-700071	22883254 (51) Fax
Chandigarh	LGEIL, SCO No. 142-143, 3rd Floor, Sector-34A, Chandigarh-160002	5087389190 (Fax) 5089107
Chennai	LGEIL, AA11, 2nd Avenue, Fatima Tower, Anna Nagar West, Chennai-600040	65510501-04 (Fax) 26203506
Cochin	LGEIL, 40/1270, Vasudeva Buildings, T.D. Road, Emakulam Cochin-682011	2369765/2369743/2370744/4027444/4027555/2360977 (Fax)
Coimbatore	LGEIL, 250A, Sangannur Main Road, Kannappa Nagar, Coimbatore-641027	2332197, 2332195
Delhi	LGEIL, A-27, Mohan Co-operative, Industrial Estate, New Delhi	26991412/11/13 (Fax) 26991410
Dehradun	LGEIL, M-22, Commercial Motors Compound, Mohabewala Indl. Area, Delhi-Saharanpur Road, Dehradun (Uttarakhand)	2644213/283
Gurgaon	LGEIL, IInd Flr, A Block, Centre Point Bldg, Sushant Lok , Ph-I, Gurgaon-122001	4047461- 62 - 63/4272867, 4047460 (Fax)
Ghaziabad	LGEIL, J-10, RDC Rajnagar, Ghaziabad - 201001	9811354152/3/64/65/266
Guwahati	LGEIL, Shantinee Bhawan, C K Aggarwal Path, Chenikurthi, Guwahati-781003	2663895/2666958/2665983/2668984 (Telefax)
Hyderabad	LGEIL, 1st Floor, Survey No. 54, Pulla Reddy Building, Vikarampuri, Main Road, Kharkhana, Secunderabad-500009	27207504, 05, 06/27204094 27201462 (Fax)
Hubli	LGEIL, 1 Floor, Above Bellad & Co., Near Bannigida Busstop, Gokul Road, Hubli-580030	4250251/52
Indore	LGEIL, 3rd flr., 304 Bansi Trade Centre, 581/5 M.G. Road, Indore-452003	4065523-24, 4082157 (Fax)
Jaipur	LGEIL, B-71, Sahakar Marg, Lal Kothi Scheme, Jaipur-302015	5111118/5113028/5105392, 5111540 (Fax)
Jammu	LGEIL, Plot No. 52, Yard No. 6, Transport Nagar, Narwal, Jammu-180006	2477420, 2477419, 2474396, 2474384
Jodhpur	LGEIL, 22(1-A)21(2-B)2, RIICO Heavy Industrial Area, Jodhpur-342003	2742384, 392 / 5120030 (Fax)
Karnal	LG Electronics India Pvt Ltd, Super Tyre Building, Near New Anaj Mandi, Opp. New World Restauramt, G.T. Road Kamal, Haryana	2219201, 2219202 (Telefax)
Lucknow	LGEIL, B-537, Hari Kunj, Keshav Nagar, Sitapur Road, Lucknow-226020	2757538, 39,2759121 (Fax) 2757559
Ludhiana	LGEIL, Village Jhande, Near Badawal Railway Station, Opp. Ferozpur Road, Ludhiana.	2804412 - 19
Mumbai(N & S)	LGEIL, Trade Star, 4th Floor, A Wing, J.B. Nagar, Andheri Kurla Road, Andheri (E) Mumbai-400059	28352882-2887 / 28352889 (Fax)
Nagpur	LGEIL, 5A, Road No.13, Behind Msrtc Workshop, MIDC Hinga, Nagpur-440016	235120, 235122, Fax : 234401
Patna	LGEIL, 2nd Floor, Ankit Chandra Deep Complex, Bander Bageecha, Near Samrat Hotel, Patna-800001.	3298714, 2541845 (Fax)
Pune	LGEIL, 105/106, Premium Point, GM Road, Opp. Modern High School, Illrd Floor, Shivaji Marg, Pune-411005	66030100,732/733/734/735, 66030740 (Fax)
Rajkot	LGEIL, Sanskruti Apartment, Opp. Dr. Ambedkar Bhawan, Near Atithi Chowk, Akshar Road , Rajkot - 360004	2481499,2467692 (Fax)
Raipur	613 to 616 , 6th Floor, Offizo, Magneto - The Mall, GE Road, Raipur - 492001	4053171/4037470 (Fax) 4038426/10/11
Ranchi	LGEIL, 402, Commerce Tower, Opp. Gel Church Complex, Main Road, Ranchi	3294026, 2331815
Surat	LGEIL, 1001-1004, Ascon Plaza, IInd Flr, Anand Mahal Road, Behind Bhulka Bhavan School, Adajan, Surat-395009	2730982/83, 2730984 (Fax)
Thane	LGEIL, Gall Shop No - 206,207, 2nd Floor, Sai Plaza , Above Vijay Sales Opp. Cine Wonder Mall, Ghodbunder Road , Thane(West)-400607	25472633/2637 25472602(Fax)
Varanasi	LGEIL, Pama Complex, DLW, Lahartara Road, Shivdaspur, Manduadih, Varanasi, UP-221002	2373432/36/37
Vijaywada	LGEIL, Door No. 32-2/1-7, Ratnamamba Street, Prajasakti Nagar, Vijaywada-520010, Andhra Pradesh	2497283/87, (Fax) 2497284
Warangal	LGEIL, House No. 1-8-98/1, First Floor, Beside HDFC Bank, Nakkalgutta, Hanamakonda-506001 (Warangal)	2551453
Kozhikode	3/568, Thripuri Building, Wayanadu Road, First Floor,Near K.S.F.E, East Nadakkavu, Calicut-673011	2366755, 2366756, 2366678, (Fax) 2766678

TEST RUNNING

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

A Prepare remote control

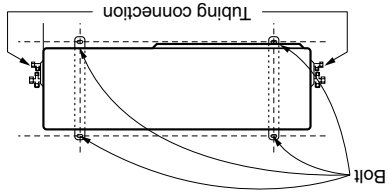
1. Remove the battery cover by pulling it according to the arrow direction.
2. Insert new batteries making sure that the (+) and (-) of battery are installed correctly.
3. Reattach the cover by pushing it back into position.



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

B Settlement of outdoor unit

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



C Evaluation of the performance

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

CAUTION:

This is performed when the unit is to be relocated or the refrigerant circuit is serviced. Pump Down means collecting all refrigerant in the outdoor unit without loss in refrigerant gas.

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

Pump Down Procedure

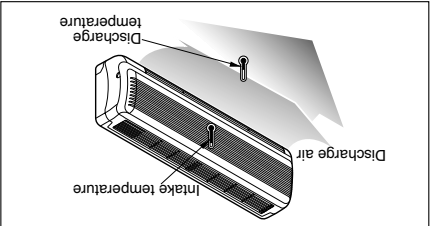
1. Connect a low-pressure gauge manifold hose to the charge port on the gas side service valve.
2. Open the gas side service valve halfway and purge the air from the manifold hose using the refrigerant gas.
3. Close the liquid side service valve(all the way in).
4. Turn on the unit's operating switch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

PUMP DOWN

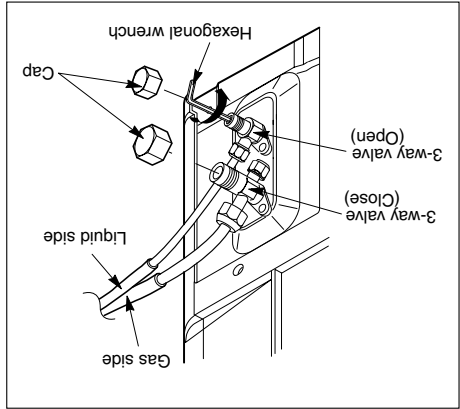
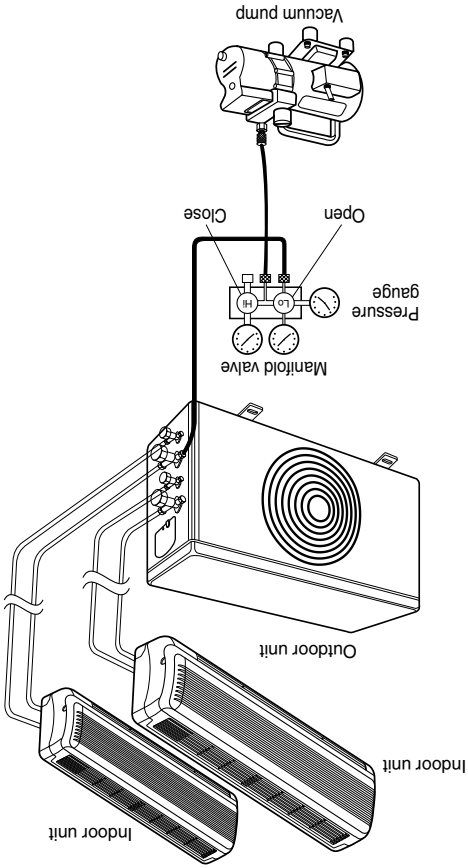
NOTE: If the actual pressure are higher than shown, the system is most likely over-charged, and charge should be removed. If the actual pressure are lower than shown, the system is most likely undercharged, and charge should be added. The air conditioner is now ready for use.

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

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



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



- 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.

D Finishing the job

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

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

- 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.

C Evacuation

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

Air purging

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

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

Air purging with vacuum pump

2

A Preparation

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

B Leak test

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

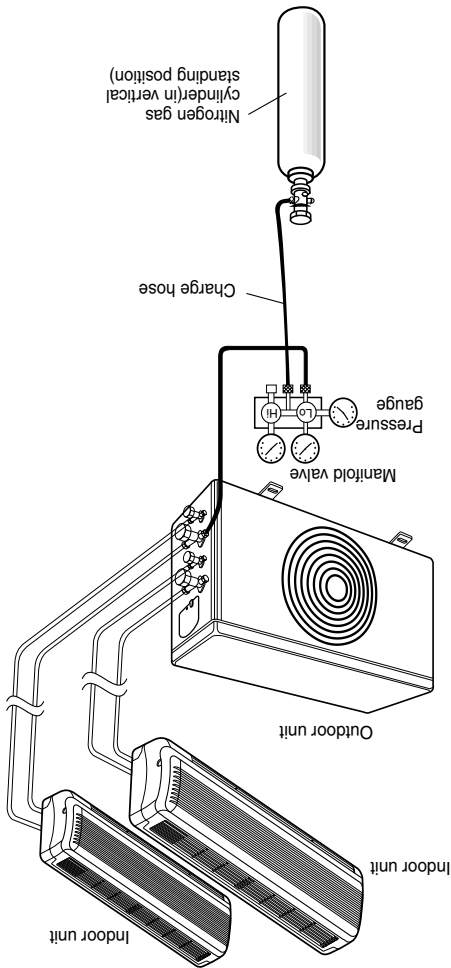
CAUTION

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

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

CAUTION

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



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

Checking the drainage



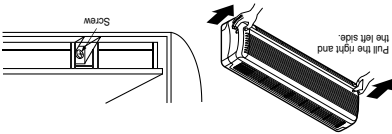
A To remove the front panel from the indoor unit, remove the front panel from the

indoor unit cabinet.

■ Set the air direction louvers up-and-down to the position(horizontal) by hand.

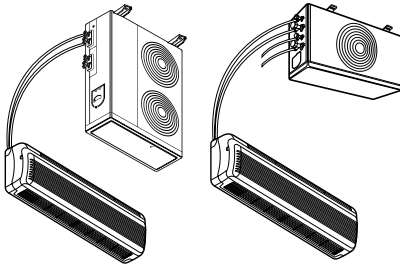
■ Remove the securing screws that retain the front panel. Pull the lower left and right

sides of the grille toward you and lift it off. (18K, 24K, 26K Btu models: 3EA)



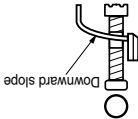
B To check the drainage.

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

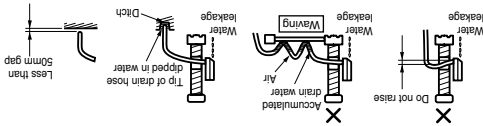


C Drain piping

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



■ Do not make drain piping.



Form the piping



A Form the piping by wrapping the connecting portion of the indoor unit with

insulation material and secure it with two

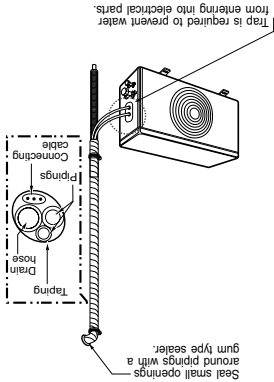
kinds of vinyl tapes.

■ If you want to connect an additional drain hose, the end of the drain outlet should be

routed above the ground. Secure the drain hose appropriately.

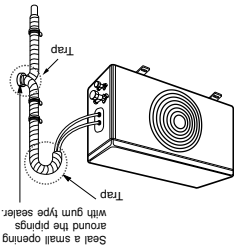
B In cases where the outdoor unit is installed below the indoor unit perform the following.

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



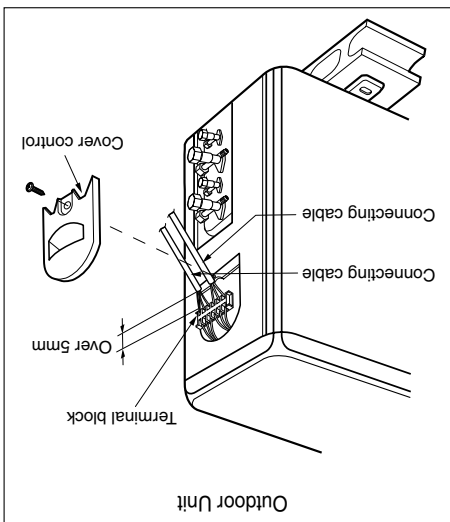
C In cases where the Outdoor unit is installed above the Indoor unit perform the following.

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



Connect the cable to the outdoor unit

- A** Remove the control cover from the unit by loosening the screw.
Connect the wires to the terminals on the control board individually.
- B** Secure the cable onto the control board with the cord clamp.
- C** Refix the control cover to the original position with the screw.
- D** Use a recognized circuit breaker 20Ax2 (24K), 25Ax2 (36K, 48K) between the power source and the unit. A disconnecting device to adequately disconnect all supply lines must be fitted.



CAUTION

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

- 1) Never fail to have an individual power circuit 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 capability is sufficient.
- 5) See to that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
- 6) Confirm that the cable thickness is as specified in the power source specification. (Particularly note the relation between cable length and thickness. (Refer to page 11))
- 7) Always install an earth leakage circuit breaker in a wet or moist area.
- 8) The following would be caused by voltage drop.
 - Vibration of a magnetic switch, which will damage the contact point, fuse breaking, disturbance of the normal function of the overload.
- 9) The means for disconnection from a power supply shall be incorporated in the fixed wiring and have an air gap contact separation of at least 3mm in each active(phase) conductors.

2) Clamping of cables

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

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

CAUTION

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

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

NORMAL CROSS-SECTIONAL AREA

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

NORMAL CROSS-SECTIONAL AREA 1.25mm² (24/36/48K)

20mm

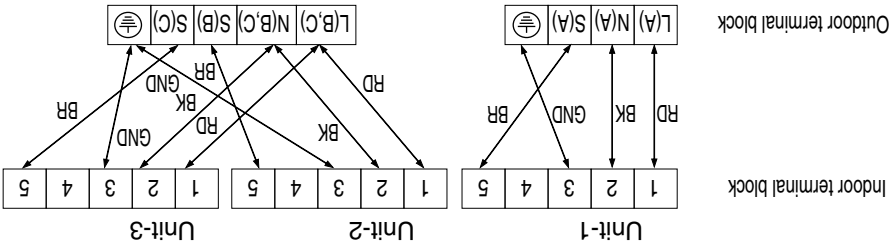
GND

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

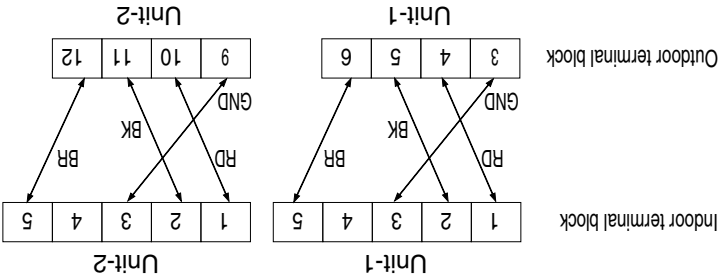
Model	1 Phase	24/36/48K	1.5 mm ²	No of core
				4

Wire specification.

Note : GND = Ground Earthing



C) 48K (3 Room)



B) 48K

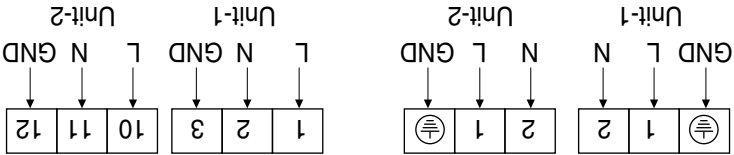
24/36/48K BTU/h

1) Connecting cables to the Indoor Unit

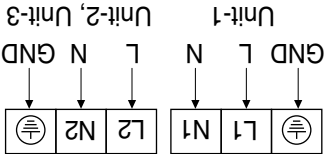
- Connect the wires to the terminals on the control board individually according to the outdoor unit connection.
- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively

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

B) 48K



C) 48K (3 Room)

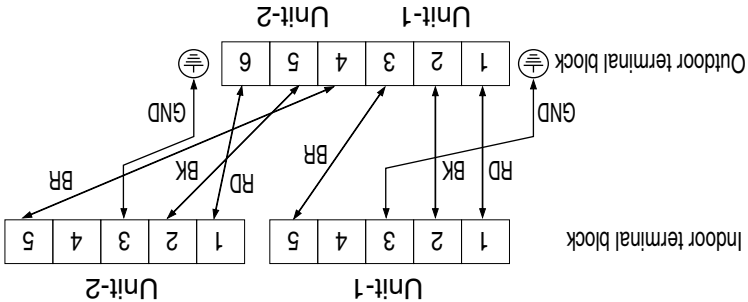


Wire specification.

1 Phase	Model
mm2 * core	24/36/48K
2.5 mm2*3	

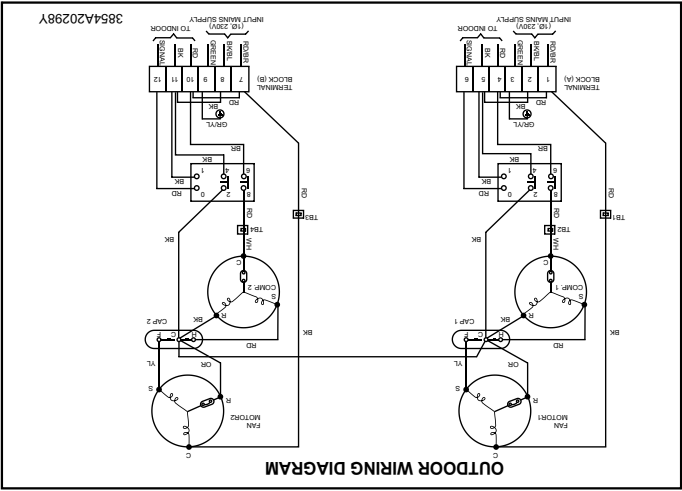
2) For connection between of Indoor and Outdoor unit & wire specification

A) 24/36K

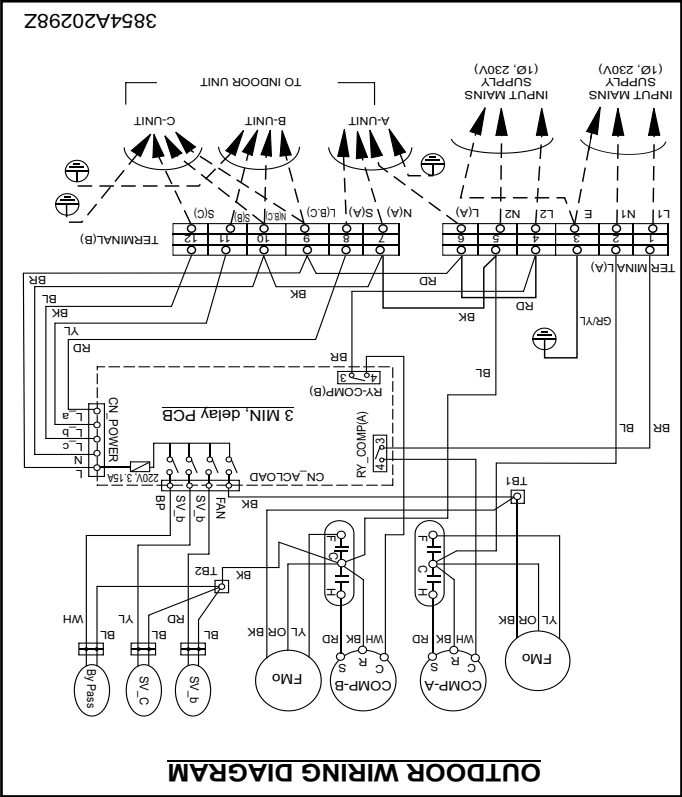


Note : GND = Ground Earthing

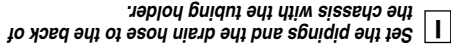
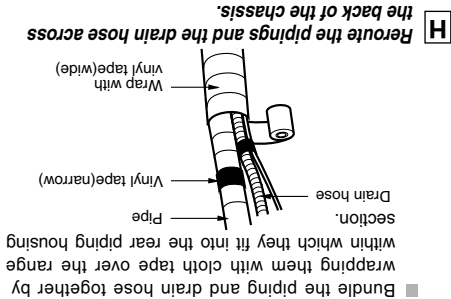
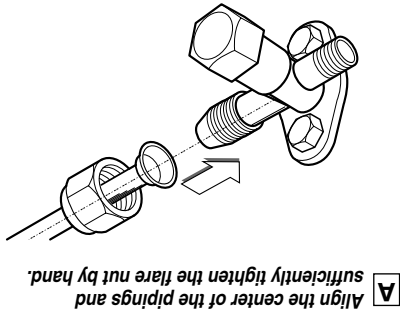
Indoor Wiring Diagram : 48K (2 Room)



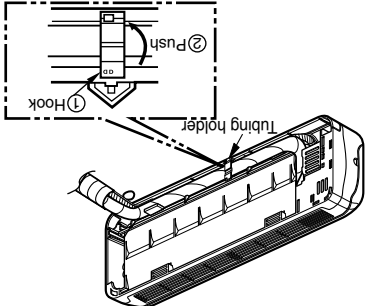
Outdoor Wiring Diagram : 48K (3 Room)



3 Connection of the pipes-Outdoor

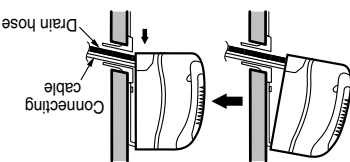


■ Hook the edge of tubing holder to tap on chassis and push the bottom of tubing holder to be engaged at the bottom of chassis.

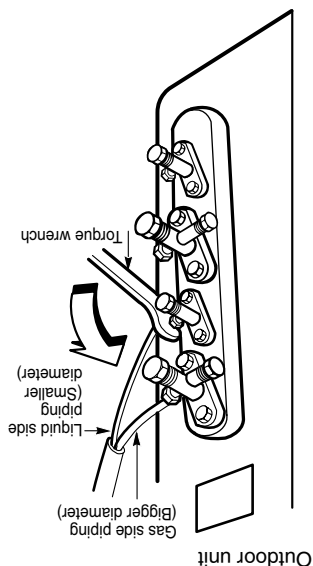


J Indoor unit installation

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



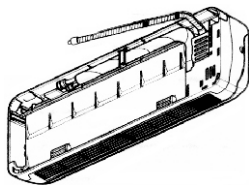
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots(clicking sound).



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

- When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

B Finally, tighten the flare nut with torque wrench until the wrench clicks.

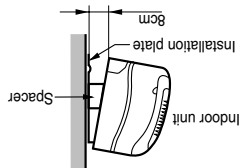


- C** Insert the connecting cable into the indoor unit.
- Don't connect the cable to the indoor unit.
 - Make a small loop with the cable for easy connection later.
- D** Tape the drain hose and the connecting cable.

• Connecting cable

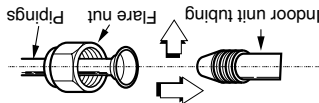
E Indoor unit installation

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

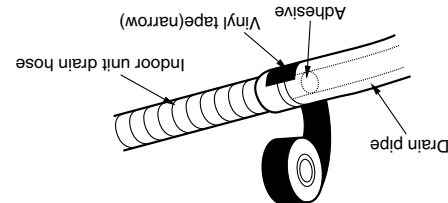
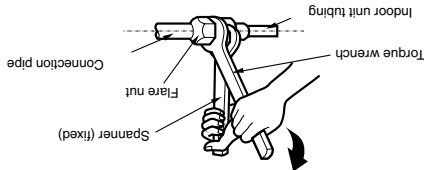


F Connecting the pipings to the indoor unit and the drain hose to drain pipe.

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



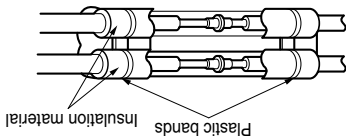
- Tighten the flare nut with a wrench.



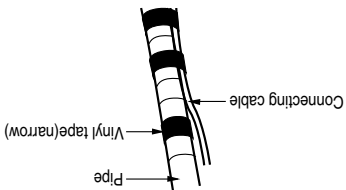
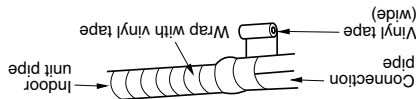
- When extending the drain hose at the indoor unit, install the drain pipe.

G Wrap the insulation material around the connecting portion.

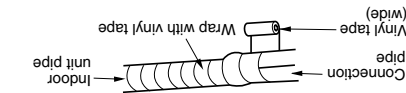
- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.



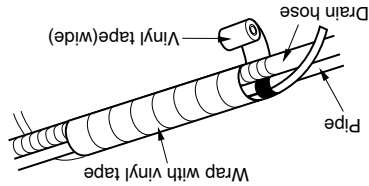
- Wrap the area which accommodates the rear piping housing section with vinyl tape.



■ Wrap the area which accommodates the rear

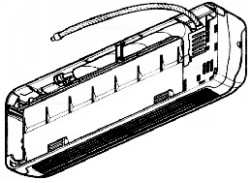


■ Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.

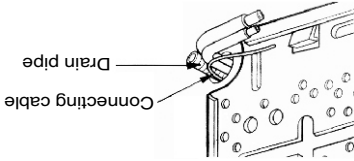


For right rear piping

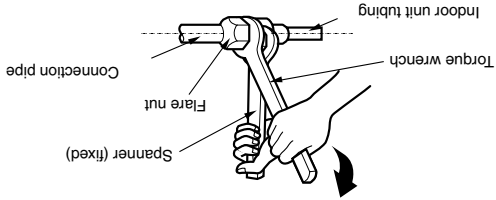
A Route the indoor tubing and the drain hose to the required piping hole position.



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

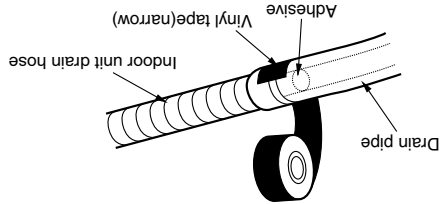


■ Tighten the flare nut with a wrench.



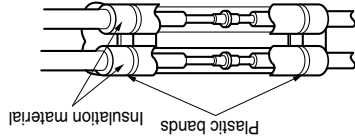
Capacity (Btu/h)	Pipe Size[Torque]	
	GAS	LIQUID
24K, 36K	1/2"[5.5kg·m]	1/4"[1.8kg·m]
48K	5/8"[6.6kg·m]	1/4"[1.8kg·m]

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



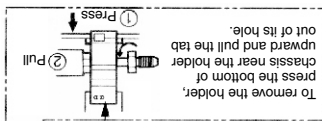
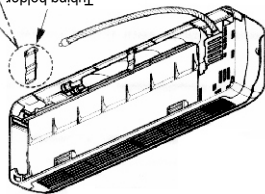
F Wrap the insulation material around the connecting portion.

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



Connection of piping --Indoor

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

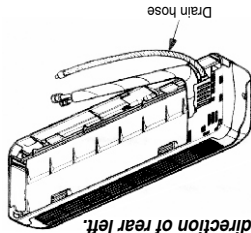


To remove the holder, press the bottom of chassis near the holder upward and pull the tab out of its hole.

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

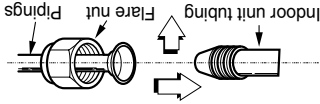
For left rear piping

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



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

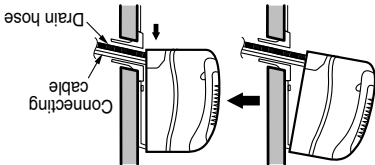
- Do not connect the cable to the indoor unit. Make a small loop with the cable for easy connection later.



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

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

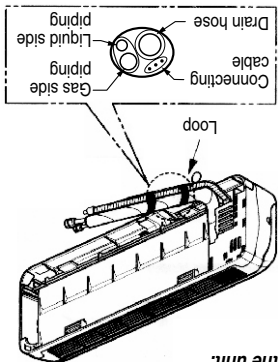
Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking-sound).



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

- D** Indoor unit installation

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



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

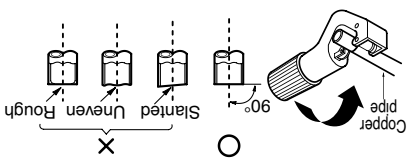


Flaring work

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

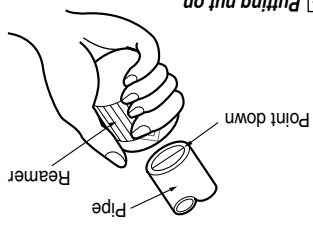
A Cut the pipes and the cable.

- Use the piping kit accessory or the pipes purchased locally;
- Measure the distance between the indoor and the outdoor unit.
- Cut the pipes a little longer than measured distance.
- Cut the cable 1.5m longer than the pipe length.



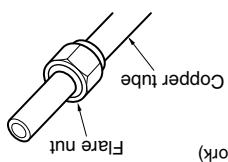
B Burrs removal

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



C Putting nut on

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

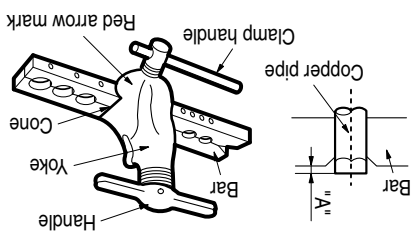


D Flaring work

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

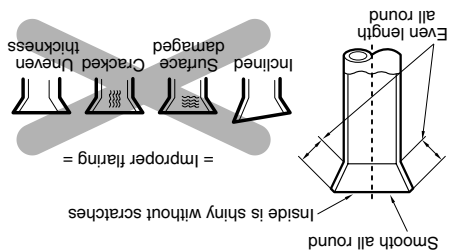
Outside diameter		A	
mm	inch	mm	inch
ø6.35	1/4	0-0.5	0-0.5
ø9.52	3/8	0-0.5	0-0.5
ø12.7	1/2	0-0.5	0-0.5
ø15.88	5/8	0-1.0	0-1.0

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



E Check

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

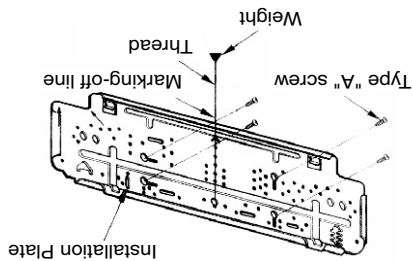


How to fix installation plate

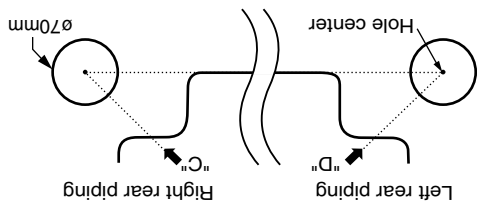
The wall you select should be strong and solid enough to prevent vibration.

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

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

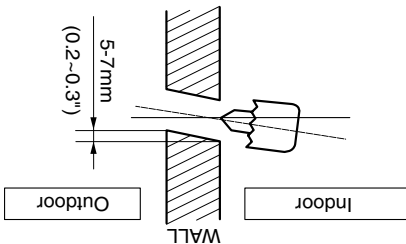


- B** Measure the wall and mark the centerline. It is also important to use caution concerning the location of the installation plate-routing of the wiring to power outlets is through the walls typically. Drilling the hole through the wall for piping connections must be done safely.



Drill a hole in the wall

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



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

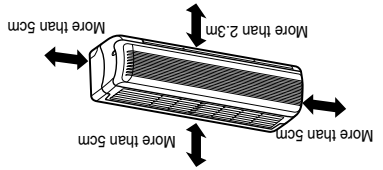
INSTALLATION OF INDOOR, OUTDOOR UNIT

Read completely, then follow step by step.

Select the best location



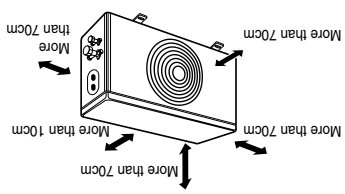
- A Indoor unit**
 - Do not have any heat or steam near the unit.
 - Select a place where there are no obstacles in front of the unit.
 - Make sure that condensation drainage can be conveniently routed away.
 - Do not install near a doorway.
 - Ensure that the space around the left and right of the unit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



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

B Outdoor unit

- If an awning is built over the unit to prevent direct sunlight or rain exposure, make sure that heat radiation from the condenser is not restricted.
- Ensure that the space around the back and sides is more than 10cm. The front of the unit should have more than 70cm of space.
- Do not place animals and plants in the path of the warm air.
- Take the air conditioner weight into account and select a place where noise and vibration are minimum.
- Select a place so that the warm air and noise from the air conditioner do not disturb neighbors.

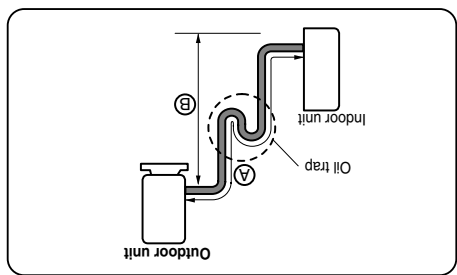
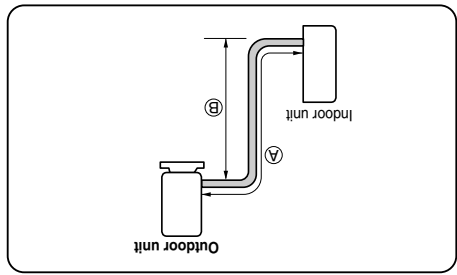


2

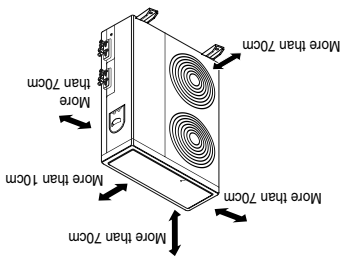
Piping length and elevation

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

Capacity (Btu/h)	GAS LIQUID	Standard Length (m)	Max. Elevation B (m)	Max. Refrigerant length A (m)	Additional (g/m)
12K X 2EA (Indoor)	1/2"	4 or 5	15	30	20
18K X 2EA (Indoor)	1/2"	4 or 5	15	30	20
24K X 2EA (Indoor)	5/8"	1/4"	4 or 5	15	20



In case more than 5m



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

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

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

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

CAUTION



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

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

When installed in an insufficiently strong place, the unit could fall causing injury.

Install the unit securely in a place which can bear the weight of the unit.

Incorrect installation could cause injury due to fire, electric shock, the unit falling or leakage of water. Consult the dealer from whom you purchased the unit or special installer.

Do not install it yourself (customer).

Be sure to use the part provided or specified parts for the installation work.
The use of defective parts could cause an injury due to a fire, electric shock, the unit falling, etc.

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

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

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

WARNING



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

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

WARNING : Could lead to death, serious injury, etc.



■ The indications and meanings are as follows.

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

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

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THE FOLLOWING SHOULD BE ALWAYS OBSERVED FOR SAFETY

INSTALLATION OVERVIEW

Installation Requirements

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

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

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

Flaring work and connection of piping 6

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

Connection of piping(Indoor).....7

For right rear piping

Wiring Diagram 11

Connecting the cable between indoor unit and outdoor unit 13

Checking the drainage and forming the piping 16

Air purging 17

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

Test running 19

- ❑ Two type "B" screws

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

Required Parts

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

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

.....11

- ❑ A glass of water
- ❑ Screw driver

.....17

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

.....19

- ❑ Holder Remote Control

INSTALLATION MANUAL AIR CONDITIONER

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

TYPE : MULTI SPLIT WALL MOUNTED