



ENGLISH

ITALIANO

ESPAÑOL

FRANÇAIS

DEUTSCH

PORTUGUÊS

РУССКИЙ/РЫСЫК

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: Art Cool Gallery Series



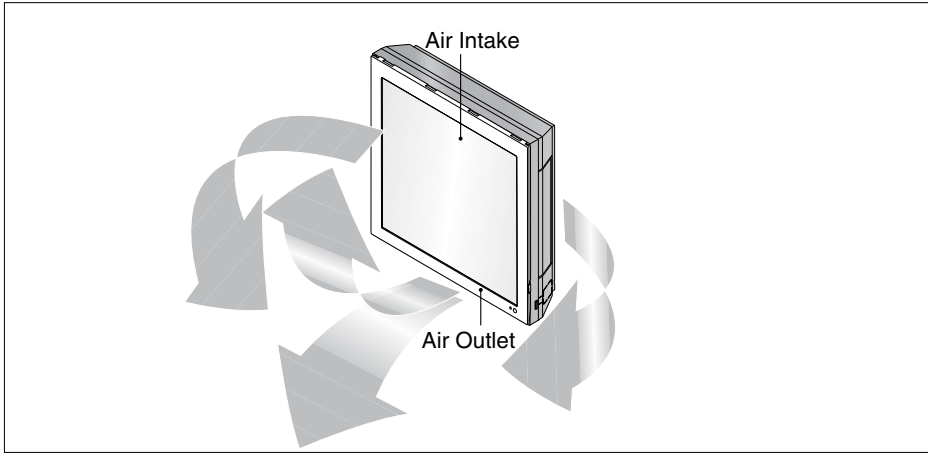
P/NO : MFL42803112

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

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Installation Parts



Read carefully, and then follow step by step.

Installation Parts

Installation guide map	Type "A" screw and plastic anchor
	

Safety Precautions

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

- Be sure to read before installing the air conditioner.
- Be sure to observe the cautions specified here as they include important items related to safety.
- 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.

- Meanings of 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 a defective or under-rated circuit breaker. Use this appliance on a dedicated circuit.

- There is risk of fire or electric shock.

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

- Do not disassemble or repair the product. There is risk of fire or electric shock.

Always ground the product.

- There is risk of fire or electric shock.

Install the panel and the cover of control box securely.

- There is risk of fire or electric shock.

Always install a dedicated circuit and breaker.

- Improper wiring or installation may cause fire or electric shock.

Use the correctly rated breaker or fuse.

- There is risk of fire or electric shock.

Do not modify or extend the power cable.

- There is risk of fire or electric shock.

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

- Moisture may condense and wet or damage furniture.

Be cautious when unpacking and installing the product.

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

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

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

Do not install the product on a defective installation stand.

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

Be sure the installation area does not deteriorate with age.

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

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.

■ Operation

Do not store or use flammable gas or combustibles near the product.

- There is risk of fire or failure of product.

 **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 product.

- Avoid personal injury.

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

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

If you eat the liquid from the batteries, brush your teeth and see doctor. Do not use the remote if the batteries have leaked.

- The chemicals in batteries could cause burns or other health hazards.

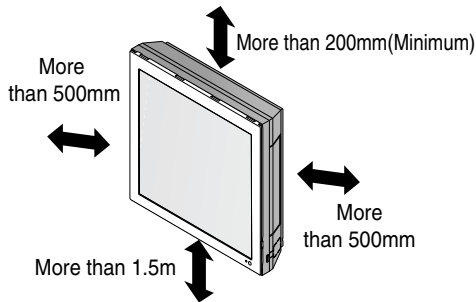
The Power cord connected to the unit should be selected according to the following specifications.

Installation

Read completely, then follow step by step.

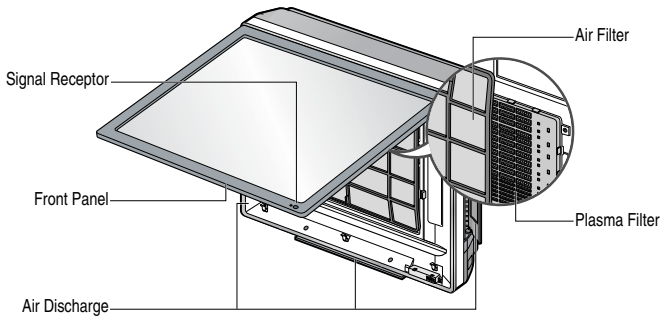
Selection of the best location

- 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 50cm. The unit should be installed as high on the wall as possible, allowing a minimum of 10cm from ceiling.
- Use a stud finder to locate studs to prevent unnecessary damage to the wall.



CAUTION : In case that the unit is installed near the sea, the installation parts may be corroded by salt. The installation parts (and the unit) should be taken appropriate anti-corrosion measures.

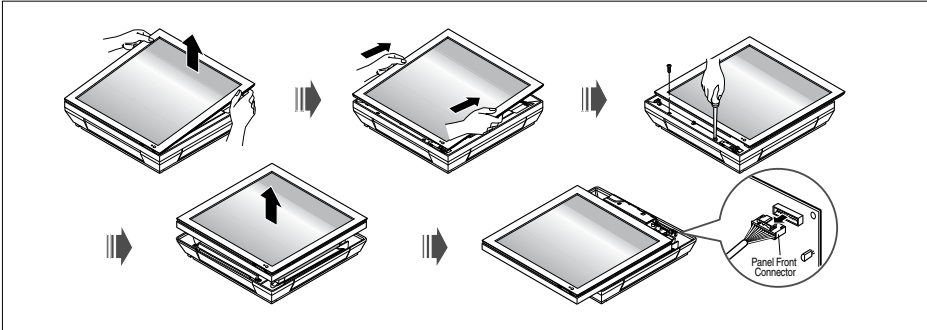
Features



Preparing Work for Installation

Open panel front

1. Pull the upper part of the front panel.
2. Lift up the panel.
3. To detach the front panel, remove the two screws at the lower part.
4. Detach the front panel from the body.
5. To detach the panel, disconnect the connector at the upper part.

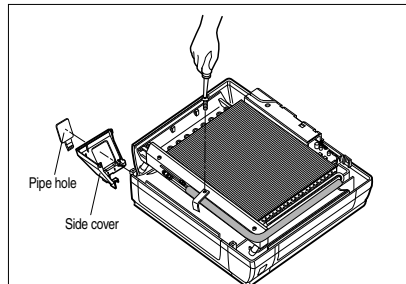


Cover pipe and cover side remove

1. Please remove the screw of the center tuning cover.
2. Pull up the side cover of desired connecting direction, then cover side is separated.
3. Pick the pipe hole of the side cover.

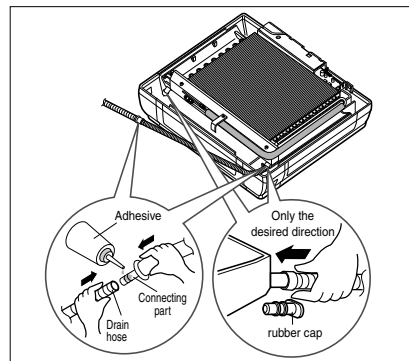
CAUTION: After removing the pipe hole, cut the burr for safety.

NOTICE When making pipe path through rear wall, you don't need to pick the pipe hole.



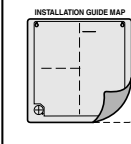
Drain hose junction

1. Remove the rubber stopple in the desired drain direction.
2. Insert drain hose into the handle of drain pan, and join drain hose and connecting hose according to the figure by.

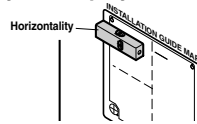


Fixing Indoor Unit

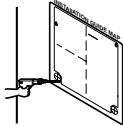
1. Attach an Installation guide map on the desired surface.



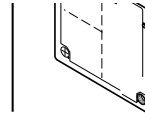
2. Look at suited horizon by horizontal meter on the horizontal setting line, and fix lightly the map by adhesive tape.



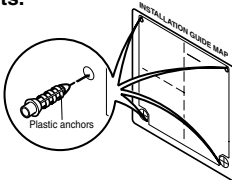
3. Make a hole with a diameter of 6mm and depth of 30-35mm by piercing a screw point.



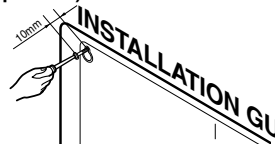
4. Drill the pierced part as a diameter of 50mm for connecting piping. (In case of piercing rear surface)



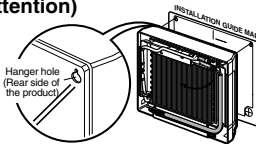
5. Drive the fore plastic anchors into drilled points.



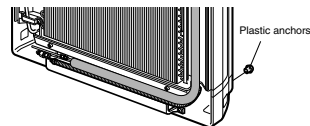
6. First, Drive the two points of the upper parts by screws. (Leave 10mm for hanging the product)



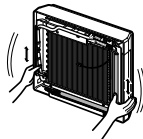
7. Hang the hole of product at the upper screws, and remove the map. (Falling attention)



8. Drive the lower parts after facing the hole of product with plastic anchors, and fix completely the upper screws.



9. Check the fixed product with light power.



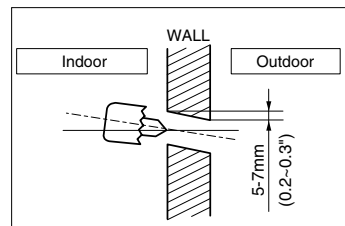
10. In case of nothing wrong, connect the pipe and the wire. (Refer to installation manual)

Drill a Hole in the Wall

- Drill the piping hole with a $\phi 50\text{mm}$ hole core drill. Drill the piping hole at either the right or the left with the hole slightly slanted to the outdoor side.

⚠ CAUTION

If the split type Indoor unit is installed in a wall having hole or opening near by or back side of the unit, then the air from other side of the wall can come inside the condition space through that hole/ opening. That air can cause unwanted dew/ water droplet formation when it comes in contact with body of the indoor unit. So all hole or opening on the wall must be blocked very well to avoid water dropping from the body of the unit.

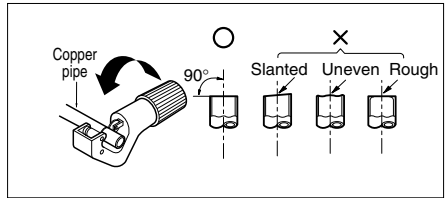


Flaring Work

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

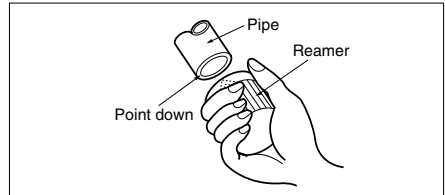
Cutting the pipes and the cable.

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



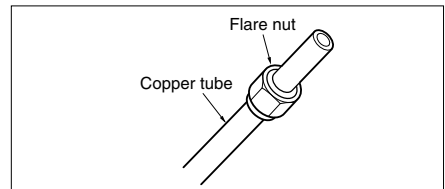
Removing burrs

1. Completely remove all burrs from the cut cross section of pipe/tube.
2. 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

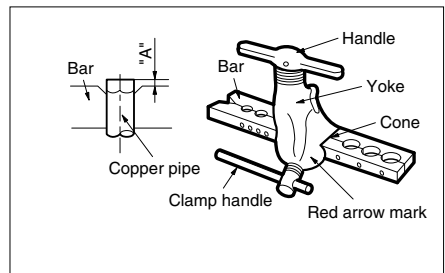
- Remove flare nuts attached to indoor and outdoor unit, then put them on pipe/tube having completed burr removal.
(not possible to put them on after flaring work)



Flaring work

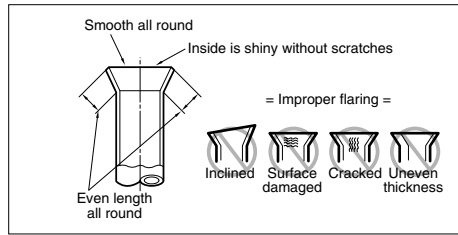
1. Firmly hold copper pipe in a die in the dimension shown in the table below.
2. Carry out flaring work with the flaring tool.

Outside diameter		A
mm	inch	mm
Ø6.35	1/4	0~0.5
Ø9.52	3/8	0~0.5
Ø12.7	1/2	0~0.5
Ø15.88	5/8	0~1.0
Ø19.05	3/4	1.0~1.3



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.

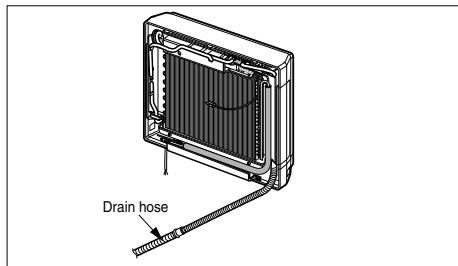


Connecting the Piping

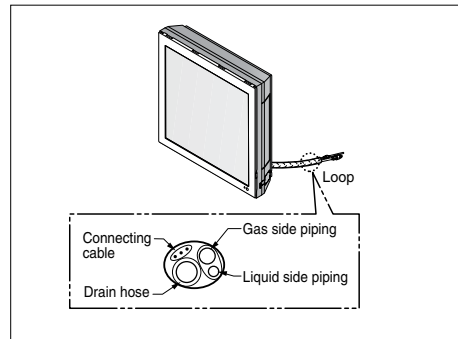
Indoor

Preparing the indoor unit's piping and drain hose for installation through the wall.

1. Route the indoor tubing and the drain hose in the direction of rear left or right



2. 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.



CAUTION: 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.

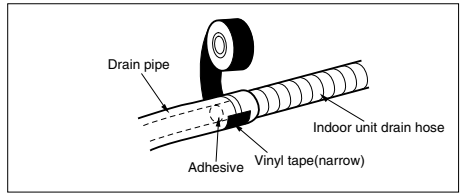
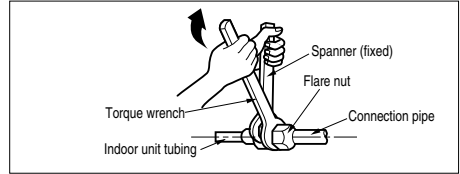
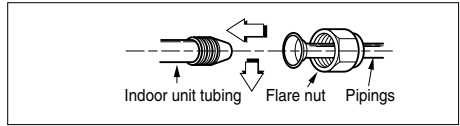
Installation

Connecting the piping with the indoor unit and drain hose with drain pipe

1. Align the center of the pipings and sufficiently tighten the flare nut by hand.
2. Tighten the flare nut with a wrench.

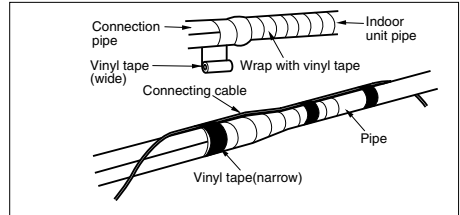
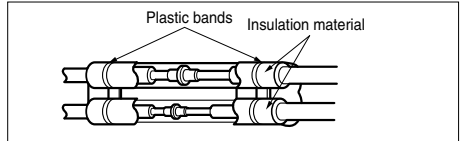
Outside diameter		Torque
mm	inch	kgf-m
Ø6.35	1/4	1.8~2.5
Ø9.52	3/8	3.4~4.2
Ø12.7	1/2	5.5~6.6
Ø15.88	5/8	6.3~8.2
Ø19.05	3/4	9.9~12.1

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

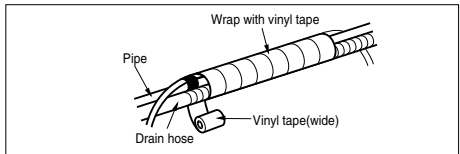


Wrap the insulation material around the connecting portion.

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



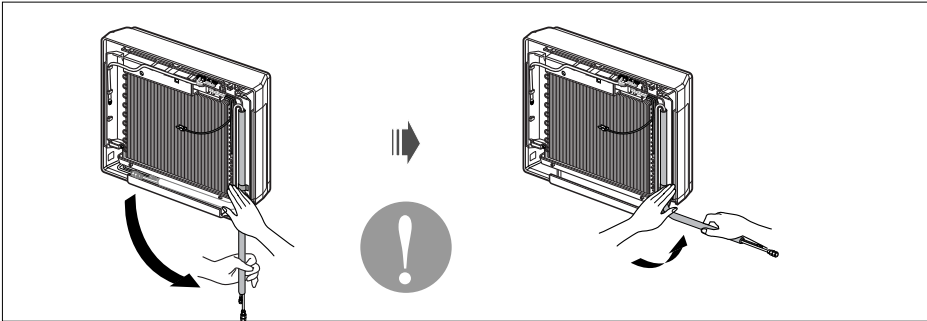
3. Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.



CAUTION: Installation Information
For right piping. Follow the instruction below.

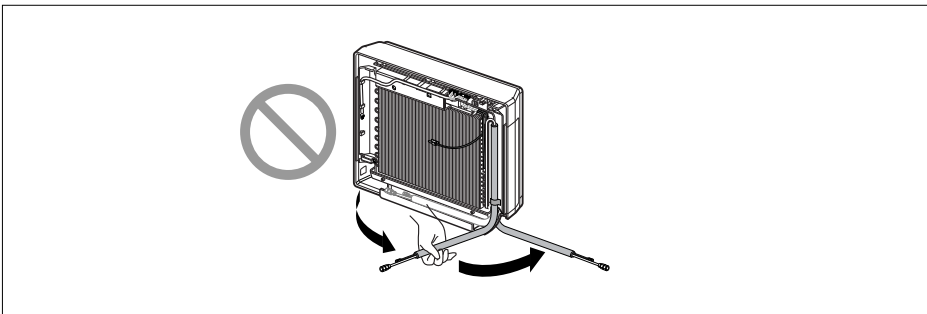
Good case

- Press on the upper side of clamp and unfold the tubing to downward slowly.



Bad case

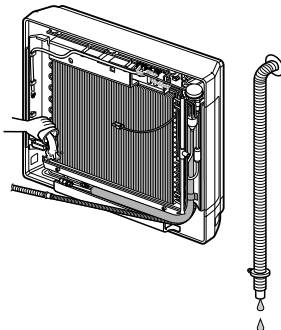
- Following bending type from left to right may cause damage to the tubing.



Drain Piping

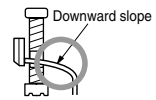
1) To check the drainage.

- 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.

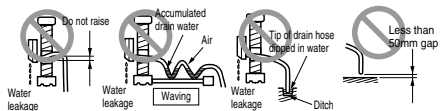


2) Drain piping

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

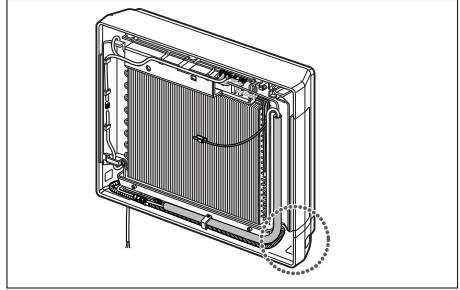


- Do not make drain piping.

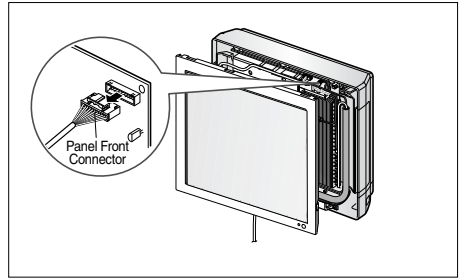


Panel Front Assembly

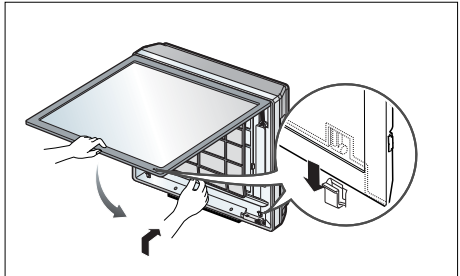
1. First, Check the side cover assembly exactly, and fix the power cord in the bottom groove of cover side left.



2. Assemble connecting lead wire with controller, fix the upper part of panel front, and match the lower part of panel front.

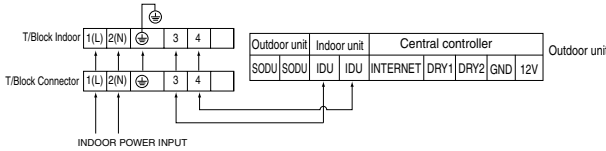


3. Screw up panel front, and suspend the hook of panel front in the groove.

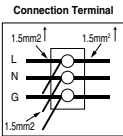


Wiring Connection

- 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.



- When installing, refer to the circuit diagram on the Control Box of Indoor Unit.
- When installing, refer to the wiring diagram on the Control Cover Inside Outdoor Unit.



- The capacity of connection terminal should be over 250V 20A. And when connecting the power line and communication line between indoor units, you are advised to use the connection terminal.
- When you are not able to use the connection terminal, fix each power line/communication line by using the clamp cord attached in the product, together with the clamp cord and screw in the accessories.

Please consider the all connected capacity of indoor units.

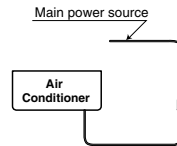


CAUTION

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



Circuit Breaker
Use a circuit breaker or time delay fuse.

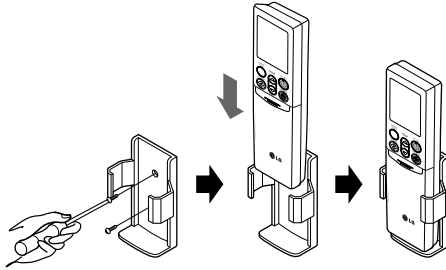


CAUTION After the confirmation of the above conditions, prepare the wiring as follows:

- 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 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 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 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) Always install an earth leakage circuit breaker where it is wet or moist.
- 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 protection device.
- 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.

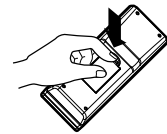
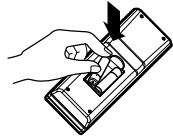
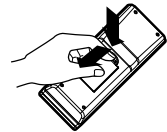
Installation of Wireless Remote Controller

How to mount onto a wall



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.



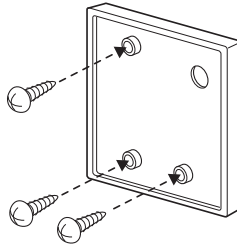
NOTICE

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.

Installation of Wired Remote Controller

1. Please fix tightly using provided screw after placing remote controller setup board on the place where you like to setup.

- Please set it up not to bend because poor setup could take place if setup board bends.
- Please set up remote controller board fit to the reclamation box if there is a reclamation box.

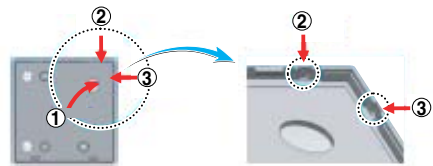


2. Can set up Wired remote controller cable into three directions.

- Setup direction: the surface of wall reclamation, upper, right
- If setting up remote controller cable into upper and right side, please set up after removing remote controller cable guide groove.

※ Remove guide groove with long nose.

- ① Reclamation to the surface of the wall
- ② Upper part guide groove
- ③ Right part guide groove

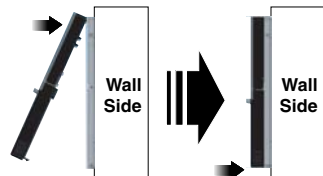


<Wire guide grooves>

3. Please fix remote controller upper part into the setup board attached to the surface of the wall, as the picture below, and then, connect with setup board by pressing lower part.

- Please connect not to make a gap at the remote controller and setup board's upper and lower, right and left part.

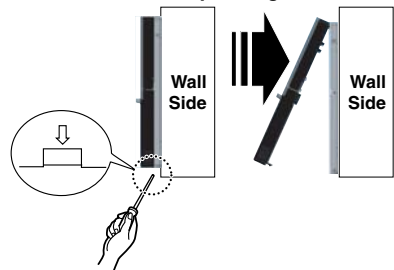
<Connecting order>



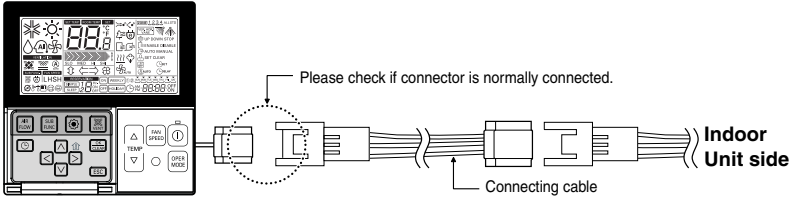
When separating remote controller from setup board, as the picture below, after inserting into the lower separating hole using screw driver and then, spinning clockwise, remote controller is separated.

- There are two separating holes. Please individually separate one at a time.
- Please be careful not to damage the inside components when separating.

<Separating order>



4. Please connect indoor unit and remote controller using connection cable.



5. Please use extension cable if the distance between wired remote controller and indoor unit is more than 10m.

CAUTION

When installing the wired remote controller, do not bury it in the wall.

(It can cause damage in the temperature sensor.)

Do not install the cable to be 50m or above.

(It can cause communication error.)

- When installing the extension cable, check the connecting direction of the connector of the remote controller side and the product side for correct installation.
- If you install the extension cable in the opposite direction, the connector will not be connected.
- Specification of extension cable: 2547 1007 22# 2 core 3 shield 5 or above.

WIRED REMOTE CONTROLLER INSTALLATION

- Since the room temperature sensor is in the remote controller, the remote controller box should be installed in a place away from direct sunlight, high humidity and direct supply of cold air to maintain proper space temperature. Install the remote controller about 5ft(1.5m) above the floor in an area with good air circulation at an average temperature.

Do not install the remote controller 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 remote controller is equipped with a seven segment LED display. For proper display of the remote controller LED's, the remote controller should be installed properly as shown in Fig.1. (The standard height is 1.2~1.5 m from floor level.)

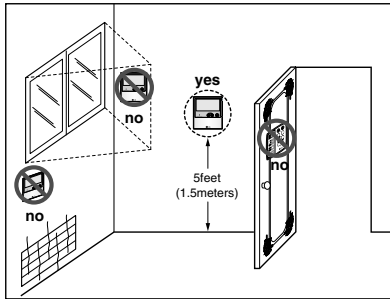
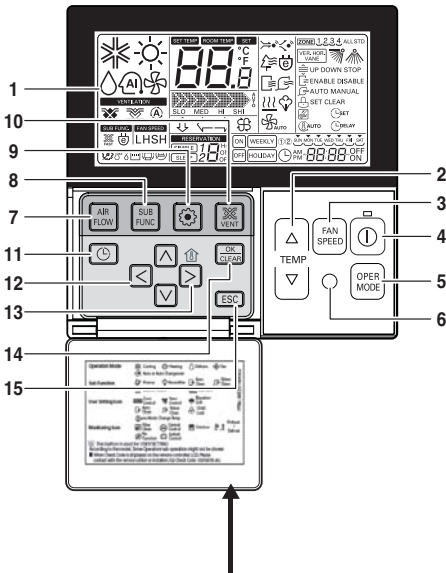



Fig.1 Typical locations for remote controller

Name and function of wired remote controller(Accessory)



Please attach the inform label inside of the door.
Please choose proper language depend on your country.

1. **Operation indication screen**
2. **Set temperature button**
 - It will set not room temperature but outlet air temperature.
3. **Fan speed button**
 - Fan Speed have 3 Steps.
 - Middle and Low step is same
4. **ON/OFF button**
5. **Operation mode selection button**
6. **Wireless remote controller receiver**
 - Some products don't receive the wireless signals.
7. **Air flow button**
8. **Subfunction button**
9. **Function setting button**
10. **Ventilation button**
11. **Reservation**
12. **Up,down,left,right button**
 - To check the indoor temperature, press  button.
13. **Room temperature button**
 - Displays only the room temperature of the remote controller perception.
 - There is no control of room temperature.
 - In case of fresh air intake unit, displays only the temperature around remote controller.
14. **Setting/Cancel button**
15. **Exit button**

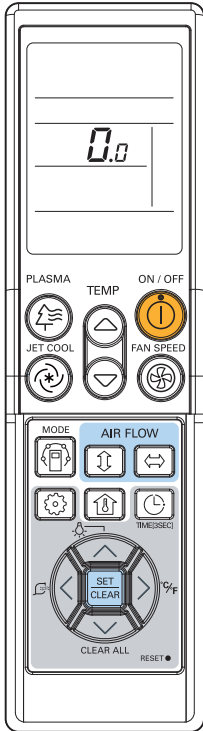
※ Some functions may not be operated and displayed depending on the product type.

※ It will display strange value to the room temperature if wired remote controller is not connected.

Model : PQRCSL0 (Black Color)
PQRCSLQW (White Color)

Group Control Setting

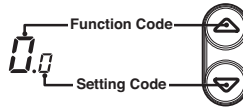
Master/Slave Setting



- 1** With the FAN SPEED button pressed, press the RESET button.



- 2** By using the TEMPERATURE SETTING button, set function code and setting value. (Please refer the Installer Setting Code Table.)



- 3** Press the ON/OFF button toward the indoor unit 1 time.



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

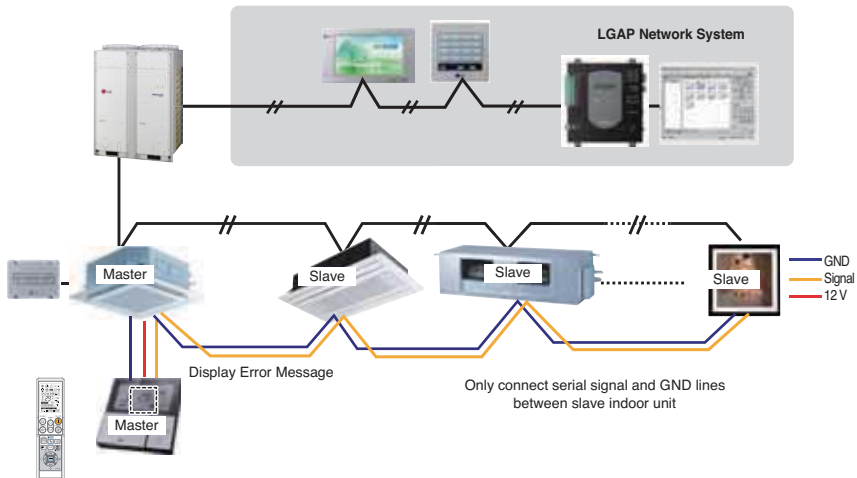


Installer Setting Code Table

No.	Function	Function Code	Setting Value	Remote Controller LCD
1	Group Control	2	0 : Set to Master	2.0
			1 : Set to Slave	2.1
			2 : Check Master/Slave	2.2

1. Group Control 1

■ Wired remote controller 1 + Indoor units



1. It is possible to 16 indoor units(Max) by one wired remote controller.

Set only one indoor unit to Master, set the others to Slave.

2. It is possible to connect with every type of indoor units.

3. It is possible to use wireless remote controller at the same time.

4. It is possible to connect with Dry Contact and Central controller at the same time.

- The Master indoor unit is possible to recognize Dry Contact and Central Controller only.
- In case of Central controller and Group controller at the same time, it is possible to connect standard 2series indoor units or later since Feb. 2009.
- In case of Central controller setting, the Central controller can control indoor units after setting only the address of master indoor unit.
- Slave indoor unit will be operated like master indoor unit.
- Slave indoor unit can not be individually controlled by Central controller.
- Some remote controller can't perform with Dry Contact and Central controller at the same time. So contact us further information about it.

5. In case of any error occurs at indoor unit, display on the wired remote controller.

Exception of the error indoor unit, an individual indoor unit control possibility.

6. In case of Group Control, it is possible to use following functions.

- Selection of operation options (operation/stop/mode/set temperature)
- Control of flow rate (High/Middle/Low)
- It is not possible at some functions.

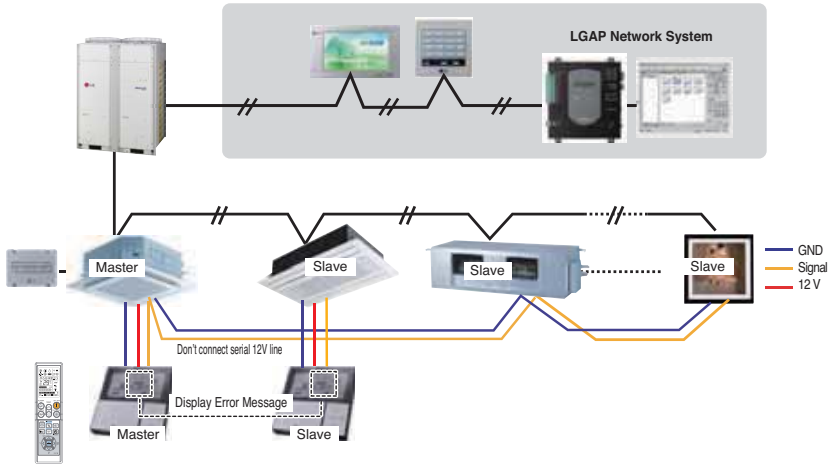
※ Indoor units be set possible using a wireless remote controller.

This indoor unit be set possible using a wireless remote controller for setting group control. (type : Wall Mounted, ART COOL Gallery, ART COOL Mirror)

※ It is possible to connect indoor units since Feb. 2009. In the other cases, please contact LGE.

※ It can be the cause of malfunctions when there is no setting of master and slave.

2. Group Control 2



*** It is possible to control N indoor units by wired remote controller M units. ($M + N \leq 17$ Units)**

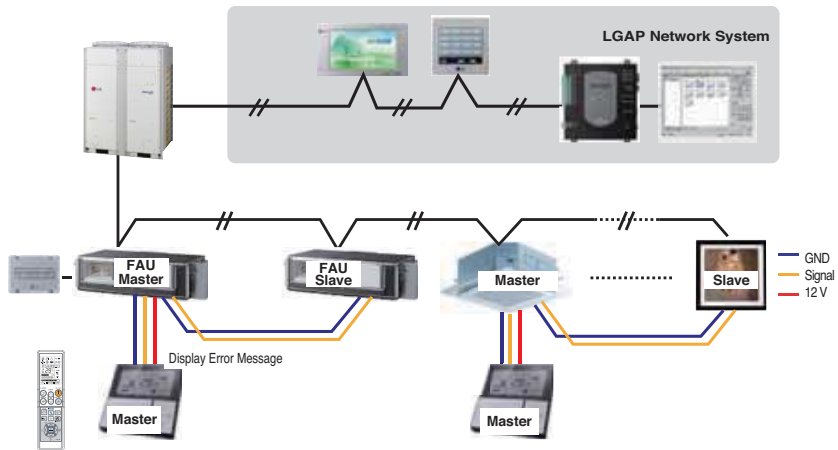
Set only one indoor unit to Master, set the others to Slave.

Set only one wired remote controller to Master, set the others to Slave.

Other than those, it is same with the Group Control 1.

3. Group Control 3

■ Mixture connection with indoor units and Fresh Air Intake Unit



※ In case of connecting with standard indoor unit and Fresh Intake Unit, separate Fresh Air Intake Unit with standard units. (Because setting temperature are different.)

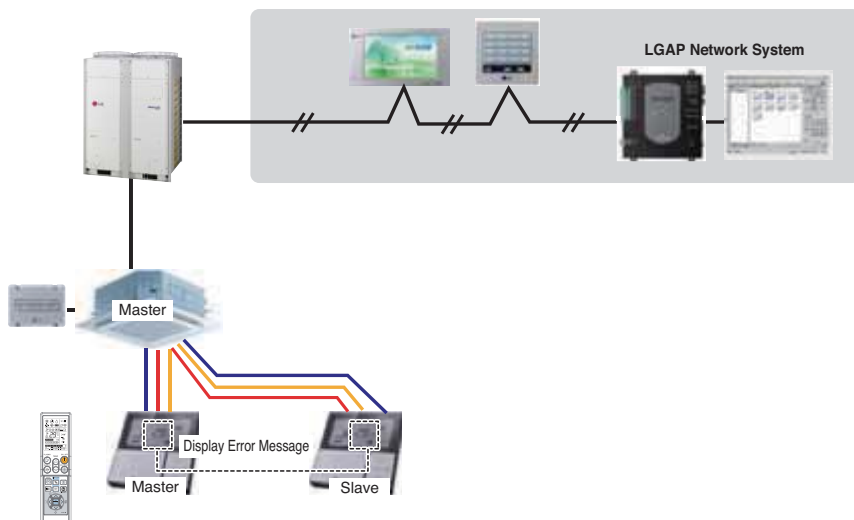
※ Other than those, it is same with Group Control 1.



* FAU : Fresh Air Intake Unit
Standard: Standard Indoor Unit

4. 2 Remote Control

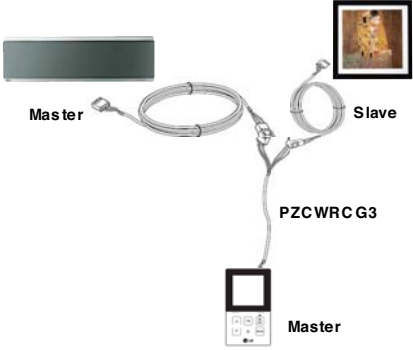
■ Wired remote controller 2 + Indoor unit 1



1. It is possible to connect two wired remote controllers with one indoor unit.
 2. Every types of indoor unit is possible to connect two remote controller.
 3. It is possible to use wireless remote controller at the same time.
 4. It is possible to connect with Dry Contact and Central controller at the same time.
 5. In case of any error occurs at indoor unit, display on the wired remote controller.
 6. There isn't limits of indoor unit function.
- ※ Maximum 2wired remote controllers can be connected with 1 indoor unit.

5. Accessories for group control setting

It is possible to set group control by using below accessories.

Indoor unit 2 EA +Wired remote controller	Indoor unit 1 EA +Wired remote controller 2EA
<p>※ PZCWRCG3 cable used for connection</p> 	<p>※ PZCWRC2 cable used for connection</p> 