

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



P/NO: MFL67939944

www.lg.com

Copyright © 2020 LG Electronics Inc. All Rights Reserved

TABLE OF CONTENTS

3 TIPS FOR SAVING ENERGY

4 IMPORTANT SAFETY INSTRUCTIONS

6 INTRODUCTION

6 Features

7 INSTALLATION OF INDOOR

7 Selection of the best location

7 Installation of Unit

10 Indoor Unit Drain Piping

10 Drain test

11 Thermal Insulation

12 Wiring Connection

13 INSTALLATION INSTRUCTION

16 Remote controller installation

17 Group control

18 Installer Setting - How to Enter Setting Mode

19 Installer Setting - Central Control Address Setting Installer

20 Installer Setting – Wired Controller Master / Slave Setting

21 Installer Setting - Static Pressure Step Setting

22 Installer Setting - Static Pressure Setting

23 Installer Setting - E.S.P.

24 Installer Setting - Thermistor

25 Installer Setting - Test Run Mode

26 Installer Setting - Celsius Setting

33 DIP SWITCH SETTING

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 : _____

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product

WARNING

It can result in serious injury or death when the directions are ignored

CAUTION

It can result in minor injury or product damage when the directions are ignored

WARNING

- Installation or repairs made by unqualified persons can result in hazards to you and others.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.
- 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.
- 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

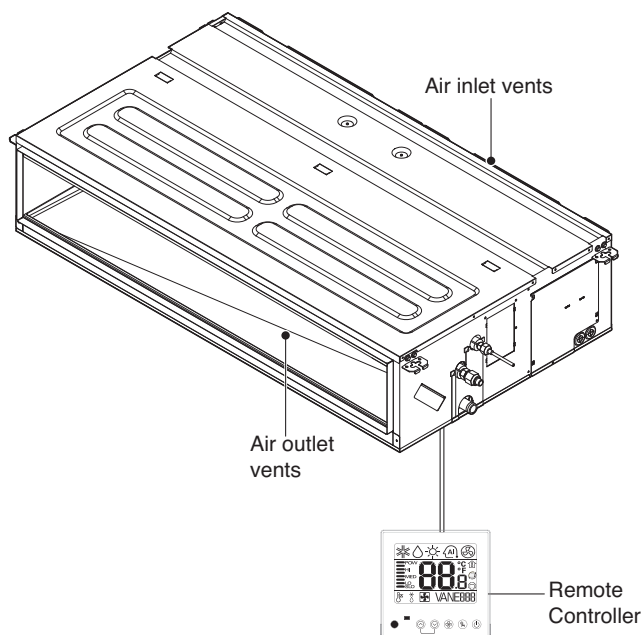
- Install the drain hose to ensure that drain can be securely done. - Otherwise, it may cause water leakage.
- Install the product so that the noise or hot wind from the outdoor unit may not cause any damage to the neighbors. - Otherwise, it may cause dispute with the neighbors.
- Always inspect gas 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.

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.

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.

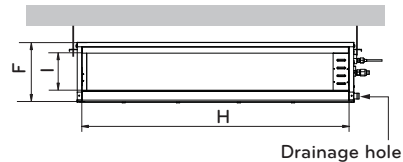
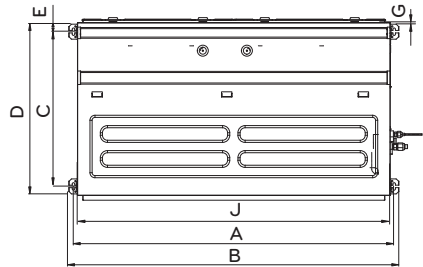
Installation of Unit

Install the unit above the ceiling correctly.

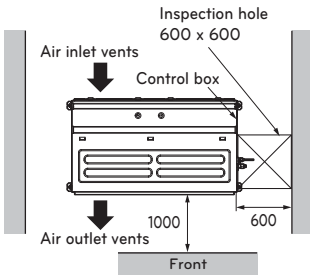
CASE 1

Position of suspension Bolt

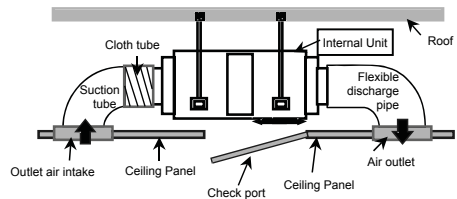
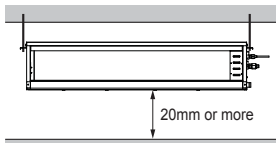
- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.



Top view
Unit: mm



Front view
Unit: mm



(Unit:mm)

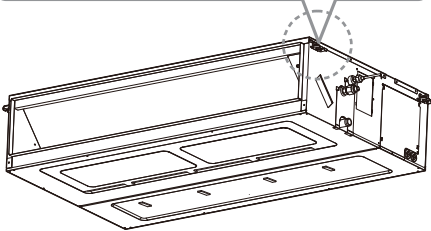
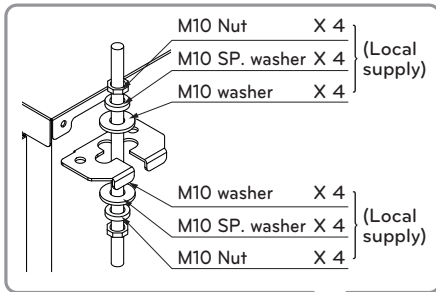
Dimension	A	B	C	D	E	F	G	H	I	J
Chassis										
M3	1283.4	1321.6	619.2	700	30	360	15.2	1208	291.4	1250
M2	1283.4	1321.6	619.2	700	30	270	15.2	1208	201.4	1250
M1	933.4	971.6	619.2	700	30	270	15.2	858	201.4	900

CASE 2

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

Position of console Bolt

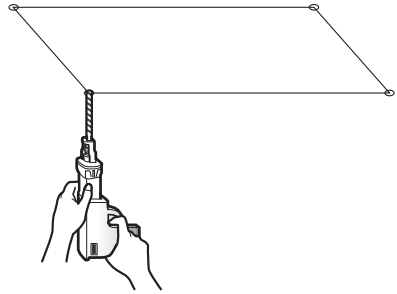
- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.



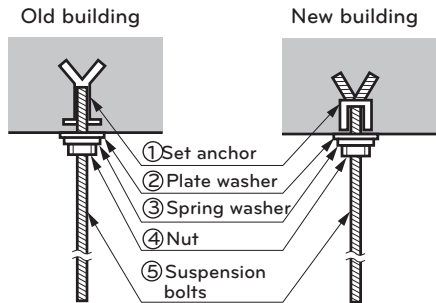
CAUTION

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.

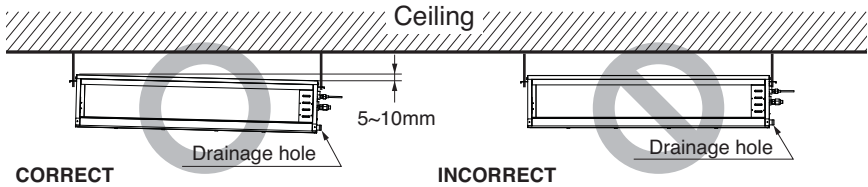


CAUTION

- 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 5mm.

Front of view

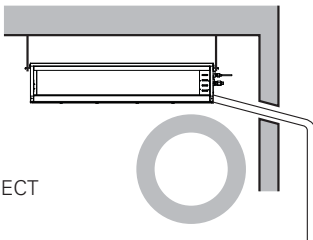
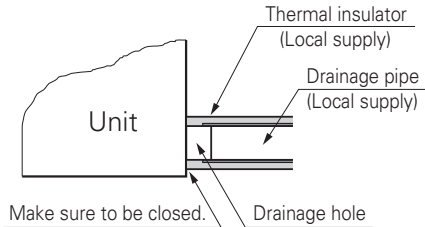
- The unit must be declined to the drain hose connected when finished installation.



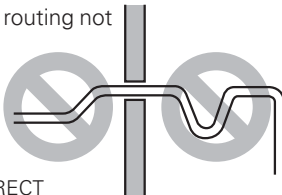
Caution for gradient of unit and drain piping

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.

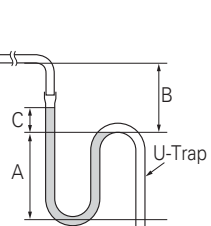


- Upward routing not allowed



Applied U-Trap Dimension

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



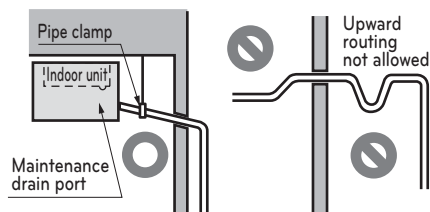
- Install the P-Trap (or U-Trap) to prevent a water leakage caused by the blocking of intake air filter.

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

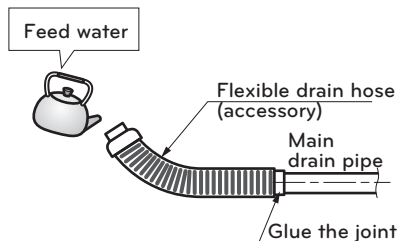
- Be sure to execute thermal insulator on the drain piping.
- Install the drain raising pipes at a right angle to the indoor unit and no more than 300 mm from the unit.



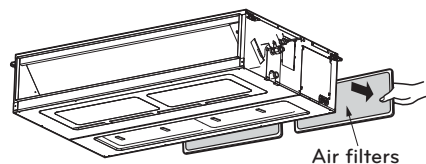
Thermal insulator material: Polyethylene foam with thickness more than 8 mm.

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.

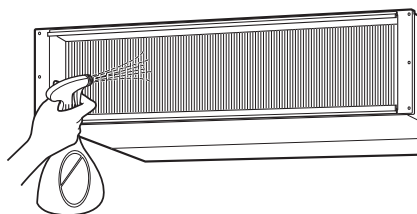


- 1 Remove the air filter.



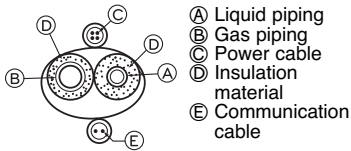
- 2 Check the drain.

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

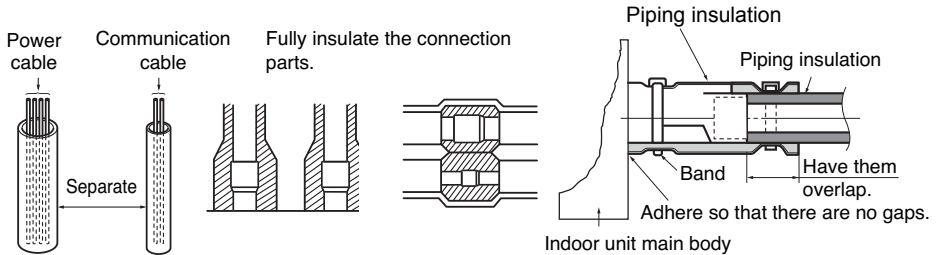


Thermal Insulation

- 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.



- do the insulation work as it is showing below
(piping insulation must be at least 19mm thick)



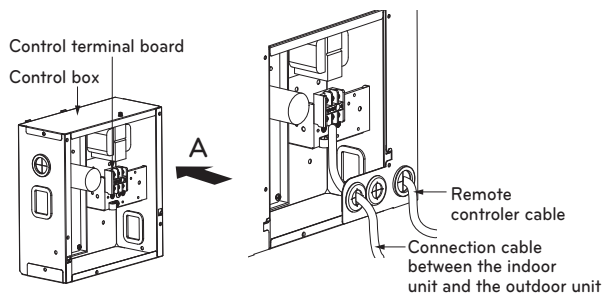
Applies to	Insulation material standard (mm) (besides normal conditions for residential use)		Insulation material Standard (mm) - residential		Insulation material standard (mm) (unfavorable conditions)
			If installed in an air-conditioned place (CASE 1) (ex: bedroom, living room, etc.)	If installed in a non-air-conditioned place (CASE 2) (ex: hallway, outdoors, etc.)	
	Refrigerant piping dimensions (mm)	EPDM	EPDM	EPDM	EPDM
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				
	12.7~44.45	13	13	13	13

* Normal conditions: Temperature of 30 °C, relative humidity of 85 %

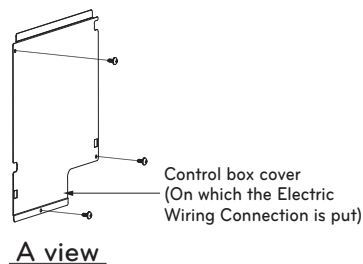
* Unfavorable conditions: Temperature of 30 °C, relative humidity of 90 % (humid places such as bathrooms, swimming pools, etc.: air supply and exhaust fan installation)

Wiring Connection

- Open the control box cover and connect the Remote controller cable and Indoor power wires.



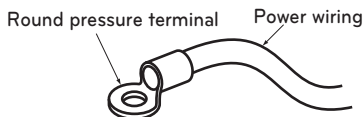
- Remove the control box cover for electrical connection between the indoor and outdoor unit. (Remove screws ①.)
- Use the cord clamper to fix the cable.



CAUTION

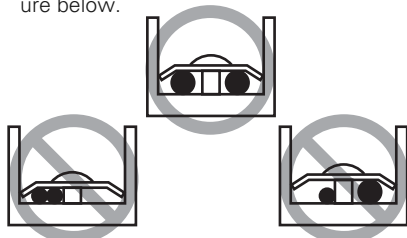
Precautions when laying power wiring

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



When none are available, follow the instructions below.

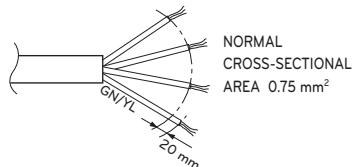
- Do not connect wiring of different thicknesses to the power terminal block. (Slack in the power wiring may cause abnormal heat.)
- When connecting wiring which is the same thickness, do as shown in the figure below.



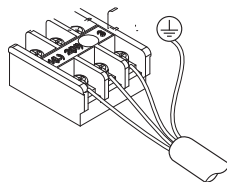
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal block.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will strip the head and make proper tightening impossible.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

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.

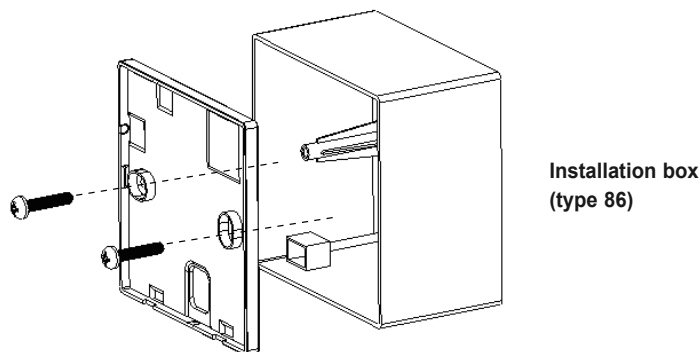


INSTALLATION INSTRUCTION

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)

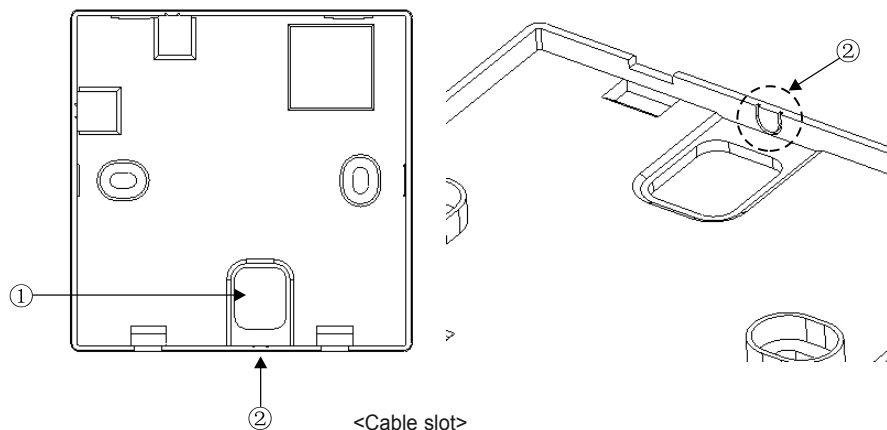


2. The connection cables of the wired controller can be set from two directions:

- 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.

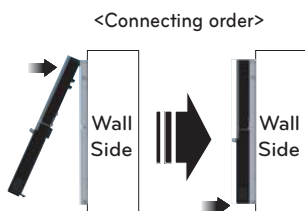
* Remove the guide slot with long-nose plier

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



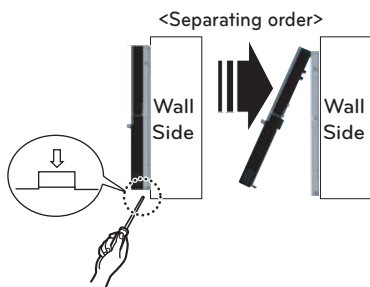
- 3 Please fix remote controller upper part into the backplate attached to the surface of the wall, as the picture below, and then, connect with backplate by pressing lower part.

- 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.



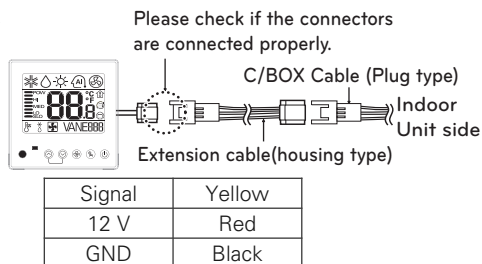
Remove remote controller by inserting a screwdriver into the lower separating holes and twisting to release the controller from backplate.

- 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.



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.

CAUTION

- Installation work must be performed in accordance with the national wiring standards and local by authorized personnel only.
- Installations must comply with the applicable local/national or international standards.
- 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.

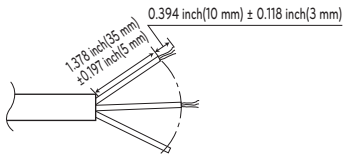
- 5 Please use an extension cable if the distance between the wired remote controller and the indoor unit is longer than 32 ft(10 m).

CAUTION

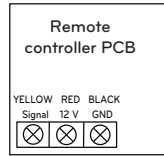
- When installing the wired remote controller, do not bury it in the wall. (It can cause damage in the temperature sensor.)
- Do not install the cable to be 164 ft(50 m) or longer. (It can cause communication error.)

- When connecting Terminal Blocks of the indoor C/BOX and the wired remote controller with the extension cable, refer to the steps below.

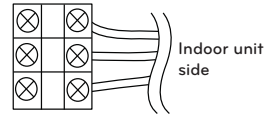
- ① Remove the screw on the cable which is fastened to the wired remote controller's Terminal Block by loosening with a screw driver.
- ② Remove the housing of the provided 32 ft extension cable with a cutting nipper and peel it as shown in the figure below. (when purchasing the extension cable at the site directly, please peel it as shown in the figure below.)



- ③ Make sure each wire is securely fastened under each screw terminal and the wires are not in contact with each other.
- ④ Please connect the Terminal blocks of indoor unit's C/BOX and wired remote controller by referring to the images and contents shown below.
Connect the yellow(signal) part of the wired remote controller's terminal block and the 'YL' part of the indoor unit's terminal block. Connect the red(12 V) part of the wired remote controller's terminal block and the 'RD' part of the indoor unit's terminal block. Connect the black(GND) part of the wired remote controller's terminal block and the 'BK' part of the indoor unit's terminal block.



<Remote controller>



<Indoor Terminal Block>

Remote controller PCB Terminal block Remark	Indoor Terminal block	Function
YELLOW	YL	Signal
RED	RD	12 V
BLACK	BK	GND

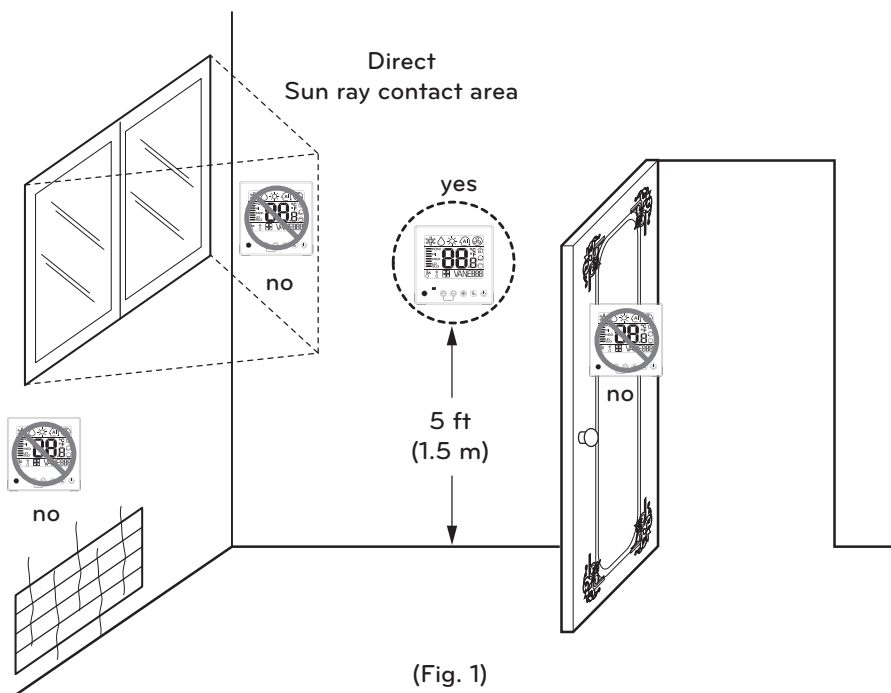
- * In case of loosened screws or insufficient contact between the terminal and the wire, remote controller may not function properly.
- * When the power is off on the remote controller, check the connection between the remote controller and Terminal Block.
- * Use an appropriate screwdriver for tightening 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 wires and terminal block structure.

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:

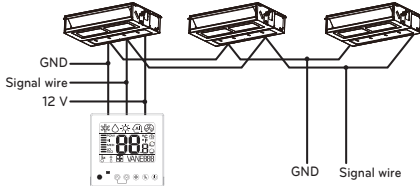
- Drafts, or dead spots behind doors and in corners.
- Hot or cold air from ducts.
- Radiant heat from sun or appliances.
- Concealed pipes and chimneys.
- Uncontrolled areas such as an outside wall behind the remote controller.
- This remote controller is equipped with LCD. display. For proper display 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.)



(Fig. 1)

Group Control

- When installing more than 2 units of air conditioner to one wired remote controller, please connect as the right figure.
 - If it is not event communication indoor unit, set the unit as slave.
 - Check for event communication through the product manual.



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)



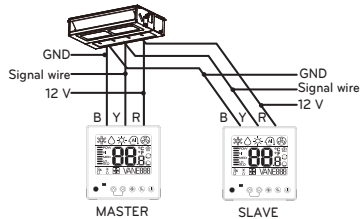
#3 switch ON: Slave

- 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.

- When installing more than 2 wired remote controllers to one air conditioner, please connect as the right picture.
 - 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.

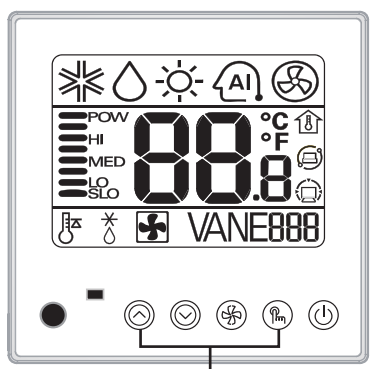


- When controlling in groups, set the master/slaver of the remote controller. Refer to Installer setting section on how to set master/slave for more detail.

How to enter the setting mode

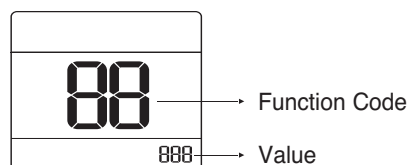
! Caution

The installation setting mode is used for detailed function settings of the wired controller. The incorrect setting mode may cause product failure or loss of body or property of the user. The setting must be performed by a person with professional qualification. The company does not assume responsibility for installation or modification by unprofessional personnel, or does not provide free repair services.



1 If wanting to enter manual setting mode, please press the temperature rise adjustment key and the operation mode key simultaneously for 5 seconds.

2 When entering the setting mode for the first time, the function code is displayed at the bottom of the LCD.



<Code Table for Installation Settings>

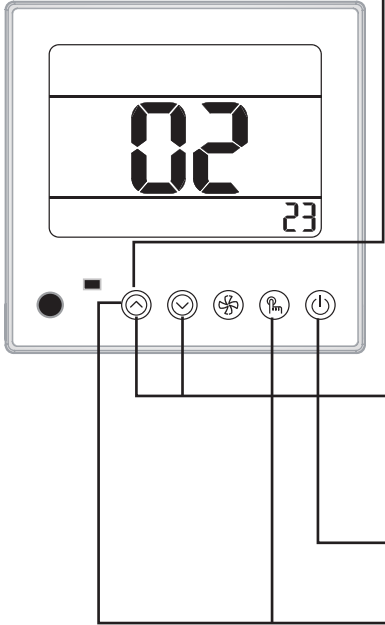
1) Conventional air-conditioning products











Code	Function	Code	Value
1	Trial run	01	01: Settings
2	Address settings	02	00~FF: Address
3	E.S.P settings	03	<Setting> <Setting value> <Example> 01: Ultra low 0~255 02: Low 03: Medium 04: High 05: Ultra high <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> 0301 <small>Function Code</small> </div> <div style="text-align: center;"> 001 <small>Static pressure value settings</small> </div> <div style="text-align: center;"> 000 <small>Static pressure value</small> </div> </div>
4	Temperature sensor	04	01: Wired controller sense 02: Indoor unit sense 03: Double sense
5	Static pressure settings	06	01: Variable / high static pressure 02: Fixed / high static pressure 03: Variable / low static pressure 04: Fixed / low static pressure
6	Main board settings	07	00: Slave 01: Master
7	Celsius settings	17	00: 1 °C 01: 0.5 °C
8	Settings for static pressure step setting	32	00: Use static pressure value set in setup mode 06 01~11: Use static pressure value set in setup mode 32

*The display may be different due to different product functions.

Installer Setting - Central Control Address Setting

This function is used to connect to the central control. Please refer to the central controller manual for details.



- 1 Pressing the  key and  key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
- After entering the manual setting mode, press the  key to select the code value for central control address setting.
* The code value for central control address setting is: 02
- 2 Set codes of the group and indoor unit through the temperature up and down adjustment buttons (, ).
 — Group code
 — Indoor unit code
For example, set to
[Group code = 2 Indoor unit code = 3] The content will be displayed as shown in the left figure.
- 3 Press the  key to save the setting value
- 4 After the setting is completed, press the  key and  key simultaneously for more than 3 seconds to exit the address setting mode.
- If there is no key input within 25 seconds, the system will also exit the manual setting mode automatically.

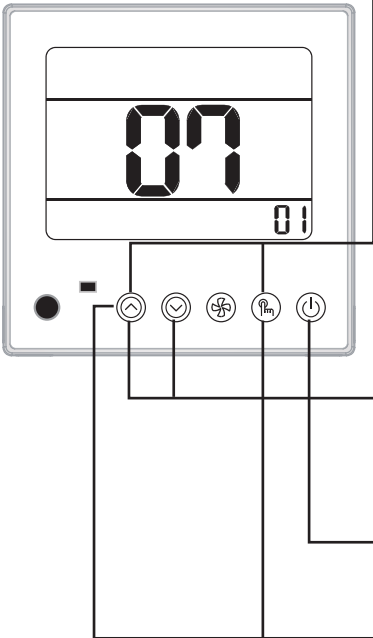
- If the indoor unit and the central control are connected, the central control address of the indoor unit needs to be set so that the central controller can identify each indoor unit.
- The central control address consists of the group code and the indoor unit code.



Note: If the central controller locks the wired controller, 'HL' is displayed on the latter.


* When the central controller is locked, the wired controller, which displays 'HL', cannot control the indoor unit.




Installer Setting - Wired Controller Master / Slave Setting

This function is used for group control or setting when two wired controllers are used.



- 1 Pressing the  key and  key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
 - Select the master / slave setting code of the wired controller by pressing the mode button after entering the manual setting mode.
 - * Codes for wire controller master / slave setting: 07
- 2 Select the desired setting value with the temperature key.



*Setting value
00: Slave
01: Master
- 3 Press the  button to save the setting value.
- 4 After the setting is completed, pressing the  key and  key simultaneously for more than 3 seconds can exit the manual setting mode of the system.
 - If there is no key input within 25 seconds, the system will exit the manual setting mode automatically.

Wired controller	Function
Master	In group control, the indoor unit runs based on the master wired controller. (factory settings is "Master")
Slave	The group control is set to 'master', and the others are set to 'slave'

* Please refer to the group control section for details

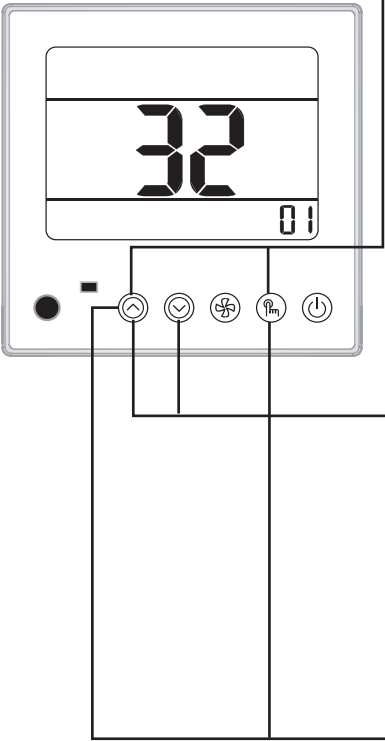
- In group control, basic operation settings, weak / medium / strong airflow strength, lock settings of wired controller, time settings and other functions may be restricted





Installer Setting - Static Pressure Step Setting


This function is only applicable to products with hidden ducts. Setting this function on other products will cause malfunction.

This function is only available for some of models.

This function divides the static pressure setting of the product into 11 steps.






- 1** Pressing the  key and  key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
 - After entering the setting mode, press the operation mode button to select the code of the static pressure step setting.
 * Code value of static pressure step setting: 32
- 2** Set the required pressure value by using the temperature adjustment keys (up) () and down () .



Code value

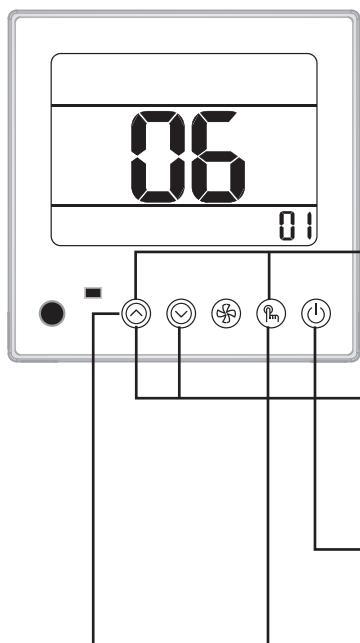
Setting value

00: Use static pressure value set in setup mode 06
 01~11: Use static pressure value set in setup mode 32
- 3** Press  to save the setting.
- 4** Press the  key and  key simultaneously for more than 3 seconds in the setting mode, the system will automatically exit the manual setting mode.
 - If there is no key input within 25 seconds, the system will also exit the manual setting mode.

- If the static pressure step is set by code 32, the static pressure value set by code 06 will not work.
- Please refer to the product manual of the indoor unit for each step of static pressure value setting.

Installer Setting - Static Pressure Setting

This function is only available for products with hidden air ducts. Setting this function in other types of products will cause a malfunction.



- 1 Pressing the ☺ key and Ⓜ key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
- After entering the setting mode, press the operation mode button to select the static pressure setting code.

* Static pressure setting code value: 06

- 2 Set the required pressure value by temperature keys up (☺) and down (☻).



* Setting value
01: V-H
02: F-H
03: V-L
04: F-L

- 3 Press ⏻ to save the setting.

- 4 Press the ☺ key and Ⓜ key simultaneously for more than 3 seconds in the setting mode, the system will automatically exit the manual setting mode.
- If there is no key input within 25 seconds, the system will also exit the manual setting mode.

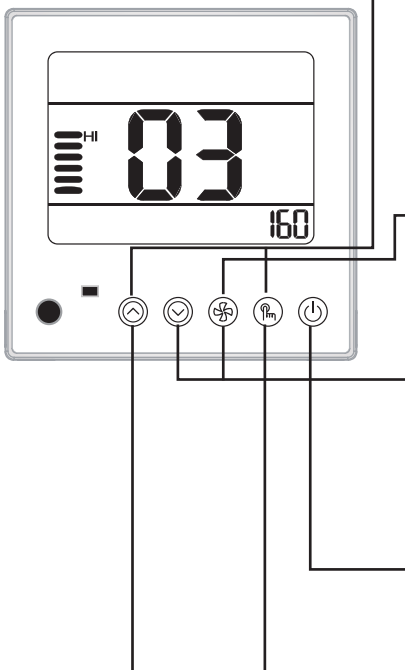
<Setting table of static pressure>











Pressure selection		Function	
		Zone status	E.S.P standard value
01	V-H	Variety	High
02	F-H	Fixing	High
03	V-L	Variety	Low
04	F-L	Fixing	Low

Installer Setting - E.S.P Setting

This is a function to set wind speeds and volumes. This feature is to facilitate installation.

- Incorrect set of external static pressure may cause malfunction of the air conditioner.
- The external static pressure setting must be performed by qualified personnel.



- Pressing the  key and  key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
 - Select the code value of external static pressure by pressing  key after entering the manual setting mode.
 - * External static pressure value: 03
- The  key can be used to select the required wind speed. Press the  to set the [Very Weak → Weak → Medium → Strong → Po] wind speed in sequence and circularly.
- Adjust the desired air volume with the temperature adjustment buttons up () and down ().
 - * E.S.P range value: 0~255
 - The static pressure value will be shown in the display window.
- Press the  key to save the E.S.P value setting.
- After the setting is completed, press the  key and  key simultaneously for more than 3 seconds to exit the manual setting mode of system.
 - If there is no key input within 25 seconds, the system will also exit the manual setting mode.

- The static pressure setting will change the air volume of the product, please be careful when changing it.
- The static pressure value can be changed according to different products.
- Pressing wind speed button during the setting of static pressure value will not change static pressure value of the wind speed.

Installer Setting - Thermistor

This function is to test the room temperature by selecting a temperature sensor.

1 Pressing the key and key simultaneously for more than 3 seconds can enter the manual setting mode of the system.

- After entering the manual setting mode, select the setting code of the temperature sensor by pressing key.

* Code value of the temperature sensor: 04

2 Use the temperature adjustment key to set code value of the temperature sensor up () and down ().

Code value

Value

* Setting value

- 01: Wired controller sense
- 02: Indoor unit sense
- 03: Joint sense of the wired controller and the indoor unit

3 Press the key to save the setting value.

4 Press the key and key simultaneously for more than 3 seconds in the setting state to exit the manual setting mode.

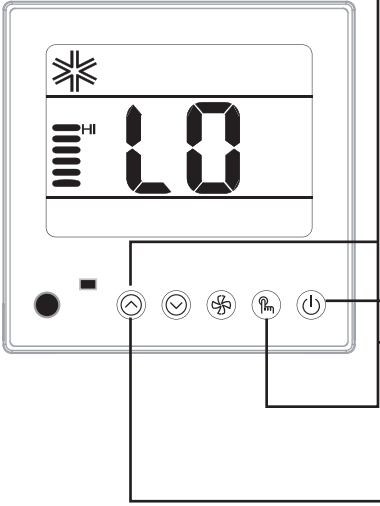
- If there is no key input within 25 seconds, the system will also exit the manual setting mode.







• The function setting method is slightly different for various products. Please refer to the corresponding product manual for details.

Installer Setting - Test Run Mode

The test mode must be run after installation.

Please refer to the product manual for details on operation.

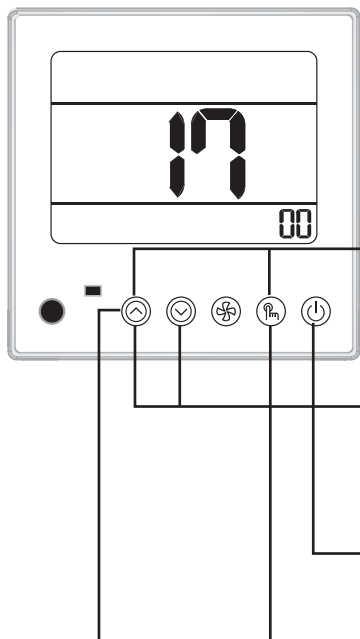


- 1** Pressing the  key and  key simultaneously for more than 3 seconds can enter the manual setting mode of the system.
- After entering the manual setting mode, press the  key to enter the trial run mode.
* Value for the trial run mode: 01
- 2** Press the  key to start the trial run mode, and the content is displayed on the left figure.
- 3** After the setting is completed, pressing the  key and  key simultaneously for more than 3 seconds can exit the manual setting mode.
- If there is no key input signal for more than 25 seconds, it will also exit the manual setting mode.
- 4** After 18 minutes trial run, the system will automatically stop running and switch to standby mode.
- The trial run mode will be forced to exit if pressing any key during running.

- What is a trial run?
 - Trial run is to confirm the installation status of the product, and its operation under refrigeration, strong wind and compressor startup when room temperature is undetected.

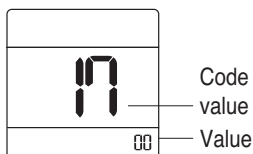
Installer Setting - Celsius Setting

This function is used to set the unit for changing Celsius as 1 °C or 0.5 °C.



- 1** Pressing the key and key simultaneously for more than 3 seconds can enter the manual setting mode.
 - When entering the manual setting mode, press the mode button to select the Celsius setting code value.
 * Code value of Celsius setting: 17

- 2** Select the desired setting value with the temperature key.



*Setting value
 00: 1 °C
 01: 0.5 °C

- 3** Pressing the key can save the determined Celsius setting.

- 4** After the setting is completed, pressing the key and key simultaneously for more than 3 seconds can exit the manual setting mode of the system.
 - If there is no key input within 25 seconds, the system will also exit the manual setting mode.

Saudi Models

[Table. 1]

Capacity - Phase (Heating/Cooling)	Step	CMM	Static Pressure[mmAq(Pa)]										
			2.5(25)	4(39)	5(49)	6(59)	8(78)	9(88)	10(98)	11(108)	12(118)	13(127)	14(137)
			Setting Value										
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10	32 : 11
60k (54k) - 1Φ 60k (54k) - 3Φ	HIGH	48	91	94	97	100	104	109	112	115	117	119	121
	MID	43	86	90	92	96	98	104	106	109	112	114	117
	LOW	38	81	82	89	92	94	100	102	105	108	110	113

Capacity - Phase (Heating/Cooling)	Step	CMM	Static Pressure[mmAq(Pa)]									
			4(39)	5(49)	6(59)	7(68)	8(78)	9(88)	10(98)	11(108)	12(118)	
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	
48k - 1Φ	HIGH	38	83	89	92	94	98	100	102	105	108	
	MID	32	78	82	84	89	94	96	98	101	104	
	LOW	26	74	76	79	82	89	92	94	96	99	

Capacity - Phase (Heating/Cooling)	Step	CMM	Static Pressure[mmAq(Pa)]									
			4(39)	5(49)	6(59)	7(68)	8(78)	9(88)	10(98)	11(108)	12(118)	
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	
42k - 1Φ	HIGH	40	83	89	92	94	98	100	102	105	108	
	MID	34	78	82	84	89	94	96	98	101	104	
	LOW	28	74	76	79	82	89	92	94	96	99	

Capacity - Phase (Heating/Cooling)	Step	CMM	Static Pressure[mmAq(Pa)]									
			2(20)	2.5(25)	3(29)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10
36k - 1Φ	HIGH	30	66	69	71	76	80	84	86	89	94	98
	MID	25	62	65	67	72	76	80	82	85	90	94
	LOW	20	58	61	63	68	72	76	78	81	86	90

Capacity - Phase (Heating/Cooling)	Step	CMM	Static Pressure[mmAq(Pa)]									
			2(20)	2.5(25)	3(29)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)
			Setting Value									
30k - 1Φ	HIGH	22	32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10
	MID	20	88	90	92	96	100	104	108	112	116	119
	LOW	18	80	83	85	90	94	98	103	108	112	115
			74	76	78	82	88	94	99	104	108	111

Capacity - Phase (Heating/Cooling)	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										
18k - 1Φ	HIGH	16.5	32:01	32:02	32:03	32:04	32:05	32:06	32:07	32:08	32:09	32:10	32:11
	MID	14.5	85	87	90	94	103	110	118	125	128	131	134
	LOW	13	76	77	85	91	97	107	114	121	125	128	131
24k - 1Φ	HIGH	18	73	74	77	88	93	103	111	117	120	125	128
	MID	16.5	90	92	95	99	108	115	122	129	132	135	138
	LOW	14.5	85	87	90	94	103	111	118	125	128	131	134
			76	77	85	89	97	106	114	121	124	127	130

NOTE

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

Capacity - Phase (Heating/Cooling)	Factory set (E.S.P.)	Lower Limit (E.S.P)	Upper Limit (E.S.P)
60k (54k) - 1Φ 60k (54k) - 3Φ	6(59)	2.5(25)	14(137)
48k - 1Φ	6(59)	4(39)	12(118)
42k - 1Φ	6(59)	4(39)	12(118)
36k - 1Φ	8(78)	2(20)	10(98)
30k - 1Φ	6(59)	2.5(25)	15(147)
24k - 1Φ	6(59)	2(20)	15(147)
18k - 1Φ	6(59)	2(20)	15(147)

! NOTE

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

Capacity - Phase (Heating/Cooling)	Maximum Value
60k (54k) - 1Φ 60k (54k) - 3Φ	98
48k - 1Φ	98
42k - 1Φ	98
36k - 1Φ	72
30k - 1Φ	98
24k - 1Φ	115
18k - 1Φ	115

Egypt Models

[Table. 2]

Model	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
ABNW24GM1E4	HIGH	16.5	85	87	90	94	103	110	118	125	128	131	134
	MID	14.5	76	77	85	91	97	107	114	121	125	128	131
	LOW	13	73	74	77	88	93	103	111	117	120	125	128
ABNW30GM1E4	HIGH	18	90	92	95	99	108	115	122	129	132	135	138
	MID	16.5	85	87	90	94	103	111	118	125	128	131	134
	LOW	14.5	76	77	85	89	97	106	114	121	124	127	130

Model	Step	CMM	Static Pressure[mmAq(Pa)]									
			2(20)	2.5(25)	3(29)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10
ABNW36GM2E4	HIGH	32	88	90	92	96	100	104	108	112	116	119
	MID	28	80	83	85	90	94	98	103	108	112	115
	LOW	24	74	76	78	82	88	94	99	104	108	111

NOTE

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

Model	Factory set (E.S.P.)	Lower Limit (E.S.P)	Upper Limit (E.S.P)
ABNW36GM2E4	8(78)	2(20)	10(98)
ABNW30GM1E4	6(59)	2(20)	15(147)
ABNW24GM1E4	6(59)	2(20)	15(147)

NOTE

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

Model	Maximum Value
ABNW36GM2E4	98
ABNW30GM1E4	115
ABNW24GM1E4	115

Bahrain Models

[Table. 3]

Capacity - Phase	Step	CMM	Static Pressure[mmAq(Pa)]										
			2.5(25)	4(39)	5(49)	6(59)	8(78)	9(88)	10(98)	11(108)	12(118)	13(127)	14(137)
			Setting Value										
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10	32 : 11
60k (54k) - 1Φ 60k (54k) - 3Φ	HIGH	50	91	94	97	100	104	109	112	115	117	119	121
	MID	45	86	90	92	96	98	104	106	109	112	114	117
	LOW	40	81	82	89	92	94	100	102	105	108	110	113

Capacity - Phase	Step	CMM	Static Pressure[mmAq(Pa)]								
			4(39)	5(49)	6(59)	7(68)	8(78)	9(88)	10(98)	11(108)	12(118)
			Setting Value								
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09
48k - 1Φ 48k - 3Φ	HIGH	38	83	89	92	94	98	100	102	105	108
	MID	32	78	82	84	89	94	96	98	101	104
	LOW	26	74	76	79	82	89	92	94	96	99

Capacity - Phase	Step	CMM	Static Pressure[mmAq(Pa)]								
			4(39)	5(49)	6(59)	7(68)	8(78)	9(88)	10(98)	11(108)	12(118)
			Setting Value								
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09
42k - 1Φ	HIGH	40	83	89	92	94	98	100	102	105	108
	MID	34	78	82	84	89	94	96	98	101	104
	LOW	28	74	76	79	82	89	92	94	96	99

Capacity - Phase	Step	CMM	Static Pressure[mmAq(Pa)]									
			2(20)	2.5(25)	3(29)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10
36k - 1Φ	HIGH	32	66	69	71	76	80	84	86	89	94	98
	MID	28	62	65	67	72	76	80	82	85	90	94
	LOW	24	58	61	63	68	72	76	78	81	86	90

Capacity - Phase	Step	CMM	Static Pressure[mmAq(Pa)]									
			2(20)	2.5(25)	3(29)	4(39)	5(49)	6(59)	7(69)	8(78)	9(88)	10(98)
			Setting Value									
			32 : 01	32 : 02	32 : 03	32 : 04	32 : 05	32 : 06	32 : 07	32 : 08	32 : 09	32 : 10
30k - 1Φ	HIGH	32	88	90	92	96	100	104	108	112	116	119
	MID	28	80	83	85	90	94	98	103	108	112	115
	LOW	24	74	76	78	82	88	94	99	104	108	111

Capacity - Phase	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
18k - 1Φ	HIGH	16.5	85	87	90	94	103	110	118	125	128	131	134
	MID	14.5	76	77	85	91	97	107	114	121	125	128	131
	LOW	13	73	74	77	88	93	103	111	117	120	125	128
24k - 1Φ	HIGH	18	90	92	95	99	108	115	122	129	132	135	138
	MID	16.5	85	87	90	94	103	111	118	125	128	131	134
	LOW	14.5	76	77	85	89	97	106	114	121	124	127	130

NOTE

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

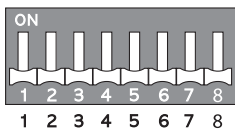
Capacity - Phase	Factory set (E.S.P.) mmAq(Pa)	Lower Limit (E.S.P.) mmAq(Pa)	Upper Limit (E.S.P.) mmAq(Pa)
60k (54k) - 1Φ 60k (54k) - 3Φ	6(59)	2.5(25)	14(137)
48k - 1Φ 48k - 3Φ	6(59)	4(39)	12(118)
42k - 1Φ	6(59)	4(39)	12(118)
36k - 1Φ	8(78)	2(20)	10(98)
30k - 1Φ	8(78)	2(20)	10(98)
24k - 1Φ	6(59)	2(20)	15(147)
18k - 1Φ	6(59)	2(20)	15(147)

NOTE

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

Capacity - Phase	Maximum Value
60k (54k) - 1Φ 60k (54k) - 3Φ	98
48k - 1Φ 48k - 3Φ	98
42k - 1Φ	98
36k - 1Φ	72
30k - 1Φ	98
24k - 1Φ	115
18k - 1Φ	115

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