VRF (Variable Refrigerant Flow)
Installation manual

VLOD***S6-5P

- Thank you for purchasing this Lennox Product.
- Before operating this unit, please read this manual carefully and retain it for future reference.

LENNOX Powered by SAMSUNG

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Safety Information

California Proposition 65 Warning (US)

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

IMPORTANT – This product has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency when matched with appropriate coil components.

However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency.

Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions.

Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.

⚠ WARNING

- Hazards or unsafe practices that may result in severe personal injury or death.

⚠ CAUTION

- Hazards or unsafe practices that may result in minor personal injury or property damage.
- Carefully follow the precautions listed below because they are essential to guarantee the safety of the equipment.

⚠ WARNING

- Always disconnect the air conditioner from the power supply before servicing it or accessing its internal components.
- Verify that installation and testing operations are performed by qualified personnel.
- Verify that the air conditioner is not installed in an easily accessible area.

Symbol	Meaning
	Flammable gas
	Flammable materials
	Refrigerant safety group
	Read operating manual
	Refer to operating manual
	Read service manual

⚠ WARNING

The installation and testing of this appliance must be performed by a qualified technician.

- The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe installation of the appliance.

Always install the air conditioner in compliance with current local, state, and federal safety standards.

- Do not use means to accelerate the defrost operation or to clean, other than those recommended by Lennox.
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.

Safety Information

General information

⚠ WARNING

- Carefully read the content of this manual before installing the air conditioner and store the manual in a safe place to be able to use it as a reference after installation.
- For maximum safety, installers should always carefully read the following warnings.
- Store the operation and installation manual in a safe location and remember to hand it over to the new owner if the air conditioner is sold or transferred.
- This manual explains how to install an indoor unit with a split system with two Lennox units. Using other types of units with different control systems may damage the units and invalidate the warranty. The manufacturer shall not be responsible for damages arising from the use of non-compliant units.
- The manufacturer shall not be responsible for damage from unauthorized changes or improper electrical connections. The requirements outlined in the "Operating limits" table, included in the manual, shall immediately invalidate the warranty.
- All pipe work including piping material, pipe routing, and installation shall include protection from physical damage in operation and service and comply with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. Any field joints shall be accessible for inspection before being covered or enclosed.
- The air conditioner should be used only for the applications for which it has been designed: the indoor unit is not suitable to be installed in areas used for laundry.
- Do not use the units if damaged. If problems occur, switch the unit off and disconnect it from the power supply.
- To prevent electric shocks, fires or injuries, always stop the unit, disable the protection switch and contact Lennox's technical support if the unit produces smoke, if the power cable is hot or damaged or if the unit is very noisy.
- Inspect the unit, electrical connections, refrigerant tubes and protections regularly. These operations should be performed by qualified personnel only.
- The unit contains moving parts, which should always be kept out of the reach of children.
- Do not attempt to repair, move, alter or reinstall the unit. If performed by unauthorized personnel, these operations may cause electric shocks or fires.
- Do not place containers with liquids or other objects on the unit.
- The air conditioner contains a refrigerant that must be disposed of as special waste. At the end of its life cycle, the air conditioner must be disposed of in authorized centers or returned to the retailer so it can be disposed of correctly and safely.
- Wear protective equipment (such as safety gloves, goggles, and headgear) during installation and maintenance work. Installation/repair technicians may be injured if protective equipment is not properly equipped.
- This unit is a partial unit air conditioner, complying with partial unit requirements of this International Standard, and must only be connected to other units that have been confirmed as complying with corresponding partial unit requirements of this International Standard.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.
  Children should be supervised to ensure they do not play with the appliance.

Installing the unit

⚠ WARNING

IMPORTANT: When installing the unit, always connect the refrigerant tubes first, and then the electrical lines.

- Always disassemble the electric lines before the refrigerant tubes.
- Upon receipt, inspect the product to verify that it has not been damaged during transport. If the product appears damaged, DO NOT INSTALL it, and immediately report the damage to the carrier or retailer (if the installer or the authorized technician has collected the material from the retailer.)
- After completing the installation, always carry out a functional test and provide instructions on how to operate the air conditioner to the user.
- Do not use the air conditioner in environments with hazardous substances or close to equipment that releases free flames to avoid the occurrence of fires, explosions or injuries.
- Do not install the product on a ship or a vehicle (such as a campervan). Salt, vibration or other environmental factors may cause the product to malfunction, electric shock or fire.

- Excessive indoor humidity or clogged condensate drain lines may cause water to drip from indoor units. Do not install the indoor unit where dripping could result in property damage, such as over electronic equipment or other sensitive instruments.
- Our units must be installed in compliance with the space specifications presented in the installation manual to ensure accessibility from both sides and allow repairs or maintenance operations to be carried out.
  The unit's components must be accessible and easy to disassemble without endangering people and objects.
- For this reason, where it is not observed as indicated in the Installation Manual, the cost necessary to reach and repair the unit (safely as required by local regulations) with slings, trucks, scaffolding or any other means of elevation won't be considered in-warranty and charged to end user.
- If any gas or impurities, except R-32 refrigerant, come into the refrigerant pipe, a serious problem may occur and it may cause injury.
  Use the supplied accessories, specified components and tools for the installation.
  - Do not use the pipe and the installation product used for the R-22, R-410A refrigerant.
  - Failure to use the specified components can cause the product to fall, water leakage, electrical shock, and fire. (The pipe and flare components used for R-22, R-410A refrigerant must not be used)

Power supply line, fuse or circuit breaker

⚠ WARNING

- Always make sure that the power supply is compliant with current safety standards. Always install the air conditioner following current local safety standards.
- Always verify that a suitable grounding connection is available.
- Verify that the voltage and frequency of the power supply comply with the specifications and that the installed power is sufficient to ensure the operation of any other domestic appliance connected to the same electric lines.
- Always verify that the cut-off and protection switches are suitably dimensioned.
- Verify that the air conditioner is connected to the power supply following the instructions provided in the wiring diagram included in the manual.
- Always verify that electric connections (cable entry, section of leads, protections...) are compliant with the electric specifications and with the instructions provided in the wiring scheme. Always verify that all connections comply with the standards applicable to the installation of air conditioners.
- Devices disconnected from the power supply should be completely disconnected in the condition of overvoltage category.
- Be sure not to perform power cable modification, extension wiring, and multiple wire connection.
  - It may cause electric shock or fire due to poor connection, poor insulation, or current limit override.

⚠ CAUTION

Make sure that you ground the cables.

- Do not connect the earth wire to the gas pipe, water pipe, lightning rod or telephone wire. If grounding is not complete, electric shock or fire may occur.

Install the circuit breaker.

- If the circuit breaker is not installed, electric shock or fire may occur.

Make sure that the condensed water dripping from the drain hose runs out properly and safely.

Install the power cable and communication cable of the indoor and outdoor unit at least 1m away from the electric appliance.

Install the indoor unit away from a lighting apparatus using the ballast.

- If you use the wireless remote control, reception error may occur due to the ballast of the lighting apparatus.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.

Do not use the indoor unit for the preservation of food items, plants, equipment, and artwork. This may cause deterioration of their quality.

Do not install the indoor unit if it has any drainage problems.

This unit is equipped with electrically powered safety measure. For the safety measures to be effective, the unit must be electrically powered at all times after installation, other than when servicing.

This unit is equipped with a leak detection system for safety. For leak detection to be effective, the unit must be electrically powered at all times after installation, other than when servicing.

Safety Information

Precautions for using R-32 refrigerant

General

- This product is pre-charged with mildly flammable gas classified as A2L by ASHRAE. The following precautions and instruction manuals must be followed during installation, operation, servicing and decommissioning of the product.
- The appliance shall be stored in a room without continuously operating ignition sources, like open flames or a gas appliance or an electric heater.
- All national and local regulations shall be observed at all times.
- All pipe-work including piping material, pipe routing and installation shall include protection from physical damage in operation and service, and comply with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field joints shall be accessible for inspection before being covered or enclosed.
- All field piping and joints shall be pressure tested with an inert gas according to prevalent industry standards before refrigerant charging and system commissioning.
- Where additional field charging is required. The installer shall write with a permanent marker the field charge added on the ODU label provided, such that the Total Charge = Factory 'Pre-charge' + field charge.
- For ducted systems, any auxiliary systems that are potential ignition sources shall not be installed in the duct work. Examples of ignition sources are hot surfaces with temperatures exceeding 700°C and electric switching devices.
- Any auxiliary device installed must be approved by LENNOX and must be suitable for operating with the refrigerant marked on the label.
- For mechanical ventilation the lower edge of the air extraction opening shall not be more than 100mm above the floor. The exhaust location outside the building must be at least 3 m away from the building opening and mechanical air intake openings.
- To handle, purge, and dispose of the refrigerant, or break into the refrigerant circuit, the worker should have a certificate from an industry-accredited authority.
- Non-ducted systems may be installed in areas such as false ceilings not being used as return air plenum if the conditioned air does not mix with the air in the false ceilings.
- For ducted appliances false ceilings or drop ceilings may be used as return air plenum if a refrigerant leak detection system is provided in the system and any external connections are also provided with a sensor immediately below the return air plenum duct joint.
- Installation, servicing, and any type of maintenance or repair must be performed by certified personnel who are competent to carry out such activity following national and local regulations.

General information on Servicing

- Do not work in a confined space. Ensure adequate ventilation is provided at the workspace during the entirety of the duration of the work to safely disperse any released refrigerant.
- All maintenance staff and others working in the local area shall be instructed on the nature of the work being performed and instructed to follow all instructions provided by LENNOX, national and local authorities.
- The area shall be checked with an approved refrigerant detector before and during any work on the system.
- Have a dry CO_2 fire extinguisher adjacent to the charging area and workspace.
- The service personnel shall not use any ignition sources in a manner that may lead to the risk of fire or explosion.
- Potential ignition sources shall be kept away from the work area where the flammable refrigerant can be released into the surrounding area.
- The work area should be checked to ensure that there are no flammable hazards or ignition risks. The "No Smoking" sign shall be attached.
- Under no circumstances shall potential sources of ignition be used upon detection of leakage.

The following checks shall be applied to installations and maintenance operations.

- The actual total refrigerant charge is in accordance with the room size in accordance with Table 1.
- The ventilation machinery and outlets are operating adequately and are not obstructed.
- Markings on the equipment are visible and legible.
- Refrigerant pipes or components are installed in a position where they are unlikely to be exposed to any substance that may corrode refrigerant containing components.

Initial checks of electrical devices shall include the following.

- that capacitors are discharged safely to avoid sparking.
- that no live electrical components and wiring are exposed while charging, recovering or purging the system.
- That there is continuity to earth bonding.
- Check that cabling is not worn, corroded or damaged in any manner.

Electrical repair safety measures

- All electrical components used or replaced must be to LENNOX's specifications.
- If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with.
- Sealed electrical components and intrinsically safe components shall be replaced and not repaired.
- Cabling should be protected from excessive vibration, pressure, sharp edges, and other adverse environmental factors.

Detection of flammable refrigerants

- Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
- Make sure that the detector is not a potential source of ignition.
- Leak detection equipment shall be set at a percentage of the LFL (Lower flammable limit) of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25% maximum) is confirmed.
- The use of detergents containing chlorine shall be avoided for cleaning because the chlorine may react with the refrigerant and corrode the piping.
- If leakage is suspected, naked flames shall be removed.
- If a leakage is found while brazing, the entire refrigerant shall be recovered from the product or isolated (e.g. using shut-off valves). It shall not be directly released into the environment. Oxygen-free nitrogen (OFN) shall be used for purging the system before and during the brazing process.
- The work area shall be checked with an appropriate refrigerant detector before and during work.
- Ensure that the leakage detector is appropriate for use with flammable refrigerants.

Removal and Evacuation

- When removing refrigerant for servicing it is recommended to remove the entire quantity.
- When removing refrigerant follow local and national regulations and follow best practices including;
  - evacuate;
  - purge the circuit with inert gas (optional for A2L);
  - evacuate (optional for A2L);
  - continuously flush or purge with inert gas when using a flame to open the circuit; and
  - open the circuit.
- Use proper recovery cylinders appropriate for the type of refrigerant.
- Follow prescribed industry best practices for purging and evacuation.
- Oxygen free nitrogen shall be used for purging the system.

Charging procedure

- Follow industry standard refrigerant charging best practices.
- Before recharging the system shall be pressure tested with oxygen free nitrogen gas.
- Ensure that contamination of different refrigerants does not occur when charging.
- Cylinders shall be kept in the appropriate position as per instructions.
- The refrigerant system should be grounded before charging the system.
- Label the system when charging is completed.
- Take extreme care not to overfill the refrigeration system.
- The system shall be leak tested on completion of charging before commissioning.

Decommissioning

- Only qualified licensed professionals shall perform refrigerant recovery and decommissioning.
- Isolate the system electrically.
- All recovery equipment and cylinders shall conform to appropriate standards. Only approved cylinders, with pressure relief valves, for the type of refrigerant shall be used.
- Recover refrigerant following industry standard procedure for flammable refrigerants.
- When draining compressors oil care must be taken that there is no flammable refrigerant in the compressor and that the compressor is not hot. Oil should be handled according to local and federal regulations.
- After decommissioning, the system shall be labeled stating that it has been decommissioned. The label shall be dated and signed. The label should state that it "contains flammable refrigerant".
- Ensure that there are labels on the equipment indicating the equipment contains flammable refrigerant.
- Recovered refrigerant shall not be mixed or reused. It shall be processed according to national, state and local regulations.

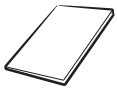
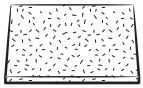
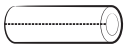
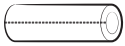
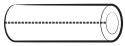
About Refrigerant Detection System(RDS)

- This system includes a refrigerant detection system (RDS) and automatic leak mitigation controls.
- When a leak is detected, the RDS will stop the compressor and energize the indoor unit(s) fan for air circulation to disperse the leaked gas and display an error Code.
- The RDS sensor does automatic self-test each hour and does not require any periodic maintenance.
- The sensor should be replaced upon end of life when <error Code E700> is displayed.
- For complete replacement instructions, please refer to the Service Manual.
- The RDS sensor must only be replaced with sensors as specified by Lennox. Sensor replacement must be performed by a certified technician.

Installation Procedure

Step 1 Checking and preparing accessories

The following accessories are supplied with the indoor unit. The type and quantity may differ, depending on the specifications.

User manual	Installation manual
	
Clamp hose	Flexible hose
	
Insulation drain	Thermal insulation sponge A
	
Cable-tie	Thermal insulation sponge B
	
Rubber	Thermal insulation sponge C
	
Reducer	Wi-Fi connecting Wire
	

Step 2 Choosing the installation location

Installation location requirements

- There must be no obstacles near the air inlet and outlet.
- Install the indoor unit on a ceiling that can support its weight.
- Maintain sufficient clearance around the indoor unit.
- Before installing the indoor unit, be sure to check whether the chosen location is well-drained.
- The indoor unit must be installed such that it is beyond public access and is not touchable by users.
- A vibration-resistant location that is not inclined (If the indoor unit is installed on a structure that is not sturdy, it may fall and get damaged or cause injury.)
- Where it is not exposed to direct sunshine.
- Where the air filter can be removed and cleaned easily.
- A location where animals cannot access and urinate on the product. Ammonia may be generated.
- The amount of refrigerant to add differs, depending on the installation conditions (e.g., the total piping length and the indoor unit combination), and the minimum indoor-unit installation area depends on the final amount of refrigerant.
  Minimum floor area of the room shall be in compliance with the min. room area according to the total charge of the installation according to Table 1 in the outdoor unit installation manual.

⚠ WARNING

- Because your air conditioner contains R-32 refrigerant, make sure that it is installed, operated, and stored in a room whose floor area is larger than the minimum required floor area specified.
- Refer to the "R-32 system arrangement requirements" section in the user manual for the combined outdoor units, and use a permanent marker pen to write down the indoor-unit installation area for the final refrigerant amount in the "Minimum Room Area" section on the "Rating label" on the indoor unit.
  ※ This information is mandatory for "Annex 101.DVF Caution/Warning Standards" and must be filled in. If it is not filled in, the installer will be held responsible for any breakage or damage.

⚠ CAUTION

- As a rule, the unit cannot be installed at a height of less than 7.2ft (2.2m).
- If you install a cassette type indoor unit on the ceiling when the temperature is over 80.6°F (27°C) and humidity is over 80%, you must apply an extra 0.39 inch (10mm) thick polyethylene insulation or a similar type of insulation to the body of the indoor unit.

Do not install the air conditioner in the following places.

- A place where there is mineral oil or arsenic acid. resin parts flame and the accessories may drop, or water may leak. The capacity of the heat exchanger may be reduced, or the air conditioner may be out of order.
- A place with exposure to mineral oil, oil vapor or a cooking area where there is spray (If oil adheres to the heat exchanger, performance degradation, spray or condensation scattering may occur. If oil adheres to a plastic component, the component may deform or get damaged. Such issues may result in a system failure or refrigerant leak.)
- A place with aromatic diffusers, aromatherapy, scented candles or perfumes as the chemicals may react to the product's materials and may result in system failure or refrigerant leaks.
- The place where corrosive gas such as sulphuric acid gas is generated from the vent pipe or air outlet.
- The copper pipe or connection pipe may corrode and the refrigerant may leak.
- The place where there is a machine that generates electromagnetic waves. The air conditioner may not operate normally due to the control system.
- The place where there is a danger of existing combustible gas, carbon fiber or flammable dust.
- The place where thinner or gasoline is handled. Gas may leak and it may cause fire.
- The place that is close to heat sources.
- Do not use the indoor unit for the preservation of food items, plants, equipment, and artwork. This may cause deterioration of their quality.
- Do not install the indoor unit if it has any drainage problems.

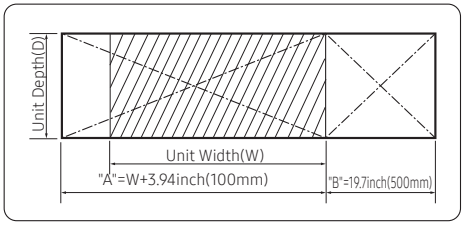
Space requirements for installation

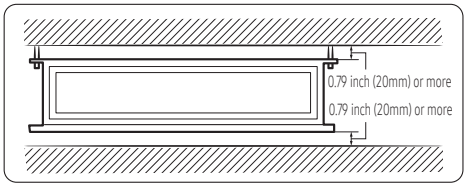
Construction Standard for Inspection Hole

1 In case, the ceiling is tex tile, Inspection hole dose not need.

2 In case, the ceiling is plaster board, Inspection hole depends on Inside height of the ceiing.

- **a** Height is more than 1.64ft(0.5m) : Only "B" [Inspection for PBA] is applied.
- **b** Height is less than 1.64ft(0.5m) : Both "A"&"B" are applied.
- **c** "A"&"B" are inspection holes .





- You must have 0.79 inch (20mm) or more space between the ceiling and the bottom of indoor unit. Otherwise, the noise from the vibration of indoor unit may bother the user. When the ceiling is under construction, the hole for check-up must be made to take service, clean and repair the unit.
- It is possible to install the unit at an height of between 7.3~8.3ft (2.2~2.5m) from the ground, if the unit has a duct with a well defined lenght [11.81 inch(300 mm) or more], to avoid fan motor blower contact.

Installation Procedure

Installation conditions for indoor units and wired remote controls

- Make sure to install a dedicated R-32-capable wired remote control for each indoor unit.
  See the installation examples below for reference.

Make sure to use R-32-capable wired remote controls. The product will not operate if an R-32-capable wired remote control is not located in the vicinity or if users try to control the product using a common wired remote control.

※ E694: This error occurs if an installed R-32 indoor unit and R-32-capable wired remote control are not a correct combination.

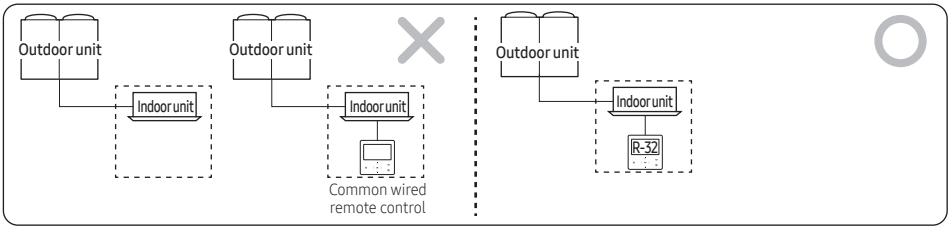
Use R-32-capable wired remote controls.

※ VSTAT04P-1

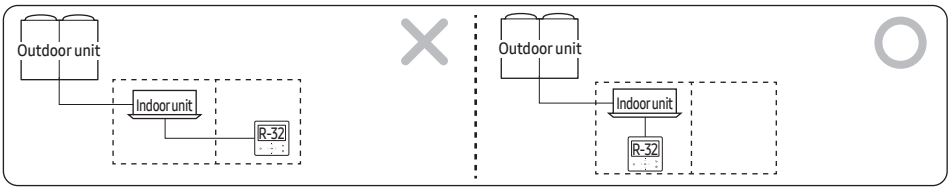
※ R-32-capable wired remote controls should be purchased separately.

⚠ WARNING

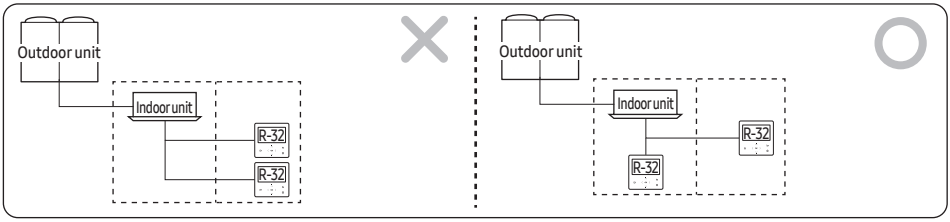
- Lennox is not responsible for any loss or damage to the product resulting from using anything but the specified wired remote control.



Make sure R-32-capable wired remote controls are located in the same room as the indoor units.



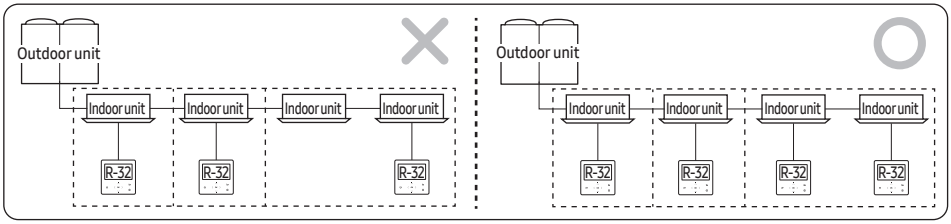
If using two or more R-32-capable wired remote controls, at least one of them must be placed in the same room as the indoor units.



Make sure to connect all indoor units to respective R-32-capable wired remote controls.

At least one remote control must be installed for each indoor unit, even if multiple indoor units are installed in the same room.

Grouped control is not possible.



For the occupancy listed below, the safety alarm system shall also warn at a supervised location, such as the night porter's location, as well as the occupied space:

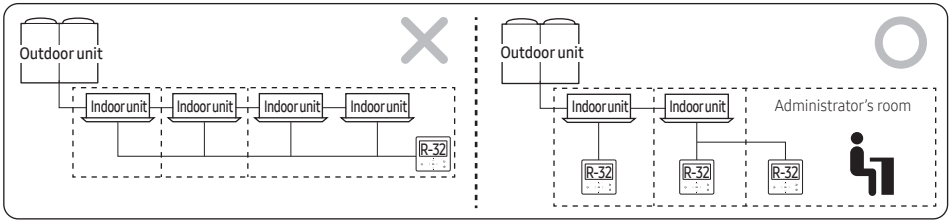
▶ rooms, parts of buildings, building where sleeping facilities are provided,

▶ rooms, parts of buildings, building where people are restricted in their movement,

▶ rooms, parts of buildings, building where an uncontrolled number of people are present, or

▶ rooms, parts of buildings, building to which any person has access without being personally acquainted with the necessarysafety precautions.

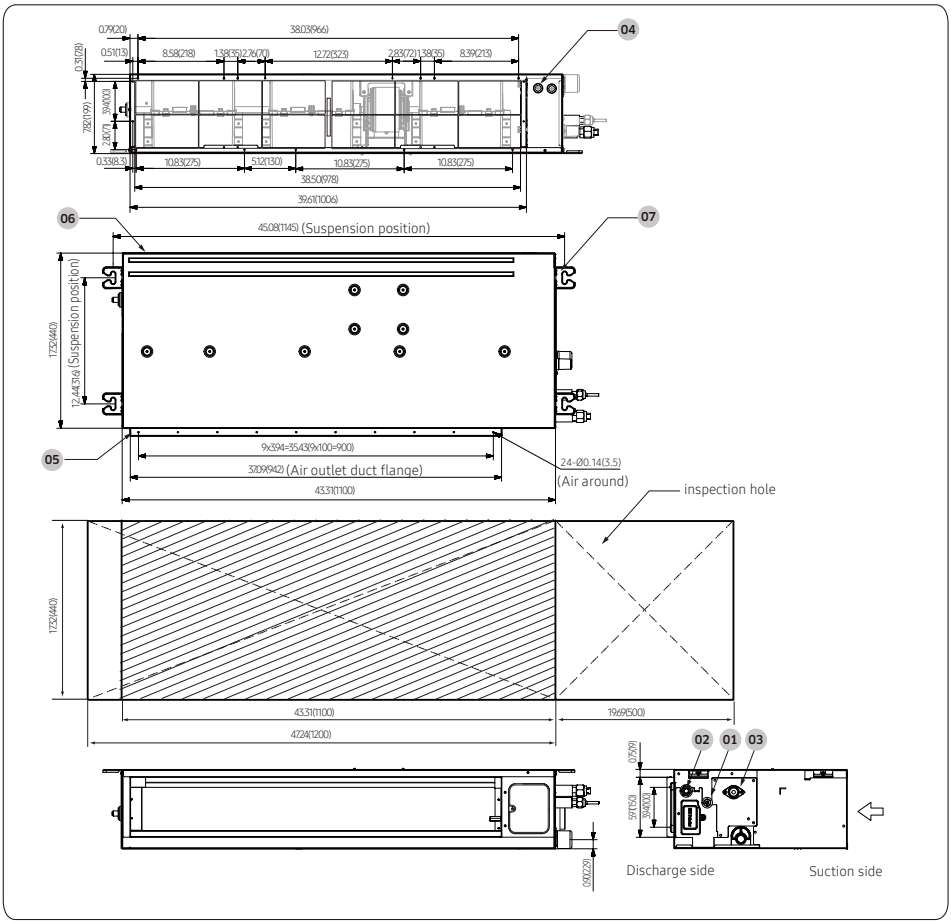
A wired remote control must be installed in the administrator's room, using wired remote control supervisor mode. For details on how to set wired remote control supervisor mode, refer to the wired remote control installation manual.



Installation Procedure

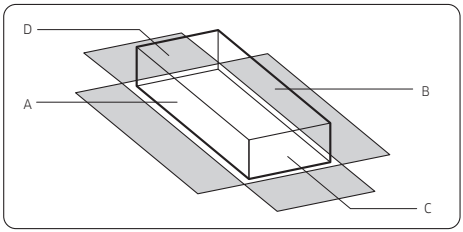
Indoor unit dimensions

VLOD007S6-5P,VLOD009S6-5P,VLOD012S6-5P,VLOD018S6-5P,VLOD024S6-5P **Unit: inch(mm)**



No.	Name	Description
01	Liquid pipe connection	VLOD007/009/012/018S6-5P: ø6.35(1/4") ,VLOD024S6-5P: ø9.52(3/8")
02	Gas pipe connection	VLOD007/009/012/018S6-5P: ø12.70(1/2") ,VLOD024S6-5P: ø15.88(5/8")
03	Drain pipe connection	3/4 inch [OD 1.05 inch (26.67 mm)]
04	Power supply connection	
05	Air discharge flange	
06	Air filter	
07	Hook	ø9.52(3/8") or M10

Step 3 Optional: Insulating the body of the indoor unit



Thickness: more than 0.39inch (10mm)

Indoor Unit	VLOD007S6-5P VLOD009S6-5P VLOD012S6-5P VLOD018S6-5P VLOD024S6-5P
	43.31X17.32X7.83 (1100X440X199)
A	43.31X7.83 (1100X199)
B	43.31X7.83 (1100X199)
C	17.32X7.83 (440X199)
D	17.32X7.83 (440X199)
Front/Back	Insulate the front and back side in proper size at the same time when insulating the suction duct and discharge duct.

Unit: inch(mm)

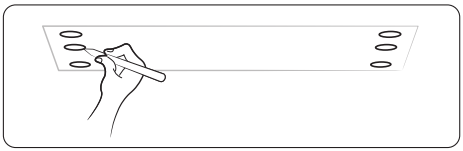
NOTE

- Insulate the end of the pipe and some curved area by using separate insulator.
- Insulate the discharge and suction part at the same time when you insulate connection duct.

Step 4 Installing the indoor unit

When deciding on the location of the air conditioner with the owner, the following restrictions must be taken into account

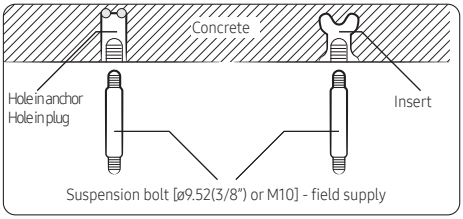
1 Place the pattern sheet on the ceiling at the spot where you want to install the indoor unit.



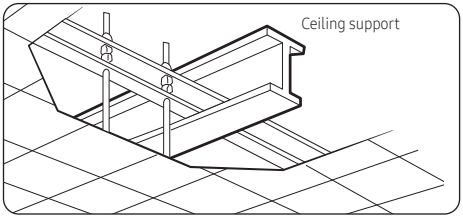
NOTE

- Since the diagram is made of paper, it may shrink or stretch slightly due to temperature or humidity. For this reason, before drilling the holes maintain the correct dimensions between the markings.

2 Insert bolt anchors. Use existing ceiling supports or construct a suitable support as shown in figure.



3 Install the suspension bolts depending on the ceiling type.



⚠ CAUTION

- Ensure that the ceiling is strong enough to support the weight of the indoor unit. Before hanging the unit, test the strength of each attached suspension bolt.
- If the length of the suspension bolt is more than 4.92ft (1.5m), vibration prevention is recommended. If this is not possible, create an opening on the false ceiling to be able to use it to perform the required operations on the indoor unit.
- If this is not possible, create an opening on the false ceiling in order to be able to use it to perform the required operations on the indoor unit.

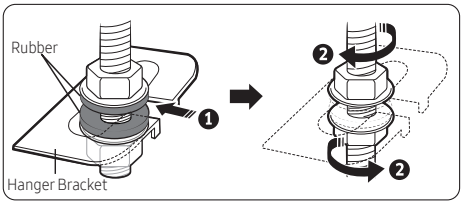
Installation Procedure

4 Screw eight nuts to the suspension bolts making space for hanging the indoor unit.

NOTE

- You must install all the suspension rods.

5 Hang the indoor unit to the suspension bolts between two nuts.



⚠ CAUTION

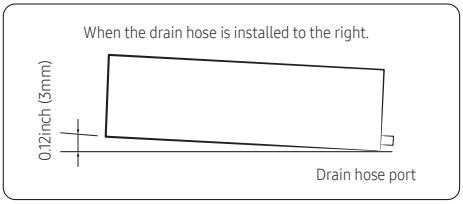
- Piping must be laid and connected inside the ceiling when suspending the unit. If the ceiling is already constructed, lay the piping into position for connection to the unit before placing the unit inside the ceiling.

6 Screw the nuts to suspend the unit.

7 Adjust level of the unit by using measurement plate for all 4 sides.

⚠ CAUTION

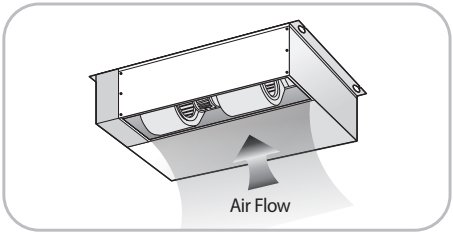
- For proper drainage of condensate, give a 0.12 inch (3mm) slant to the left or right side of the unit which will be connected with the drain hose, as shown in the figure. Make a tilt when you wish to install the drain pump, too.



- When installing the indoor unit, make sure it is not tilted toward front or back side.

⚠ CAUTION

- Noise will increase 3~6 dB(A) when the air flow enters from the bottom side (Only for Slim Duct Type product).



Step 5 Purging inert gas from the indoor unit

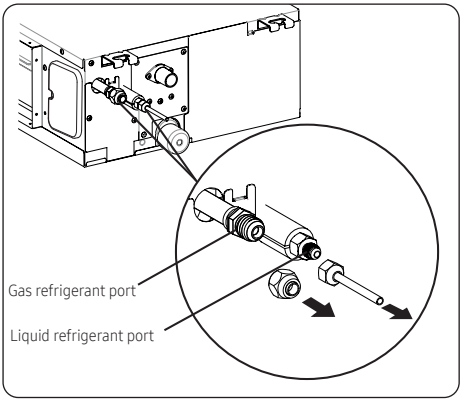
From the factory, the unit is supplied and set with a pre-charge of nitrogen gas. Therefore, all inert gas must be purged before connecting the assembly piping.

⚠ CAUTION

- Be careful not to damage the Wi-Fi cover when removing Flare Nut.

Unscrew the pinch pipe at the end of each refrigerant pipe.

Result : All inert gas escapes from the indoor unit.



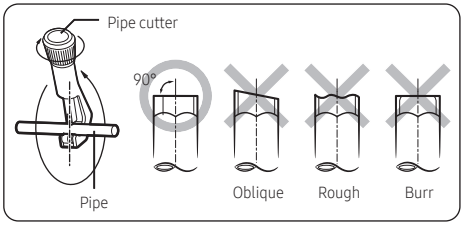
NOTE

- The designs and shape are subject to change according to the model.
- To prevent dirt or foreign objects from getting into the pipes during installation, do NOT remove the pinch pipe completely until you are ready to connect the piping.

Step 6 Cutting and flaring the pipes

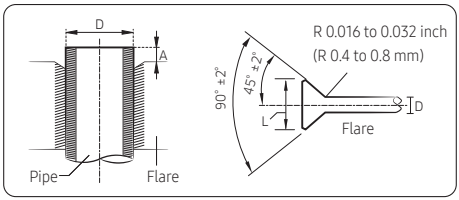
1 Make sure that you have the required tools available: pipe cutter, reamer, flaring tool, and pipe holder.

2 If you wish to shorten the pipes, cut them with a pipe cutter, ensuring that the cut edge remains at a 90° angle to the side of the pipe. Refer to the illustrations below for examples of edges cut correctly and incorrectly.



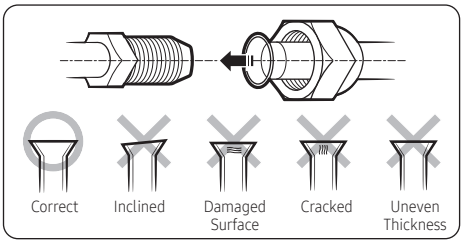
3 To prevent any gas from leaking out, remove all burrs at the cut edge of the pipe, using a reamer.

4 Slide a flare nut on to the pipe and modify the flare.



Outer Diameter (D)		Depth (A)		Flare dimension (L)	
mm	inch	mm	inch	mm	inch
Ø6.35	1/4	1.3	0.051	8.7 to 9.1	0.34 to 0.36
Ø9.52	3/8	1.8	0.071	12.8 to 13.2	0.50 to 0.52
Ø12.70	1/2	2.0	0.079	16.2 to 16.6	0.64 to 0.65
Ø15.88	5/8	2.2	0.087	19.3 to 19.7	0.76 to 0.78
Ø19.05	3/4	2.2	0.087	23.6 to 24.0	0.93 to 0.94

5 Check that the flaring is correct, referring to the illustrations below for examples of incorrect flaring.

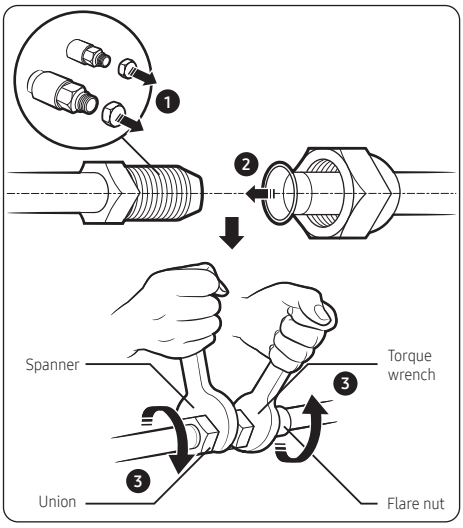


Step 7 Connecting the assembly pipes to the refrigerant pipes

There are two refrigerant pipes of different diameters :

- A smaller one for the liquid refrigerant.
- A larger one for the gas refrigerant. The inside of copper pipe must be clean and have no dust.

1 Remove the pinch pipe on the pipes and connect the assembly pipes to each pipe, tightening the nuts, first manually and then with a torque wrench, a spanner applying the following torque.



Installation Procedure

Outer Diameter		Torque	
mm	inch	N·m	lbf.ft
Ø6.35	1/4	14 to 18	10.3 to 13.3
Ø9.52	3/8	34 to 42	25.1 to 31.0
Ø12.70	1/2	49 to 61	36.1 to 45.0
Ø15.88	5/8	68 to 82	50.2 to 60.5
Ø19.05	3/4	100 to 120	73.8 to 88.5

(1N·m=10kgf·cm)

NOTE

- If the pipes must be shortened, see Step 6 Cutting and flaring the pipes on page **15**.

2 Be sure to use an insulator thick enough to cover the refrigerant tube to protect the condensate water on the outside of the pipe falling onto the floor and to improve the efficiency of the unit.

3 Cut off any excess foam insulation.

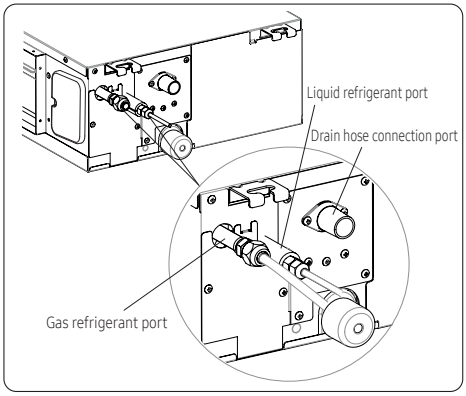
4 Make sure that there are no cracks or waves on the bent area.

5 It would be necessary to double the insulation thickness (10 mm or more) to prevent condensation even on the insulator when if the installed area is warm and humid.

6 Do not use joints or extensions for the pipes connecting the indoor and outdoor units.

⚠ CAUTION

- Connect the indoor and outdoor units using pipes with flared connections(not supplied). For the lines, use insulated, unwelded, degreased and deoxidized copper pipe (Cu DHP type to ISO 1337 or UNI EN 12735-1), suitable for operating pressures of at least 4200kPa and for a burst pressure of at least 20700kPa. Copper pipe for hydro-sanitary applications is completely unsuitable.
- For sizing and limits (height difference, line length, max. bends, refrigerant charge, etc.) see the outdoor unit installation manual.
- All refrigerant connection must be accessible, in order to permit either unit maintenance or removing it completely.
- If the pipes require brazing, ensure that OFN (Oxygen Free Nitrogen) is flowing through the system.
- The nitrogen blowing pressure range is 0.02 ~ 0.05MPa(2.9 to 7.3 psi).

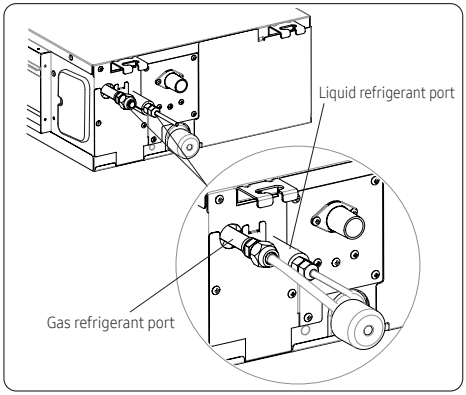


Step 8 Performing the gas leak test

To identify potential gas leaks in the indoor unit, inspect the connection area of each refrigerant pipe using a leak detector for R-32.

Before creating a vacuum and adding refrigerant, pressurize the whole system with nitrogen using a cylinder with a pressure reducer at a pressure above 0.2 MPa(29.0 psi), less than 4.0 MPa(594.7 psi) (gauge) to detect leaks on the refrigerant fittings.

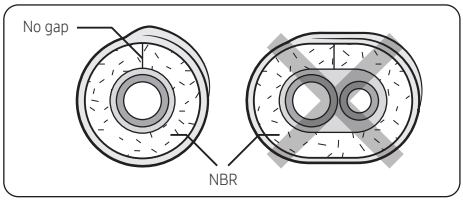
Make a vacuum for 15 minutes and pressurize the system with nitrogen.



Step 9 Insulating the refrigerant pipes

Once you have checked that there are no leaks in the system, you can insulate the piping and hose.

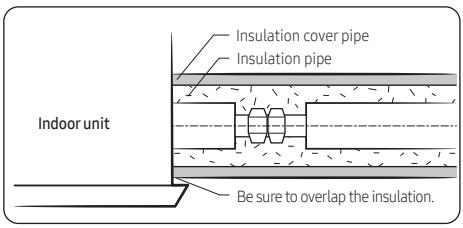
1 To avoid condensation problems, place Acrylonitrile Butadien Rubber separately around each refrigerant pipe.



NOTE

- Always make the seam of pipes face upwards.

2 Wind insulating tape around the pipes and drain hose avoiding compressing the insulation too much.



⚠ CAUTION

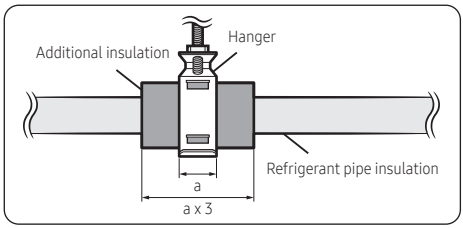
- Be sure to wrap insulation tightly without any gaps.

3 Finish wrapping insulating tape around the rest of the pipes leading to the outdoor unit.

4 The pipes and electrical cables connecting the indoor unit with the outdoor unit must be fixed to the wall with suitable ducts.

⚠ CAUTION

- Must fit tightly against body without any gap.
- Make sure that all refrigerant connection must be accessible for easy maintenance and detachment.
- Install the insulation not to get wider and use the adhesives on the connection part of it to prevent moisture from entering.
- Wind the refrigerant pipe with insulation tape if it is exposed to outside sunlight.
- Install the refrigerant pipe respecting that the insulation does not get thinner on the bent part or hanger of pipe.
- Add the additional insulation if the insulation plate gets thinner.
- All refrigerant connection must be accessible, in order to permit eithernit maintenance or removal.



5 Select the insulation of the refrigerant pipe.

- Insulate the gas side and liquid side pipe, noting the insulation thickness that must differ according to the pipe size.
- Standard: Less than an indoor temperature of 86 °F (30 °C), with humidity at 85%. If installing in a high humidity environment, use one grade thicker insulator by referring to the table below. If installing in an unfavorable environment, use a thicker one.
- The heat-resistance temperature of the insulator must be more than 248 °F (120 °C).

Pipe	Outer diameter		Insulation Type (Cooling, Heating)				Remarks
			General [86°F(30°C), 85%]		High humidity [86°F(30°C), over 85%]		
			EPDM, NBR				
	mm	inch	mm	inch	mm	inch	
Liquid pipe	6.35~9.52	1/4~3/8	9	3/8	9	3/8	Heating resisting temperature over 248°F(120°C)
	12.7~50.80	1/2~2	13	1/2	13	1/2	
Gas pipe	6.35	1/4	13	1/2	19	3/4	
	9.52~25.4	3/8~1	19	3/4	25	1	
	28.58~44.45	11/8~13/4	19	3/4	32	11/4	
	50.8	2	25	1	38	11/2	

- When installing insulation in the places and conditions below, use the same insulation that is used for high humidity conditions.

Installation Procedure

<Geological condition>
High humidity locations such as shorelines, hot springs, lake or riversides, and ridges (when part of the building is covered by earth and sand)
<Operation purpose condition>
Restaurant ceiling, sauna, swimming pool etc.
<Building construction condition>
Ceilings frequently exposed to moisture and cooling are not covered. For example, pipes installed at a corridor of a dormitory and studio or near an exit that opens and closes frequently. Places (where the pipes are installed) that are highly humid due to a lack of ventilation.

- Refrigerant pipe before EEV kit and MCU or without EEV kit and MCU
  - You can contact the gas side and liquid side pipes but the pipes should not be pressed.
  - When contacting the gas side and liquid side pipe, use 1 grade thicker insulator.
- Refrigerant pipe after EEV kit and MCU
  - Install the gas side and liquid side pipes, leave 0.39inch (10mm) of space.
  - When contacting the gas side and liquid side pipe, use 1 grade thicker insulator.

Charging additional refrigerant

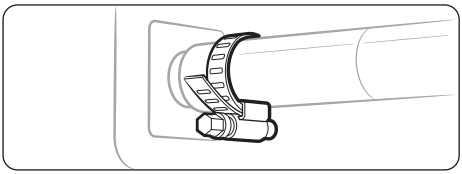
The amount of additional refrigerant for each indoor unit.

Model	Charging additional refrigerant	
	kg	lb
VLOD007S6-5P	0.28	0.62
VLOD009S6-5P	0.28	0.62
VLOD012S6-5P	0.28	0.62
VLOD018S6-5P	0.28	0.62
VLOD024S6-5P	0.28	0.62

Step 10 Installing the drain hose and drain pipe

1 Push the supplied drain hose as far as possible over the drain socket.

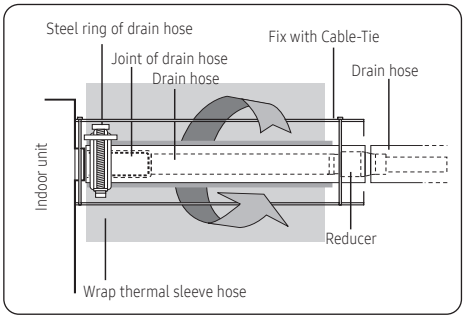
2 Tighten the metal clamp as shown in the picture.



3 Wrap the supplied large sealing pad over the metal clamp and drain hose to insulate and fix it with clamps.

4 Insulate the complete drain piping inside the building (field supply).
If the drain hose cannot be sufficiently set on a slope, fit the hose with drain raising piping (field supply).

5 Push the drain hose up to insulation when connecting the drain hose to drain socket.

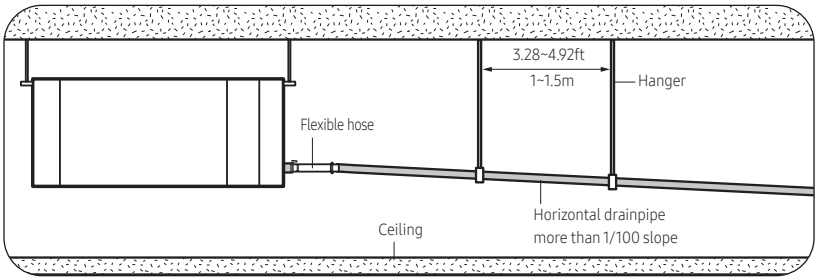


Drainpipe Connection without the drain pump

1 Install horizontal drainpipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft(1~1.5m).

2 Install U-trap at the end of the drainpipe to prevent a nasty smell to reach the indoor unit.

3 Do not install the drainpipe to upward position. It may cause water flow back to the unit.



Drainpipe Connection with the drain pump

1 The drain pipe should be installed within 11.81inch(300mm) to 21.65inch(550mm) from the flexible hose and then lift down 0.79inch(20mm) or more.

2 Install the horizontal drainpipe and copper pipe at an incline of at least 1/100, and attach a full-thread bolt hanger every 39.37 to 59.05 inches (1 to 1.5 m) along the pipe to fix it in place.

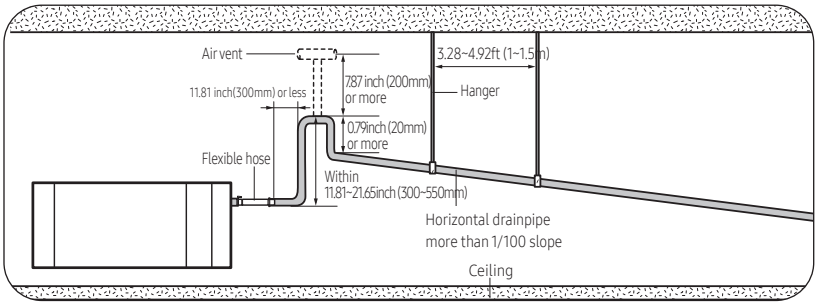
3 Install the air vent in the horizontal drainpipe to prevent water from flowing back to the indoor unit.

- Place the drainpipe at a height of 11.81 to 21.65 inches (300 to 550 mm) within 11.81 inches (300 mm) from the drain hose, and install it with a drop-off of at least 0.79 inch (20 mm).
- If the slope of the horizontal drainpipe is less than 1/100, install an air vent with a height of at least 7.87 inches (200 mm) or a backflow prevention vent at each drain inlet, to ensure smooth condensate flow.
- If the slope of the drainpipe is less than 1/100 and no air vent is installed, the air conditioner will not operate properly because condensate is not discharged.
- If an air vent with a of height less than 7.87 inches(200 mm) or a vent without backflow prevention functionality is installed, the drainpipe may become clogged, causing water to leak through the vent.

NOTE

- You may not need to install it if there is a proper slope in the horizontal drainpipe.

4 The flexible hose should not be installed in a upward position, as it may cause water to flow back to the indoor unit.

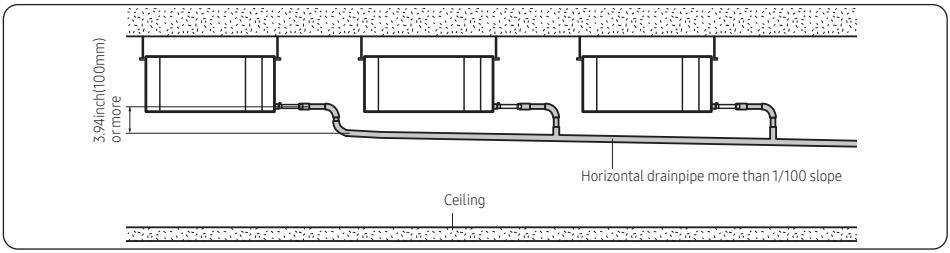


Installation Procedure

Centralized Drainage without the drain pump

1 Install horizontal drainpipe with a slope of 1/100 or more and fix it by hanger space of 3.28~4.92ft(1~1.5m)..

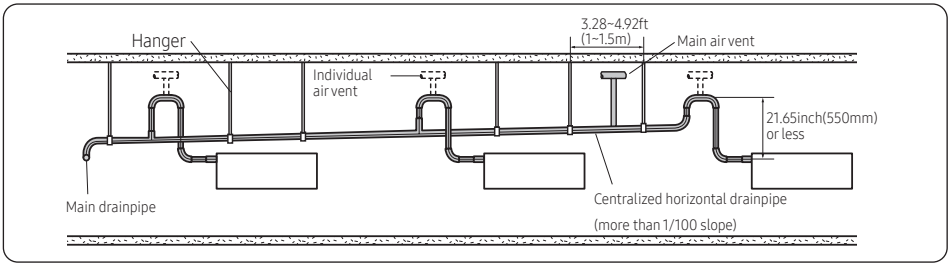
2 Install U-trap at the end of the drainpipe to prevent a nasty smell to reach the indoor unit.



Centralized Drainage with the drain pump

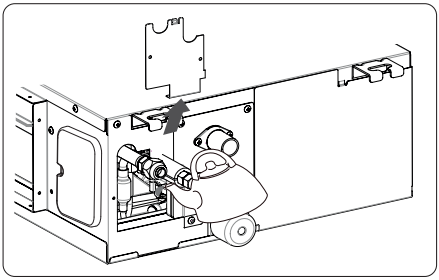
1 Install main air vent at the front of the farthest indoor unit from the main drain when installed indoor units are more than 3.

2 You may need to install individual air vent to prevent water flow back at the top of each indoor unit drainpipe.



Step 11 Performing the drainage test

1 Pour water into the base pan in the indoor unit as shown in figure.



⚠ CAUTION

- The leak test must be performed for at least 24 hours.

2 Confirm that the water flows out through the drain hose.

a Pour about 2 liters (0.54 gal) of water into the indoor unit drain pan.

Step 12 Connecting the power and communication cables

Power and communication cable connection

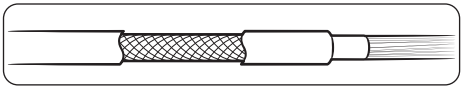
- Before wiring work, you must turn off all power source.
- Connect the power and communication cable among the units within maximum length to set the voltage drop under10%.
- The auxiliary circuit breaker (ELCB, MCCB, ELB) should be considered more capacity if many indoor units are connected from one breaker.
- Connect F3, F4(for communication) to the communication cable of the wired remote control.
- Tighten the electric wires with a proper tool within the torque limit to connect and fix them firmly, and then organize the wires to prevent outside pressure being exerted on the covers and other parts. Failure to do so may result in overheating, electric shock, and fire.

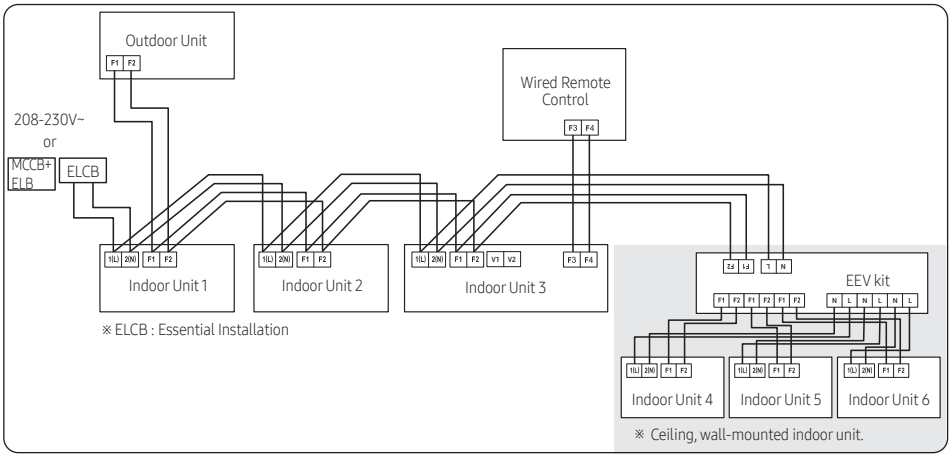
	Tightening torque	
	N·m	lbf.ft
M3.5	0.8 to 1.2	0.59 to 0.89
M4	1.2 to 1.8	0.89 to 1.1

(1N·m=10kgf·cm)

To protect the product from water and possible shock, you should keep the power and the communication cables of the indoor and outdoor units in the iron pipe.

- Connect the power cable to the auxiliary circuit breaker (ELCB, MCCB, ELB).
- Keep distances of 1.97inch (50mm) or more between power cable and communication cables..
- Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord. (Code designation IEC:60245 IEC 57 / CENELEC: H05RN-F or IEC:60245 IEC 66 / CENELEC: H07RN-F)
- Screws on terminal block must not be unscrewed with the torque less than 0.87 lbf·ft (12 kgf•cm).
- When installing the indoor unit in a computer room, use the double shielded (tape aluminum / polyester braid + copper) cable of FROHH2R type.



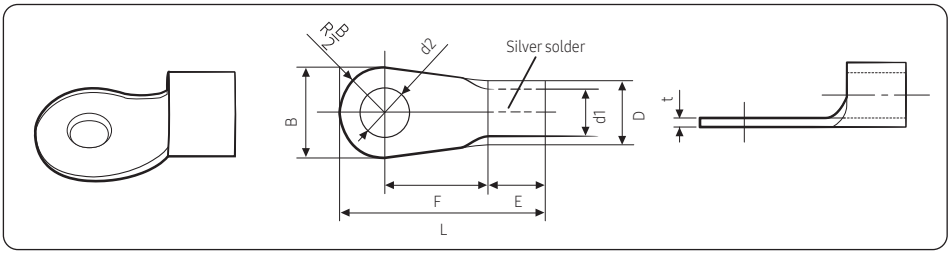


Installation Procedure

Selecting the crimping terminal lug

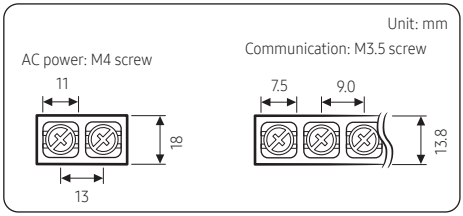
1 Select the crimping terminal lug based on the norminal dimension of the power cable.

2 Cover the connection part of the power cable and crimping terminal lug to insulate it.



Norminal dimensions for cable [inch²(mm²)]		0.0023 (1.5)		0.0039 (2.5)		0.0062 (4)
Norminal dimensions for screw [inch(mm)]		0.157 (4)	0.157 (4)	0.157 (4)	0.157 (4)	0.157 (4)
B	Standard dimension [inch(mm)]	0.260 (6.6)	0.315 (8)	0.260 (6.6)	0.335 (8.5)	0.374 (9.5)
	Allowance [inch(mm)]	± 0.008 (0.2)		± 0.008 (0.2)		± 0.008 (0.2)
D	Standard dimension [inch(mm)]	0.134 (3.4)		0.165 (4.2)		0.220 (5.6)
	Allowance [inch(mm)]	+0.012 (0.3) -0.008 (0.2)		+0.012 (0.3) -0.008 (0.2)		+0.012 (0.3) -0.008 (0.2)
d1	Standard dimension [inch(mm)]	0.067 (1.7)		0.091 (2.3)		0.134 (3.4)
	Allowance [inch(mm)]	± 0.008 (0.2)		± 0.008 (0.2)		± 0.008 (0.2)
E	Min. [inch(mm)]	0.161 (4.1)		0.236 (6)		0.236 (6)
F	Min. [inch(mm)]	0.236 (6)		0.236 (6)		0.236 (6)
L	Max. [inch(mm)]	0.630 (16)		0.689 (17.5)		0.787 (20)
d2	Standard dimension [inch(mm)]	0.169 (4.3)		0.169 (4.3)		0.169 (4.3)
	Allowance [inch(mm)]	+0.008 (0.2) 0 (0)		+0.008 (0.2) 0 (0)		+0.008 (0.2) 0 (0)
t	Min. [inch(mm)]	0.028 (0.7)		0.031 (0.8)		0.035 (0.9)

Specifications of the terminal blocks



Power supply (single phase)	MCCB	ELB
Min : 187V Max : 253V	XA	XA, 30 mA 0.1 s
Power cable	**Earth cable**	**Communication cable**
13 AWG (2.5 mm²) or more	13 AWG (2.5 mm²)	18~15 AWG (0.75~1.5 mm²)

Decide the power cable specification and maximum length by formula **2**.

1 Decide the capacity of ELB and MCCB by below formula.

$$\text{The capacity of ELB, MCCB } X[A] = 1.25 \times 1.1 \times \Sigma Ai$$

NOTE

- X : The capacity of ELB, MCCB
- ΣAi : Sum of rating currents of each indoor unit.

Rated currents

Unit	Rating current (A)
VLOD007S6-5P	0.30 A
VLOD009S6-5P	0.33 A
VLOD012S6-5P	0.42 A
VLOD018S6-5P	0.60 A
VLOD024S6-5P	0.68 A

2 Decide the power cable specification and maximum length within 10% voltage drop among indoor units.

$$\sum_{k=1}^{n} \left(\frac{Coef \times 35.6 \times Lk}{1000 \times Ak} \times ik \right) < 10\% \text{ of input voltage[V]}$$

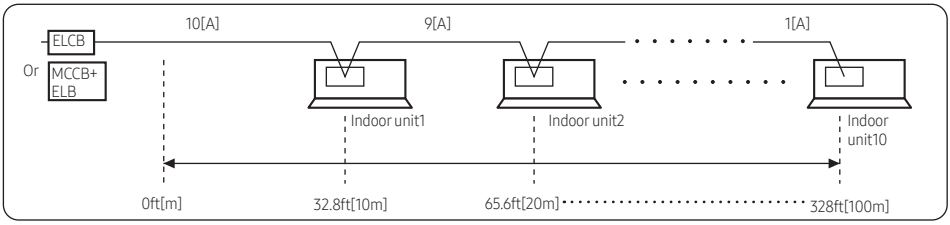
NOTE

- Coef: 1.55
- Lk: Distance among each indoor unit[m], Ak: Power cable specification[mm²(inch²)]
- ik: Running current of each unit[A]

Installation Procedure

Example of Installation

Total power cable length L = 328.08ft(100m), Initial pull-in current = 10[A], Running current of each units = 1[A], Total 10 indoor units were installed

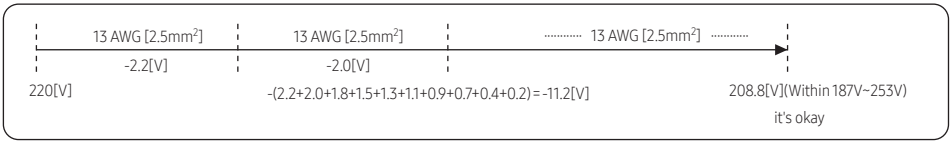


- Apply following equation.

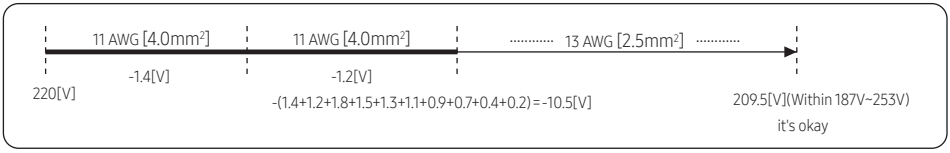
$$\sum_{k=1}^{n}\left(\frac{Coef\times 35.6\times Lk}{1000\times Ak}\times ik\right) < 10\%\ \text{of input voltage[V]}$$

Calculation

- Installing with 1 sort wire.



- Installing with 2 different sort wire.



⚠ CAUTION

- Select the power cable in accordance with relevant local and national.
- Wire size must comply with local and national code.
- You should connect the power cable into the power cable terminal and fasten it with a clamp.
- The unbalanced power must be maintained within 10% of supply rating among whole indoor units.
- If the power is unbalanced greatly, it may shorten the life of the condenser. If the unbalanced power is exceeded over 10% of supply rating, the indoor unit is protected, stopped and the error mode indicates

- Connect the power cable to the auxiliary circuit breaker. An all pole disconnection from the power supply must be incorporated in the fixed wiring [≥0.12 inch (3mm)].
- You must keep the cable in a protection tube.
- Maximum length of power cables are decided within 10% of power drop. If it exceeds, you must consider another power supplying method.
- The circuit breaker(MCCB, ELB) should be considered more capacity if many indoor units are connected from one breaker.
- Use round pressure terminal for connections to the power terminal block.
- For wiring, use the designated power cable and connect it firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.
- Over-tightening the terminal screws may break them.

Step 13 Setting additional functions of wired remote control

External Static Pressure (ESP) setting for phase control motor

With its phase control motor, you can adjust the indoor unit fan speed depending on the installation condition. If the external static pressure is high so that the duct becomes longer or if the external static pressure is low so that the duct becomes shorter, adjust the fan speed by referring to the following table.

Model		VLOD007S6-5P
Static Pressure		Option Code for Indoor Unit
InH2O	mmAq	
0≤SP≤0.08	0≤ SP ≤2	010054-1C543C-201616-331190
0.08<SP≤0.12	2≤ SP ≤3	010054-1C55D5-201616-331190
0.12<SP≤0.16	3< SP ≤4	010054-1C592A-201616-331190

Model		VLOD009S6-5P
Static Pressure		Option Code for Indoor Unit
InH2O	mmAq	
0≤SP≤0.08	0≤ SP ≤2	010054-1C545E-201C1C-331190
0.08<SP≤0.12	2≤ SP ≤3	010054-1C55F6-201C1C-331190
0.12<SP≤0.16	3< SP ≤4	010054-1C594C-201C1C-331190

Model		VLOD012S6-5P
Static Pressure		Option Code for Indoor Unit
InH2O	mmAq	
0≤SP≤0.08	0≤ SP ≤2	010054-1C5580-202323-331190
0.08<SP≤0.12	2≤ SP ≤3	010054-1C5918-202323-331190
0.12<SP≤0.16	3< SP ≤4	010054-1C597D-202323-331190

Model		VLOD018S6-5P
Static Pressure		Option Code for Indoor Unit
InH2O	mmAq	
0≤SP≤0.08	0≤ SP ≤2	010054-1C591A-203434-331190
0.08<SP≤0.12	2≤ SP ≤3	010054-1C5A92-203434-331190
0.12<SP≤0.16	3< SP ≤4	010054-1C5AD6-203434-331190

Model		VLOD024S6-5P
Static Pressure		Option Code for Indoor Unit
InH2O	mmAq	
0≤SP≤0.08	0≤ SP ≤2	010054-1C593B-204848-331190
0.08<SP≤0.12	2≤ SP ≤3	010054-1C5AB4-204848-331190
0.12<SP≤0.16	3< SP ≤4	010054-1C5AF7-204848-331190

NOTE

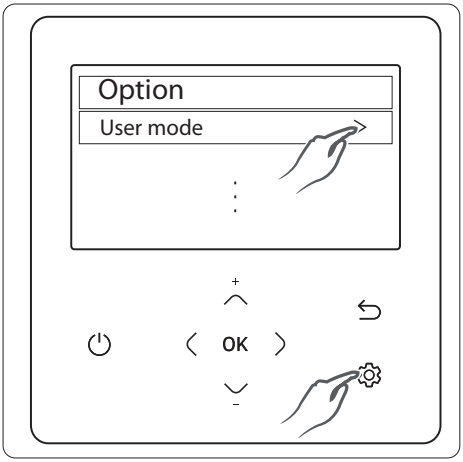
- represents E. S. P (External Static Pressure) range of factory setting.
  You don't have to adjust the fan speed separately if the external static pressure of the installation place is in . When it is out of , input the appropriate option code.
- If you input the inappropriate option code, an error may occur, or the air conditioner is out of order. The option code must be input correctly by the installation specialist or service agent.

Installation Procedure

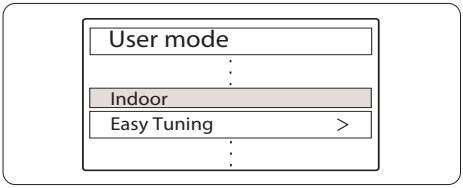
EASY Tuning

If more cooling and heating airflow rate is wanted, or if the quieter operation set is wanted, the air conditioner can be tuned for comfort.

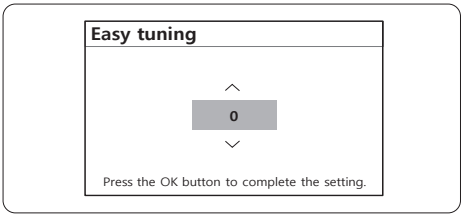
Indoor unit airflow rate for high, mid and low modes increases or decreases for +2 ~ -2 Steps with wired remote control.



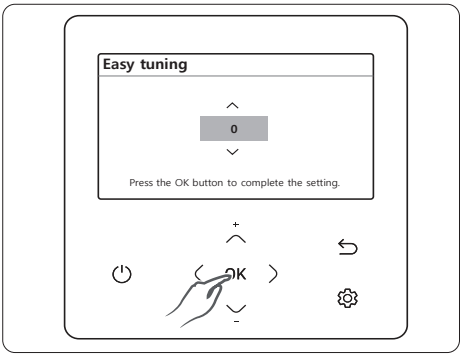
1 Press the ⚙ button.
(Main Menu) will be displayed, and you can press the [∧]/[∨] buttons to select User mode.



2 Press the [∧]/[∨] buttons to select Easy Tuning.



3 Press the [∧]/[∨] buttons to select Easy tuning value (-2,-1,0,1,2) tuning.



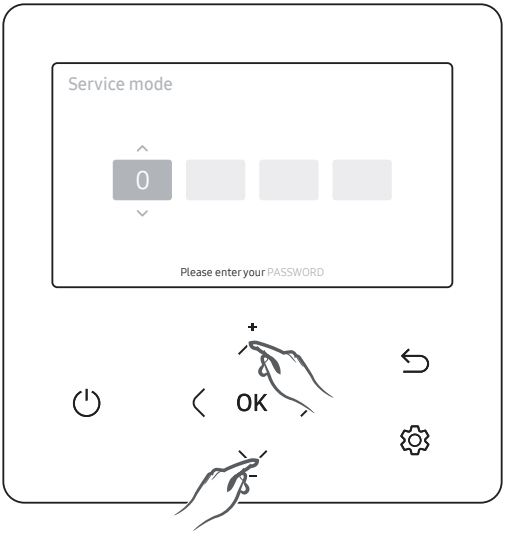
4 Press the **OK** buttons to complete the Easy Tuning.

NOTE

- Easy tuning value
  - Default : 0, reflecting the status value of the indoor unit.
  - Range : -2-+2 (unit:1)
- Press the ⮌ button anytime during setup to exit without setting.
- When airflow is reduced using Easy Tuning, reduction in system performance is possible.

Step 14 Setting the indoor unit option code with the wired remote control

To set the indoor unit option code use the wired remote control and follow the directions below.



1 If you want to use the various additional functions for your Wired Remote Control, press the ∧ and ∨ buttons at the same time for more than 3 seconds.
   - The password entry screen appears.

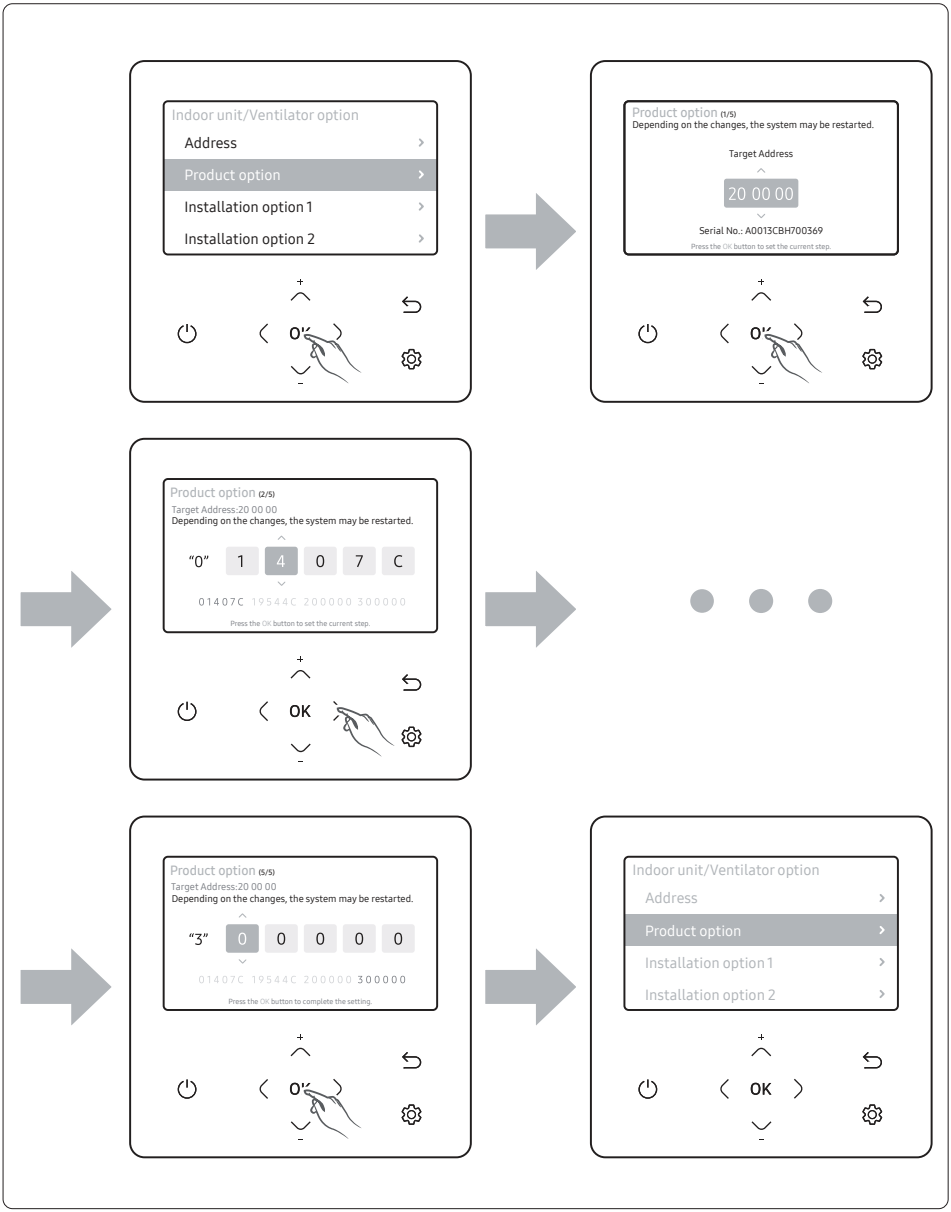
2 Enter the password, "0202," and then press the **OK** button.
   - The settings screen for installation/service mode appears.

3 See the list of additional functions for the Wired Remote Control on the next page, and then select the Product option menu.
   - Once you have entered the settings screen, the current setting appears.
   - Refer to the chart for data setting.
   - Using the ∧ / ∨ buttons, change the settings and press the ❯ button to move to the next setting.
   - Press the **OK** button to save the new setting.
   - Press the ⮌ button to move to the Home screen.

NOTE

- While setting the data, you can press the ⮌ button to move to the Home screen after checking the saving status at a pop-up screen.

Installation Procedure



Product Option (1/5)

Depending on the changes, the system may be restarted.

Target Address

20 00 01

Serial No. : **********

Press the OK button to set the current step.

[Product Option 2page]

Product Option (2/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"0" 1 **0** 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Product Option 3page]

Product Option (3/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"1" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Product Option 4page]

Product Option (4/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"2" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Product Option 5page]

Product Option (5/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"3" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

Installation Procedure

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	✳	✳	✳	✳	✳

Page number

SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	✳	✳	✳	✳	✳

Page number

SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	✳	✳	✳	✳	✳

Page number

SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	✳	✳	✳	✳	✳

Page number

⚠ CAUTION

- Option code will not be applied if you don't press the **OK** button.
- Setting the indoor unit option code is only possible in the Main wired remote Control. You can only check the indoor unit option code in Sub wired remote Control.
- Setting an indoor unit option code is possible when one indoor unit is connected. If more than 2 indoor units are connected, you can only check the Main indoor unit option code.

Step 15 Setting indoor unit addresses and installation options with wired remote control

Set the indoor unit address and installation option with the remote control option. Set each option separately since you cannot set the ADDRESS setting and indoor unit installation setting option at the same time. You need to set twice when setting the indoor unit address and installation option.

Setting an indoor unit address

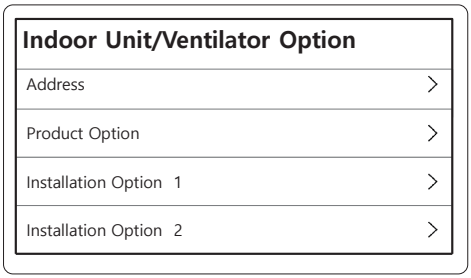
1 If you want to use the various additional functions for your Wired Remote control, press the ∧ and ∨ buttons at the same time for more than 3 seconds.
   - The password entry screen appears.

2 Enter the password, "0202," and then press the OK button.
   - The settings screen for installation/service mode appears.

3 See the list of additional functions for the Wired Remote control on the next page, and then select the Address menu.
   - Once you have entered the settings screen, the current setting appears.
   - Refer to the chart for data setting.
   - Using the ∧ / ∨ buttons, change the settings and press the 〉button to move to the next setting.
   - Press the OK button to save the new setting.
   - Press the ⮌ button to move to the Home screen.

NOTE

- While setting the data, you can press the ⮌ button to move to the Home screen after checking the saving status at a pop-up screen.



Installation Procedure

[Address > Main Address]

Main Address

Target Address	New address
20 00 01	0 8

Press the 'OK' button to complete the setting.

[Address > RMC Address]

RMC Address

Target Address	New address
20 00 01	0 8

Press the 'OK' button to complete the setting.

Address setting range : Main (0 ~ 4F) / RMC (0 ~ FE)

NOTE

- Press the ⮌ button anytime during setup to exit without setting.
- Address will not be applied if you don't press OK button.
- Setting the Main/RMC Address of an Indoor unit is available only with a Main wired remote control.

Setting an indoor unit installation option

1 If you want to use the various additional functions for your Wired Remote control, press the ∧ and ∨ buttons at the same time for more than 3 seconds.
   - The password entry screen appears.

2 Enter the password, "0202," and then press the OK button.
   - The settings screen for installation/service mode appears.

3 See the list of additional functions for the Wired Remote control on the next page, and then select the Installation Option 1 menu.
   - Once you have entered the settings screen, the current setting appears.
   - Refer to the chart for data setting.
   - Using the ∧ / ∨ buttons, change the settings and press the 〉button to move to the next setting.
   - Press the OK button to save the new setting.
   - Press the ⮌ button to move to the Home screen.

NOTE

- While setting the data, you can press the ⮌ button to move to the Home screen after checking the saving status at a pop-up screen.

Installation Option 1 (1/5)

Depending on the changes, the system may be restarted.

Target Address

20 00 01

Serial No. : **********

Press the OK button to set the current step.

[Installation Option 1-2page]

Installation Option 1(2/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"0" 2 **0** 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Installation Option 1-3page]

Installation Option 1(3/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"1" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Installation Option 1-4page]

Installation Option 1(4/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"2" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

[Installation Option 1-5page]

Installation Option 1(5/5)

Target Address: 20 00 01

Depending on the changes, the system may be restarted.

"3" **0** 0 0 0 0

00000 00000 00000 00000

Press the OK button to set the current step.

Installation Procedure

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	**2**	RESERVED	External room temperature sensor / Minimizing fan operation when the thermostat is off	Central control	RESERVED
SEG7	**SEG8**	**SEG9**	**SEG10**	**SEG11**	**SEG12**
1	Drain pump & Emergency Stop	Hot Coil	Auxiliary heater	Controller variables for the auxiliary heater	RESERVED
SEG13	**SEG14**	**SEG15**	**SEG16**	**SEG17**	**SEG18**
2	External control	External control output	RESERVED	Buzzer	Maximum filter usage time
SEG19	**SEG20**	**SEG21**	**SEG22**	**SEG23**	**SEG24**
3	Individual control of a remote control	Heating setting compensation	RESERVED	Away Set OFF Timer	RESERVED

NOTE

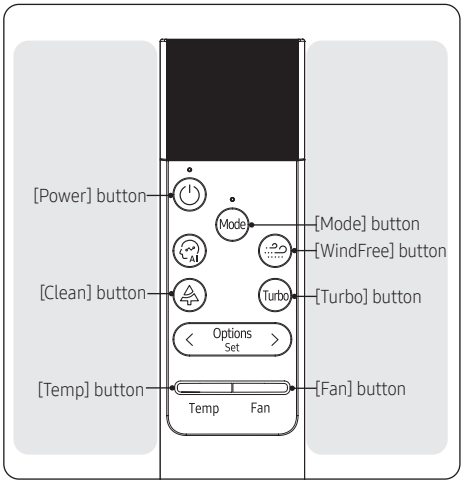
- Press ⮌ button anytime during setup to exit without setting.
- Option code will not be applied if you don't press **OK** button.
- The setting Installation option code is available only with a Main wired remote control.
- Setting Installation option code is available when there is one-on-one connection between a wired remote control and an indoor unit.

Step 16 Optional : Setting the indoor unit addresses and the installation options with the wireless remote control

You cannot set both of the indoor unit addresses and the installation options in a batch: set both of them respectively.

Common steps for setting the addresses and options

Remote controls



NOTE

- The remote control display and buttons may vary depending on the model.

1 Enter the mode for setting the options.

a Reset remote control : [Temp] button Down + [Fan] button Down + [Mode] Press for 10 seconds.

b You can see the "SW Initialization" message and enter the following in 5 seconds.

c Press [WindFree] button and [Turbo] button for 5 seconds.

d Make sure that you are entered into the mode for setting options:

2 Set the option values.

⚠ CAUTION

- The total number of available options is 24 : SEG1 to SEG24.
- Because SEG1, SEG7, SEG13, and SEG19 are the page options used by the previous remote control models, the modes to set values for these options are skipped automatically.
- You can see 20 SEG (except SEG1, SEG7, SEG13, SEG19 SEG2 → ...→ SEG6 → SEG8 → .....→ SEG12 → SEG 14 → .... → SEG 18 → SEG20 → ... → SEG 24

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	X	X	X	X	X
SEG7	**SEG8**	**SEG9**	**SEG10**	**SEG11**	**SEG12**
1	X	X	X	X	X
SEG13	**SEG14**	**SEG15**	**SEG16**	**SEG17**	**SEG18**
2	X	X	X	X	X
SEG19	**SEG20**	**SEG21**	**SEG22**	**SEG23**	**SEG24**
3	X	X	X	X	X

- You can set the next SEG by pressing the mode button.
- You can change the digit value through the following operation.
  Left value : Temp up or down, range : 0 ~ F
  Right value : Fan up or down, range : 0 ~ F

Installation Procedure

Take the steps presented in the following table:

Steps	Remote control display
1 Set the SEG2 and SEG3 values: **a** Set the SEG2 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG3 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG2  SEG3
2 Press the Mode button to move to the next page.	
3 Set the SEG4 and SEG5 values: **a** Set the SEG4 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG5 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG4  SEG5
4 Press the Mode button to move to the next page.	

Steps	Remote control display
5 Set the SEG6 and SEG8 values: **a** Set the SEG6 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG8 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG6  SEG8
6 Press the Mode button to move to the next page.	
7 Set the SEG9 and SEG10 values: **a** Set the SEG9 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG10 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG9  SEG10
8 Press the Mode button to move to the next page.	

Installation Procedure

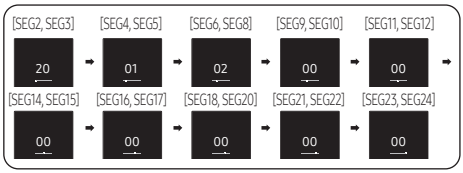
Steps	Remote control display
9 Set the SEG11 and SEG12 values: **a** Set the SEG11 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG12 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG11  SEG12
10 Press the Mode button to move to the next page.	
11 Set the SEG14 and SEG15 values: **a** Set the SEG14 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG15 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG14  SEG15
12 Press the Mode button to move to the next page.	

Steps	Remote control display
13 Set the SEG16 and SEG17 values: **a** Set the SEG16 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG17 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG16  SEG17
14 Press the Mode button to move to the next page.	
15 Set the SEG18 and SEG20 values: **a** Set the SEG18 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG20 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG18  SEG20
16 Press the Mode button to move to the next page.	

Installation Procedure

Steps	Remote control display
17 Set the SEG21 and SEG22 values: **a** Set the SEG21 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG22 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG21  SEG22
18 Press the Mode button to move to the next page.	
19 Set the SEG23 and SEG24 values: **a** Set the SEG23 value by pressing the Temp button repeatedly until the value you want to set appears on the remote control display. **b** Set the SEG24 value by pressing the Fan button repeatedly until the value you want to set appears on the remote control display. When you press the Fan or Temp button, values appear in the following order: 0 → 1 → ··· E → F	 SEG23  SEG24

3 Check whether the option values you have set are correct by pressing the Mode button repeatedly.

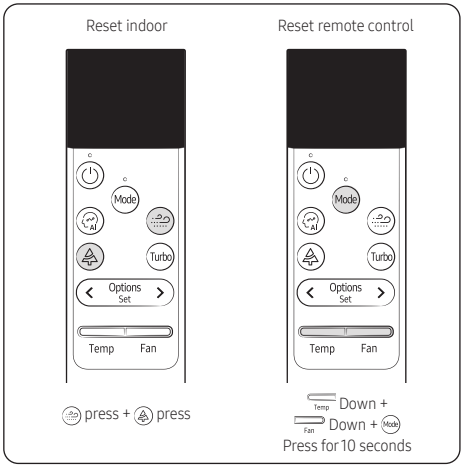


4 Save the option values into the indoor unit:
Point the remote control to the remote control sensor on the indoor unit and then press the button on the remote control twice.
Make sure that this command is received by the indoor unit. When it is successfully received, you can hear a short sound from the indoor unit. If the command is not received, press the button again.

5 Check whether the air conditioner operates following the option values you have set:

a Reset the indoor or outdoor unit.
- Indoor Unit : Press button + button for 5 seconds
- Outdoor Unit: Press the K3 button

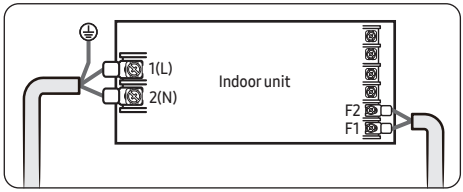
b Reset remote control: Temp button Down + Fan button Down + Mode Press for 10 seconds
You can see the "SW Initialization" message.



Setting the indoor unit addresses (MAIN/RMC/MCU)

1 Make sure that the power is supplied to the indoor unit.
- If the indoor unit is not plugged in, it must include a power supply.

2 Make sure that the panel or display is connected to the indoor unit so that it can receive options.



3 Set an address (MAIN/RMC/MCU port) for each indoor unit using the remote control, according to your air conditioning system plan.
- The indoor unit addresses (MAIN/RMC/MCU port) are set to 0A0000-100000-200000-300000 by default.

Installation Procedure

Setting the installation options in a batch

Option No. for an indoor unit address: 0AXXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Function	Page		Mode		Setting main address		100-digit of an indoor unit address		10-digit of an indoor unit address		The single digit of an indoor unit	
Indication and details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		A		0	No main address	0 to 9	10-digit	0 to 9	A single digit	0 to 3	A single digit
					1	Main address setting mode						
Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12	
Function	Page		-		Setting RMC address		-		Group channel (x16)		Group address	
Indication and details	Indication	Details	-		Indication	Details	-		Indication	Details	Indication	Details
	1				0	No RMC address			RMC1	0 to F	RMC2	0 to F
					1	RMC address setting mode						
Option	SEG13		SEG14		SEG15		SEG16		SEG17		SEG18	
Function	Page		-		Setting MCU PORT address		10-digit of MCU address		1-digit of MCU		MCU PORT address	
Indication and details	Indication	Details	-		Indication	Details	Indication	Details	Indication	Details	Indication	Details
	2				0	No MCU PORT	0~1	10-digit	0~9	1-digit	A~F	PORT Location
					1	MCU PORT address setting mode						

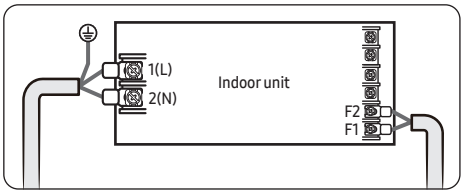
⚠ CAUTION

- If you enter A to F to the SEG5 or SEG6, the indoor unit main address is not changed.
- If you enter 0 to the SEG3, the indoor unit maintains the previous main address although you enter the option value for the SEG5 or SEG6.
- If you enter 0 to the SEG9, the indoor unit maintains previous RMC address although you enter the option value for the SEG11 or SEG12.
- You cannot set the SEG11 or SEG12 to F value at the same time.
- If the indoor unit is connected to the MCU, you can set the SEG 15~18.
- Ex.) If you want to set the indoor unit to 'A' port of MCU #1.
  (0A0000 – 100000 – 20101A -30000)

Setting the indoor unit installation option (suitable for the condition of each installation location)

1 Make sure that the power is supplied to the indoor unit.
- If the indoor unit is not plugged in, it must include a power supply.

2 Make sure that the panel or display is connected to the indoor unit so that it can receive options



3 Set an address for each indoor unit using the remote control, according to your air conditioning system plan.
- The indoor unit addresses are set to 020010-120000-2000E0-300000 by default.
- The SEG20 option, Individual control with remote control, allows you to control multiple indoor units individually by using the remote control.

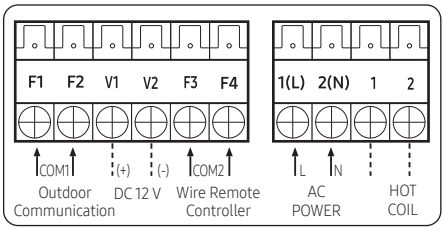
Installation options for the 02 series

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	2	Evaporator Drying	Use of external room temperature sensor / Minimizing fan operation when thermostat is off	Use of central control	FAN RPM compensation
SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
1	Use of drain pump	Use of hot water heater	Settings for load operation during heater control Fan control during defrost mode / heater control during defrost mode	EEV Step when heating stops	-
SEG13	SEG14	SEG15	SEG16	SEG17	SEG18
2	Use of external control	Setting the output of external control / External heater signal / Cooling operation signal / Free Cooling control signal	S-Plasma ion	Buzzer control / whether to use humidity sensor / whether to use APP UX DSP (Dual Set Point) / whether to use R-32 sensor	Hours of filter usage
SEG19	SEG20	SEG21	SEG22	SEG23	SEG24
3	Individual control of a remote controller	Heating setting compensation / Removing condensate water in heating mode	Adjusted EEV step of stopped unit during oil return /defrost mode.	-	-

- Even if you set the Use of drain pump (SEG8) option to 0, it is automatically set to 2 (the drain pump is used with 3 minute delay).
- If you set the Maximum filter usage time (SEG18) option to a value other than 2 and 6, it is automatically set to 2 (1000 hours).
- If you set an option to a value that is out of range specified above, the option is automatically set to 0 by default.

Installation Procedure

- The SEG5 option (Use of central control) is set to 1 (Use) by default. Therefore, you don't need to set the SEG5 option additionally. Note that even if the central control system is not connected, no errors occur. If you want a specific indoor unit not to be controlled by the central control system, set the SEG option of that indoor unit to 0 (Disuse).
- The external output of SEG15 is generated via VSTAT10P-1 connection. (Refer to the manual of VSTAT10P-1.)
- If you set the Individual control with remote control (SEG20) option to a value other than 0 to 4, it is automatically set to 0 (Indoor1).



※ The output of hot coil terminal is AC 220 V / 230 V (The same as Indoor Unit's input Power)

02 series installation option (Detailed)

Option No. : 02XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4			SEG5		SEG6	
Explanation	PAGE		MODE		Evaporator Drying		Use of external room temperature sensor / Minimizing fan operation when thermostat is off			Use of central control		FAN RPM compensation	
	Indication	Details	Indication	Details	Indication	Details	Indication	Details		Indication	Details	Indication	Details
								Use of External room temperature sensor	Minimizing fan operation when thermostat is off				
Indication and Details	0		2		0	Disuse	0	Default	Default	0	Disuse	0	Disuse
							1	Use	Disuse				
							2	Disuse	Use (Heating) (*2)				
					2	Use (5min) (*1)	3	Use	Use (Heating) (*2)				
							4	Disuse	Use (Cooling) (*2)				
							5	Use	Use (Cooling) (*2)				
					4	Use (10min) (*1)	6	Disuse	Use (Heating / Cooling) (*2)	1	Use		
							7	Use	Use (Heating / Cooling) (*2)				
							8	Disuse	Use (Cooling Ultra Low Fan) (*2)				
					6	Use (30min) (*1)	9	Use	Use (Cooling Ultra Low Fan) (*2)				
							A	Disuse	Use (Heating / Cooling Ultra Low Fan) (*2)				
							B	Use	Use (Heating / Cooling Ultra Low Fan) (*2)				

Option	SEG7		SEG8		SEG9		SEG10			SEG11		SEG12
Explanation	PAGE		Use of drain pump		Use of hot water heater		Settings for load operation during heater control Fan control during defrost mode / Heater control during defrost mode			EEV Step when heating stops		-
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Detail Fan control during defrost mode	Detail Heater control during defrost mode	Indication	Details	-
	1		0	Disuse	0	Disuse	0	Fan Off	Off	0	Default	
							1	Fan turns on when heater turns on	Off			
							2	Fan Off	Off			
							3	Fan turns on when heater turns on	Off			
							4	Fan Off	On			
							5	Fan turns on when heater turns on	On			
			1	Use	1	Use (*3)	6	Fan Off	On	1	Adjusted EEV Step setting	
							7	Fan turns on when heater turns on	On			
							8	Fan Off	Off			
							9	Fan turns on when heater turns on	Off			
			2	When an indoor unit stops, drain pump will operate for 3min	3	Use (*3)	A	Fan Off	Off			
							B	Fan turns on when heater turns on	Off			
							C	Fan Off	On			
							D	Fan turns on when heater turns on	On			
							E	Fan Off	On			
							F	Fan turns on when heater turns on	On			

Installation Procedure

Option	SEG13		SEG14		SEG15		SEG16		SEG17					SEG18	
Explanation	PAGE		Use of external control		Setting the output of external control / External heater signal / Cooling operation signal / Free Cooling control signal		S-Plasma ion		Buzzer control / whether to use humidity sensor / whether to use APP UX DSP (Dual Set Point) / whether to use R-32 sensor					Hours of filter usage	
										Detail					
	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Buzzer Control	Humidity sensor	APP UX DSP	R-32 sensor	Indication	Details
Indication and Details	2		0	Disuse	0	External control (Thermo On)	0	Disuse	0	Use Buzzer	Disuse	Disuse	Disuse	2	1000 Hour
									1	Disuse Buzzer	Disuse	Disuse	Disuse		
			1	ON/OFF control	1	External control (Operation On)			2	Use Buzzer	Use	Disuse	Disuse		
									3	Disuse Buzzer	Use	Disuse	Disuse		
					2	External heater signal (*4)			4	Use Buzzer	Disuse	Use	Disuse		
									5	Disuse Buzzer	Disuse	Use	Disuse		
			2	OFF control	3	External heater signal (*4)			6	Use Buzzer	Use	Use	Disuse		
									7	Disuse Buzzer	Use	Use	Disuse		
					4	Cooling operation signal (*5)	1	Use	8	Use Buzzer	Disuse	Disuse	Use	6	2000 Hour
									9	Disuse Buzzer	Disuse	Disuse	Use		
			3	Window ON/OFF control	5	Free Cooling control (Cooling Thermo On) (*6)			A	Use Buzzer	Use	Disuse	Use		
									B	Disuse Buzzer	Use	Disuse	Use		
					6	Free Cooling control (Cooling/ Dry Thermo On) (*6)			C	Use Buzzer	Disuse	Use	Use		
									D	Disuse Buzzer	Disuse	Use	Use		
									E	Use Buzzer	Use	Use	Use		
									F	Disuse Buzzer	Use	Use	Use		

Option	SEG19		SEG20		SEG21			SEG22		SEG23	SEG24
Explanation	PAGE		Individual control of a remote controller		Heating setting compensation / Removing condensate water in heating mode			Adjusted EEV step of stopped unit during oil return /defrost mode.		-	-
Indication and Details	Indication	Details	Indication	Details	Indication	Details: Heating Setting Compensation	Details: Removing Condensate Water in Heating Mode	Indication	Details	-	-
	3		0 or 1	channel 1	0	Default	Disuse	0	Default		
					1	3.6 °F (2 °C)	Disuse				
			2	channel 2	2	9 °F (5 °C)	Disuse				
					3	Default	Use (*7)				
			3	channel 3							
					4	3.6 °F (2 °C)	Use (*7)	1	Adjusted EEV positon		
			4	channel 4	5	9 °F (5 °C)	Use (*7)				

* Advanced function: Controlling cooling/heating current or power saving with motion detect.

(*1) When Cooling or dry mode is off. The indoor fan operate in setting minutes.

(*2) Minimizing fan operation when thermostat is off
- Fan operates for 20 seconds at an interval of 5 minutes in Heat mode.
- Fan stops or operates Ultra low in Cooling when thermostat is off.

(*3) 1: Fan is turned on continually when the hot water heater is turned on,
3: Fan is turned off when the hot water heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option, install the Mode Select switch(VCTRL07P-1) on the outdoor unit and fix it as Cool mode.

Installation Procedure

(*4) When the following 2 or 3 is used as external heater On/Off signal, the signal for monitoring external contact control will not be output.
2: Fan is turned on continually when the external heater is turned on,
3: Fan is turned off when the external heater is turned on with cooling only indoor unit
Cooling only indoor unit: To use this option, install the Mode Select switch(VCTRL07P-1) on the outdoor unit and fix it as Cool mode.
- If Fan is set to off for cooling only indoor unit by setting the SEG9=3 or SEG15=3, you need to use an external sensor or wired remote controller sensor to detect indoor temperature exactly.

(*5) When indoor unit is in cooling or Dry mode, The output signal is "ON"

(*6) For free cooling control, Economizer controller is required.

(*7) This function can be applied to 4 Way Cassette and Mini 4 Way Cassette only.
If the air conditioner operates the heating mode immediately after finishing the cooling mode, the condensate water in the drain pan becomes water vapor by the heat of the indoor unit heat exchanger. Since the water vapor might be condensed on the indoor unit, which may fall into a living space, use this function to get rid of the water vapor out of the indoor unit by operating the fan (for maximum 20 minutes) even when the indoor unit is turned off after cooling mode is turned to heating mode.

(*8) Soft Off: If no motion is detected for the Soft Off time, the MDS Kit turns off the indoor units.
Then if any motion is detected until the Hard Off time is passed, the MDS Kit restarts the indoor units.

(*9) Hard Off: If no motion is detected for the Hard Off time, the MDS Kit turns hard off the indoor units.
Then although any motion is detected, the MDS Kit does not restart the indoor and outdoor units.
You must manually restart the units with the wired or wireless remote control.

05 series installation option

SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
0	5	Use of Auto Change Over for HR only in Auto mode / Use of Cooling only indoor unit of HR	(When setting SEG3) Standard heating temp. Offset	(When setting SEG3) Standard cooling temp. Offset	(When setting SEG3) Standard for mode change Heating → Cooling
SEG7	**SEG8**	**SEG9**	**SEG10**	**SEG11**	**SEG12**
1	(When setting SEG3) Standard for mode change Cooling → Heating	(When setting SEG3) Time required for mode change	Compensation option for Long pipe or height difference between indoor units	MTFC (*3)	-
SEG13	**SEG14**	**SEG15**	**SEG16**	**SEG17**	**SEG18**
2	-	Dual fuel (heater lock) setting	Dual fuel (HP lock) setting	-	Control variables when using hot water / external heater (*4)
SEG19	**SEG20**	**SEG21**	**SEG22**	**SEG23**	**SEG24**
3	-	-	-	Forced FAN Operation for Heating and Cooling	Whether to use UV LED / whether to use BLE Onboarding / whether to allow fan speed control during auto mode / MDS (motion detection sensor) control UX type

05 series installation option (Detailed)

Option No. : 05XXXX-1XXXXX-2XXXXX-3XXXXX

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		Use of Auto Change Over for HR only in Auto mode / Use of Cooling only indoor unit of HR		(When setting SEG3) Standard heating temp. Offset		(When setting SEG3) Standard cooling temp. Offset		(When setting SEG3) Standard for mode change Heating → Cooling	
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		5		0	Follow product option	0	0°F(0°C)	0	0°F(0°C)	0	1.8°F(1°C)
							1	0.9°F(0.5°C)	1	0.9°F(0.5°C)	1	2.7°F(1.5°C)
					1	Use Auto Change Over for HR only	2	1.8°F(1°C)	2	1.8°F(1°C)	2	3.6°F(2°C)
							3	2.7°F(1.5°C)	3	2.7°F(1.5°C)	3	4.5°F(2.5°C)
							4	3.6°F(2°C)	4	3.6°F(2°C)	4	5.4°F(3°C)
					2	Use Cooling only indoor unit for HR	5	4.5°F(2.5°C)	5	4.5°F(2.5°C)	5	6.3°F(3.5°C)
							6	5.4°F(3°C)	6	5.4°F(3°C)	6	7.2°F(4°C)
							7	6.3°F(3.5°C)	7	6.3°F(3.5°C)	7	8.1°F(4.5°C)

Option	SEG7		SEG8		SEG9		SEG10		SEG11		SEG12
Explanation	PAGE		(When setting SEG3) Standard for mode change Cooling → Heating		(When setting SEG3) Time required for mode change		Compensation option for Long pipe or height difference between indoor units		MTFC (*3)		-
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	-
	1		0	1.8°F(1°C)	0	5min	0	Default	0	Default	-
			1	2.7°F(1.5°C)	1	7min	1	(*1) Height difference is more than 30m or (*2) Distance is longer than 110m			
			2	3.6°F(2°C)	2	9min					
			3	4.5°F(2.5°C)	3	11min					
			4	5.4°F(3°C)	4	13min	2	(*1) Height difference is 15~30m or (*2) Distance is 50~110m	2	Use	-
			5	6.3°F(3.5°C)	5	15min					
			6	7.2°F(4°C)	6	20min					
			7	8.1°F(4.5°C)	7	30min					

Installation Procedure

Option	SEG13		SEG14	SEG15		SEG16		SEG17	SEG18		
Explanation	-		-	Dual fuel (heater lock) setting		Dual fuel (HP lock) setting		-	Control variables when using hot water / external heater (*4)		
Indication and Details	Indication	Details	-	Indication	Detail	Indication	Detail	-	Indication	Details	
										0	Disuse
	2		-	0	Disuse	0	Disuse	-	0	At the same time as thermo on	No delay
				1	64.9°F(18.3°C)	1	45.0°F(7.2°C)		1	At the same time as thermo on	10 minutes
				2	60.1°F(15.6°C)	2	39.9°F(4.4°C)		2	At the same time as thermo on	20 minutes
				3	55.0°F(12.8°C)	3	35.1°F(1.7°C)		3	2.7°F(1.5°C)	No delay
				4	50.0°F(10.0°C)	4	30.0°F(-1.1°C)		4	2.7°F(1.5°C)	10 minutes
				5	45.0°F(7.2°C)	5	25.0°F(-3.9°C)		5	2.7°F(1.5°C)	20 minutes
				6	39.9°F(4.4°C)	6	19.9°F(-6.7°C)		6	5.4°F(3.0°C)	No delay
				7	35.1°F(1.7°C)	7	15.1°F(-9.4°C)		7	5.4°F(3.0°C)	10 minutes
				8	30.0°F(-1.1°C)	8	10.0°F(-12.2°C)		8	5.4°F(3.0°C)	20 minutes
				9	25.0°F(-3.9°C)	9	5.0°F(-15°C)		9	8.1°F(4.5°C)	No delay
				A	19.9°F(-6.7°C)	A	0°F(-17.8°C)		A	8.1°F(4.5°C)	10 minutes
				B	15.1°F(-9.4°C)	B	-5.1°F(-20.6°C)		B	8.1°F(4.5°C)	20 minutes
				C	10.0°F(-12.2°C)	C	-9.4°F(-23.0°C)		C	10.8°F(6.0 °C)	No delay
				D	5.0°F(-15°C)	D	-14.8°F(-26.0°C)		D	10.8°F(6.0 °C)	10 minutes
				E	0°F(-17.8°C)	E	-20.2°F(-29.0°C)		E	10.8°F(6.0 °C)	20 minutes
				F	Cannot be used	F	Cannot be used				

Option	SEG19		SEG20	SEG21	SEG22	SEG23			SEG24				
Explanation	PAGE		-	-	-	Forcing FAN Operation for Heating and Cooling			Whether to use UV LED / whether to use BLE Onboarding / whether to allow fan speed control during auto mode / MDS (motion detection sensor) control UX type(*5)				
Indication and Details	Indication	Details	-	-	-	Indication	Details		Indication	Detail			
							Cooling Fan Setting	Heating Fan Setting		UV LED	BLE Onboarding	Whether to allow fan speed control during auto mode	MDS (motion detection sensor) control UX type
	3		-	-	-	0	Disuse	Disuse	0	Disuse	Disuse	Disuse	Fan speed and power saving mode can be set simultaneously
						1	Disuse	Use (Fan: User setting)	1	Use	Disuse	Disuse	Fan speed and power saving mode can be set simultaneously
						2	Disuse	Use (Fan: High)	2	Disuse	Use	Disuse	Fan speed and power saving mode can be set simultaneously
						3	Disuse	Use (Fan: Low)	3	Use	Use	Disuse	Fan speed and power saving mode can be set simultaneously

Option	SEG19	SEG20	SEG21	SEG22	SEG23			SEG24				
Explanation	PAGE	-	-	-	Forcing FAN Operation for Heating and Cooling			Whether to use UV LED / whether to use BLE Onboarding / whether to allow fan speed control during auto mode / MDS (motion detection sensor) control UX type(*5)				
Indication and Details	3	-	-	-	4	Use (Fan: User setting)	Disuse	4	Disuse	Disuse	Use	Fan speed and power saving mode can be set simultaneously
					5	Use (Fan: User setting)	Use (Fan: User setting)	5	Use	Disuse	Use	Fan speed and power saving mode can be set simultaneously
					6	Use (Fan: User setting)	Use (Fan: High)	6	Disuse	Use	Use	Fan speed and power saving mode can be set simultaneously
					7	Use (Fan: User setting)	Use (Fan: Low)	7	Use	Use	Use	Fan speed and power saving mode can be set simultaneously
					8	Use (Fan: High)	Disuse	8	Disuse	Disuse	Disuse	Only fan speed or power saving mode can be set at a time
					9	Use (Fan: High)	Use (Fan: User setting)	9	Use	Disuse	Disuse	Only fan speed or power saving mode can be set at a time
					A	Use (Fan: High)	Use (Fan: High)	A	Disuse	Use	Disuse	Only fan speed or power saving mode can be set at a time
					B	Use (Fan: High)	Use (Fan: Low)	B	Use	Use	Disuse	Only fan speed or power saving mode can be set at a time
					C	Use (Fan: Low)	Disuse	C	Disuse	Disuse	Use	Only fan speed or power saving mode can be set at a time
					D	Use (Fan: Low)	Use (Fan: User setting)	D	Use	Disuse	Use	Only fan speed or power saving mode can be set at a time
					E	Use (Fan: Low)	Use (Fan: High)	E	Disuse	Use	Use	Only fan speed or power saving mode can be set at a time
					F	Use (Fan: Low)	Use (Fan: Low)	F	Use	Use	Use	Only fan speed or power saving mode can be set at a time

Installation Procedure

(*1) Height difference : The difference of the height between the corresponding indoor unit and the indoor unit installed at the lowest place. For example, When the indoor unit is installed 131.23ft(40m) higher than the indoor unit installed at the lowest place, select the option "1".

(*2) The difference between the pipe length of the indoor unit installed at farthest place from an outdoor unit and the pipe length of the corresponding indoor unit from an outdoor unit.
For example, when the farthest pipe length is 328 ft (100 m) and the corresponding indoor unit is 131.23ft(40m) away from an outdoor unit, select the option "2". (328ft(100m) - 131.23ft(40m) = 196.85ft(60m))

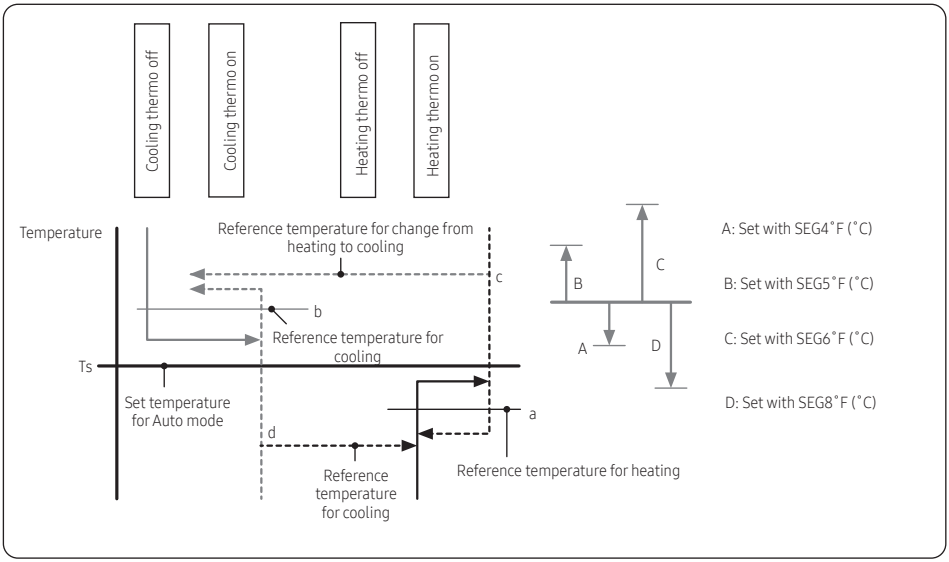
(*3) For MTFC option, MTFC(Multi Tenant Function Controller) kit is required.

(*4) Heater operation when the SEG9 of 02 series installation option is set to using hot water heater or when SEG15 is set to using external heater.
Example 1) Setting 02 series SEG9 ="1" / Setting 05 series SEG18 = "0": The hot water heater is turned on at the same time as the heating thermostat is on, and turned off when the heating thermostat is off.
Example 2) Setting 02 series SEG15 ="2" / Setting 05 series SEG18 ="A": Room temp. ≤ set temp. + f (heating compensation temp.)
- External heater is turned on when the temperature is maintained as 8.1 °F (4.5 °C) for 10 minutes. Room temp. > set temp. + f(heating compensation temp.)
- External heater is turned off when the temperature is maintained as 8.1 °F (4.5 °C) + 1.8 °F (1 °C) [1,8 °F (1 °C) is the Hysteresis for On/Off selection.]

(*5) Duct products do not use "UV LED & MDS"

Additional information on SEG3, 4, 5, 6, 8, 9

When SEG3 is set to 1 and the HR-specific auto changeover function is run, the indoor unit operates as shown in the following figure:



The mode change between the Cool and Heat modes is made only when the thermo off state is maintained for the period of time set with SEG9.

Changing the addresses and options individually

When you want to change the value of a specific option, refer to the following table and follow the steps in **Common steps for setting the addresses and options** on page **35**.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Function	Page		Mode		Type of the option to change		Tens position of the option number		Units position of the option number		New value	
Indication and details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option type	0 to F	Tens position value	0 to 9	Units position value	0 to 9	New value	0 to F

Example: Changing the Buzzer control (SEG17) option of the installation options to 1 disuse.

Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Function	Page	Mode	Type of the option to change	Tens position of the option number	Units position of the option number	New value
Indication	0	D	2	1	7	1

⚠ CAUTION

- If your indoor units support both cooling and heating, the mixed operation (two or more indoor units operate in different modes simultaneously) is not available when the indoor units are connected to the same outdoor unit. If you set an indoor unit as the master indoor unit by using the remote control, the outdoor unit automatically operate in the current mode of the master indoor unit.

Installing external outputs

An external output signal occurs if the R-32 sensor in the indoor unit detects a refrigerant leak, or the sensor has a malfunction or short circuit.

Based on this signal, safety measures required for the indoor unit, such as ventilation system activation and alarm activation, can be taken.

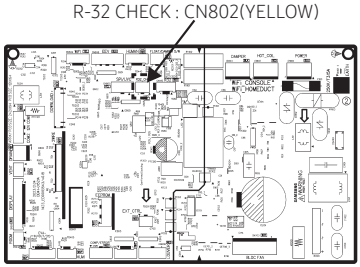
VSTAT10P-1 (External Contact Control Module) can be used to link the GAS LEAK output.

NOTE

- The VSTAT10P-1 can be connected to the required load on connectors 3 and 4.
- The load is AC (208-230), AC 2.25Amax
- When an error occurs due to a gas leak or R-32 sensor error, 3 and 4 are in a short state (the relay operates).

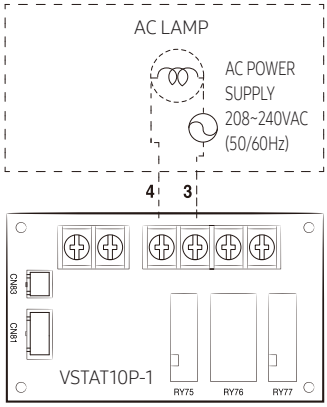
Installation Procedure

For controlling AC LAMP (On/Off)

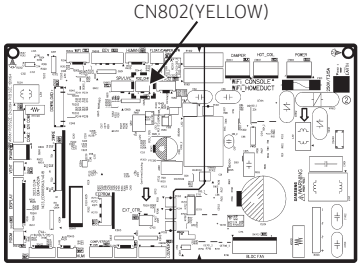


※ Use of the WIRE HARNESS included in the product manual

To Main PBA

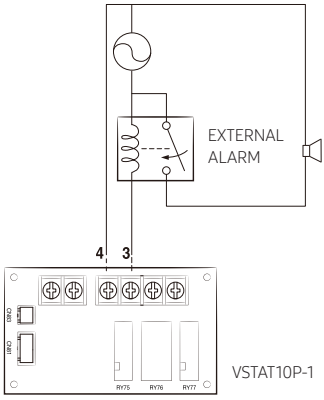


For controlling AC LAMP (On/Off)



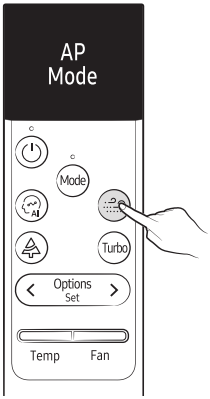
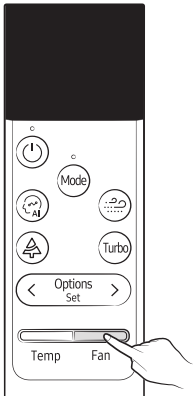
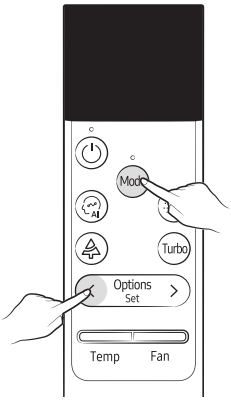
※ Use of the WIRE HARNESS included in the product manual

To Main PBA



Step 17 Optional : LED Display indicator specifications when checking Wi-Fi Easy Setup and Wi-Fi status

The wireless remote controller can be used for Easy Setup, checking internet connection status and connecting or disconnecting Wi-Fi.

Easy Setup	Check internet connection status	Enable/Disable Wi-Fi
		
Press the button for 5 seconds	Press the Fan button for 5 seconds	Press the Mode and Options Set button for 5 seconds

Installation Procedure

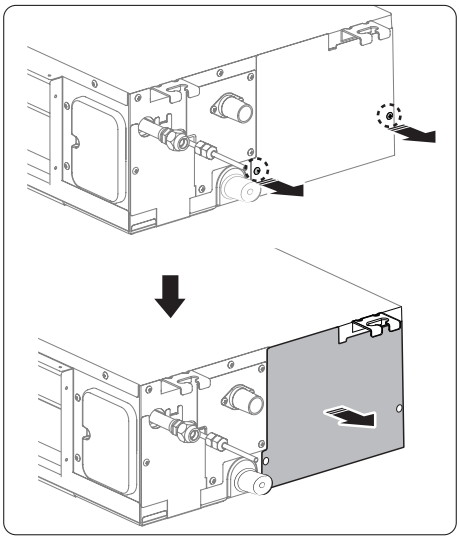
LED indicator Status

Duct		Indicators				Note	Action
		On / Off	Timer	Fan	Filter sign		
							
Easy Setup	AP Entry	●	●	●	●	All LEDs turn On	
	Device Check	◑	◑	◑	◑	All LEDs Flashing	
	Device Registration	◑	◑	◑	◑	LEDs Flashing sequentially (On/Off → Timer → Fan → Filter sign)	
	Connection success	◑	◑	◑	◑	All LEDs Flashing(During 3SEC)	
	Connection failed	X	X	X	X	All LEDs turn Off and operate in the original mode	AP setting, Wi-Fi module replacement
Check your internet connection	AP, when connected to the Internet normally	●	●	●	●	All LEDs turn On (During 5SEC)	Use normally
	When not connected to AP	X	X	X	X	All LEDs turn Off (During 5SEC)	AP setting, Wi-Fi module replacement
Wi-Fi function	When connected	◑	◑	◑	◑	All LEDs flash one time	-
	When disconnected	◑	◑	◑	◑		-
When setting AP with wired remote control		◑	◑	◑	◑	All LEDs Flashing (MAX 10Min)	
Initialize connection information		◑	◑	◑	◑	LEDs Flashing sequentially (On/Off → Timer → Fan → Filter sign)	-
Initialize the device		◑	◑	◑	◑	LEDs Flashing sequentially (Filter sign → Fan → Timer → On/Off)	-

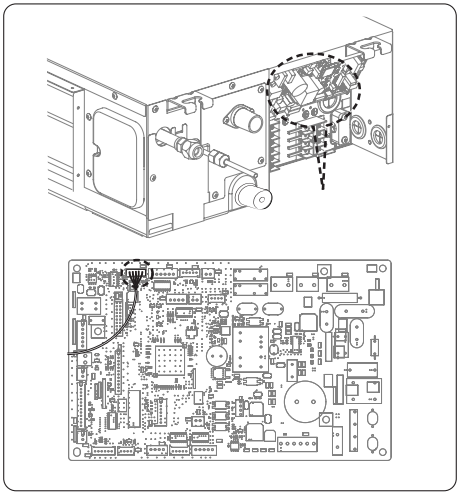
Step 18 Wi-Fi module Reinstallation guide

If the ceiling construction material interferes with the Wi-Fi signal, it may be necessary to remove the Wi-Fi module from it's factory location and relocate the Wi-Fi module using the included extension harness.

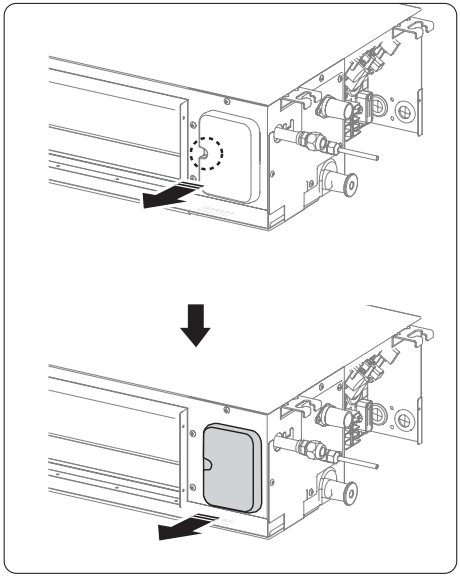
1 Disassemble two screws and remove the Cover control.



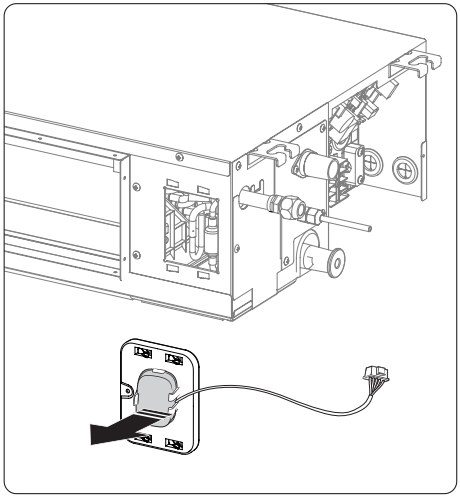
2 Disconnect Wi-Fi connector.



3 Remove one screw and remove the Cover case.

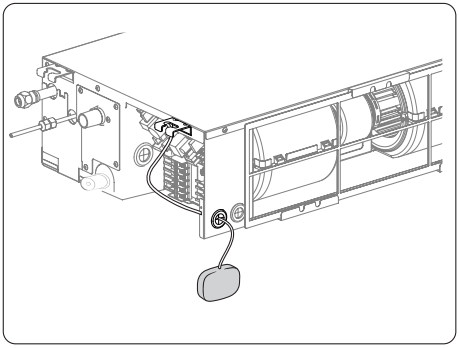


4 Pull the Wi-Fi wire through the wiring hole, and then take out the Wi-Fi module from the back side of the Cover pipe.



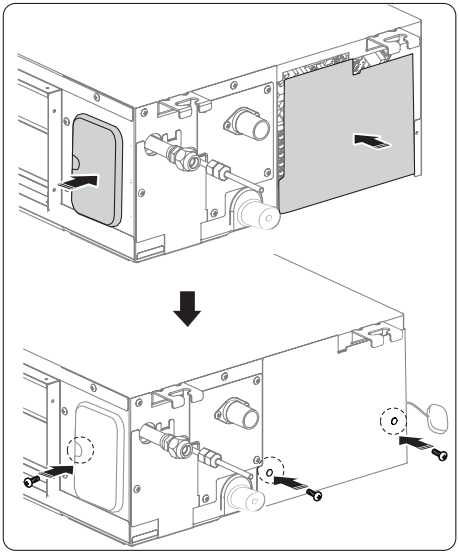
Installation Procedure

5 Connect the Wi-Fi wire connector through the wire hole.

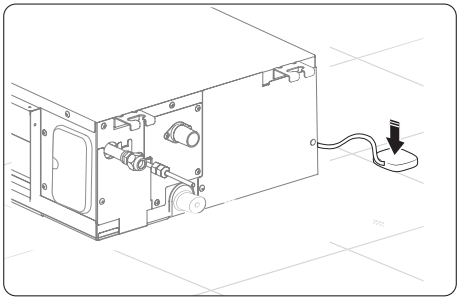


- If length extension is required, use an enclosed wire (Accessory bag).

6 Assemble the cover pipe and the Cover control.



7 Fix the Wi-Fi module to the Ceiling to avoid the steel structure.



Performing final check and trial operation

To complete the installation, perform the following checks and tests to ensure that the air conditioner operates correctly.

1 Check the followings.
- Strength of the installation site
- Tightness of pipe connection to detect a gas leak
- Electric wiring connections
- Heat-resistant insulation of the pipe
- Drainage
- Earth conductor connection
- Correct operation (follow the steps below)

After finishing the installation of the air conditioner, you should explain the following to the user. Refer to appropriate pages in the User's Manual.

1 How to start and stop the air conditioner
2 How to select the modes and functions
3 How to adjust the temperature and fan speed
4 How to adjust the airflow direction
5 How to set the timers
6 How to clean and replace the filters

NOTE

- When you complete the installation successfully, hand over the User's Manual and this Installation Manual to the user for storage in a handy and safe place.

Appendix

Troubleshooting

- If an error occurs during the operation, one or more LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

Abnormal condition	Error code	LED Display				
		Blue	Red			
Error on indoor temperature sensor (Short or Open)	E121	×	×	◑	×	×
1. Error on Eva-in sensor (Short or Open)	E122	◑	×	◑	×	×
2. Error on Eva-out sensor (Short or Open)	E123					
3. Discharge sensor error (Short or Open)	E126					
Indoor fan error	E154	×	×	×	◑	×
1. Error on outdoor temperature sensor (Short or Open)	E221	◑	×	×	◑	×
2. Error on cond sensor	E237					
3. Error on discharge sensor	E251					
Other outdoor unit sensor error that is not on the above list						
1. When there is no communication between the indoor·outdoor units for 2 minutes	E101	×	×	◑	◑	×
2. Communication error received from the outdoor unit	E102					
3. 3 miniute tracking error on outdoor unit	E202					
4. Communication error after tracking due to unmatching number of installed units	E201					
5. Error due to repeated communication address	E108					
6. Communication address not confirmed	E109					
Other outdoor unit communication error that is not on the above list						
Self diagnosis error display		×	×	◑	◑	◑
1. Error due to opened EEV (2nd detection)	E151					
2. Error due to closed EEV (2nd detection)	E152					
3. Eva in sensor is detached	E128					
4. Eva out sensor is detached	E129					
5. Thermal fuse error (Open)	E198					

● On ◑ Flickering **X** Off

If you turn off the air conditioner when the LED is flickering, the LED is also turned off.

Abnormal condition	Error code	LED Display				
		Blue	Red			
1. COND mid sensor is detached	E241					
2. Refrigerant leakage (2nd detection)	E554					
3. Abnomally high temperature on Cond (2nd detection)	E450					
4. Low pressure s/w (2nd detection)	E451					
5. Abnomally high temperature on discharged air on outdoor unit (2nd detection)	E416					
6. Indoor operation stop due to unconfirmed error on outdoor unit	E559					
7. Error due to reverse phase detection	E425					
8. Comp stop due to freeze detection (6th detection)	E403					
9. High pressure sensor is detached	E301					
10. Low pressure sensor is detached	E306					
11. Outdoor unit copression ration error	E428					
12. Outdoor sump down_1 prevetion control	E413					
13. Compressor down due to low pressure sensor prevention control_1	E410	X	X	◑	◑	◑
14. Simultaneous opening of cooling/heating MCU SOL valve (1st detection)	E180					
15. Simultaneous opening of cooling/heating MCU SOL valve (2nd detection)	E181					
16. Indoor unit R-32 sensor short/open	E116					
17. installation combination of indoor unit and wired remote control Error	E694					
18. Refrigerant leak sensor lifetime unpredictable error	E695					
19. 1st refrigerant leak detection error	E696					
20. 2nd refrigerant leak detection error (Error-causing indoor unit)	E697					
21. Refrigerant leak sensor failure error	E698					
22.Refrigerant leak sensor replacement notification error	E699					
23. Refrigerant leak sensor lifetime expiration error	E700					
24.2nd refrigerant leak detection error (Not Error-causing indoor unit)	E797					
Other outdoor unit self-diagnosis error that is not on the above list						
Flowating s/w (2nd detection)	E153	X	X	X	◑	◑
EEPROM error	E162	◑	◑	◑	◑	◑
EEPROM option error	E163	◑	◑	◑	◑	◑
Error due to incompatible indoor unit	E164	X	X	X	X	◑

● On ◑ Flickering **X** Off

If you turn off the air conditioner when the LED is flickering, the LED is also turned off.