

INSTALLATION MANUAL

AIR CONDITIONER

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

Ceiling Concealed Duct



MFL67939925
Rev.03_112720

www.lg.com

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TIPS FOR SAVING ENERGY

Here are some tips that will help you minimize the power consumption when you use the air conditioner. You can use your air conditioner more efficiently by referring to the instructions below:

- Do not cool excessively indoors. This may be harmful for your health and may consume more electricity.
- Block sunlight with blinds or curtains while you are operating the air conditioner.
- Keep doors or windows closed tightly while you are operating the air conditioner.
- Adjust the direction of the air flow vertically or horizontally to circulate indoor air.
- Speed up the fan to cool or warm indoor air quickly, in a short period of time.
- Open windows regularly for ventilation as the indoor air quality may deteriorate if the air conditioner is used for many hours.
- Clean the air filter once every 2 weeks. Dust and impurities collected in the air filter may block the air flow or weaken the cooling / dehumidifying functions.

For your records

Staple your receipt to this page in case you need it to prove the date of purchase or for warranty purposes. Write the model number and the serial number here:

Model number : _____

Serial number : _____

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

Dealer's name : _____

Date of purchase : _____

SAFETY INSTRUCTIONS

The following safety guidelines are intended to prevent unforeseen risks or damage from unsafe or incorrect operation of the appliance.

The guidelines are separated into 'WARNING' and 'CAUTION' as described below.



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



WARNING

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



CAUTION

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



WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Installation of all field wiring and components **MUST** conform with local building codes or, in the absence of local codes, with the National Electrical Code 70 and the National Building Construction and Safety Code or Canadian Electrical code and National Building Code of Canada.
- The information contained in the manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.
- Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

Installation

- Always perform grounding.
 - Otherwise, it may cause electrical shock.
- For installation of the product, always contact the service center or a professional installation agency.
 - Otherwise, it may cause a fire, electrical shock, explosion or injury.

4 SAFETY INSTRUCTIONS

- Securely attach the electrical part cover to the indoor unit and the service panel to the outdoor unit.
 - If the electrical part cover of the indoor unit and the service panel of the outdoor unit are not attached securely, it could result in a fire or electric shock due to dust, water, etc.
- Always install an earth leakage circuit breaker and a dedicated switching board.
 - No installation may cause a fire and electrical shock.
- Do not keep or use flammable gases or combustibles near the air conditioner.
 - Otherwise, it may cause a fire or the failure of product.
- Ensure that an installation frame of the outdoor unit is not damaged due to use for a long time.
 - It may cause injury or an accident.
- Do not disassemble or repair the product randomly.
 - It will cause a fire or electrical shock.
- Do not install the product at a place that there is concern of falling down.
 - Otherwise, it may result in personal injury.
- Use caution when unpacking and installing.
 - Sharp edges may cause injury.
- Use a vacuum pump or Inert (nitrogen) gas when doing leakage test or air purge. Do not compress air or Oxygen and Do not use Flammable gases. Otherwise, it may cause fire or explosion. There is the risk of death, injury, fire or explosion.
- Consult your local dealer regarding what to do in case of refrigerant leakage.
When the air conditioner is to be installed in a small room, it is necessary to take proper measures so that the amount of any leaked refrigerant does not exceed the concentration limit in the event of a leakage. Otherwise, this may lead to an accident due to oxygen depletion.
- Carry out the specified installation work after taking into account earthquakes.
Failure to do so during installation work may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual. An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
- Be sure to switch off the unit before touching any electrical parts.
- Make sure that all wiring is secured, the specified wires are used, and that there is no strain on the terminal connections or wires.
- If refrigerant gas leaks during installation, ventilate the area immediately.
Toxic gas may be produced if the refrigerant gas comes into contact with fire.

Operation

- Turn off the unit if strange sounds, smell, or smoke comes from it.
 - Otherwise, it may cause electrical shock or a fire.
- Keep the flames away.
 - Otherwise, it may cause a fire.
- Do not touch the power cable with wet hands when it taking out .
 - Otherwise, it may cause a fire or electrical shock.
- Do not open the suction inlet of the indoor/outdoor unit during operation.
 - Otherwise, it may electrical shock and failure.
- Do not allow water to run into electrical parts.
 - Otherwise, it may cause the failure of machine or electrical shock.
- Never touch the metal parts of the unit when removing the filter.
 - They are sharp and may cause injury.
- Do not step on the indoor/outdoor unit and do not put anything on it.
 - It may cause an injury through dropping of the unit or falling down.
- When the product is submerged into water, always contact the service center.
 - Otherwise, it may cause a fire or electrical shock.
- Take care so that children may not step on the outdoor unit.
 - Otherwise, children may be seriously injured due to falling down.

 **CAUTION****Installation**

- Install the drain hose to ensure that drain can be securely done.
 - Otherwise, it may cause water leakage.
- Install the product so that the noise or hot wind from the outdoor unit may not cause any damage to the neighbors.
 - Otherwise, it may cause dispute with the neighbors.
- Always inspect gas leakage after the installation and repair of product.
 - Otherwise, it may cause the failure of product.
- Keep level parallel in installing the product.
 - Otherwise, it may cause vibration or water leakage.
- Do not install the unit in potentially explosive atmospheres.

Operation

- Avoid excessive cooling and perform ventilation sometimes.
 - Otherwise, it may do harm to your health.
- Use a soft cloth to clean. Do not use wax, thinner, or a strong detergent.
 - The appearance of the air conditioner may deteriorate, change color, or develop surface flaws.
- Do not use an appliance for special purposes such as preserving animals vegetables, precision machine, or art articles.
 - Otherwise, it may damage your properties.
- Do not place obstacles around the flow inlet or outlet.
 - Otherwise, it may cause the failure of appliance or an accident.
- Do not turn on the breaker or power under condition that front panel, cabinet, top cover, control box cover are removed or opened.

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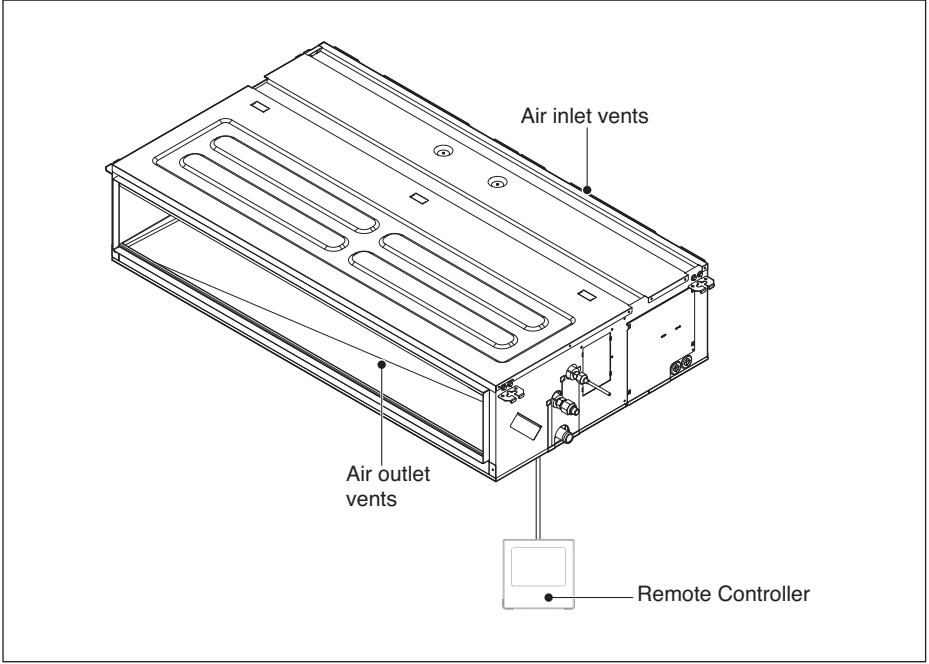
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INTRODUCTION

Features



INSTALLATION OF INDOOR

Selection of the best location

- The place shall easily bear a load exceeding four times the indoor unit's weight.
- The place shall be able to inspect the unit as the figure.
- The place where the unit shall be leveled.
- The place shall allow easy water drainage.(Suitable dimension "H" is necessary to get a slope to drain as figure.)
- The place shall easily connect with the outdoor unit.
- The place where the unit is not affected by an electrical noise.
- The place where air circulation in the room will be good .
- There should not be any heat source or steam near the unit
- Confirm the positional relationship between the unit and suspension bolts.
- Thermal insulator the ceiling opening to clean the filter or service under the product.

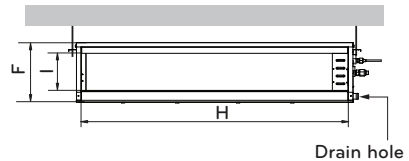
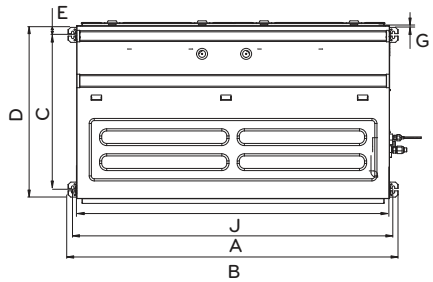
Installation of Unit

Install the unit above the ceiling correctly.

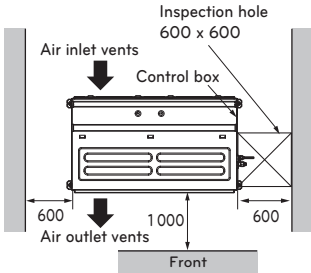
CASE 1

Position of suspension Bolt

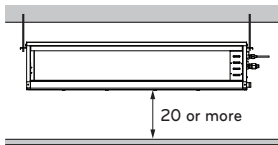
- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.



Top view Unit: mm



Front view Unit: mm



(Unit:mm)

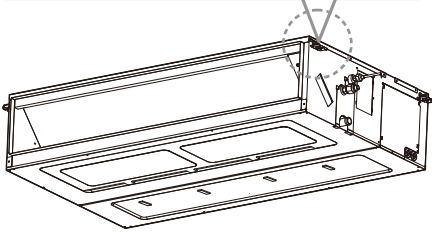
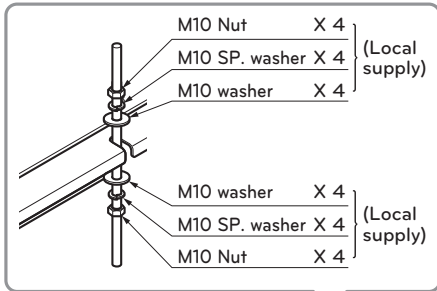
Dimension	A	B	C	D	E	F	G	H	I	J
Capacity (kBtu/h)										
18 / 24 / 30	933.4	971.6	619.2	679	35	270	4.5	857	200	900
36	1 283.4	1 321.6	619.2	679	35	270	4.5	1 206	200	1 250
48 / 50 / 54 / 60	1 283.4	1 321.6	619.2	679	35	360	4.5	1 206	291	1 250

CASE 2

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

Position of console Bolt

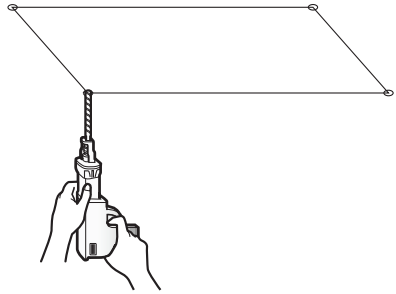
- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.



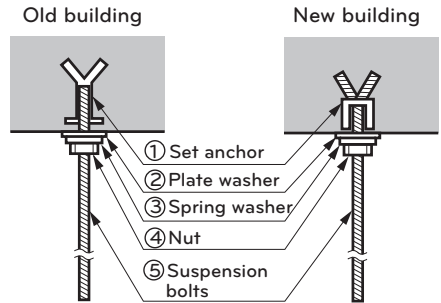
CAUTION

Tighten the nut and bolt to prevent unit falling.

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



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

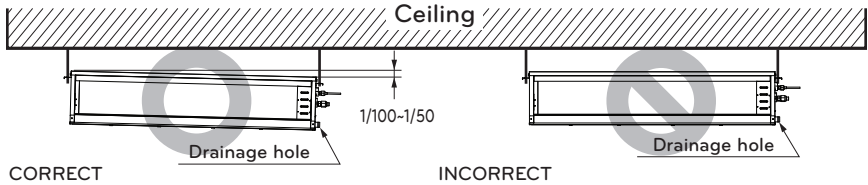


! CAUTION

- Install declination of the indoor unit is very important for the drain of the duct type air conditioner.
- Minimum thickness of the insulation for the connecting pipe shall be 19 mm.

Front of view

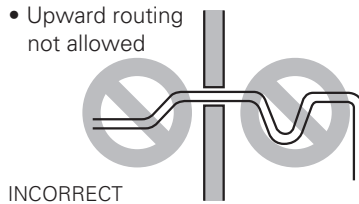
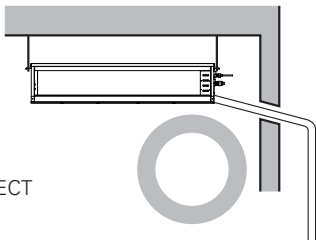
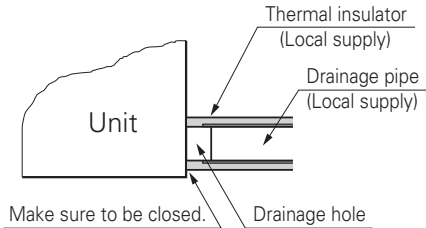
- The unit must be declined to the drain hose connected when finished installation.



Caution for gradient of unit and drain piping

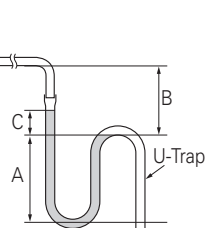
Lay the drain hose with a downward inclination so water will drain out.

- Always lay the drain with downward inclination (1/100 to 1/50). Prevent any upward flow or reverse flow in any part.
- 10 mm or thicker formed thermal insulator shall always be provided for the drain pipe.



Applied U-Trap Dimension

- A ≥ 70 mm
- B ≥ 2C
- C ≥ 2 × SP
- SP = External Pressure (mmAq)
- Ex) External Pressure = 10 mmAq
- A ≥ 70 mm
- B ≥ 40 mm
- C ≥ 20 mm



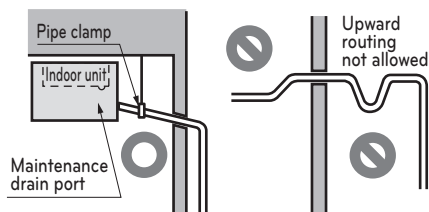
- Install the P-Trap (or U-Trap) to prevent a water leakage caused by the blocking of intake air filter.

Indoor Unit Drain Piping

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

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

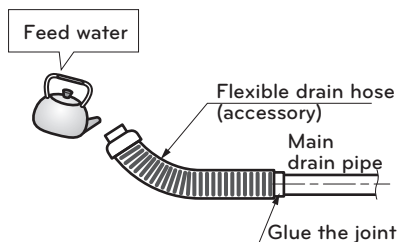
- Be sure to execute thermal insulator on the drain piping.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.



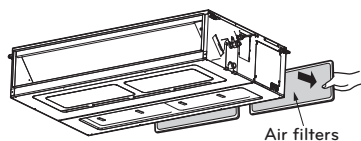
Thermal insulator material: Polyethylene foam with thickness more than 8 mm.

Drain test

- Connect the main drain pipe to the exterior and leave it provisionally until the test comes to an end.
- Feed water to the flexible drain hose and check the piping for leakage.
- When the test is complete, connect the flexible drain hose to the drain port on the indoor unit.

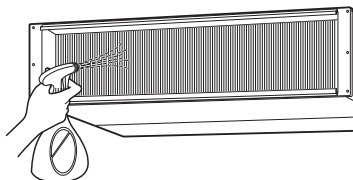


- 1 Remove the air filter.



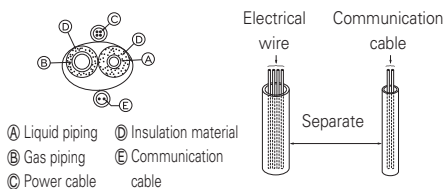
- 2 Check the drain.

- Spray one or two glasses of water upon the evaporator.
- Ensure that water flows drain hose of indoor unit without any leakage.



Piping insulation

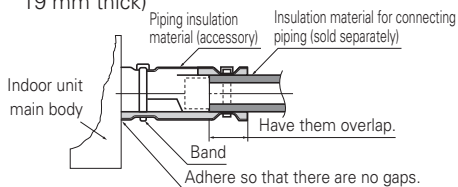
- Loosen the flare nut of the indoor unit's piping connection port, insert it into the liquid pipe and the gas pipe, and then conduct flaring work on the ends of each pipe.
- Insulate each of the liquid pipes and gas pipes using insulation material for piping.



Fully insulate the connection parts.



- Use the piping insulation included in the accessories to once again insulate the piping connection part of the gas pipe as shown below. (Piping insulation must be at least 19 mm thick)

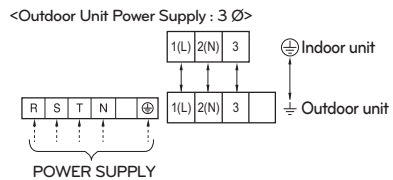
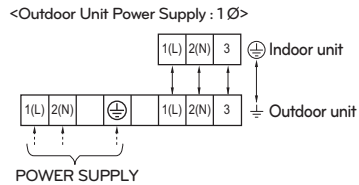
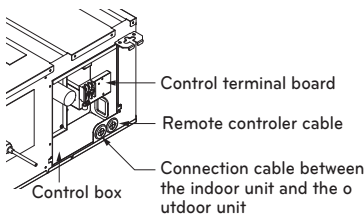
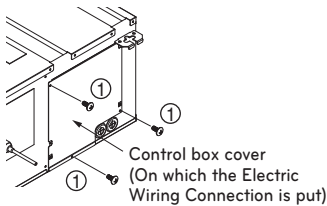


applies to	Insulation material standard (mm) (besides normal conditions for residential use)		Insulation material standard (mm) - residential		Insulation material standard (mm) (unfavorable conditions)
	Refrigerant piping dimensions (mm)	EPDM	If installed in an air-conditioned place (CASE 1) (ex: bedroom,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

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

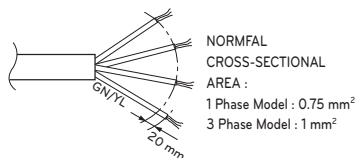
Wiring Connection

- Open the control box cover and connect the Remote controller cable and Indoor power wires.
- Remove the control box cover for electrical connection between the indoor and outdoor unit. (Remove screws ①.)
- Use the cord clammer to fix the cable.

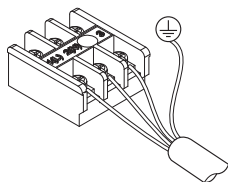


! CAUTION

- The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (Rubber insulation, type H05RN-F approved by HAR or SAA).



- If the supply cable is damaged, it must be replaced by a special cable or assembly available from the manufacturer of its service agent. When the connection line between the indoor unit and outdoor unit and outdoor unit is over 40 m, connect the telecommunication line and power line separately.



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

! CAUTION

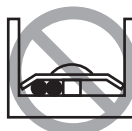
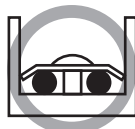
Precautions when laying power wiring

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



When none are available, follow the instructions below.

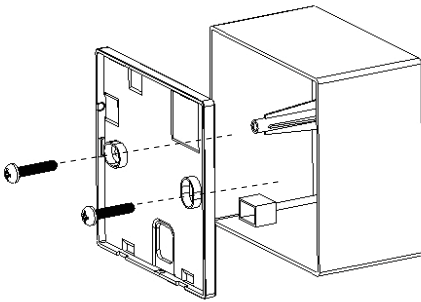
- Do not connect wiring of different thicknesses to the power terminal block. (Slack in the power wiring may cause abnormal heat.)
- When connecting wiring which is the same thickness, do as shown in the figure below.



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

INSTALLATION INSTRUCTION

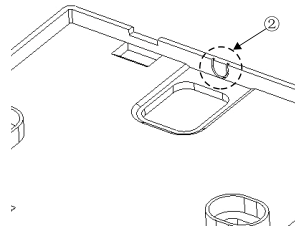
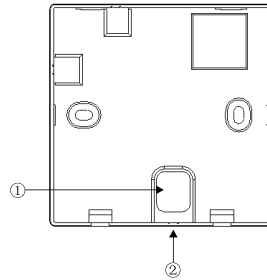
- 1 Please install the wired controller mounting plate to the position you want with the screws provided.
 - Do not bend the mounting plate during installation, as it may cause poor fixing. Please install a wired controller with a mounting box (if any) properly. (The installation box shall be type 86)



- 2 The connection cables of the wired controller can be set from two directions:
 - Installation direction: slotted on the wall surface, underside.
 - If install a wired control cable from the guide slot below, please remove the slot after installation.

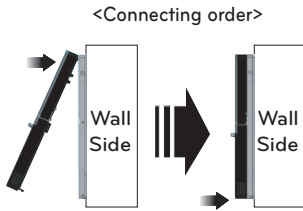
* Remove the guide slot with long-nose pliers.

- ① Slotted on the wall surface
- ② Underside guide slot



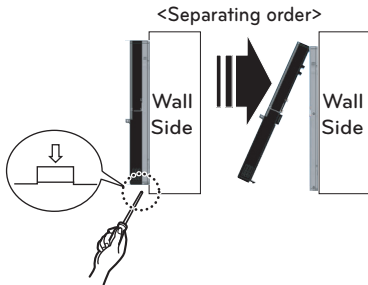
<Cable slot>

- 3 Please fix remote controller upper part into the backplate attached to the surface of the wall, as the picture below, and then, connect with backplate by pressing lower part.
- Please make sure to leave no gaps on the top, bottom, left or right sides between the remote controller and backplate.
 - Before assembly with the backplate, arrange the Cable not to interfere with circuit parts.



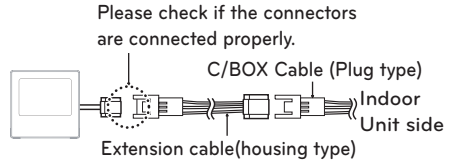
Remove remote controller by inserting a screwdriver into the lower separating holes and twisting to release the controller from backplate.

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



- 4 Please refer to the following directions when connecting the indoor unit and the wired remote controller together.

- Please connect the cables as shown in the figure below when connecting the plug type cable from the indoor unit's C/BOX and the housing type of the extension cable.



Signal	Yellow
12 V	Red
GND	Black

CAUTION

- Specification of LG supplied extension cable: AWG#22, 3 core shielded. (Model : PZCWRC1)
- * Apply enclosed noncombustible conduit(metal raceway) totally or use FT-6 rated cable or above level in case of local electric & building code that requires plenum (CMP) cable usage.
- AWG#22, 3 core shielded is recommended when using the large hole in the center of the back plate.
- AWG#24, 3 core shielded is recommended when using the side or top knock-out of the back plate.

- 5 Please use an extension cable if the distance between the wired remote controller and the indoor unit is longer than 10 m(32 ft).

CAUTION

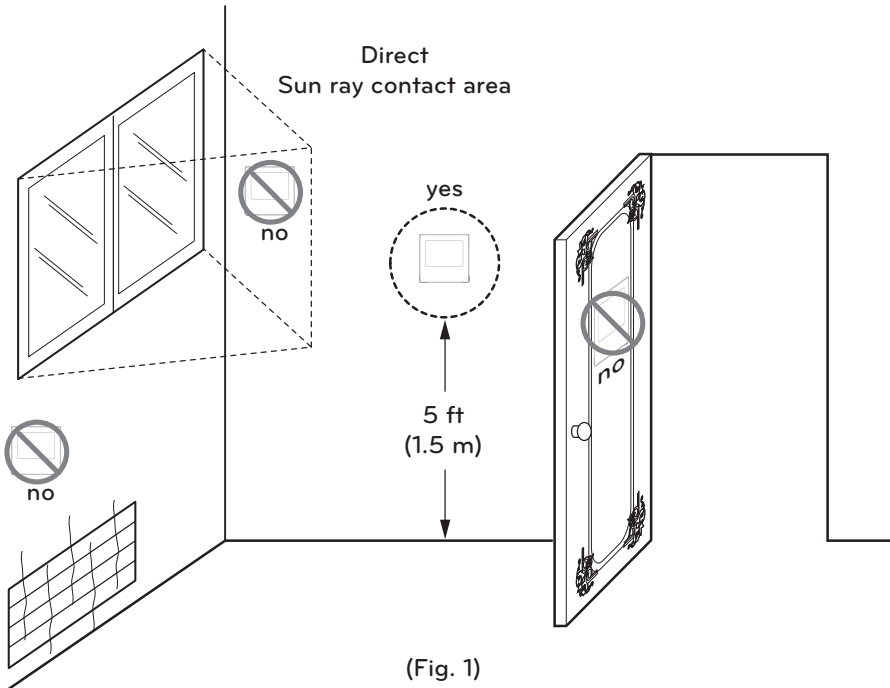
- When installing the wired remote controller, do not bury it in the wall. (It can cause damage in the temperature sensor.)
- Do not install the cable to be 50 m(164 ft) or longer. (It can cause communication error.)

Remote controller installation

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

Do not install the remote controller where it can be affected by:

- Drafts, or dead spots behind doors and in corners.
- Hot or cold air from ducts.
- Radiant heat from sun or appliances.
- Concealed pipes and chimneys.
- Uncontrolled areas such as an outside wall behind the remote controller.
- This remote controller is equipped with LCD. display. For proper display of the remote controller LCD's, the remote controller should be installed properly as shown in Fig.1.
(The standard height is 4~5 ft (1.2~1.5 m) from floor level.)



Group control

1 When installing more than 2 units of air conditioner to one wired remote controller, please connect as Figure.1.

- If it is not event communication indoor unit, set the unit as slave.
- Check for event communication through the product manual.

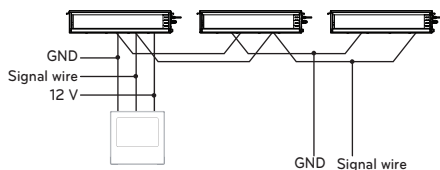


Figure.1

When controlling multiple indoor units with event communication function with one remote controller, you must change the master/slave setting from the indoor unit.

Indoor units, the master/slave configuration of the product after completion of indoor unit power 'OFF' and then 'ON' the power after 1 minutes elapsed sign up.

- For ceiling type cassette and duct product group, change the switch setting of the indoor PCB.



#3 switch OFF: Master
(Factory default setting)



#3 switch ON: Slave

Figure.2

- For wall-mount type and stand type product, change the master/slave setting with the wireless remote controller. (Refer to wireless remote controller manual for detail)

- * When installing 2 remote controllers to one indoor unit with event communication function, set the master/slave of the remote controller. (Refer to remote controller master/slave selection)

When controlling the group, some functions excluding basic operation setting, fan level Min/Mid/Max, remote controller lock setting and time setting may be limited.

2 When installing more than 2 wired remote controllers to one air conditioner, please connect as Figure.3.

- When installing more than 2 units of wired remote controller to one air conditioner, set one wired remote controller as master and the others all as slaves, as shown in the right picture.
- You cannot control the group as shown in the right for some products.
- Refer to the product manual for more detail.

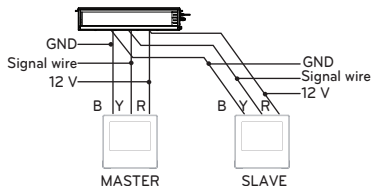


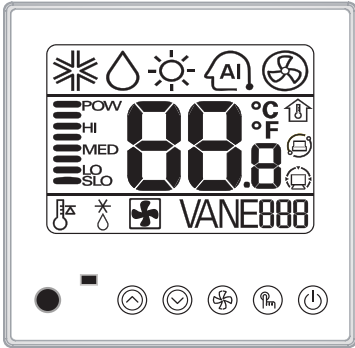
Figure.3

- When controlling in groups, set the master/slave of the remote controller. Refer to Installer setting section on how to set master/slave for more detail.

Installer Setting - How to enter installer setting mode

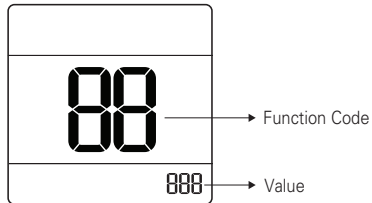
⚠ CAUTION

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



1 If you want to set installer setting mode, Press the Temperature up button and the oper mode button same time for five seconds.

2 When you enter the setting mode Initially. Function code is displayed on the LCD screen.



<Installer Setting Code Table> General air-conditioner product

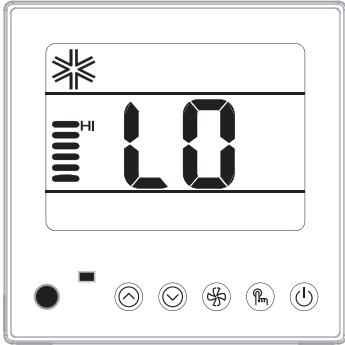
No.	Function	Code	Value
1	Test Run	01	01:Set
2	Address Setting	02	00~FF : Address
3	E.S.P. Value	03	<ESP Step> <ESP Value><Example> 01:VeryLow 0 ~ 255 02:Low 03:Med 04:High 05:Very High <div style="text-align: right; margin-top: 10px;"> 030! 00.0 Function Code ESP step ESP value </div>
4	Thermistor	04	01:Remo 02:Indoor 03:2TH
5	Ceiling Height	05	01:Med 02:Low 03:High 04:Very High
6	Static Pressure	06	01:V-H 02:F-H 03:V-L 04:F-L
7	Master Setting	07	00:Slave 01:Master
8	Celsius Fahrenheit Switching	12	00:Celsius 01:Fahrenheit (Optimized only for U.S.A)
9	Static Pressure Step	32	00: use static pressure (code 06) set value 01~ 11: static pressure step (code 32) set value







* Some contents may not be displayed depending on the product function

Installer Setting - Test Run Mode

After installing the product, you must run a Test Run mode.

For details related to this operation, refer to the product manual.



- 1 When pressing the  button and  button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.
 - After entering into the installer setting mode, select the test run mode code value by pressing the  button.
 - * Test run mode code value : 01
- 2 When pressing the  button, the test operation mode will be performed, and it is displayed as shown in the left figure.
- 3 When pressing the  button and  button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
 - If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.
- 4 When approx. 18 minutes are elapsed after starting of the test oper-mode, the system will be stopped automatically and converted to the standby state.
 - If any button is inputted during the test run mode, the test run mode will be forced to be released.

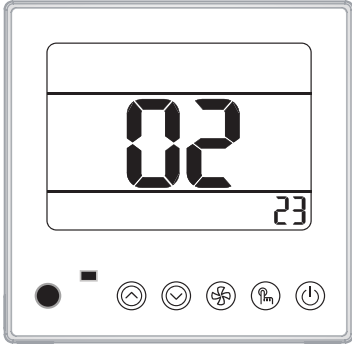
What is the test run mode?

- This means the operation of the product under the cooling, strong wind, and Comp on state without performing room temperature control in order to confirm the installed state during the product installation.

Installer Setting - Setting Address of Central Control

It's the function to use for connecting central control.

Please refer to central controller manual for the details



1 When pressing the button and button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.
 - After entering into the installer setting mode, select the central control address setting code value by pressing the button.
 * Setting address of central control code value : 02

2 Set up the group number and indoor unit with the temperature adjustment buttons.

— Group number

— Indoor unit number

For example, when setting as

[Group number=2 Indoor number=3]

it will be displayed as shown in the left figure.

3 When pressing the button, the system will be set up with the address value which has been established at present.

4 When pressing the button and button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
 - If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

- If you connect the indoor unit to the central controller, you should set the network address of the indoor unit so that the central controller could recognize it.
- The center-control address is composed of the group number and the indoor-unit number.

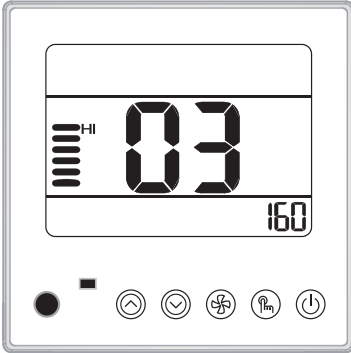
NOTE











The remote controller displays 'HL' if central controller has locked the remote controller .
 In the case when the lock is set up at the central controller, 'HL' will be indicated on the display window of the wired remote controller and the indoor unit will not be controlled by the remote controller.

Installer Setting - E.S.P.

This is the function that decides the strength of the wind for each wind level and because this function is to make the installation easier.

- If you set ESP incorrectly, the air conditioner may malfunction.
- This setting must be carried out by a certificated-technician.

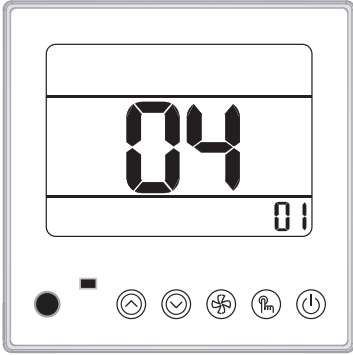


- 1 When pressing the  button and  button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.
 - After entering into the installer setting mode, select the E.S.P code value by pressing the  button.
 - * E.S.P code value : 03
- 2 Select the desired air flow rate with the  button. Whenever pressing the  button, [Lo→Med→Hi] will be indicated.
- 3 Select the desired air flow rate value with the temperature up() , down() button.
 - * E.S.P value range : 0~255
 - E.S.P value will be indicated at the upper right section of the display window.
- 4 When pressing the  button, currently established E.S.P value will be set up.
- 5 When pressing the  button and  button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
 - If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

- Precaution shall be taken not to alter the E.S.P value corresponded to each air flow section.
- E.S.P value can be varied according to the products.
- In the case of going to the next air flow rate stage by pressing the fan-speed button during the setup of the E.S.P value, the E.S.P value of previous air flow rate will be maintained by remembering the E.S.P value prior to the shift.

Installer Setting - Thermistor

This is the function to select the temperature sensor to judge the room temperature.

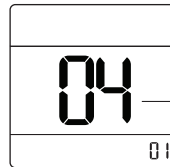


- When pressing the button and button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.

 - After entering into the installer setting mode, select the thermistor sensor setting code value by pressing the button.

* Thermistor sensor selection code value : 04

- Select the desired setting value with the temperature up(), down() button.



*Setting value
01: Remote controller
02: Indoor unit
03: 2TH

- When pressing the button, currently established thermistor sensor location will be set up.

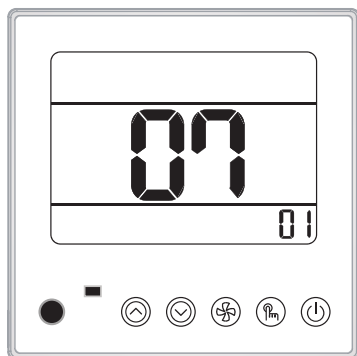
- When pressing the button and button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.

 - If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

* As the characteristic of the '2TH' function can be different in accordance with the products, refer to the product instruction manual for its detail.

Installer Setting - Remote Controller Master/Slave Setup

It is a function for settings in group control, or 2-remote controller control.

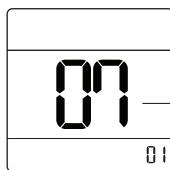


1 When pressing the button and button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.

- After entering into the installer setting mode, select the ceiling height setting code value by pressing the oper-mode button.

* Remote controller master/slave setting code value : 07

2 Select the desired setting value with the temperature up () , down () button.



* Setting value
00:Slave
01:Master

3 When pressing the button, currently established static pressure value will be set up.

4 When pressing the button and button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
- If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

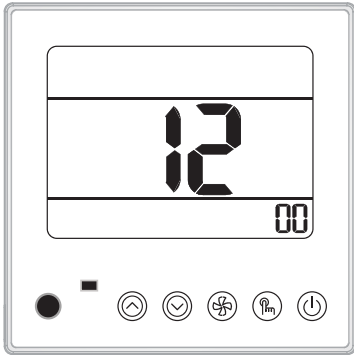
Remote controller	Function
Master	Indoor unit operates based on master remote controller at group control. (Master is set when delivering from the warehouse.)
Slave	Setup all remote controllers except one master remote controller to slave at group control



* Refer to the 'group control' part for details



- When controlling in groups, basic operation settings, airflow strength weak/medium/strong, lock setting of the remote controller, time settings, and other functions may be restricted.

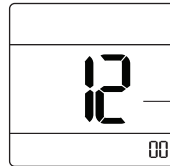
Installer Setting - Celsius / Fahrenheit Switching

This function is used for switching the display between Celsius and Fahrenheit.
(Optimized only for U.S.A)






- 1 When pressing the  button and  button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.
- After entering into the installer setting mode, select the ceiling height setting code value by pressing the oper-mode button.
* Celsius/Fahrenheit setting code value : 12



- 2 Select the desired setting value with the temperature up() , down() button.



*Setting value
00:Celsius
01:Fahrenheit

- 3 When pressing  button, currently established celsius/Fahrenheit setting value will be set up.

- 4 When pressing the  button and  button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
- If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

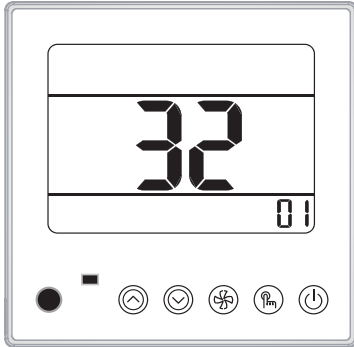
- Whenever press temp up  , down  button in Fahrenheit mode, the temperature will increase/drop 2 degrees.

Installer Setting - Static Pressure Step Setting

This function is applied to only duct type. Setting this in other cases will cause malfunction.

This function is only available on some products.

This is the function that static pressure of the product is divided in 11 steps for setting.

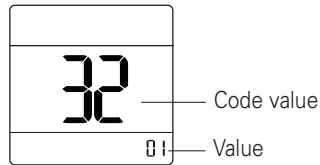


1 When pressing the button and button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.

- After entering into the installer setting mode, select the static pressure step setting code value by pressing the button.

* Static pressure step setting code value : 32

2 Select the desired setting value with the temperature up () , down () button.



00: use static pressure (code 06) set value

01~ 11: static pressure step (code 32) set value

3 When pressing button, currently established static pressure value will be set up.

4 When pressing the button and button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.
- If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

- Static Pressure (Code 06) setting will not be used if Static Pressure Step (Code 32) setting is being used.

- For the static pressure value for each step, refer to the next page Table. 1

[Table. 1]

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			2(20)	2.5(25)	3(29)	4(39)	6(59)	8(78)	10(98)	12(118)	13(127)	14(137)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
18	LOW	13	73	74	77	88	93	103	111	117	120	125	128
	MID	14.5	76	77	85	91	97	107	114	121	125	128	131
	HIGH	16.5	85	87	90	94	103	110	118	125	128	131	134

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			2(20)	2.5(25)	3(29)	4(39)	6(59)	8(78)	10(98)	12(118)	13(127)	14(137)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
24	LOW	14.5	76	77	85	89	97	107	114	121	125	128	131
	MID	16.5	85	87	90	94	103	110	118	125	128	131	134
	HIGH	18	90	92	95	99	108	115	122	129	132	135	138

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			2.5(25)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)	11(108)	13(127)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
30	LOW	18	96	102	107	110	114	118	122	125	127	132	134
	MID	20	102	110	114	118	121	125	127	130	133	135	137
	HIGH	22	110	117	121	124	127	130	133	136	137	138	140

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)	11(108)	12(118)	13(127)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
36	LOW	24	88	91	95	100	101	108	113	115	118	121	128
	MID	28	93	97	101	105	108	115	118	120	124	127	134
	HIGH	32	101	105	109	112	115	119	123	126	128	133	137

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)	11(108)	12(118)	13(127)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
48 / 50	LOW	28	74	76	79	82	89	92	94	96	99	102	107
	MID	34	78	82	84	89	94	96	98	101	104	106	112
	HIGH	40	83	89	92	94	98	100	102	105	108	110	116

Capacity (kBtu/h)	Step	CMM	Static Pressure[mmAq(Pa)]										
			4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)	11(108)	12(118)	13(127)	15(147)
			Setting Value										
			32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
54 / 60	LOW	40	82	89	92	94	98	100	102	105	108	110	113
	MID	45	90	92	96	98	102	104	106	109	112	114	117
	HIGH	50	94	97	100	104	107	109	112	115	117	119	121

NOTE

1. Be sure to set the value referring table 1. Unexpected set value will cause mal-function.
2. Table 1 is based at 230 V. According to the fluctuation of voltage, air flow rate varies.
3. Factory Set(External Static Pressure) each Model

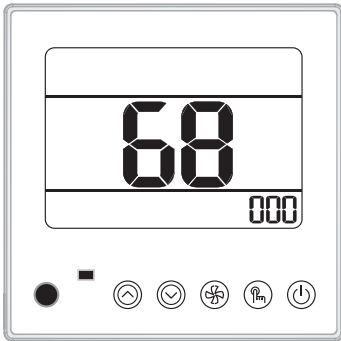
Capacity (kBtu/h)	Factory set (E.S.P.) mmAq(Pa)
18	6(59)
24	
30	
48	
50	
54	
60	

* If it is zero static pressure, please set value below Maximum value.

Capacity (kBtu/h)	Maximum Value
18	115
24	
30	120
36	
48	98
50	
54	
60	

Installer Setting - Auto ESP

This function automatically sets the rotation speed of the fans corresponding to each step of rated airflow for easy installation.

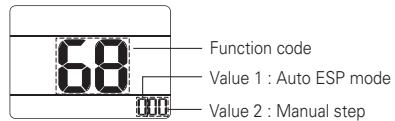


1 When pressing the button and button simultaneously for more than 3 seconds, the system will be entered into the installer setting mode.

- If button is pressed repeatedly, it is moved to Auto ESP setting menu as the picture below.

* Code value : 68

2 Set the auto ESP mode using the Temperature button and set the manual step using the Fan speed button.



3 Press button to save the setting.

4 When pressing the button and button simultaneously for more than 3 seconds after the setting has been completed, the setting mode will be released.

- If there isn't any button input for more than 25 seconds, the installer setting mode will also be released.

- ※ The voltage can be set by setting the Auto ESP Mode to 'Manual (2)', then pressing the 'Fanspeed' button.
- ※ While 'Auto ESP' is being set, the display on the wired remote control changes as shown below, and the wired remote control cannot be operated.
- ※ Once the set-up is complete, you can enter installer setup (68) to check whether the set-up has succeeded or failed. (3: Success, 4: Failure)



Value 1 (Auto ESP mode)	Value 2 (Manual Step)	Description (Voltage setting)
0 (Not use)	-	-
1 (Auto)	-	-
2 (Manual)	00	190 V
	01	200 V
	02	210 V
	03	220 V
	04	230 V
	05	240 V
	06	250 V
	07	260 V
	08	270 V
3	-	Cannot be set, only monitoring is possible. If the value1 is 3, setting is successful.
4	-	Cannot be set, only monitoring is possible. If the value1 is 4, setting has failed.

NOTE

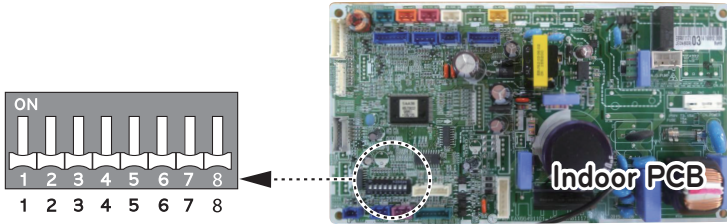
If this function is incorrectly set especially, in case of mismatching the voltage, the air conditioner may malfunction.

This function must be set by the installation specialist that holds an installation license. (please check the product type)

NOTE

- If the heat exchanger is not dry, please set the device to operate in air circulation mode for 15 minutes.
- The air filter must be properly attached to the suction side of the product.
- Adjust the dampers so that each air inlet and outlet exhaust the required air.
- Please do not use the set auto air flow function when using various booster fans (outdoor air treatment device or ERV through ducts).
- Please reinitiate the set auto air flow function if the duct shape has changed since its initial installation.
- When setting the voltage manually, the set air flow will differ from the actual air flow if the set voltage is different from the actual voltage.
- When setting voltage manually, measure the actual voltage and select the set voltage on the remote control.
- Failure to follow the above method may cause the actual air flow to differ from the rated air flow.

DIP SWITCH SETTING



	Function	Description	Setting Off	Setting On	Default
SW3	Group Control	Selection of Master or Slave	Master	Slave	Off
SW4	Dry Contact Mode	Selection of Dry Contact Mode	Wired/Wireless remote controller Selection of Manual or Auto operation Mode	Auto	Off
SW5	Installation	Fan continuous operation	Continuous operation Removal	Working	Off