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# LG

## Function Control Unit

### *Owner's & Installation Manual*

**PQCSC101S0**

#### **IMPORTANT**

- 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.

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# Safety Precautions

- The installation requires expert skills, and it should be installed by the service center or other shops specialized in the installation and recognized by our company.
- For all the problems arising after installation by someone who has no relevant qualifications, LG will not provide free service.
- The following safety cautions are provided to prevent unexpected dangers or losses.

**⚠ WARNING :** If the user does not follow the mandatory items, it may result in serious injury or death.

**⚠ CAUTION :** If the user does not follow the mandatory items, it may cause personal injury or property damage.



: Warning and Caution are to call the user's attention to the possible danger. Read and follow them carefully in order to prevent a safety accident.

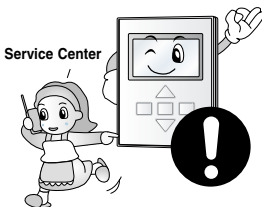


: Warning and Caution are indicated in this guide and the product itself to help protect the users from danger.

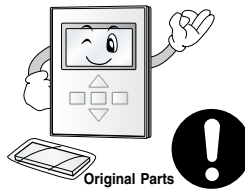
## ⚠ WARNING

### ■ Installation

Entrust installation of the product to the service center because improper installation may cause fire, an electric shock, explosion, and physical injury.



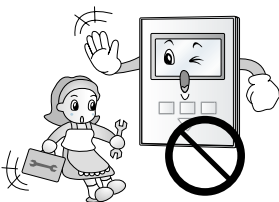
Use the original parts in order to prevent fire, an electric shock, explosion, and product breakdown.



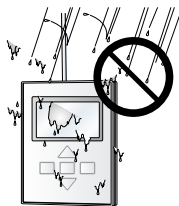
Keep combustible and/or inflammable materials away from the product in order to prevent fire or product breakdown.



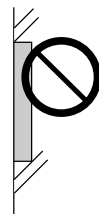
Do not disassemble, repair, or modify the product at your discretion in order to prevent fire or an electric shock.



Do not install the product in wet and humid areas in order to prevent product breakdown.

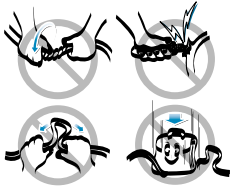


Do not expose the product to the sun in order to prevent product breakdown.



■ In-use

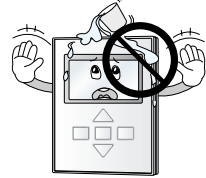
Do not modify or lengthen the power cable at your discretion. It may cause fire or an electric shock.



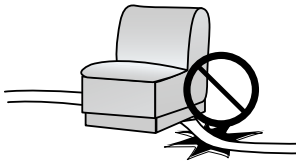
Do not place a heating device near the product. It may cause fire.



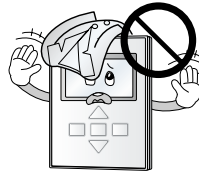
Do not drop water on to the product. It may cause an electric shock or product breakdown.



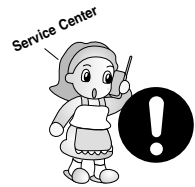
Do not place something heavy on the power cable. It may cause fire or an electric shock.



Do not place a heavy thing on the product. It may cause product breakdown.

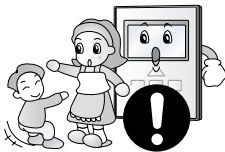


If the product was submerged under water, ask the service center for instruction. It may cause fire or an electric shock unless you do that.



▲ CAUTION

Make sure children or senior citizens use the product under proper observation in order to prevent safety accident.



Do not subject the product to shock. It will cause product breakdown.

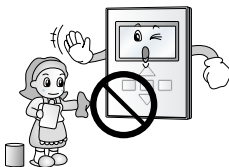


Do not pick the product with a sharp tool. It may cause product breakdown with the damage to its parts.



■ In-use

Do not clean the product with strong cleanser such as solvent. Use soft clothes in order to prevent fire or product deformation.



Do not touch the product with a wet hand. Do not pull the lead cable. It may cause product breakdown or an electric shock.

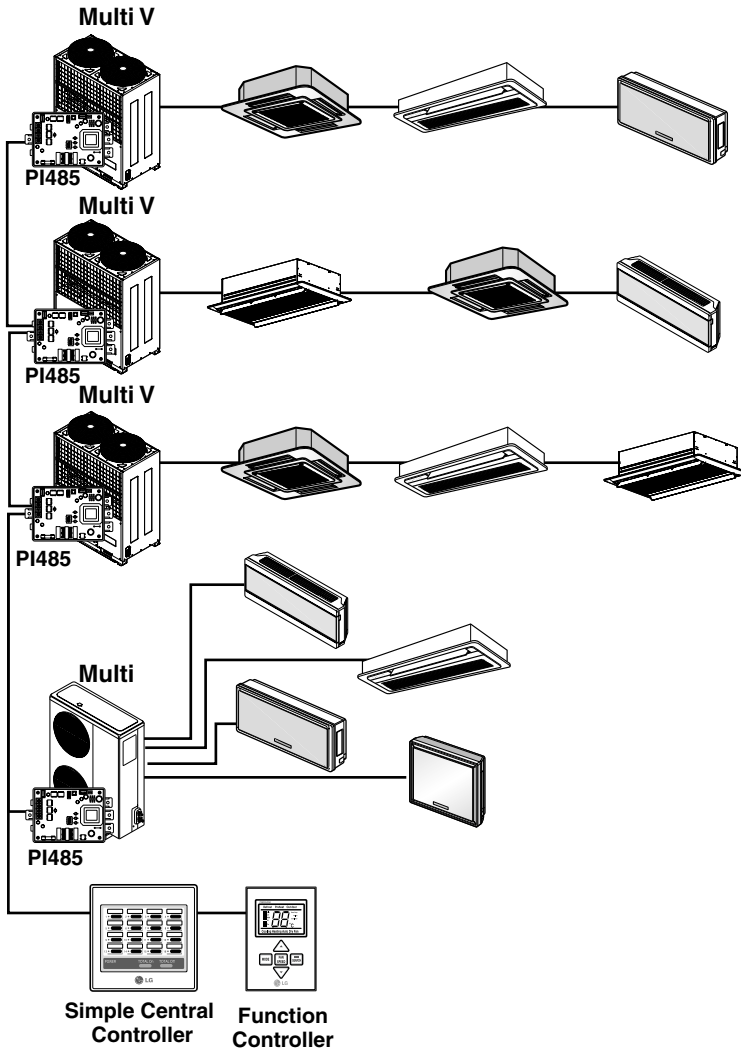


# Before Use

## System Drawing

Function controller is connected as below figure.

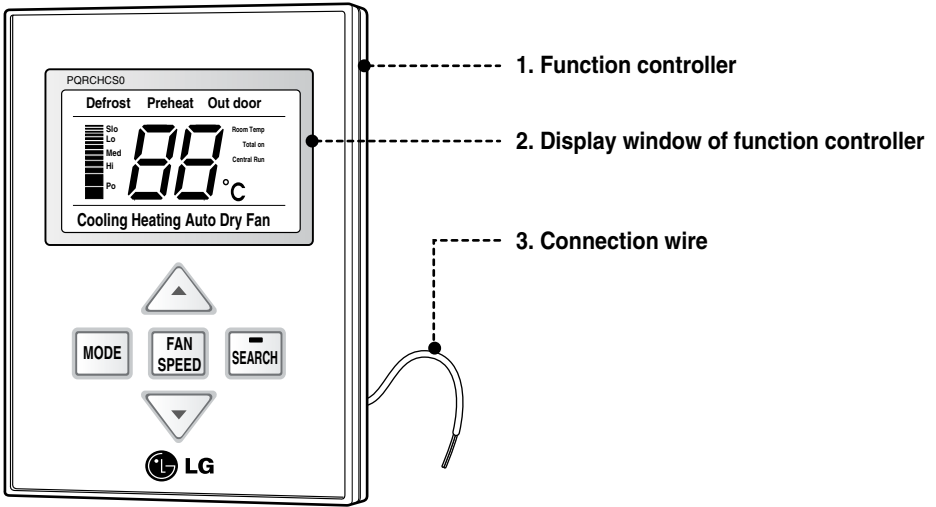
Total 128 inner units can be controlled since up to central controllers by function controller can be expanded and connected.



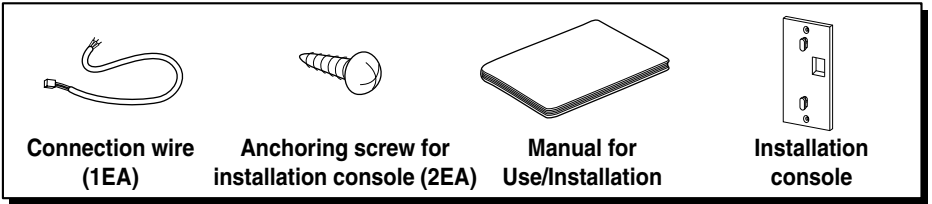
- PI485 should be purchased separately except for Multi V(2 Series).
- In case of Multi V(2 Series), PI485 is built in the main PCB.

# Name of Each Part

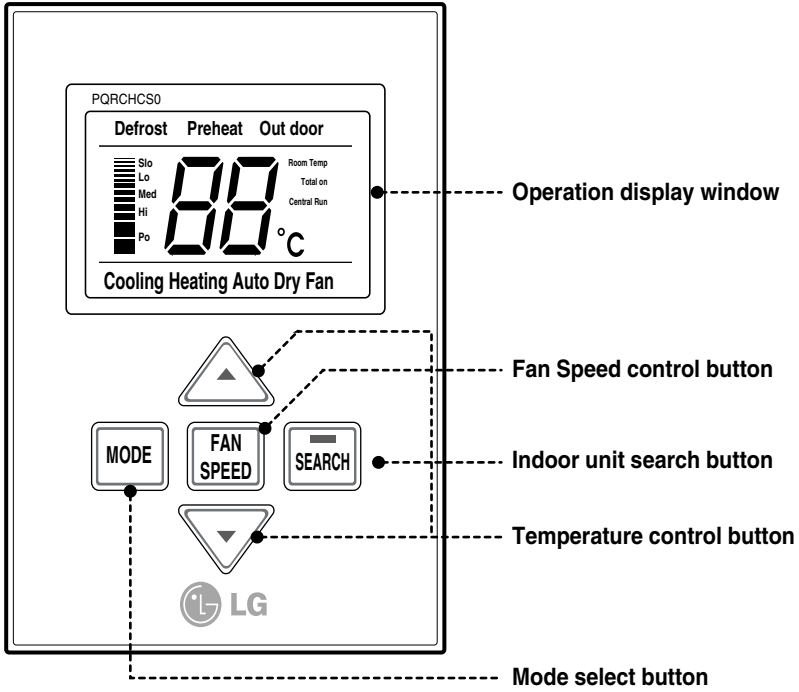
## Function controller



## Annexed parts



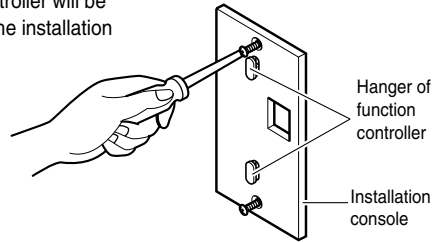
## Display window of function controller



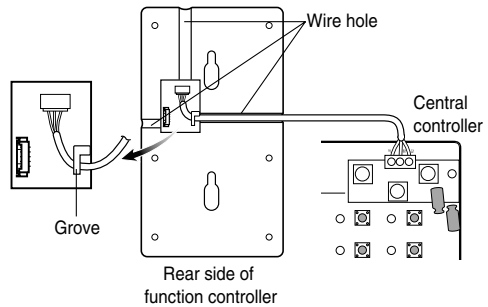
- When powering on, the window is displayed for about 3 seconds as initial display screen.

## Method of Installation

- 1** After determining position that the function controller will be installed, install it on the screw bolting part of the installation console by using fixing screws.



- 2** Connect connection wires to the central controller according to connection method of the function controller. (See page 12)  
The product is shipped with connected to only function controller. To secure connection wires, use the hanger of connection wires and wire hole.



- 3** Correspond the rear grove of the function controller and the hanger of the function controller so that they may not move.

Jointing of function controller

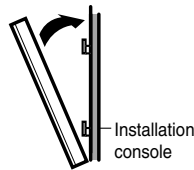
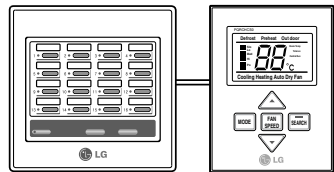


Figure of final installation



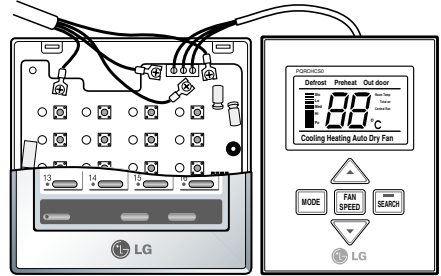
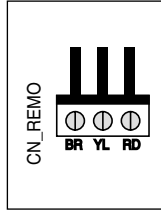


## Connection Method of Function Controller

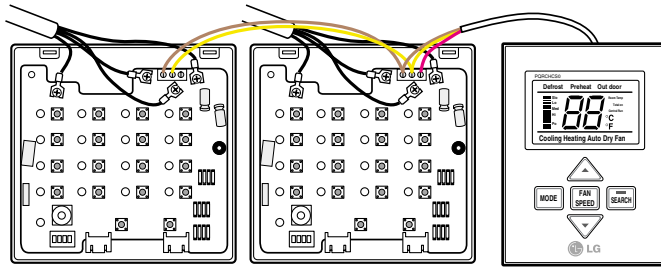
Always power off and perform work as below where connection of the function controller is required.

- 1 Connect the function controller as right figure so that symbols below CN\_REMO Terminal Block of the central controller and color of cable connected the function controller correspond.

Central controller CN_REMO	Function controller cable
RD terminal (12V)	Red
YL terminal (signal)	Yellow
BR terminal (GND)	Grey



- 2 Connect red wires and brown wires to the relevant terminal of the central controller CN\_REMO respectively as right figure where the central controller is installed as right figure.



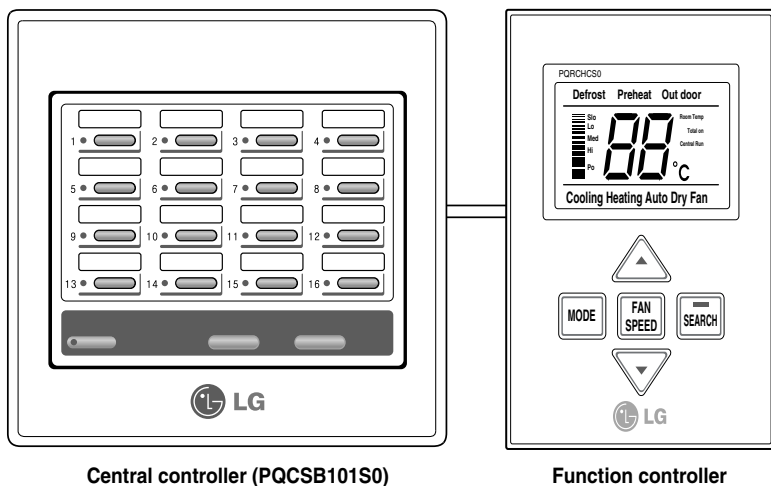
- 3 Close the central controller case and check operation after application of power.

### Caution

1. Cables adhered to the function controller as possible for communication wires between function controller and central controller.
2. Use 3P-0.75 Square Shield wires where cable extension is required.
3. Install cable length is within 1m.
4. If wiring is not proper, the product may be damaged or not operate when power is applied.

## Selection of Indoor Unit

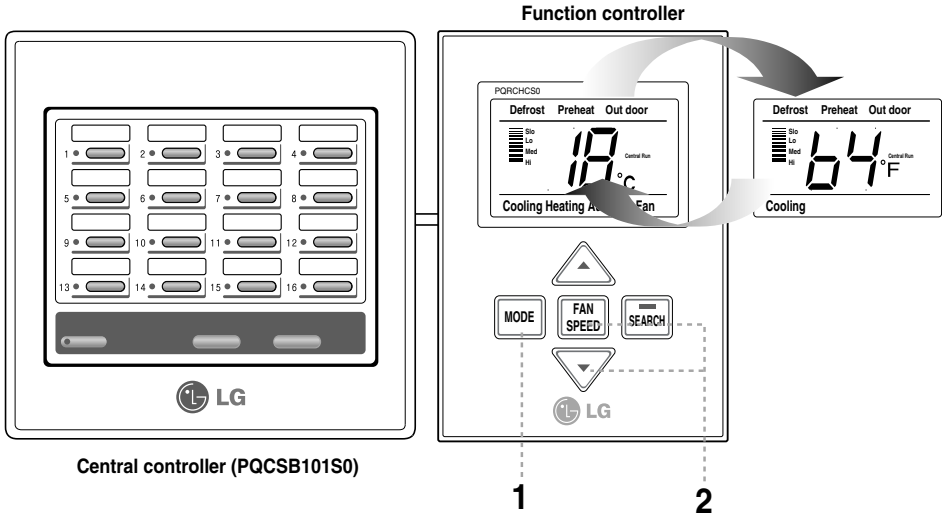
- 1) Apply power.  
The Master controller is immediately set to indoor automatic search mode after applying power.
- 2) After searching for the indoor unit, select the indoor unit to control by pressing individual operation/stop button or the simultaneous operation button of the central controller.
- 3) The function controller displays operation status of the relevant indoor unit and you can control operation mode/wind quantity/setting temperature of the indoor unit selected with entry of the function controller button.



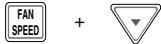
• For function not supported in relevant product, entry of operation status in the function controller is not reflected on actual product.

## Selection of Celsius or Fahrenheit

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



1. Select the indoor unit and then set to cooling or heating operation by pressing the Mode button of the function controller.
2. If you want to change Celsius or Fahrenheit  
Press Fan speed button and Temperature setting button at same time for 3seconds

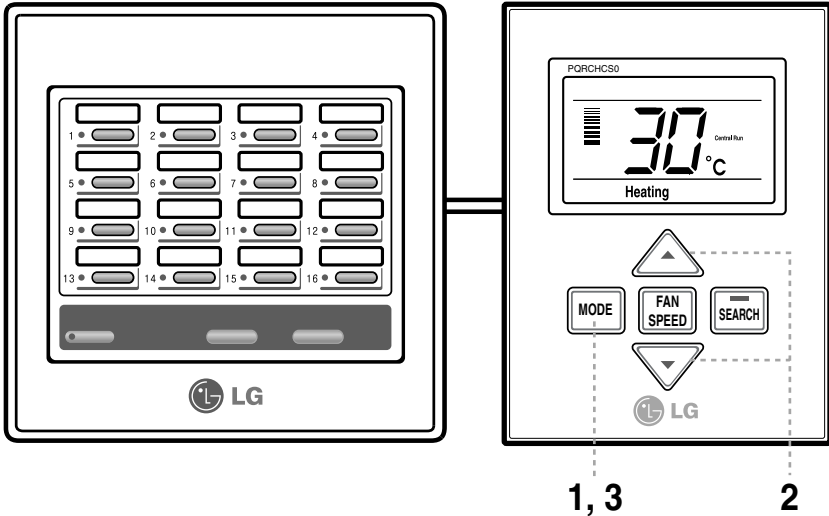


then Celsius is exchanged to Fahrenheit or Fahrenheit is exchanged to Celsius

# During Use

## Heating Operation

Function used when desiring to set operation mode of the specific indoor unit to Heating.



**1** Select the indoor unit and then set to heating operation by pressing the Mode button of the function controller.

**2** Set higher desiring temperature than indoor temperature by pressing the Temperature Control button. (18°C~30°C)



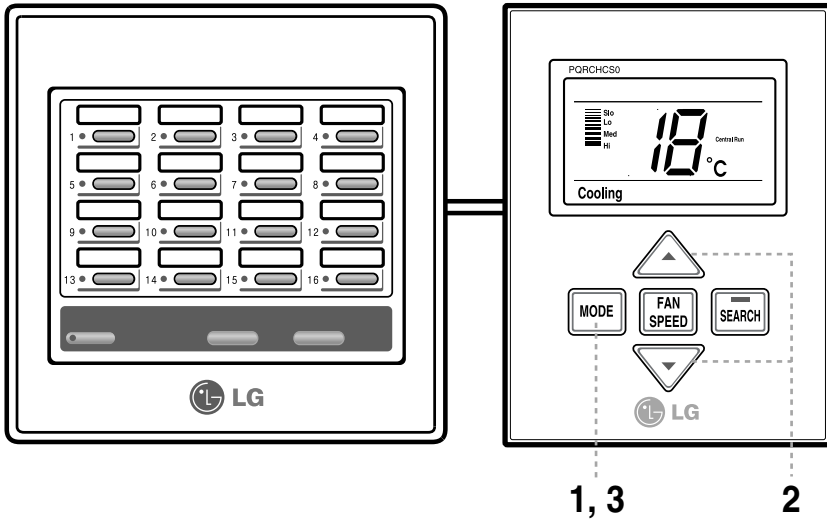
Temperature increases by 1°C whenever pressing the button once.

Temperature decreases by 1°C whenever pressing the button once.

**3** If pressing the Mode button during operation, operation mode of the relevant indoor unit is converted in order of Dehumidification → Fan → Cooling → Heating....

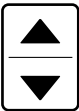
## Cooling Operation

This is function used when desiring to set operation mode of the specific indoor unit to Cooling mode.



**1** Select the indoor unit and then set to cooling operation by pressing the Mode button of the function controller.

**2** Set higher desiring temperature than indoor temperature by pressing the Temperature Control button. (18~30°C)



Temperature increases by 1°C whenever pressing the button once.

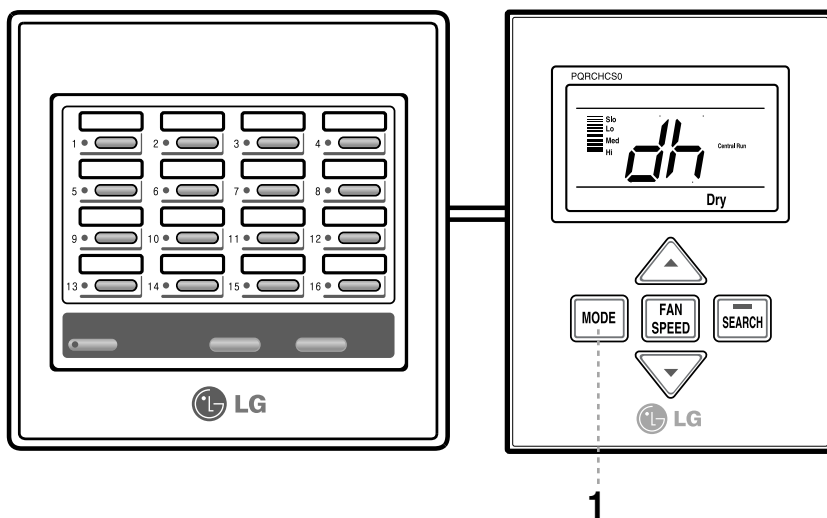
Temperature decreases by 1°C whenever pressing the button once.

• Wind in blowing status comes out since cold wind does not come out when desired temperature is set higher than indoor temperature.

**3** If pressing the Mode button during operation, operation mode of the relevant indoor unit is converted in order of Cooling → Heating → Dehumidification → Fan...

## Dehumidification operation

This is function used when desiring to set operation mode of the indoor unit to Dehumidification or Blowing mode.



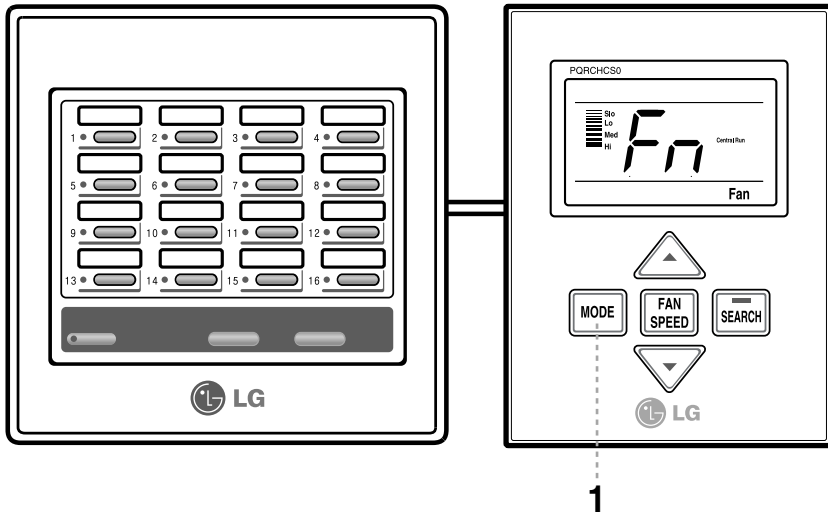
**1** Set the Dehumidification mode by pressing the Mode button after selecting the indoor door.

**2** A "dh" is displayed on the temperature part during dehumidification operation.

- You can perform effective dehumidification operation and cooling operation at the same time if using this function in rainy season or much humidity.  
It is impossible to control temperature for dehumidification operation.

## Fan Operation

This is function used when desiring to set operation mode of the indoor unit to Dehumidification or Blowing mode.

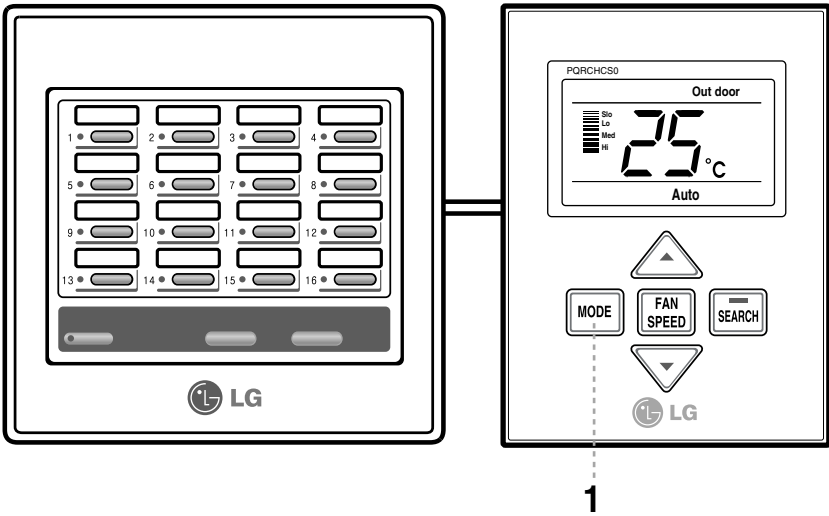


**1** Set the Blowing mode by pressing the Mode button after selecting the indoor door.

**2** A "dh" is displayed on the temperature part during blowing operation.

- During wind operation, general fan wind comes out, not cold wind.
- Generating only wind without temperature difference in the room performs function to circulate indoor.  
It is impossible to control temperature for blowing operation.

## Auto - Operation



**1** Set the Auto-Operation mode by pressing the Mode button after selecting the indoor door.

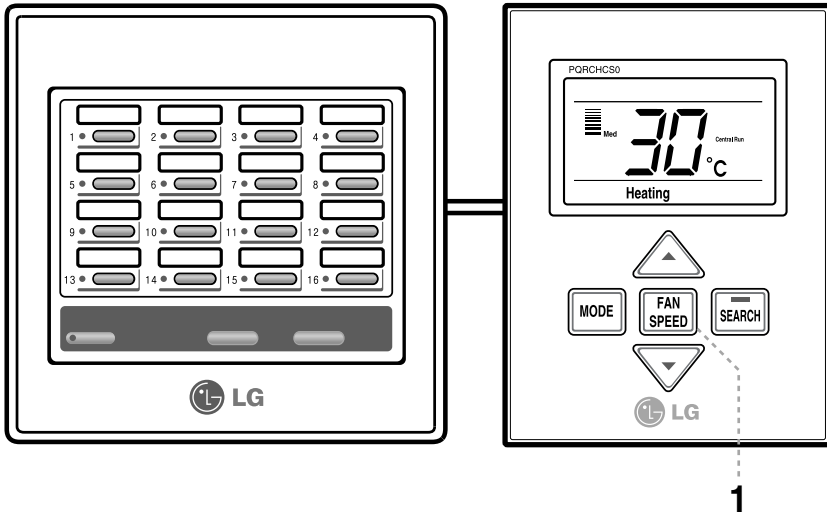
**2** When the room temperature is lower than the desired temperature: Heating Operation starts  
[For Heat Pump Models only]  
When the room temperature is higher than the desired temperature: Cooling Operation starts

• This auto-operation is not related to "Auto Change Over" function.



## Fan Speed Control

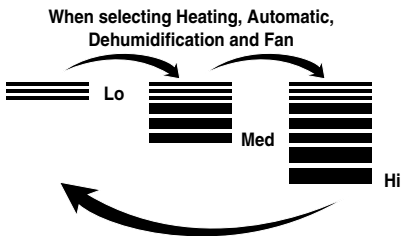
This is function to control wind quantity of the specific indoor unit as Strong/Middle/Weak.



### Fan Speed Control

You can conveniently control desired wind quantity.

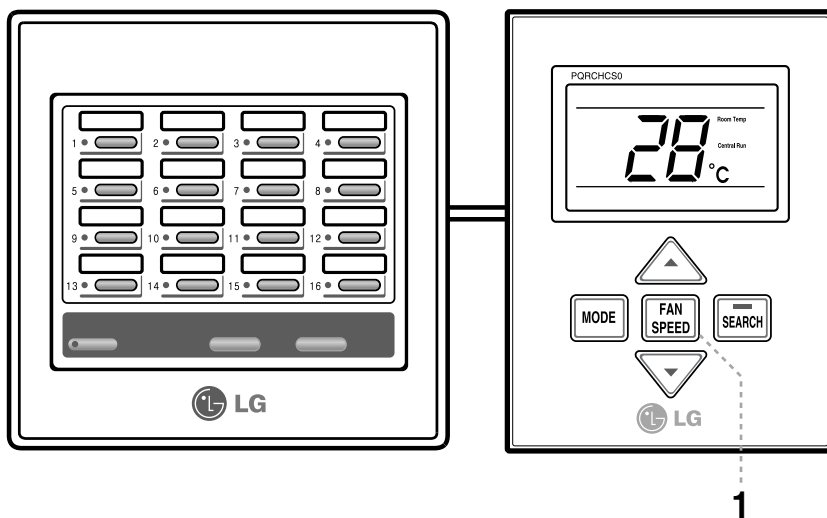
- 1 Set the desired wind quantity by pressing the Wind Quantity button on the remote control part after selecting the indoor door.



- You can select wind quantity in the order of Weak/Middle/Strong whenever pressing the Wind Quantity button.

## Display of Room Temperature

This is function to enable to effectively set desired temperature by displaying indoor temperature of the room where the indoor unit is installed.

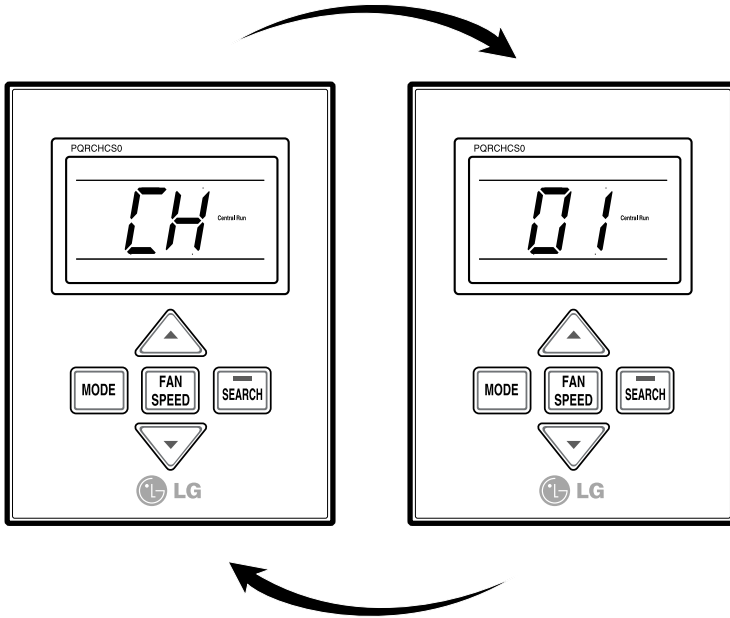


**1** Press the Wind Quantity button of the function controller for about 3 seconds after selecting the indoor unit.

**2** The operation display window returns to the previous screen after indoor temperature of the relevant indoor unit is displayed for 5 seconds.

## Self-diagnosis of Indoor Unit

This function is used when the LED displaying operation/stop status of the central controller as red.



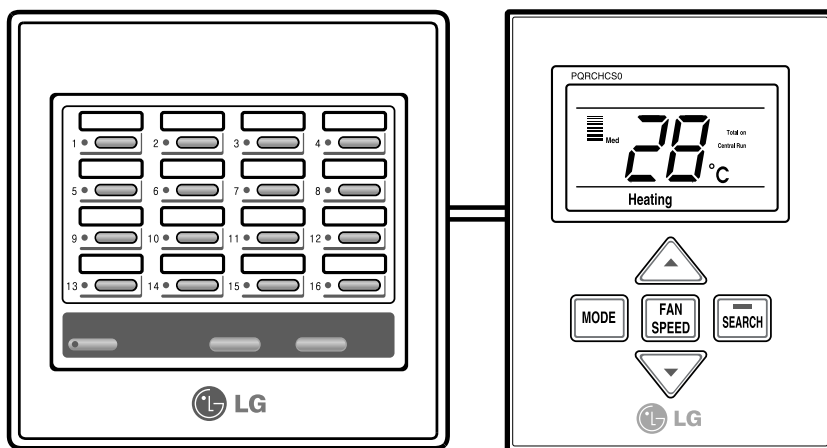
**1** Select the indoor unit with failure status by pressing individual operation/stop button of the central controller.

**2** A "CH" or "xx" (number) is repeatedly displayed on the operation display window of the function controller to represent Error code.

**Ex)** For Error Code 01: CH 01

## Group Operation and Total Operation

This function is used to control the indoor unit connected in form of group or whole or search for the indoor unit displayed on the function controller display window.



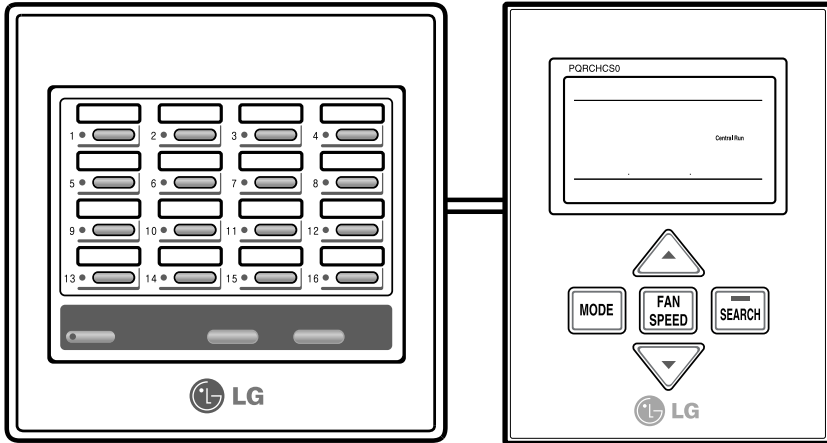
- 1 Select Group or Whole Indoor Unit from the central controller.
- 2 The function controller displays operation status and "Simultaneous Operation" of the first indoor unit connected.
- 3 You can control indoor unit function in form of group or whole by entering the function controller's button.

## Search for Indoor Unit

- 1 Press Search Button of the function controller.
- 2 The operation/stop status display of the relevant indoor unit on the central controller flickers for 5 seconds and displays that function control is being performed

## Self-diagnosis of communication

This is function for user to easily identify failure status of communication by periodically checking communication status of both central controller and function controller.



- 1 "Central Control" display flickers for 5 seconds on the operation display window of the function controller by self-diagnosing communication status with the central controller



