

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 Mirror



P/NO : MFL67475719

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- Installation guide map
- Four type "A" screws & plastic anchors
- Connecting cable

- Pipes: Gas side
Liquid side
(Refer to Product Data)
- Insulation materials
- Additional drain pipe

- Two type "B" screws

- Level gauge
- Screw driver
- Electric drill
- Hole core drill
- Horizontal meter
- Flaring tool set
- Specified torque wrenches
(different depending on model No.)
- SpannerHalf union

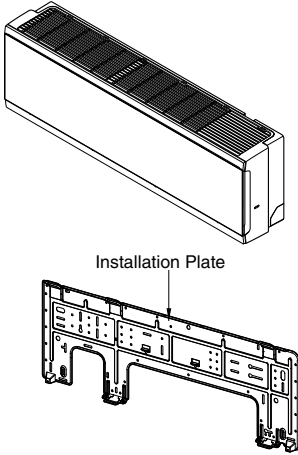
- A glass of water
- Screw driver

- Hexagonal wrench
- Gas-leak detector
- Vacuum pump
- Gauge manifold

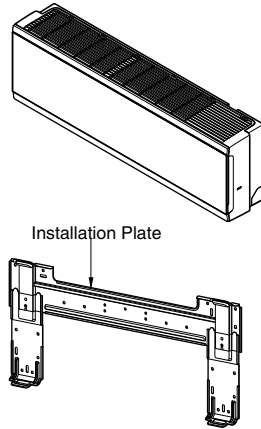
- Owner's manual
- Thermometer
- Holder Remote Controller

Installation Parts

S8

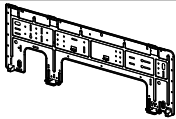


SE



S8

Installation plate(1EA)



Type "A" screws and plastic anchors(4 EA)

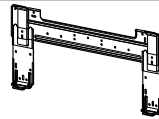


Type "B" screw (2 EA)



SE

Installation plate(1EA)



Type "A" screws and plastic anchors(4 EA)



Type "B" screw (2 EA)



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.

■ 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.

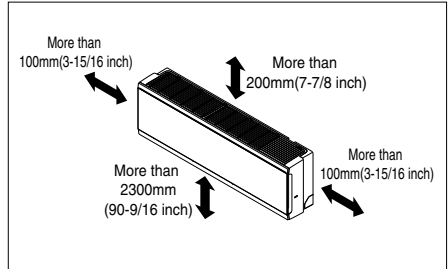
- The chemicals in batteries could cause burns or other health hazards.

Installation

Read completely, then follow step by step.

Selection of the best location

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

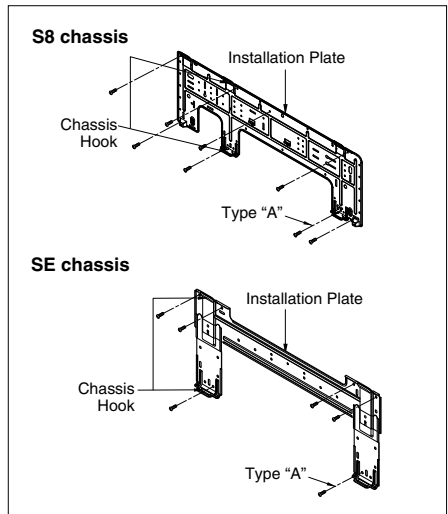


The mounting wall should be strong and solid enough to protect it from the vibration.

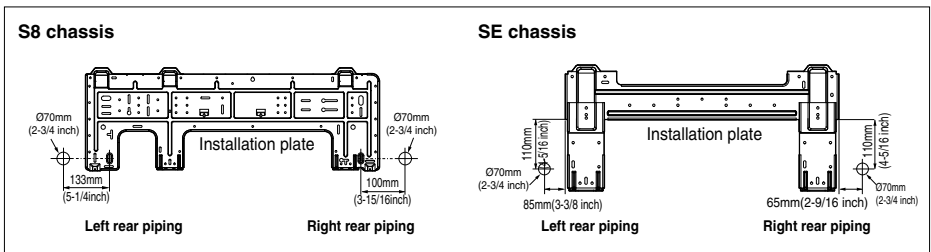
Mount the installation plate on the wall with four Type "A" screws.

(If mounting the unit on the concrete wall, consider using anchor bolts.)

- Always mount the Installation plate horizontally by aligning the marking-off line by means of the thread and a level.



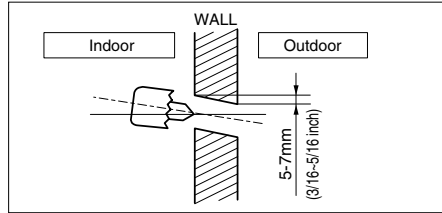
The lower left and the right side of Installation Plate



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.

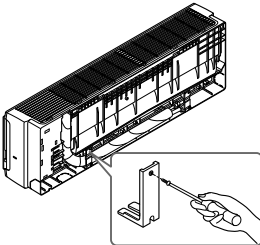
Drill a Hole in the Wall

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

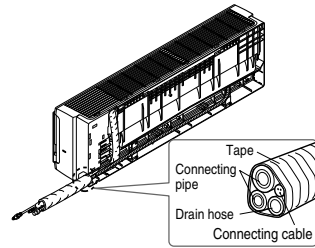


Piping Method

- 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 the chassis.
- Replace the plastic tubing holder in the original position.



3. **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.**

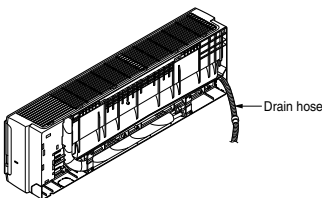


- NOTICE** : If the drain hose is routed inside the room, insulate the hose with an insulation material* so that dripping from "sweating" (condensation) will not damage furniture or floors.

*Foamed polyethylene or equivalent is recommended.

For right rear piping

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

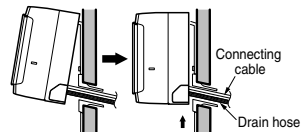


2. **Insert the connecting cable into the indoor unit from the outdoor unit through the piping hole.**

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

4. Indoor unit installation

- 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.

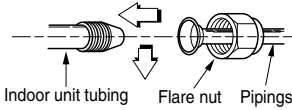


Press the lower left and right sides of the unit against the installation plate until the hooks engage into their slots (clicking sound).

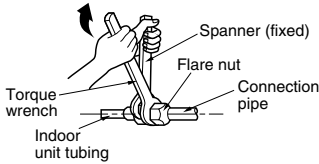
Installation

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

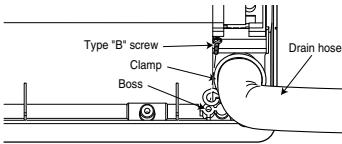
- Align the center of the pipings and sufficiently tighten the flare nut by hand.



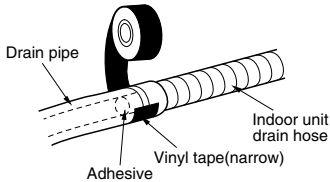
- Tighten the flare nut with a wrench.



- Mount the clamp on the boss with a type "B" screw. (optional)

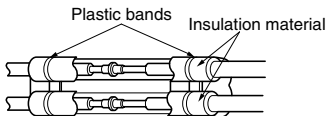


- When extending the drain hose at the indoor unit, install the drain pipe.

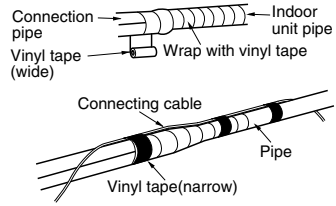


6. Wrap the insulation material around the connecting portion.

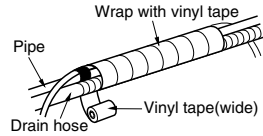
- Overlap the connection pipe insulation material and the indoor unit pipe insulation material. Bind them together with vinyl tape so that there is no gap.



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

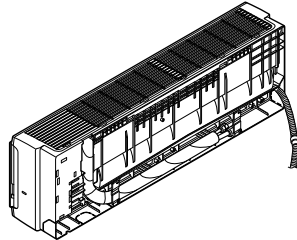


- Bundle the piping and drain hose together by wrapping them with vinyl tape over the range within which they fit into the rear piping housing section.

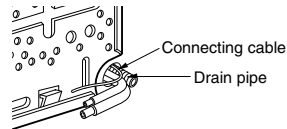


For left rear piping

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



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

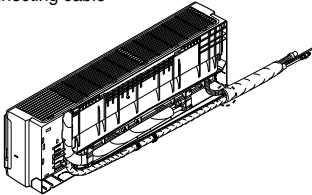


3. Insert the connecting cable into the indoor unit.

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

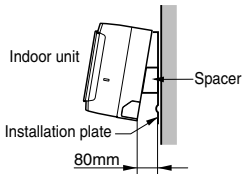
4. Tape the drain hose and the connecting cable.

- Connecting cable



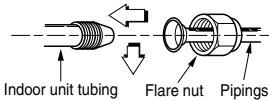
5. Indoor unit installation

- 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.

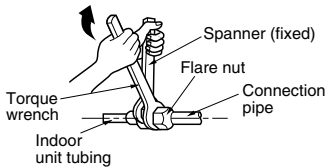


6. Connecting the pipings to the indoor unit and the drain hose to drain pipe.

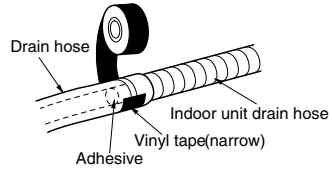
- Align the center of the pipings and sufficiently tighten the flare nut by hand.



- Tighten the flare nut with a wrench.

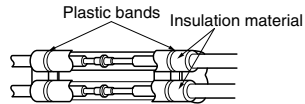


- When extending the drain hose at the indoor unit, install the drain pipe.

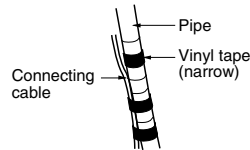
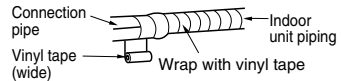


7. Wrap the insulation material around the connecting portion.

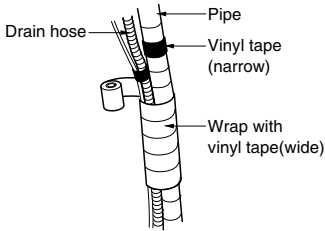
- Overlap the connection pipe heat insulation and the indoor unit pipe heat insulation material. Bind them together with vinyl tape so that there is no gap.



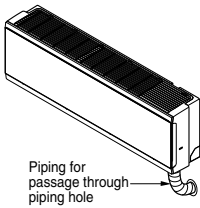
- Wrap the area which accommodates the rear piping housing section with vinyl tape.



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

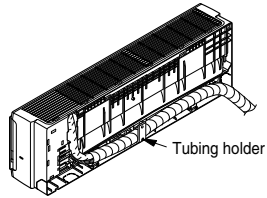


8. Reroute the pipings and the drain hose across the back of the chassis.



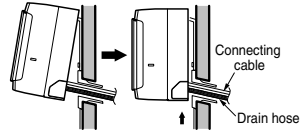
9. Set the pipings and the drain hose to the back of the chassis with the tubing holder.

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



10. 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).

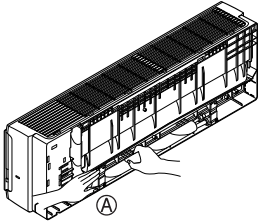
CAUTION

Installation Information (For left piping)

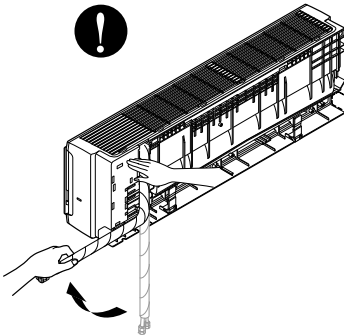
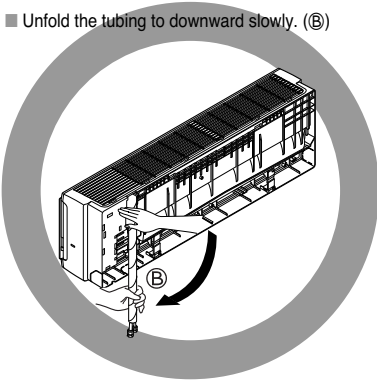
• Good case

For left piping. Follow the instruction below.

- Press on the upper side of clamp. (A)



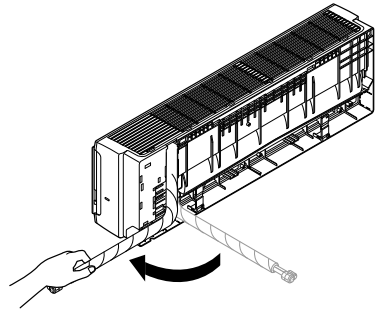
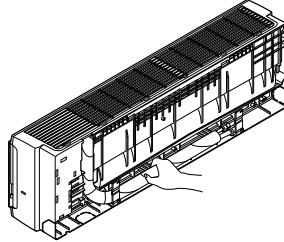
- Unfold the tubing to downward slowly. (B)



CAUTION

• Bad case

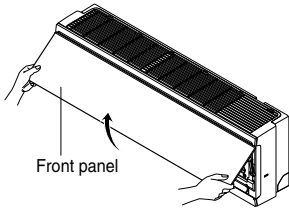
- Following bending type from right to left could cause problem of pipe damage.



Drain Piping

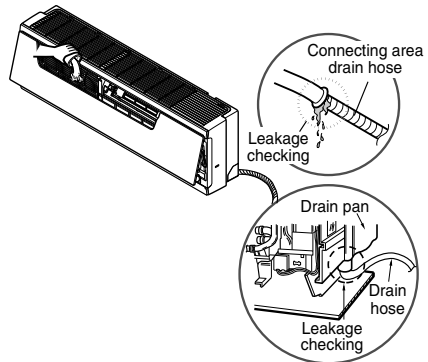
1. To remove the front panel from the indoor unit, remove the front panel from the indoor unit cabinet.

- Set the air direction louvers up-and-down to the position (horizontally) by hand.
- Remove the securing screws that retain the front panel. Pull the lower left and right sides of the grille toward you and lift it off.

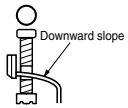


2. To check the drainage.

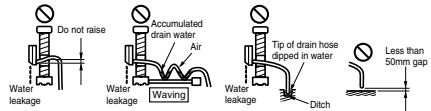
- Pour a glass of water on the evaporator.
- Ensure the water flows through the drain hose of the indoor unit without any leakage and goes out the drain exit.



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



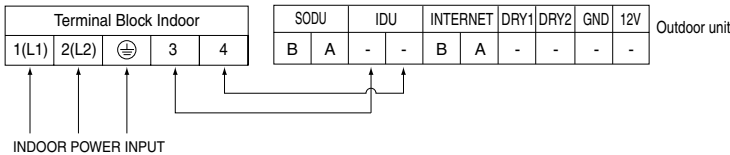
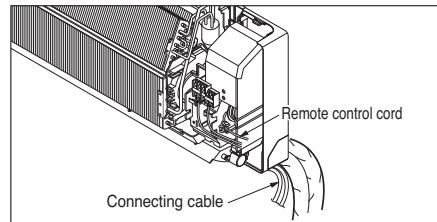
- Do not make drain piping.



Wiring Connection

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.



⚠ CAUTION:

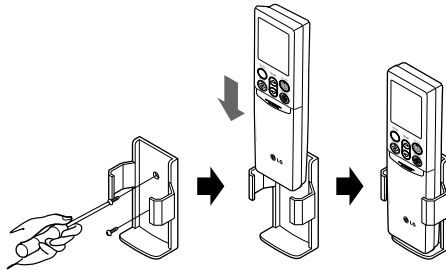
After the confirmation of the above conditions, prepare the wiring as follows:

- 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 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) In a wet or moist area, always install an earth leakage circuit breaker.
- 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.

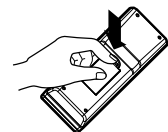
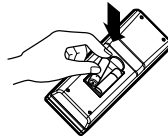
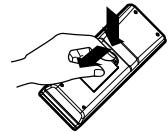
Installation of Wireless Remote Controller

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.



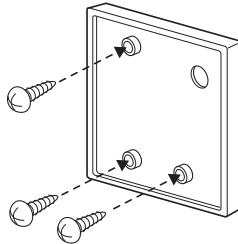
NOTICE

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.

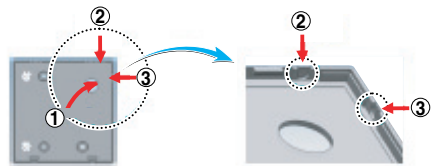


2. Can set up Wired remote controller cable into three directions.

- 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

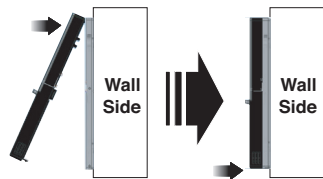


<Wire guide grooves>

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.

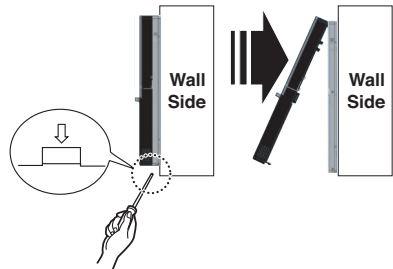
<Connecting order>



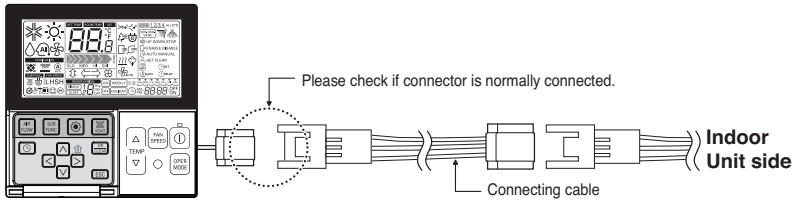
When separating remote controller from setup board, as the picture below, after inserting into the lower separating hole using screw driver and then, spinning clockwise, remote controller is separated.

- 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.

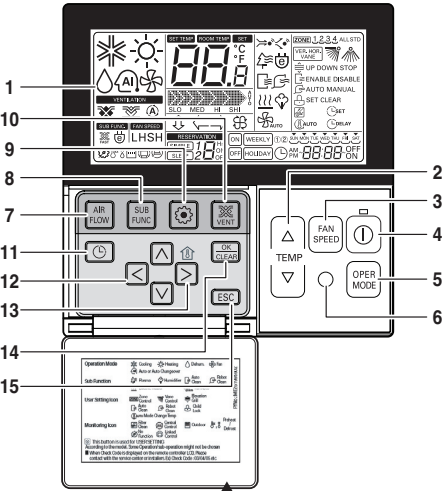
(It can cause damage in the temperature sensor.)

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.

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**

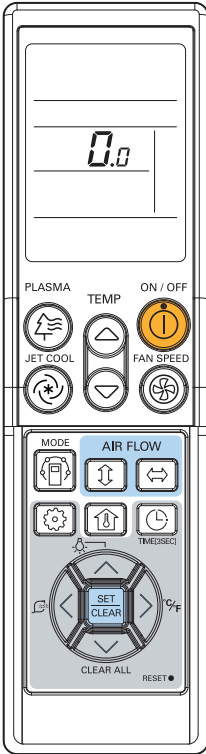
※ Some functions may not be operated and displayed depending on the product type.

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

Model : PQRCVSL0 (Black Color)
PQRCVSLQW (White Color)

Group Control Setting

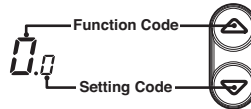
Master/Slave Setting



- 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.

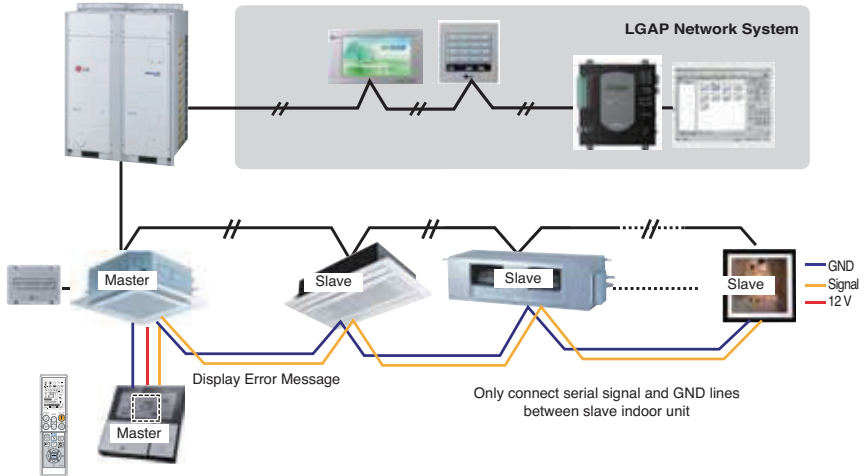


Installer Setting Code Table

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 + Standard 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)

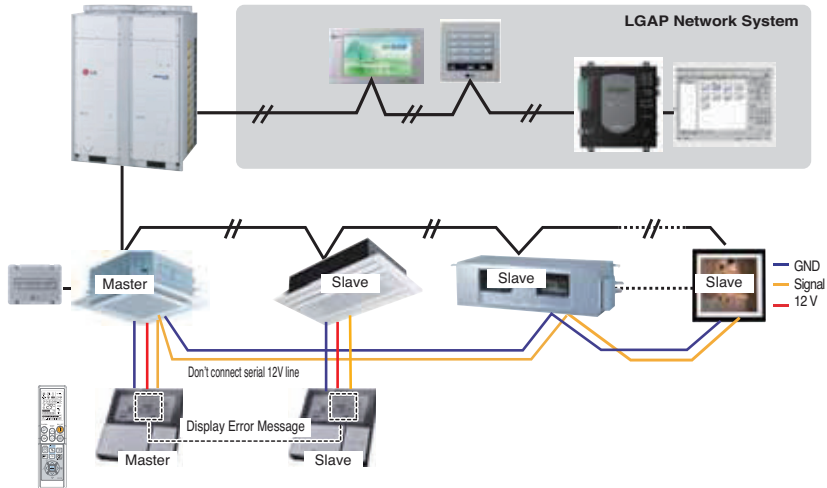
※ It is possible to connect indoor units since Feb. 2009.

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

■ Wired remote controllers + Standard Indoor Units



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

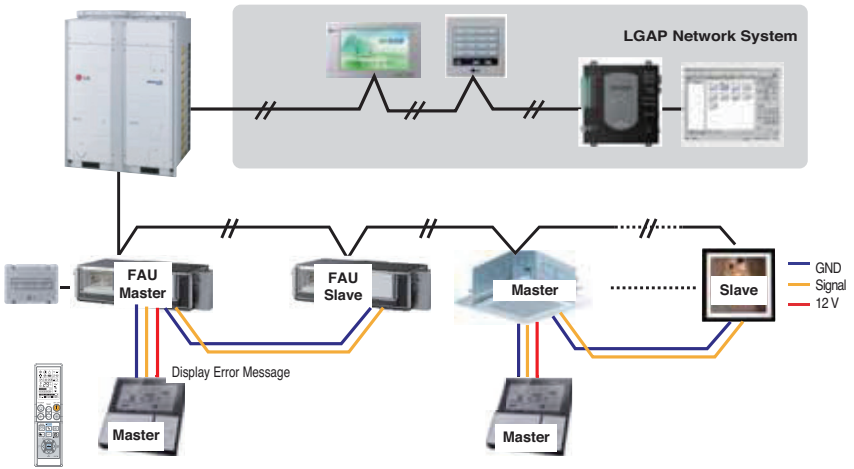
Set only one indoor unit to Master, set the others to Slave.

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.)

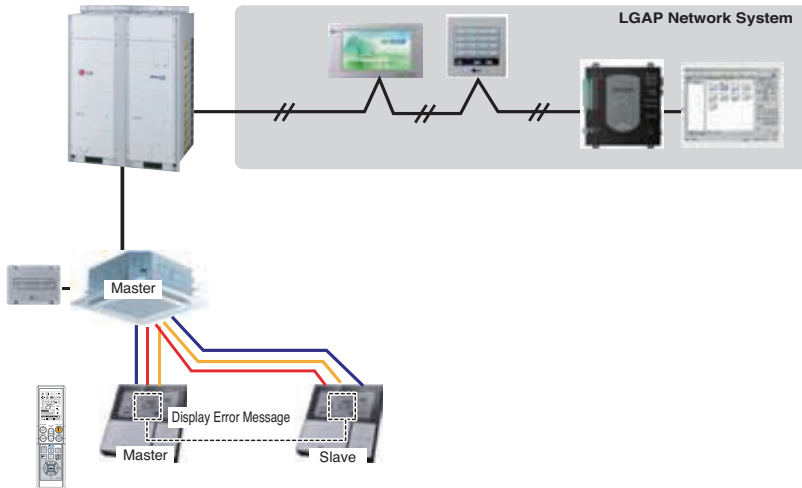
* Other than those, it is same with Group Control 1.



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

4. 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

