



LG

Ceiling Duct-Type Air Conditioner

OWNER'S MANUAL

LG

IMPORTANT

Please read through this manual. It contains valuable information about your air conditioner. This manual may help save time and money by explaining proper product maintenance and preventing improper use.

PRECAUTIONS

Pay close attention to precautions in order to prevent potential hazards and damage from misuse or improper installation. LG is not responsible for any damages caused by misuse of the product.

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www.lg.com



MFL37347406

TABLE OF CONTENTS

1. Safety Precautions

2. Operating Instructions

3. Care and Maintenance

4. Before you call for service

For Your Records

Write the model and serial numbers here:

Model # _____

Serial # _____

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

Dealer's Name _____

Date Purchased _____

Read This Manual

Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventive care on your part can save you a great deal of time and money over the life of your air conditioner.

You'll find many answers to common problems in the chart of troubleshooting tips. If you review our chart of Troubleshooting Tips first, you may not need to call for service at all.



CAUTION

- Contact the authorized service technician for repair or maintenance of this unit.
- Contact the installer for installation of this unit.
- The air conditioner is not intended for use by young children or invalids without supervision.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- When the power cord is to be replaced, replacement work shall be performed by authorized personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorized personnel only.



To prevent injury and property damage, follow these instructions.

⚠ Incorrect operation due to ignoring instructions will cause harm or damage, the seriousness of which is indicated by the following symbols.



WARNING This symbol shows the possibility of death or serious injury.



CAUTION This symbol indicates the possibility of injury or damage to property.



Never Do This



Always Do This

Installation precautions

⚠ **WARNING**

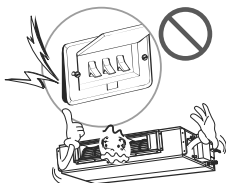
- Do not install, remove and reinstall the unit by yourself.
 - Improper installation will cause water leakage, electrical shock, or fire. Please consult authorized dealer or specialist for the installation work. Please note fault caused by improper installation is not covered by warranty.
 - Unit must be installed in an easily accessible area. Any additional cost required to hire a special equipment to service the unit will be the responsibility of the customer.

⚠ **WARNING**

■ Installation

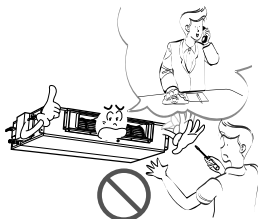
Do not use a defective or underrated circuit breaker. Use this appliance on a dedicated circuit.

- There is risk of fire or electric shock.



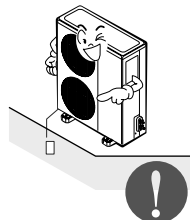
For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center.

- Do not disassemble or repair the product. There is risk of fire or electric shock.



Always ground the product.

- There is risk of fire or electric shock.



Install the panel and the cover of control box securely.

- There is risk of fire or electric shock.



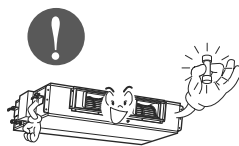
Always install a dedicated circuit and breaker.

- Improper wiring or installation may cause fire or electric shock



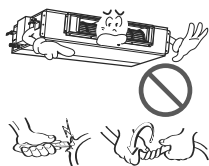
Use the correctly rated breaker or fuse.

- There is risk of fire or electric shock.



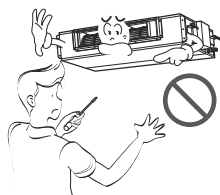
Do not modify or extend the power cable.

- There is risk of fire or electric shock.



Do not install, remove, or re-install the unit by yourself (customer).

- There is risk of fire, electric shock, explosion, or injury.



Be cautious when unpacking and installing the product.

- Sharp edges could cause injury. Be especially careful of the case edges and the fins on the condenser and evaporator.



For installation, always contact the dealer or an Authorized Service Center.

- There is risk of fire, electric shock, explosion, or injury.



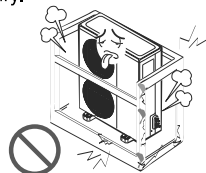
Do not install the product on a defective installation stand.

- It may cause injury, accident, or damage to the product.



Be sure the installation area does not deteriorate with age.

- If the base collapses, the air conditioner could fall with it, causing property damage, product failure, and personal injury.



■ Operation

Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open.

- Moisture may condense and wet or damage furniture.



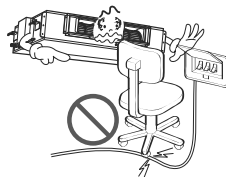
Take care to ensure that power cable could not be pulled out or damaged during operation.

- There is risk of fire or electric shock.



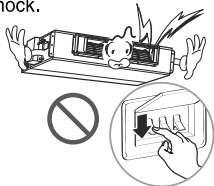
Do not place anything on the power cable.

- There is risk of fire or electric shock.



Do not plug or unplug the power supply plug during operation.

- There is risk of fire or electric shock.



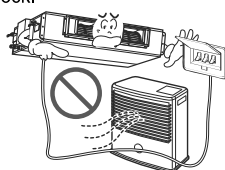
Do not touch(operate) the product with wet hands.

- There is risk of fire or electrical shock.



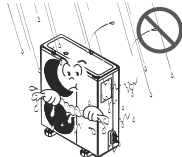
Do not place a heater or other appliances near the power cable.

- There is risk of fire and electric shock.



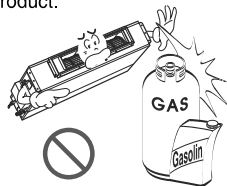
Do not allow water to run into electric parts.

- It may cause There is risk of fire, failure of the product, or electric shock.



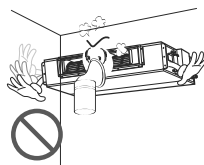
Do not store or use flammable gas or combustibles near the product.

- There is risk of fire or failure of product.



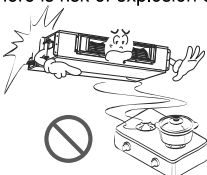
Do not use the product in a tightly closed space for a long time.

- Oxygen deficiency could occur.



When flammable gas leaks, turn off the gas and open a window for ventilation before turn the product on.

- Do not use the telephone or turn switches on or off. There is risk of explosion or fire.



If strange sounds, or small or smoke comes from product. Turn the breaker off or disconnect the power supply cable.

- There is risk of electric shock or fire.



Stop operation and close the window in storm or hurricane. If possible, remove the product from the window before the hurricane arrives.

- There is risk of property damage, failure of product, or electric shock.



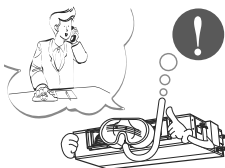
**Do not open the inlet grill of the product during operation.
(Do not touch the electrostatic filter, if the unit is so equipped.)**

- There is risk of physical injury, electric shock, or product failure.



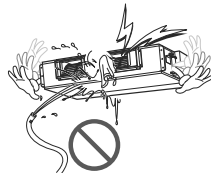
When the product is soaked (flooded or submerged), contact an Authorized Service Center.

- There is risk of fire or electric shock.



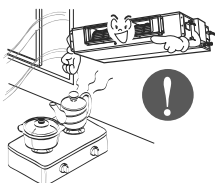
Be cautious that water could not enter the product.

- There is risk of fire, electric shock, or product damage.



Ventilate the product from time to time when operating it together with a stove, etc.

- There is risk of fire or electric shock.



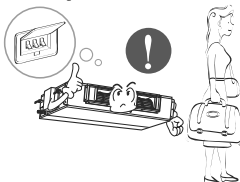
Turn the main power off when cleaning or maintaining the product.

- There is risk of electric shock.



When the product is not be used for a long time, disconnect the power supply plug or turn off the breaker.

- There is risk of product damage or failure, or unintended operation.



Take care to ensure that nobody could step on or fall onto the outdoor unit.

- This could result in personal injury and product damage.

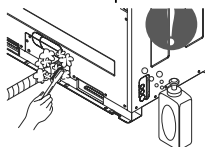


⚠ CAUTION

■ Installation

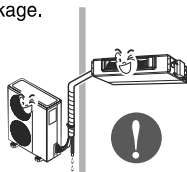
Always check for gas (refrigerant) leakage after installation or repair of product.

- Low refrigerant levels may cause failure of product.



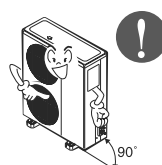
Install the drain hose to ensure that water is drained away properly.

- A bad connection may cause water leakage.



Keep level even when installing the product.

- To avoid vibration or water leakage.



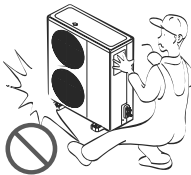
Do not install the product where the noise or hot air from the outdoor unit could damage the neighborhoods.

- It may cause a problem for your neighbors.



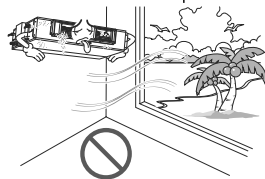
Use two or more people to lift and transport the product.

- Avoid personal injury.



Do not install the product where it will be exposed to sea wind (salt spray) directly.

- It may cause corrosion on the product. Corrosion, particularly on the condenser and evaporator fins, could cause product malfunction or inefficient operation.



■ Operation

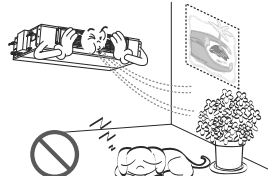
Do not expose the skin directly to cool air for long periods of time. (Don't sit in the draft.)

- This could harm to your health.



Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer air conditioner, not a precision refrigeration system.

- There is risk of damage or loss of property.



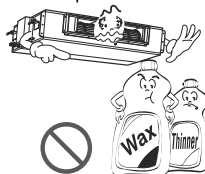
Do not block the inlet or outlet of air flow.

- It may cause product failure.



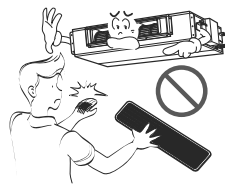
Use a soft cloth to clean. Do not use harsh detergents, solvents, etc.

- There is risk of fire, electric shock, or damage to the plastic parts of the product.



Do not touch the metal parts of the product when removing the air filter. They are very sharp!

- There is risk of personal injury.



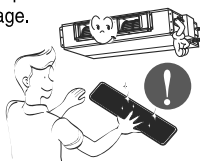
Do not step on or put anything on the product. (outdoor units)

- There is risk of personal injury and failure of product.



Always insert the filter securely. Clean the filter every two weeks or more often if necessary.

- A dirty filter reduces the efficiency of the air conditioner and could cause product malfunction or damage.



Do not insert hands or other objects through the air inlet or outlet while the product is operated.

- There are sharp and moving parts that could cause personal injury.



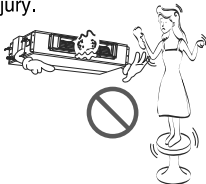
Do not drink the water drained from the product.

- It is not sanitary and could cause serious health issues.



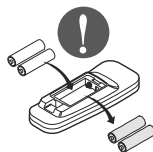
Use a firm stool or ladder when cleaning or maintaining the product.

- Be careful and avoid personal injury.



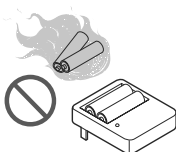
Replace the all batteries in the remote control with new ones of the same type. Do not mix old and new batteries or different types of batteries.

- There is risk of fire or explosion



Do not recharge or disassemble the batteries. Do not dispose of batteries in a fire.

- They may burn or explode.



If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked.

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



Prior to Operation

Preparing for operation

1. Contact an installation specialist for installation.
2. Use a dedicated circuit.

Usage

1. Being exposed to direct airflow for an extended period of time could be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for extended periods of time.
2. Due to the possibility of oxygen deficiency, ventilate the room when used together with stoves or other heating devices.
3. Do not use this air conditioner for non-specified special purposes (e.g. preserving precision devices, food, pets, plants, and art objects). Such usage could damage the items.

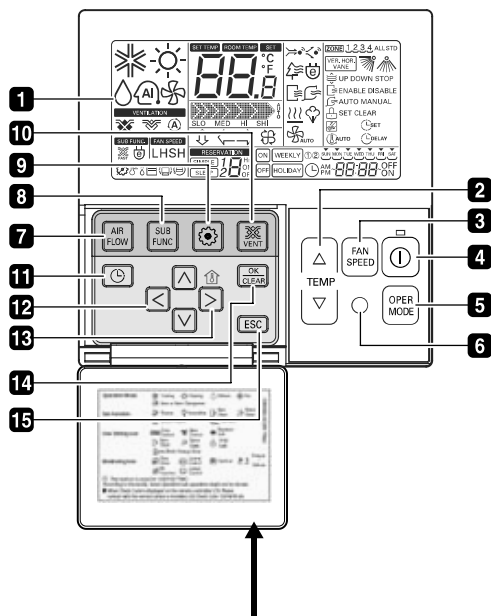
Cleaning and maintenance

1. Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
2. Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
3. When cleaning the unit, first make sure that the power and breaker are turned off. The fan rotates at a very high speed during operation. There is a possibility of injury if the unit's power is accidentally triggered on while cleaning inner parts of the unit.

Service

For repair and maintenance, contact your authorized service dealer.

Name and Function of Remote Controller



Please attach the inform label inside of the door.

1 OPERATION DISPLAY SCREEN

Displays the command / function set by the user on the remote.

2 ROOM TEMPERATURE SETTING BUTTONS

Used to select the room temperature.

3 INDOOR FAN SPEED SELECTOR \BUTTON

Used to select fan speed low, medium and high.

4 START/STOP BUTTON

Used to turn on/off the unit.

5 OPERATION MODE SELECTION BUTTON

Used to select the operation mode.

6 WIRELESS REMOTE CONTROLLER RECEIVER

Optional feature - some functions may not work from wireless remote

7 AIRFLOW BUTTON

Optional feature - used to select the wind direction

8 SUB FUNCTION BUTTON

Used to select the sub-function

9 FUNCTION SETTING BUTTON

Used to select the add-on function

10 VENTILATION BUTTON

Used to on/off the ventilation

11 RESERVATION

Used to set on timer, off timer, holiday & weekly programming.

12 UP, DOWN, LEFT, RIGHT BUTTON

Used with different functions to change the parameter.

13 ROOM TEMPERATURE BUTTON

Used to check the indoor temperature.

14 SET/CANCEL BUTTON

Used to set/cancel the command.

15 EXIT BUTTON

Used to exit from the command.

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

Installer Setting Code Table

1) 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> 01:VeryLow 02:Low 03:Med 04:High 05:Very High <ESP Value> 0 ~ 255 <Example> 0301 000 Function Code ESP step ESP value
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	Override Setting	08	00:Slave 01:Master
9	Dry Contact	09	00:Auto-Off 01:Auto-On
10	Release 3 Min. Delay	10	01:Set
11	Zone State	11	01:Variable 02:Fixed
12	Celsius Fahrenheit Switching	12	00:Celsius 01:Fahrenheit (Optimized only for U.S.A)
13	Zone Type	13	00:Zone Controller 01:Damper Controller
14	Zone Number	14	02~04(Zone number)
15	Plasma	20	00: Not Installed 01: Installed
16	Electric heater	21	
17	Humidifier	22	
18	Elevation Grill	23	
19	Ventilation Kit	24	
20	AUX Heat	25	

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

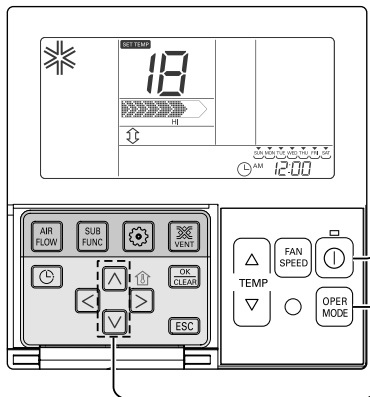
IDU Fan Speed Provision

Capacity	IDU Fan Speed
66K BTU/h	3 Speed (Hi, Low and Medium)

Owner's instruction

Standard Operation - Standard Cooling

It cools the room by comfortable and clean air.



1 Press  button to turn on the indoor.



2 Press  button to select Cooling operation mode.



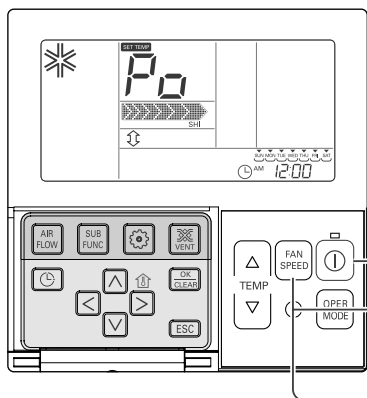
3 Adjust the desired temperature by pressing   buttons. Press  button to check the Room temperature.



* Setting Temp Range : 18°C~30°C (64°F~86°F)

Standard Operation - Power Cooling (Optional)

Power cooling can be used to cool the room quickly in hot summer.



- 1 Press  button to turn on the indoor.
- 2 Press  button to select cooling operation mode.
- 3 Press  button continuously until 'Po' displayed.

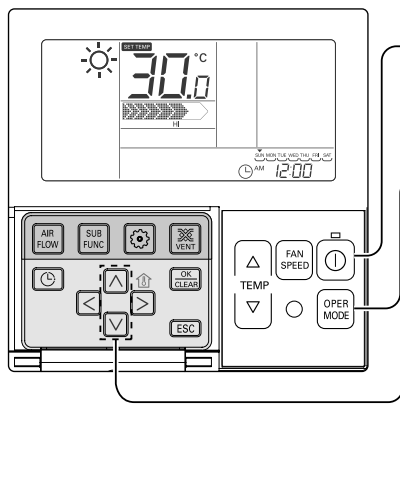
What is Power Cooling?

- Desired temperature: Po (actually 18°C)
 - Wind flow: power wind
 - Wind direction: fix to air-cooling position
- It make room temperature drop fast by running

✳ Partial product has no power air-cooling function.

Standard Operation - Heating Mode (Optional)

It supplies warm wind to the indoor



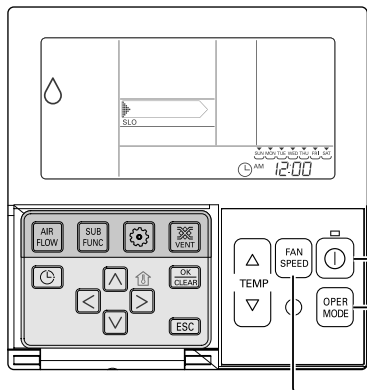
- 1 Press  button to turn on the indoor.
- 2 Press  button to select Heating mode.
(To check the indoor temperature, press the room temperature button.)
- 3 Adjust the desired temperature by pressing   buttons.

When setting the desired temperature lower than room temperature, there is only ventilation wind.

- Heating drive only operates at the cooling and heating model.
- Heating doesn't operate at cooling exclusive model.

Standard Operation - Dehumidification Mode

This mode dehumidification without overcooling.

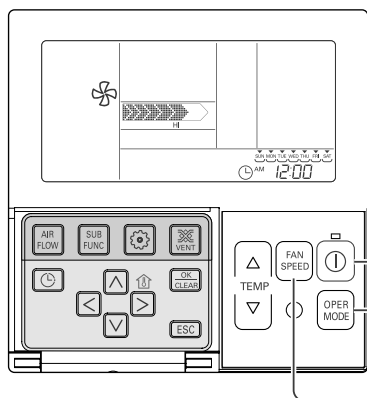


- 1 Press **①** button to turn on the indoor. 
- 2 Press **OPER MODE** button to select Dehumidification mode. The temperature setting can not be adjusted during operation this mode. 
- 3 Press the **FAN SPEED** in order of low → medium → high (The initial wind powerfulness of humidity removal drive is 'low'.) 

- In rainy season or high humidity climate, it is possible to operate simultaneously dehumidifier and cooling mode to remove humidity effectively.

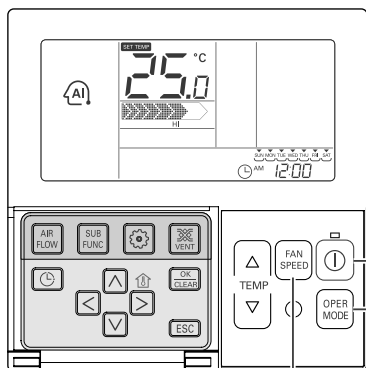
Standard Operation - Fan Mode

It blows the air as it is in the indoor, not the cold wind.



- 1 Press **①** button to turn on the indoor. 
- 2 Press **OPER MODE** button to select Fan Mode. 
- 3 Every time pressing **FAN SPEED** button, you can select **FAN SPEED** in order of low → medium → high 

Standard Operation - Auto Operation Mode



1 Press **(I)** button to turn on the indoor.



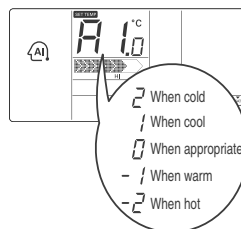
2 Press **OPER MODE** button to select Artificial intelligence Mode.



3 You can adjust the temperature as the picture on the right for cooling and heating model.



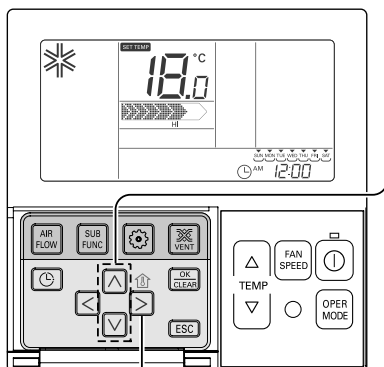
4 For the case of cooling exclusive, as the picture on the right, you can adjust the temperature from hot to cold, from "-2" to "2" based on "00".



During operating Auto Operation mode :

- We can use the FAN SPEED button
- We can change manually to other operation mode.

Standard Operation - Temperature Setting/Room Temperature Check



Temperature Setting

- 1 We can simply adjust the desired temperature.
 - Press the buttons to adjust the desired temperature.
 - : Increase 1°C or 2°F per one time pressing
 - : Decrease 1°C or 2°F per one time pressing

- Room temp: Indicate the current room temperature.
- Set temp: Indicate the temperature that user want to set.

* Depend on what kind of controller, the desired temperature can be adjusted at 0.5°C or 1°F.

Cooling operation:

- The cooling mode doesn't work if desired temperature is higher than room temperature Please lower the desired temperature.

Heating operation:

- The heating mode doesn't work if desired temperature is lower than room temperature Please increase the desired temperature.

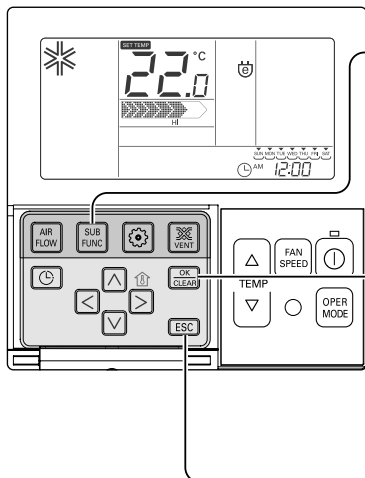
Room Temperature Check

- 1 Whenever press button, the room temperature will be displayed within 5 seconds.
After 5 seconds, it turns to display the desired temperature.
Because of location of remote controller, the real room temperature and the this displayed value can be different

- For air-cooling drive, from 18°C to 30°C, and for heating drive, from 16°C to 30°C, you can select desired temperature.
- 5°C is proper for the difference between room and outside temperature.

Sub function - Energy-Saving Cooling Operation (Optional)

Power saving air-cooling function is the function to improve use's comfortableness and power saving capacity by adjusting desired temperature while running air-cooling



1 Repeatedly pressing **SUB FUNC** button until  icon flash.



2 Operate or cancel Energy-Saving function by pressing **OK CLEAR** button.



(To cancel power saving function, you move to power saving menu by pressing **SUB FUNC** button, and then if pressing **OK CLEAR** button, power saving icon disappears and the function is cancelled.)

3 Press **ESC** button to exit.



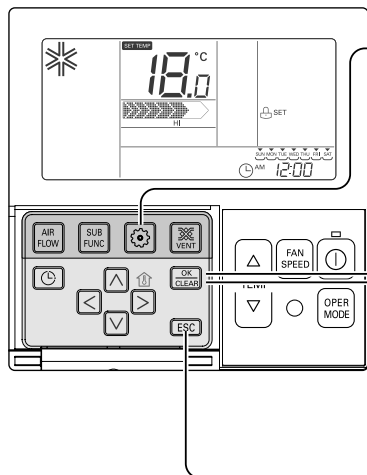
✱ After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.

✱ When exiting without pressing set button, the manipulated value is not reflected.

- Power saving function is possible to setup only when running air-cooling.
- Power saving function might not be operated at the partial product.

Function setting - Child Lock

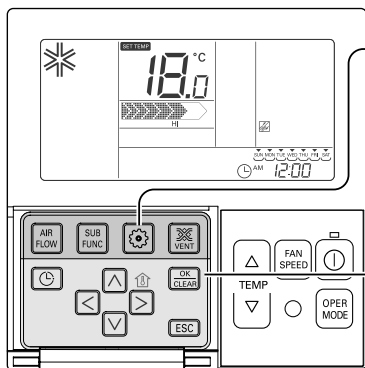
It is the function to use preventing children or others from careless using.



- 1 Press button repeatedly until the is flashing.
- 2 If moving to 'setup' icon area by using button, 'setup' icon blinks, and child lock function is setup if pressing button at that time.
- 3 When cancelling lock function, if moving to 'cancel' icon by pressing button and then, pressing , child lock function is cancelled.
- 4 Press to exit.
 - * After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.
 - * When exiting without pressing set button, the manipulated value is not reflected.

Function setting - Filter Sign Clear

This function is to clear the indicator of indoor filter cleaning.



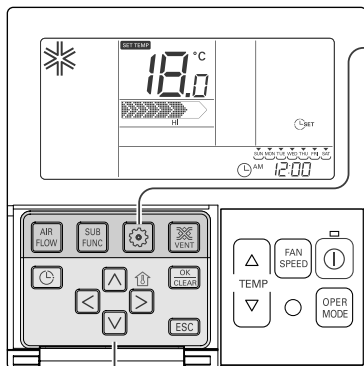
- 1 Press button repeatedly until the is flashing.
- 2 When the is flashing, press the to clear this display

- When filter is covered by dust, it will reduce cooling/heating efficiency and consume more electric power. Therefore, do clean the filter whenever cleaning time is expired.

* Filter cleaning indication is automatically cancelled without the separate cancellation after certain period of time.

Function setting - Current Time

This Procedure sets the current time and day of the week.



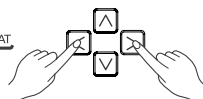
- 1 Please press function setup button. If pressing function setup button repeatedly, it moves to time setup menu. 'Time setup' icon is indicated at that time and date blinks at current time indication area.



Ex) Changing Current Time as
'Monday / AM 10:20'.

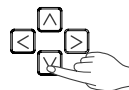
- 2 Press key to adjust the current day.

SUN MON TUE WED THU FRI SAT

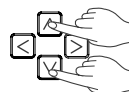


- 3 Press key to move to AM/ PM setting mode (the 'AM/ PM segment will flash).

AM 12:00

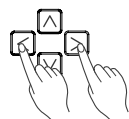


- 4 Setting AM/ PM value by pressing button.



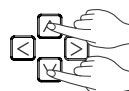
- 5 Press button to move to 'Hour' setting mode. (the 'Hour' segment will flash)

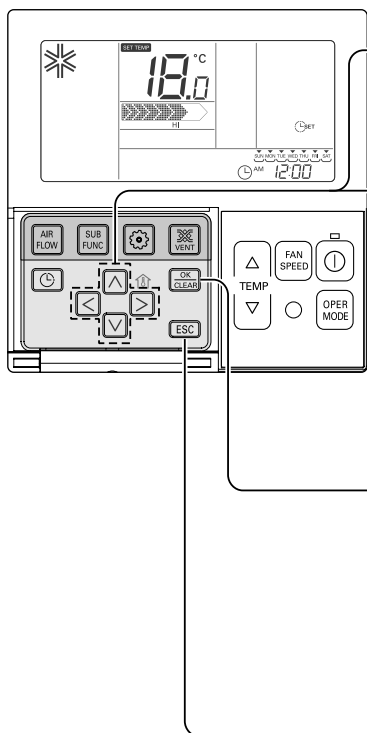
AM 12:00



- 6 Setting Hour value by pressing button.

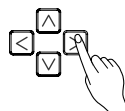
AM 10:00





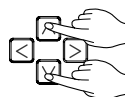
- 7** Press button to move to 'Minute' setting mode. (the 'Minute' segment will flash)

AM 10:00



- 8** Setting Minute value by pressing button.

AM 10:20



- 9** Press button to finish.

AM 10:20

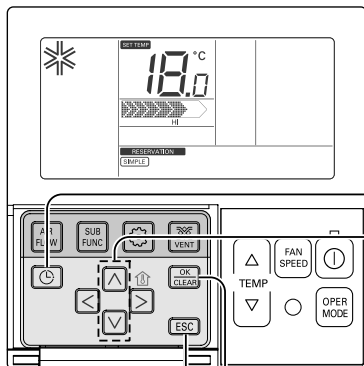


- 10** In the process, press button to release and exit from setting mode.
(In case of exit with incomplete information, it will return to the previous setting)
※ When exiting without pressing set button, the manipulated value is not reflected.



Programming - Simple Reservation

You can set the reservation conveniently in the units of 1 hour from 1 hour to 7 hours.



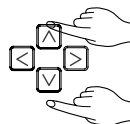
- 1** Press button to enter the Programming mode.
(the **SIMPLE** segment flashing)



Ex) Setting Simple Reservation time as '3'.

- 2** Press button to adjust reservation time.

1 → **3**



- 3** Press button to finish setting.

3



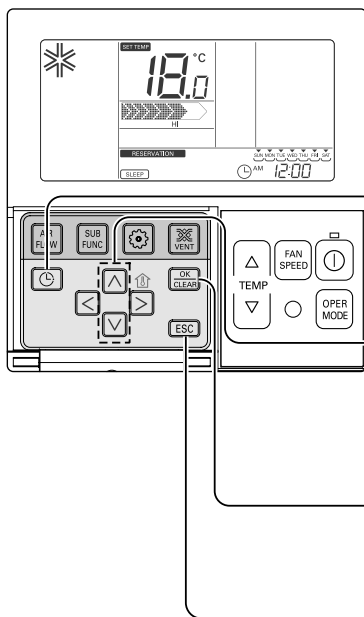
- 4** Press button to exit.
 * After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.
 * When exiting without pressing set button, the manipulated value is not reflected.

* When simple reservation setup, product automatically runs or stops after the time that is set.

- * NOTE :-
- ON Timer is available when unit is off.
 - OFF Timer is available when unit is off.
 - It starts counting time after times was set.
 - Timer can be set upto 7 hours.

Programming - Sleep Reservation

Sleep reservation is the function of air-conditioner to run and stop after certain period of time at sleep mode before sleep.



- 1** Press button to enter the Programming mode.
Ex) Setting Sleep Reservation time as '3'.
- 2** Repeat pressing button to enter the SLEEP reservation setting mode.
(segment flashing)
- 3** Press button to adjust reservation time.
The SLEEP reservation time is from 1 to 7 hours.
- 4** Press button to finish setting. Whenever reservation is done.
- 5** Press button to exit.
* After setup, it automatically gets out of setup mode if there is no button input for 60 seconds.
* When exiting without pressing set button, the manipulated value is not reflected.
- If reservation is setup, 'sleep' indication shows up at the lower part of LCD screen.
- 6** If finishing sleep reservation setup, air-conditioner product operates sleep drive and stops after the time that is set.

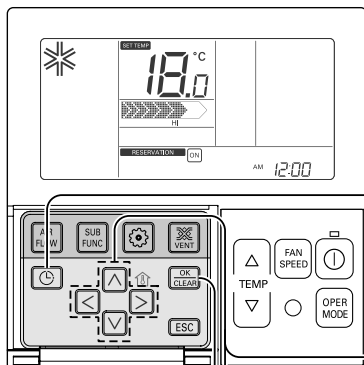
⚠ CAUTION

Please reserve proper time at sleeping. (Too much air-cooling is not good for your health.)

- Because it automatically adjusts desired temperature for comfortable air-cooling at sleep drive, there could be difference between remote controller's desired temperature and air-conditioner body's desired temperature.
- Sleep reservation operates as off reservation for the product whose temperature adjustment isn't controlled by unit of 0.5°C.

Programming - ON Reservation

Automatically turned On at reserved time that you set.



1 Press button.



Ex) Setting ON Reservation
Time as 'AM 10:20'.

2 Repeat pressing button to
enter the ON reservation
setting mode.
(segment flashing)



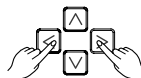
3 Press button to adjust AM/ PM
setting.

AM 12:00

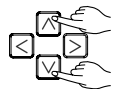


4 Press button to Hour setting
mode. When the Hour icon flash, please
setting time.
The setting range is within 1~12.

AM 12:00

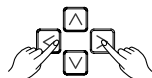


AM 10:00

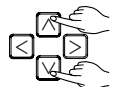


5 Press button to shift to Minute
setting mode. When the Minute icon
flash, please setting minute the setting
range is within 00~59.

AM 10:00



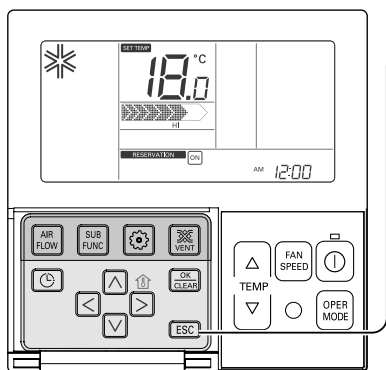
AM 10:20



6 Press button to finish setting.

AM 10:20



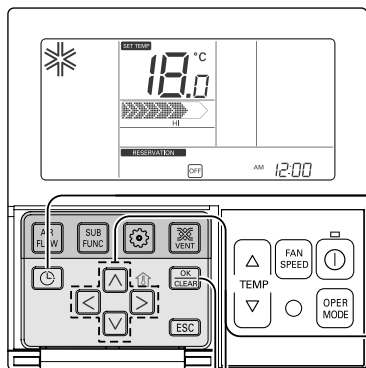


7 Press **ESC** button to exit.

- ✱ After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.
- ✱ When exiting without pressing set button, the manipulated value is not reflected.
 - If reservation is set, 'turned on' indication shows up at the lower part of LCD screen, and air-conditioner product runs at the time that is set.
 - If reservation is cancelled, 'turned on' indication disappears.

Programming - OFF Reservation

Automatically turned Off at reserved time that you set.



1 Press button.

Ex) Setting OFF Reservation
Time as 'AM 10:20'.

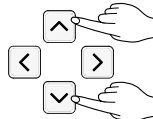


2 Repeatedly pressing button
to enter the OFF reservation
setting mode.
(segment flashing)



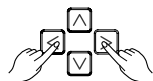
3 Press button to adjust AM/ PM
setting.

AM 12:00

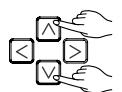


4 Press button to shift to Hour
setting mode. When the Hour icon flash,
please setting time.
The setting range is within 1~12.

AM 12:00

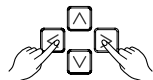


AM 10:00

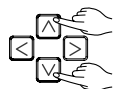


5 Press button to shift to Minute
setting mode. When the Minute icon
flash, please setting minute the setting
range is within 00~59.

AM 10:00



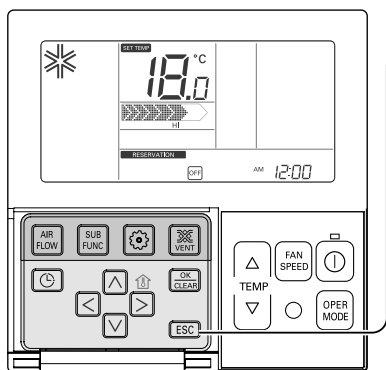
AM 10:20



6 Press button to finish setting.

AM 10:20





7 Press **ESC** button to exit.

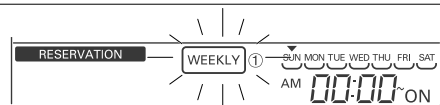
- ✱ After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.
- ✱ When exiting without pressing set button, the manipulated value is not reflected.
 - If reservation is set, 'turned off' indication shows up at the lower part of LCD screen, and air-conditioner product runs at the time that is set.
 - If reservation is cancelled, 'turned off' indication disappears.

Programming : Weekly Reservation

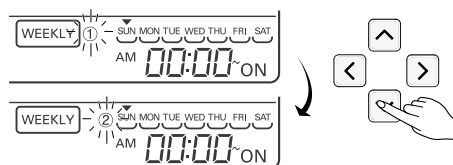
This function is used to program the unit for the specified running during the week.

- Please move to reservation setup mode by pressing reservation button.
 * You can setup two weekly reservations for one day, and up to fourteen reservations for a week.
 For example, to setup (Tuesday morning 11:30 turned on ~ afternoon 12:30 turned off), you setup in order below.

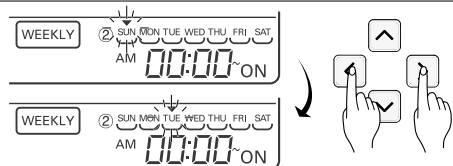
- Please move to 'weekly' by repeatedly pressing reservation button. 'Weekly' blinks at this time.



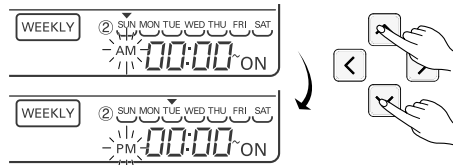
- Please select weekly reservation ① or weekly reservation ② by using $\uparrow$ $\downarrow$ button.
 * You can setup two reservations, weekly reservation 1 and weekly reservation 2, for a day.



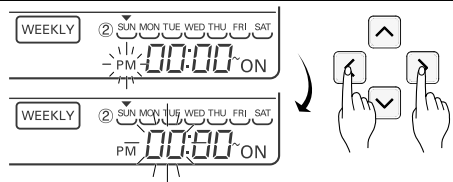
- Please move to 'date' setup part by using $\leftarrow$ $\rightarrow$ button. If 'date' indication blinks, please setup date. You can setup date from Monday to Sunday.



- Please move to 'AM/PM' setup part of turning on by using $\uparrow$ $\downarrow$ button.



- Please move to 'hour' setup part of turning on by using $\leftarrow$ $\rightarrow$ button.
 - It is the part to setup the time at which air-conditioner is turned on.

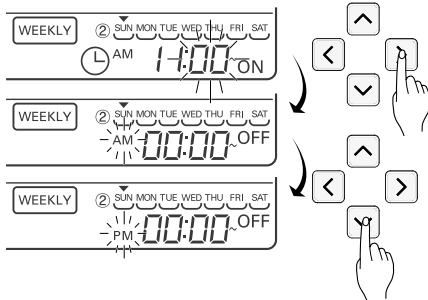


- Please change time by using $\uparrow$ $\downarrow$ button.
 - You can setup hour 0~12.

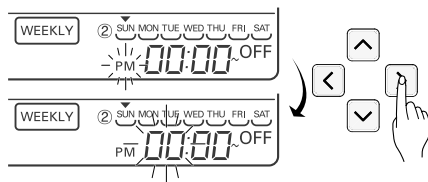
- Please move to 'minute' setup part of turning on by using $\rightarrow$ button.

- If 'minute' indication blinks, please setup 'minute' by using $\uparrow$ $\downarrow$ button

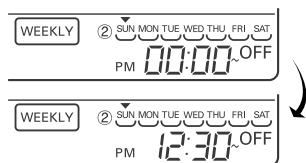
- 10** Please move to 'AM/PM' setup part of turning off by using  button.
- AM/PM setup is identical with turning on time setup.



- 11** Please move to 'hour' setup part of turning off by using Right button.
- It is the part to reserve the time at which air-conditioner is turned off.
- If 'hour' indication blinks, please setup 'hour'.



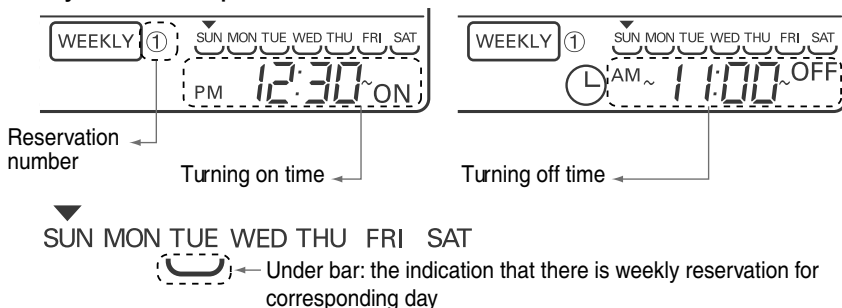
✳ Please setup 'hour' and 'minute' identically with the method to setup turning on time.



- 12** If finishing weekly reservation setup, please press setup/cancellation button. Weekly reservation setup for the day that you set is finished.

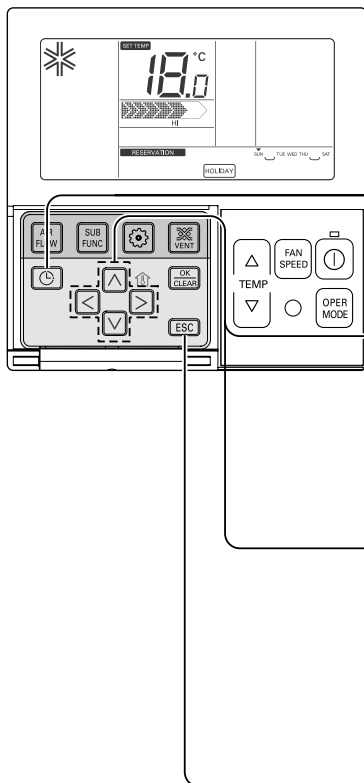
- 13** If you setup with the method identical with above by selecting the day that you'd like to setup, it operates weekly reservation.
If you setup both turning on reservation time and turning off reservation time identically, it doesn't operate reservation drive.

Weekly reservation explanation



Programming : Holiday Reservation

This function automatically stop the machine on the set day



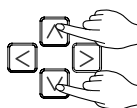
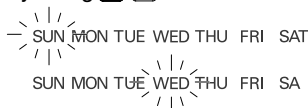
- 1 Please press button.
It enters into reservation
setup mode.



- 2 Please move to 'holiday' by repeatedly
pressing button.



- 3 Please move to 'date' that
you want to setup holiday
by using button.



- 4 Please set or cancel holiday by using
 or button.
For example, when you setup
Monday/Friday to holiday
- 'Monday', 'Friday' letter disappears.



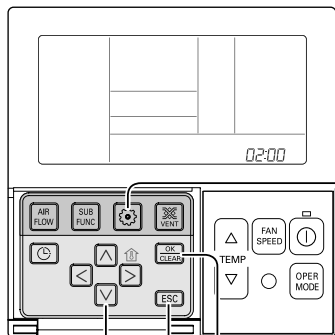
- 5 Please press button if finishing
holiday setup.

✱ If it comes to set holiday, air-conditioner
automatically stops. Once you setup
holiday appointment, until before you
cancel holiday setup, air-conditioner
automatically stops within one hour
even though you run air-conditioner.

Installer Setting - Setting Address of Central Control

This procedure is used to set up the address of Indoor units.

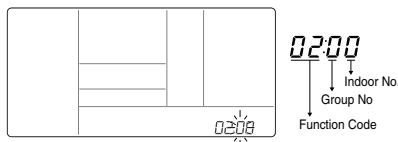
Please refer to central controller manual for connecting Indoor units with the control controller



- 1** If pressing  button long for 3 seconds, it enters into remote controller setter setup mode.
- If pressing once shortly, it enters into user setup mode. Please press more than 3 seconds for sure.

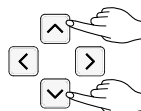


- 2** If entering into address setup mode by using  button, it indicates as picture below.



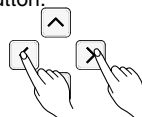
- 3** Set Group No. by pressing   button. (0~F)

02:F0



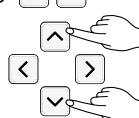
- 4** Move to Indoor No. setting option by pressing   button.

02:F0



- 5** Set Indoor No. by pressing   button.

02:F5



- 6** Press  button to save.

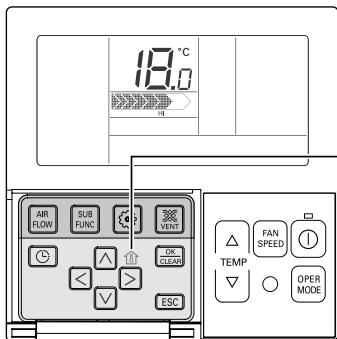
02:F5



- 7** Pressing  button will exit settings mode.
✱ After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.
✱ When exiting without pressing set button, the indoor unit address will not set.

- Multi model: Connect the outdoor unit and P1485 of outdoor unit
 - Single model: Connect P1485 of indoor unit
 - When you connect the indoor unit with central control unit, you should setup Network address which is recognized by central control unit inside of indoor unit.
 - The address of central control is consisted by group number and number of indoor unit.
- Note :** The remote controller displays 'HL' if central controller has locked the remote controller.

The Room Temperature Confirmation



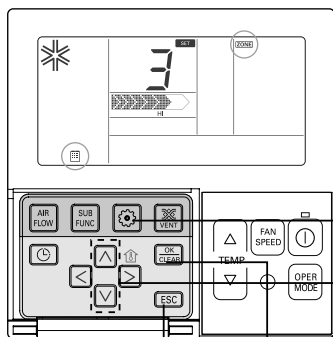
- 1 If you press the room temperature button, room temperature will be indicated about 5 seconds. It will be returned to the desired temperature after 5 seconds.

- You can select the desired temperature for cooling operation from 16°C to 37°C and heating operation from 16°C to 30°C.

*There would be some difference between actual temperature you feel and room temperature of remote controller, because the temperature of the position is not uniform which the remote controller is located on.

Function setting - 3 Compressor Selection

It is the function for adjusting the number of running outdoor units linked a indoor unit.



- 1 Repeat Pressing Button until Icon and Icon ON



- 2 Press button to change.

* Converting comp value : 1~3

1 → 3



- 3 Press button to complete and active the setting process

3



- 4 Press button to exit or system will automatically release without any input after 25 seconds.

* When exiting without pressing set button, the manipulated value is not reflected.



Pressure Function

Sr. No.	KEY & MODE	OPERATION	ERROR	RESET
*	Low Pressure Function (LP Operation)	- When Low Pressure operates, it stops Comp as well as O/D Unit after 10 sec of Comp Operation. - If Comp Off occurs 3 times in 1 hour by L/P operation after the first detection, Comp Off state has been maintained.	Respective Comp No. will blink. Blinking Zone 1 2 3	Manual power reset.
*	High Pressure Function (HP Operation)	- When High Pressure operates, it stops Comp as well as O/D Unit after 10 sec of Comp Operation. - If Comp Off occurs 3 times in 1 hour by H/P operation after the first detection, Comp Off state has been maintained.	Respective Comp No. will blink. Blinking Zone 1 2 3	Manual power reset.
*	Power Failure Compensation (Memory Function)	Micom remembers the previous running condition before power failure, such as On/Off condition, running mode, set temperature, weekly programming etc.		

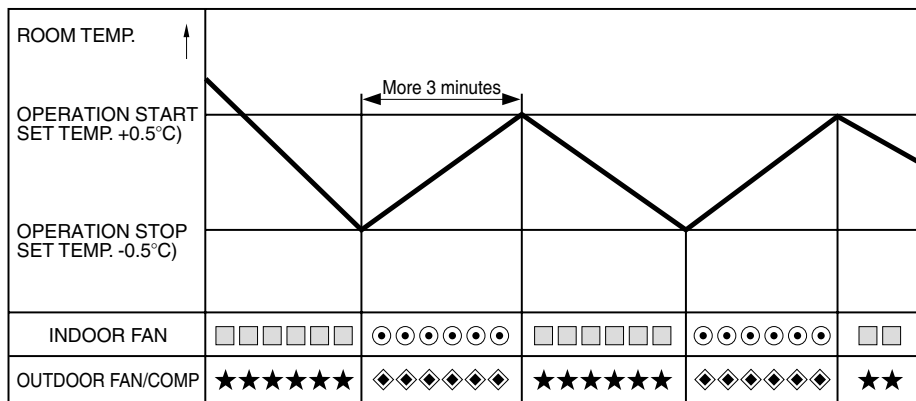
Error Diagnosis

Sr. No.	ERROR CODE	DIAGNOSIS	DESCRIPTION
1	CH-01	Check room thermistor	Recover after 5 seconds of operation when respective thermistor healthy
2	CH-02	Check pipe thermistor (CN-Pipe/In)	Recover after 3 seconds of operation when respective thermistor healthy
3	CH-06	Check pipe thermistor (CN-Pipe/Out)	Recover after 3 seconds of operation when respective thermistor healthy
4	CH-12	Check pipe thermistor (CN-Pipe/Med)	Recover after 4 seconds of operation when respective thermistor healthy
5	CH-09	Check Option PCB (EPROM)	Check Interconnection of Option PCB and Power Reset
6	CH-04	Check float sensor / Jumper	Recover after 4 minutes of operation when float sensor / Jumper healthy
7	CH-14	Check Sub PCB	Check Interconnection of Sub PCB / Recover after 5 seconds of Healthy Interconnection

Operation Details

• Cooling Operation Mode

When the room temperature is higher than the set temperature, it operates in cooling mode at the set temperature, the set fan speed, and then it will be in automatically turn off when the room temperature reaches the set temperature +0.5°C.



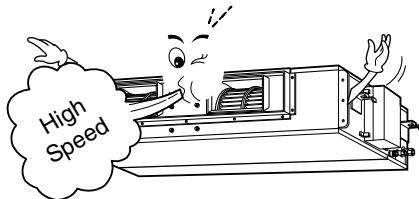
□ : SETTING FAN SPEED ● : LOW COOL OPERATION ★ : COMP ON ◆ : COMP OFF

Helpful information

Airflow speed and cooling capacity.

The cooling capacity indicated in the specification is the value when the fan speed is set to high, and the capacity will be lower at low or medium fan speed.

High fan speed is recommended when you wish to cool the room quickly.



Self-Diagnosis Function

Remote Controller display will flash Error Code when a problem occurs, please contact your Dealer.
(for e.g., CH-01)

Caution: Before performing any maintenance, turn off the main power to the system.

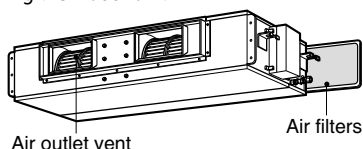
Indoor Unit

Grille, Case, and Remote Control:

- Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

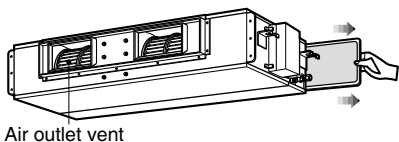
Note:

Supply power must be disconnected before cleaning the indoor unit.



Air Filter:

The air filters behind Indoor unit (the suction side) should be checked and cleaned once every 2 weeks or more often if necessary.



Indoor Unit Dimensions (mm)

Dimension Capacity	Model	A	B	C	D	E	F	G	H	I
66K BTU/H	LB-R0551QC	1291	1230	380	57.5	590	30	130	1005	232

- Slope of about 5-8 mm is to be provided at the drain hole side of the indoor unit for proper drainage.
- After installation the slope can be measured using a spirit level.

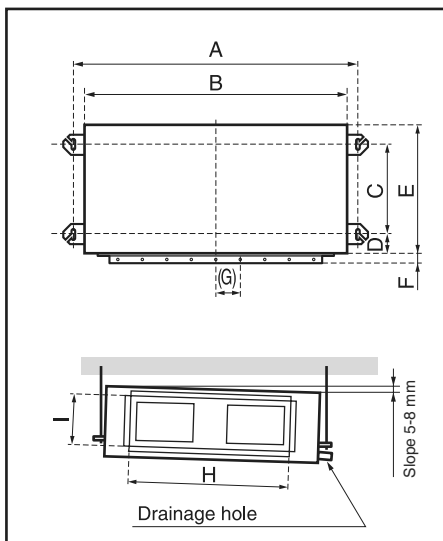
□ Never use any of the followings:

- Water hotter than 40°C
Could cause deformation and/or discoloration.
- Volatile substances
Could damage the surfaces of the air conditioner.



□ Cleaning Tips:

- 1 Clean the filter with a vacuum or warm, soapy water.
 - If very dirty, wash with a solution of detergent in lukewarm water.
 - If hot water (50°C or more) is used, filter may be deformed.
- 2 After washing with water, dry well in the shade.
- 3 Re-install the air filter.



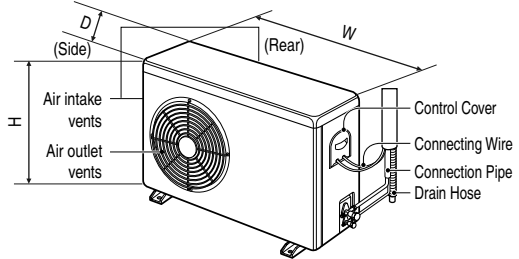
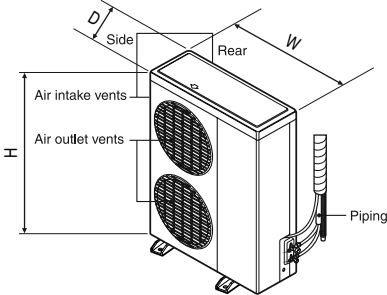
Outdoor Unit

The heat exchanger coils and panel vents of the outdoor unit should be checked regularly. If clogged with dirt or soot, the heat exchanger and panel vents may be professionally steam cleaned.

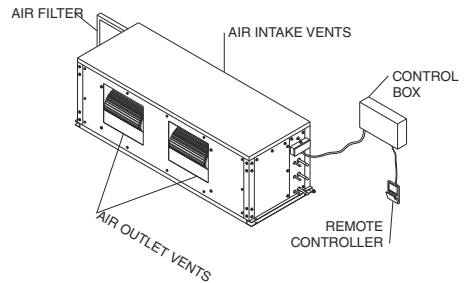
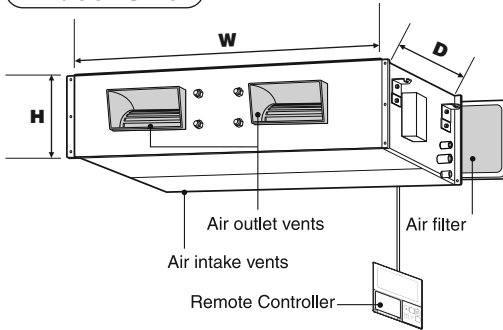
Note:

Dirty or clogged coils will reduce the operating efficiency of the system and cause higher operating costs.

Outdoor Unit



Indoor Unit



(For 198K & 264K Units)

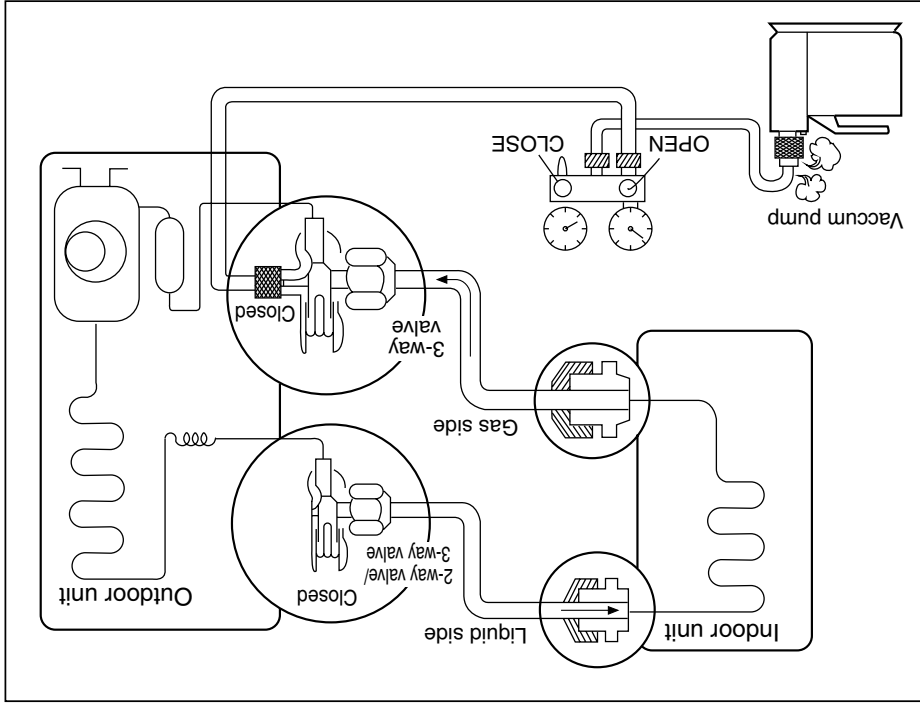
Dimension \ Capacity	Model		Indoor Unit (mm)					Outdoor Unit (mm)		
		IDU	W	D	H		ODU	W	D	H
66K BTU/H	LB-R0551QC	1	1230	590	380		1	899	355	1135

7. Air Purging of the Connecting Pipes and the Indoor Unit

The air which contains moisture remaining in the refrigeration cycle may cause a malfunction on the compressor.

1. Confirm that both the liquid side valve and the gas side valve are set to the closed position.
2. After connecting the piping, check the joints for gas leakage with gas leak detector.
3. Remove the service port nut, and connect the gauge manifold and the vacuum pump to the service port by the charge hose.
4. Vacuum the indoor unit and the connecting pipes until the pressure in them lowers to below -76cmHg.
5. Remove the valve stem nuts, and fully open the stems of the 2-way and 3-way valves with a hexagon wrench.
6. Tighten the valve stem nuts of the 2-way valve and 3-way valve.
7. Disconnect the charge hose and fit the nut to the service port.

(Tightening torque: 1.8kg.m)



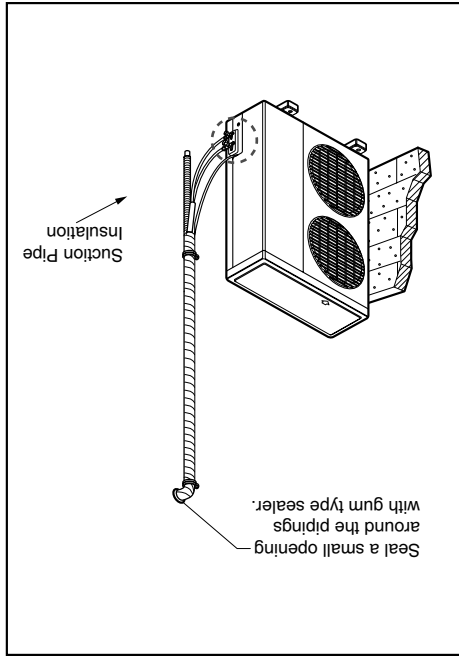
4) Form the pipings

1. Wrap the connecting portion of indoor unit with the insulation material and secure it with two Plastic Bands. (for the right pipings)

- If you want to connect an additional drain hose, the end of the drain-outlet should keep distance from the ground. (Do not dip it into water, and fix it on the wall to avoid swinging in the wind.)

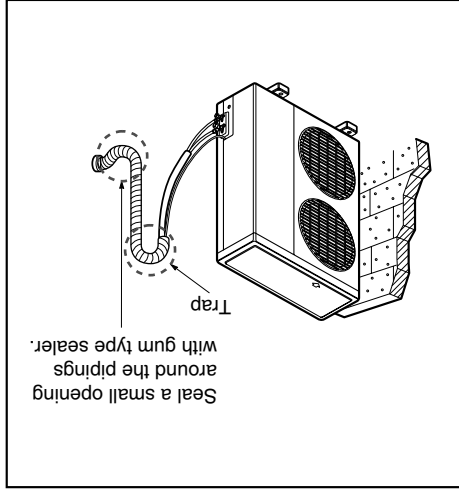
In case of the Outdoor unit being installed below position of the Indoor unit.

2. Tape the Pplings, drain hose and Connecting Cable from bottom to top.
3. Form the pipings gathered by taping along the exterior wall and fix it onto the wall by saddle or equivalent.



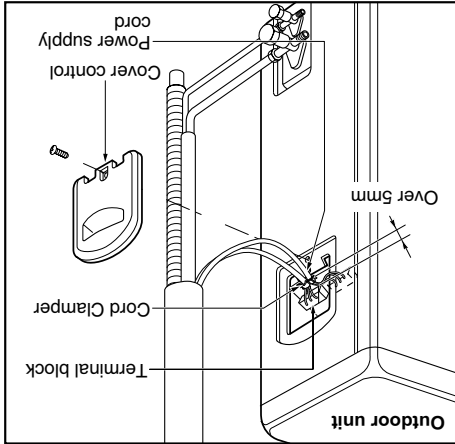
1. Tape the Pplings and Connecting cable from bottom to top.
2. Form the pipings gathered by taping along the exterior wall, and make the trap prevent water from entering into the room.
- 3 Fix the pipings onto the wall by saddle or equivalent.

In case of the Outdoor Unit being installed above position of the Indoor Unit.



3) Connecting the cable to the Outdoor Unit

1. Remove the Cover control from the unit by loosening a screw.
2. Connect the wires to the terminals on the control board individually as following.
3. Secure the cable onto the control board with the holder (clammer).
3. Refix the cover control to the original position with the screw.



CAUTION

- After the confirmation of the above conditions, prepare the wiring as follows:
- 1) Never fail to have an individual power specialized for the air conditioner. As for the method of wiring, be guided by the circuit diagram pasted on the inside of control box cover.
 - 2) Provide a circuit breaker switch between power source and the unit.
 - 3) The screw which fasten the wiring in the casing of electrical fittings are liable to come loose from vibrations to which the unit is subjected during the course of transportation. Check them and make sure that they are all tightly fastened. (If they are loose, it could give rise to burn-out of the wires.)
 - 4) Specification of power source
 - 5) Confirm that electrical capacity is sufficient.
 - 6) Be sure that the starting voltage is maintained at more than 90 percent of the rated voltage marked on the name plate.
 - 7) Confirm that the cable thickness is as specified in the power sources specification. (Particularly note the relation between cable length and thickness.)
 - 8) Never fail to equip a leakage breaker where it is wet or moist.
 - 9) The following troubles would be caused by voltage drop-down.
 - Vibration of a magnetic switch, damage on the contact point there of, fuse breaking, disturbance to the normal function of a overload protection device.
 - Proper starting power is not given to the compressor.
 - 10) Appliance must be grounded.
 - To minimize the risk of electric shock, you must always plug into a grounded outlet.
 - Do not cut or remove the grounding.

6. Connecting Cables between Indoor and Outdoor Unit

1) Connecting cables to the Indoor Unit

- Connect the wires to the terminals on the control board individually according to the outdoor unit connection.
- Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively.

* Please do the interconnection as per Interconnection Table in wiring diagram.

CAUTION

The power cord connected to the outdoor unit should be with the following specifications

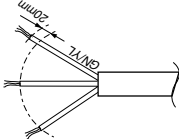


Diagram showing a power cord cross-section with a central ground wire (GN/YL) and three phase wires. The distance from the center to the outer edge is 20mm.

NORMAL CROSS-SECTIONAL AREA	
36k BTU/h	2.5mm
60k BTU/h	3.5mm

The connecting cable connected to the indoor and outdoor unit should be with the following specifications

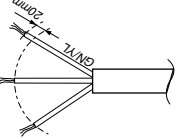


Diagram showing a connecting cable cross-section with a central ground wire (GN/YL) and three phase wires. The distance from the center to the outer edge is 20mm.

NORMAL CROSS-SECTIONAL AREA
1.25mm² (36k/60k)

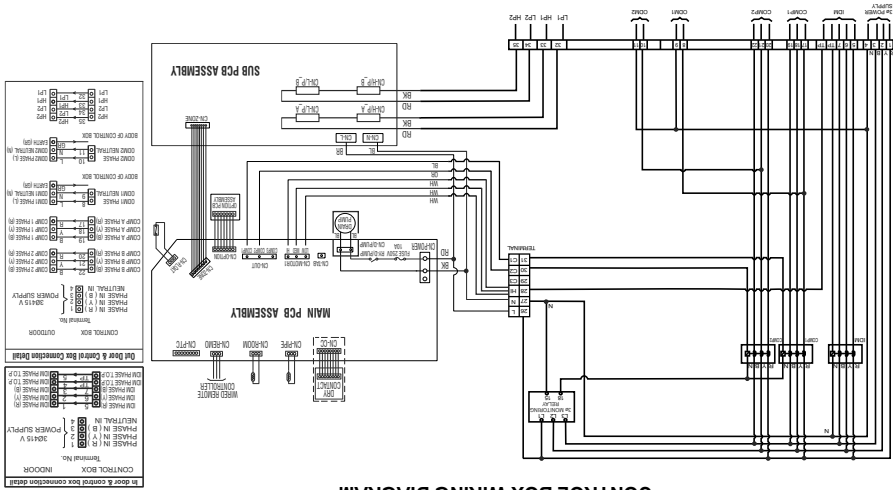
WARNING

Make sure that the screws of the terminal are free from looseness.

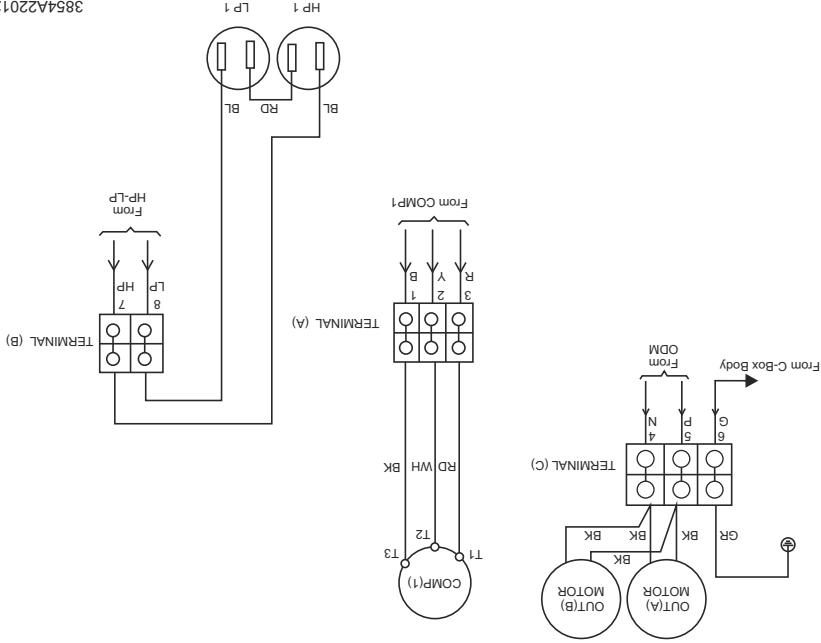
2) Clamping of cables

- 1) Arrange 2 power cables on the control panel.
- 2) First, fasten the steel clamp with a screw to the inner boss of control panel.
- 3) For the cooling model, fix the other side of the clamp with a screw strongly.

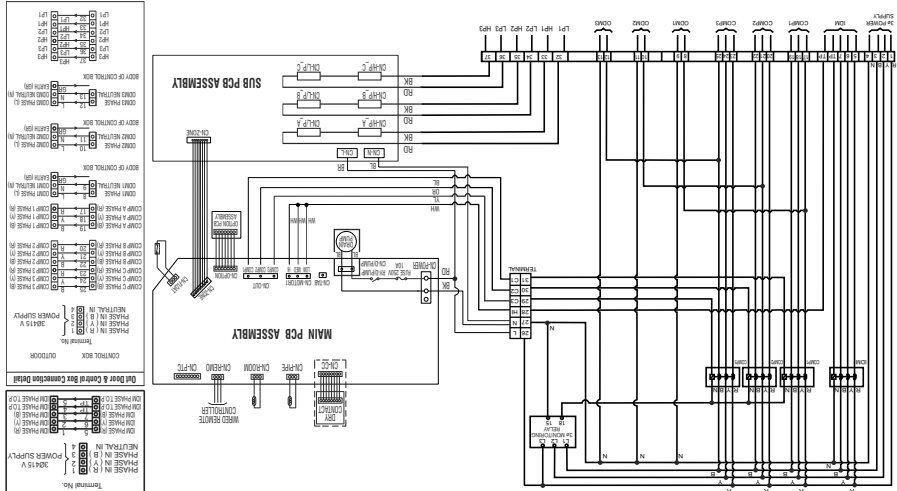
CONTROL BOX WIRING DIAGRAM



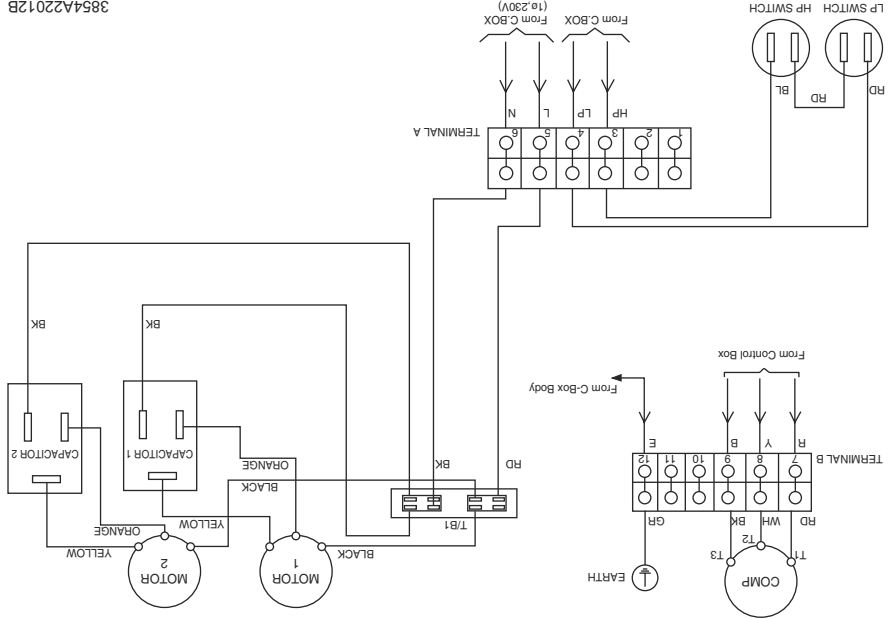
OUTDOOR WIRING DIAGRAM



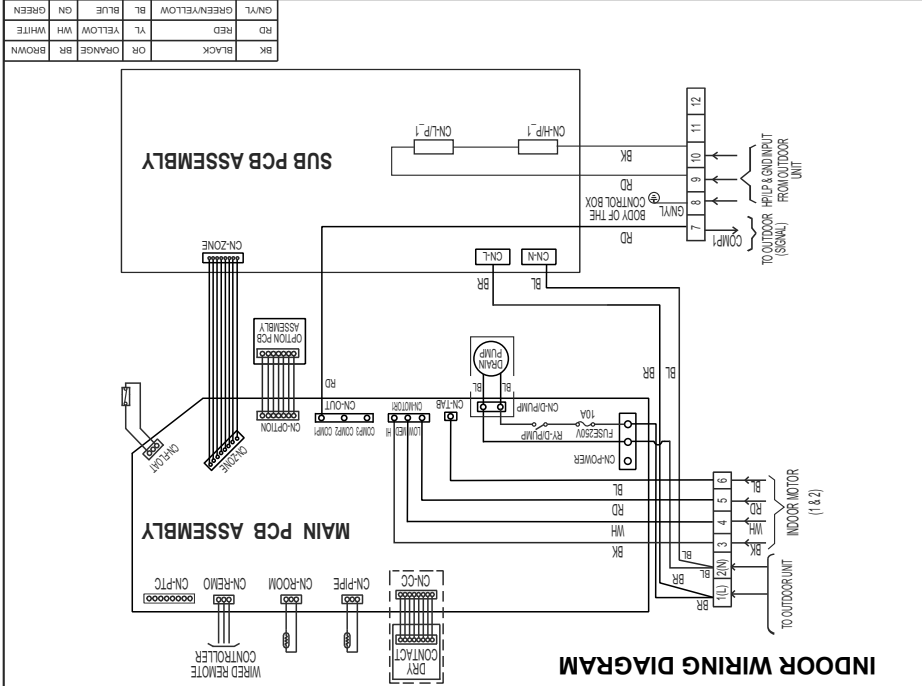
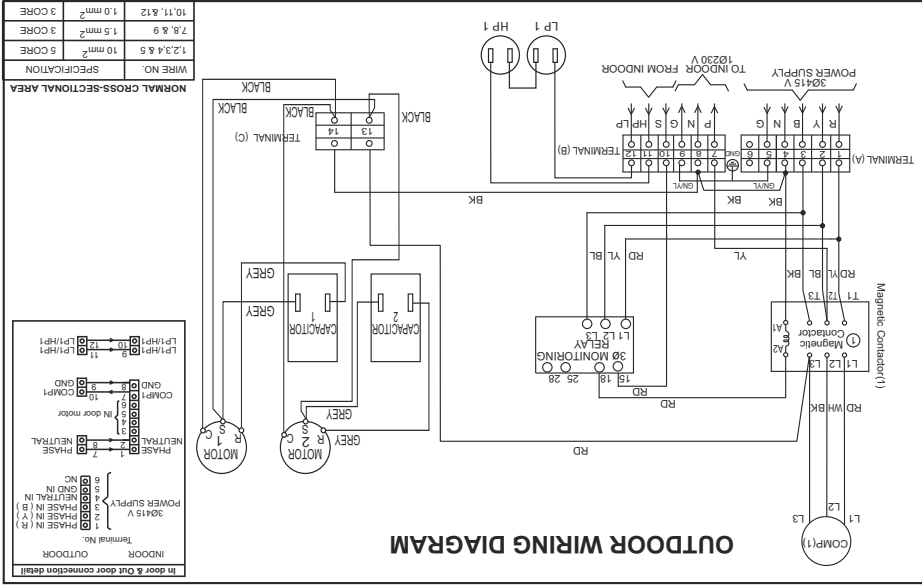
CONTROL BOX WIRING DIAGRAM



OUTDOOR WIRING DIAGRAM



Wiring Diagram
Unit : 132K BTU/H (1 ODU - Single Piping)



OUTDOOR WIRING DIAGRAM

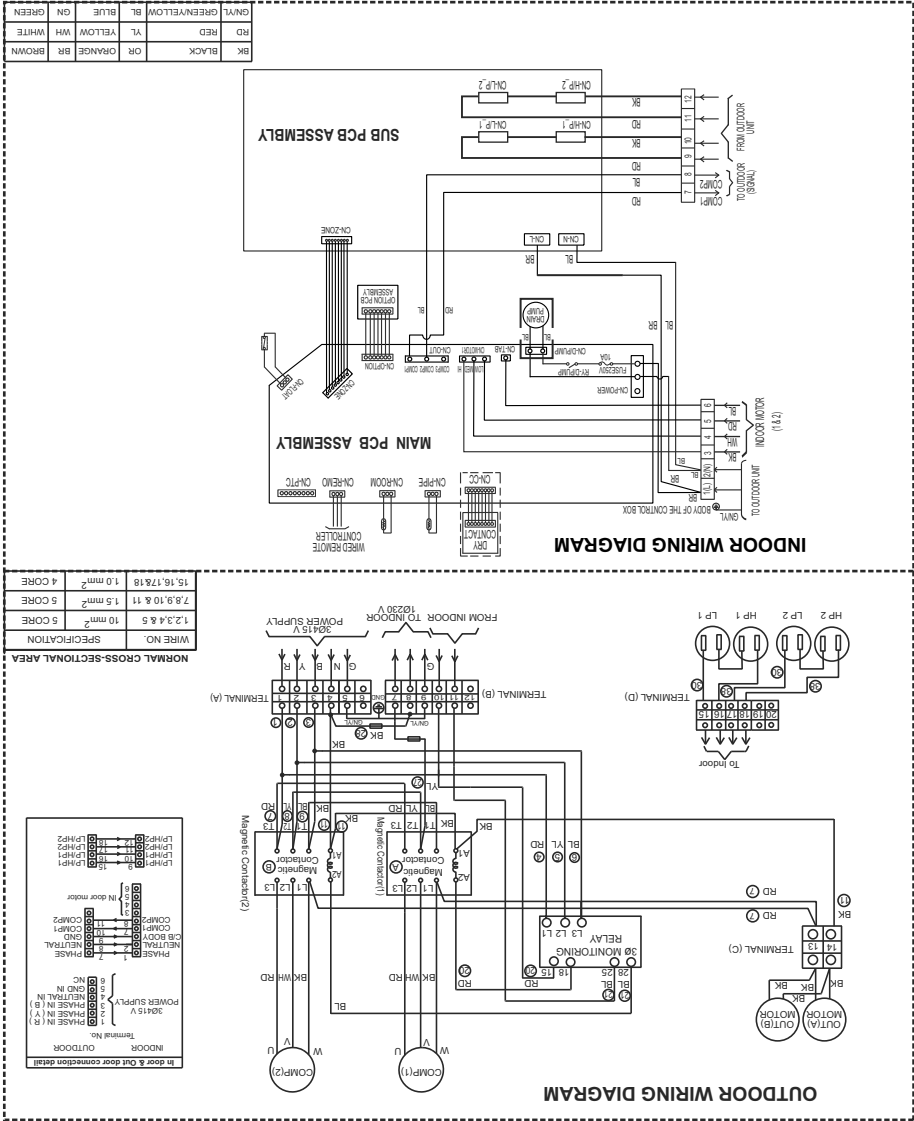


INDOOR WIRING DIAGRAM

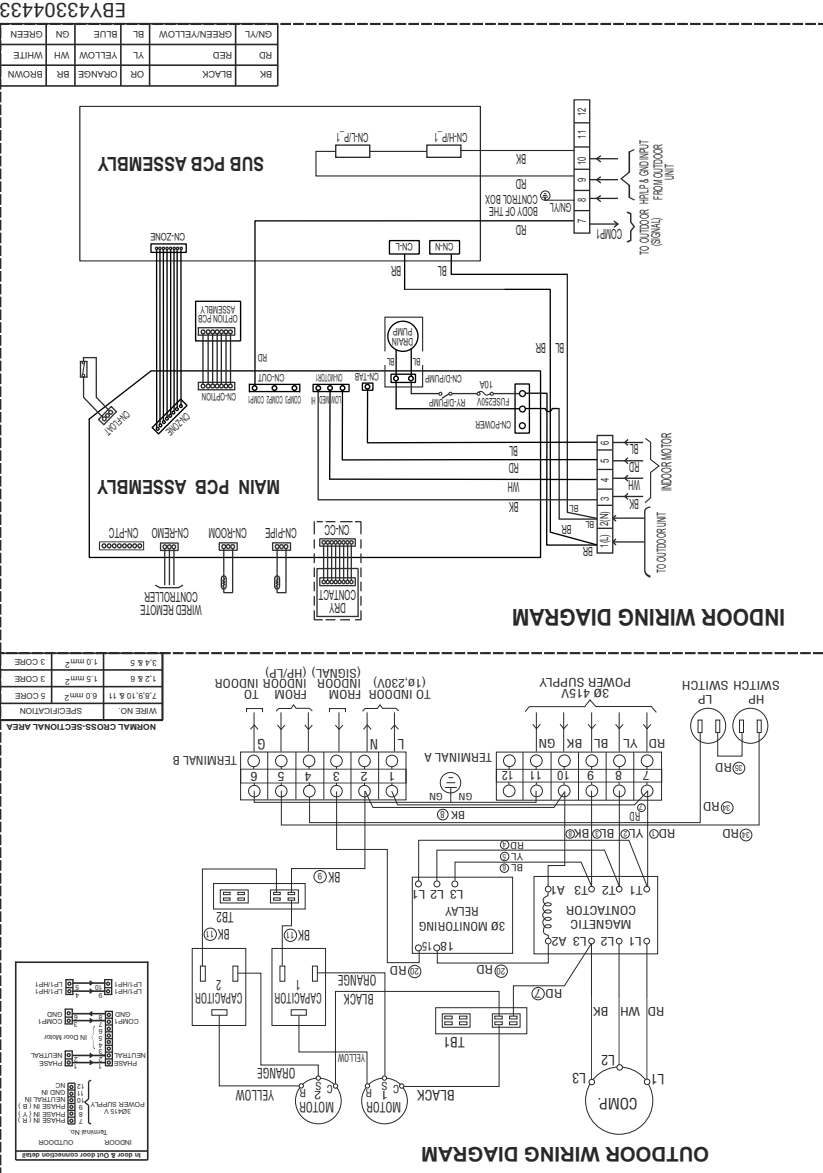
EBY43304424

NORMAL CROSS-SECTIONAL AREA		
WIRE NO.	SPECIFICATION	
7,8,9,10 & 11	10 mm ²	5 CORE
1,2 & 6	1.5 mm ²	3 CORE
3,4 & 5	1.0 mm ²	3 CORE

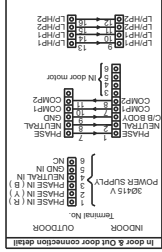
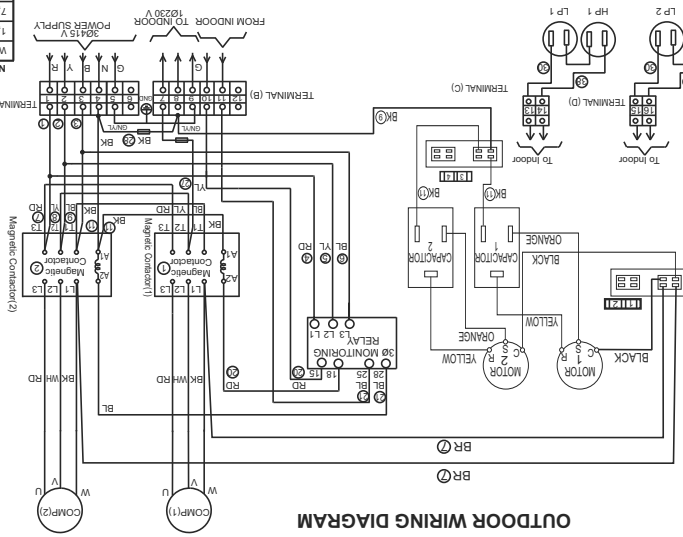
Wiring Diagram
Unit : 132K BTU/H



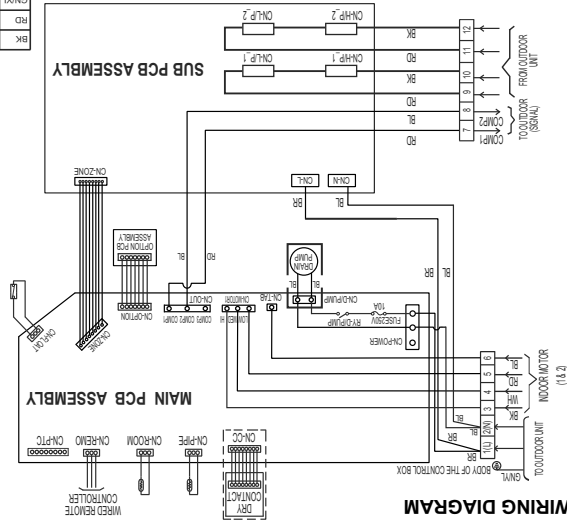
INDOOR WIRING DIAGRAM



OUTDOOR WIRING DIAGRAM



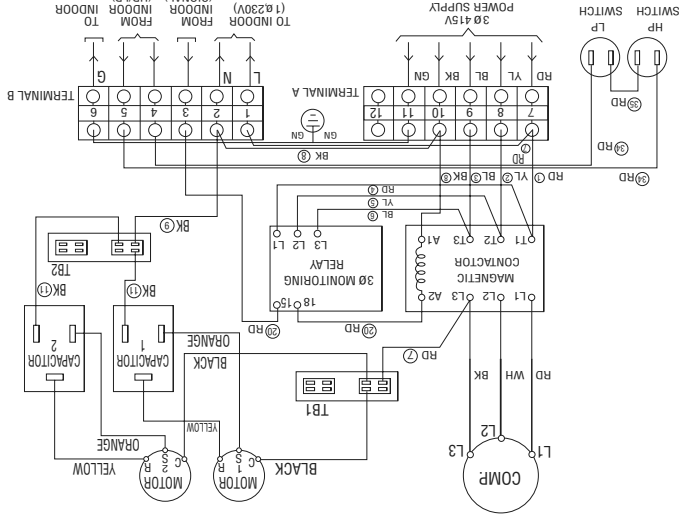
INDOOR WIRING DIAGRAM



BK	BLACK	BR	BROWN
RD	RED	YL	YELLOW
GNVL	GREEN/YELLOW	BL	BLUE
GN	GREEN	WH	WHITE

Wiring Diagram
Unit : 90K BTU/H (1 ODU - Single Piping)

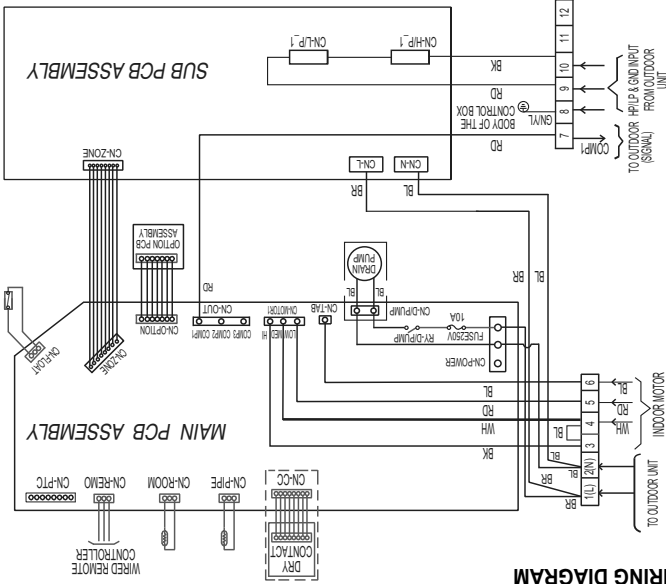
OUTDOOR WIRING DIAGRAM



NORMAL CROSS-SECTIONAL AREA		
WIRE NO.	SPECIFICATION	
7,8,9,10 & 11	6.0 mm ²	5 CORE
1,2 & 6	1.5 mm ²	3 CORE
3,4 & 5	1.0 mm ²	3 CORE

MAX CROSS-SECTIONAL AREA

INDOOR WIRING DIAGRAM

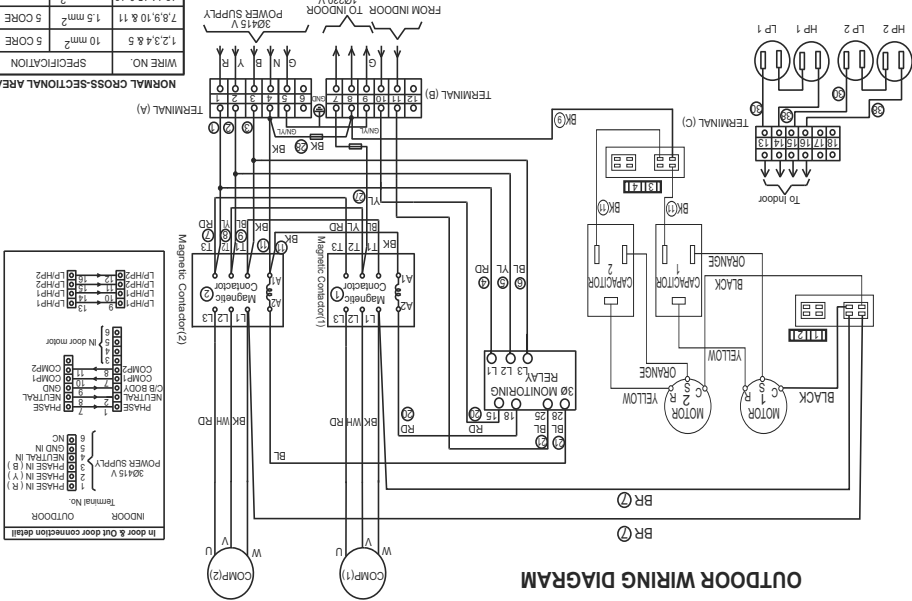


GN/YL	GREEN/YELLOW	YL	BLUE	GN	GREEN
RD	RED	YL	YELLOW	WH	WHITE
BK	BLACK	OR	ORANGE	BR	BROWN

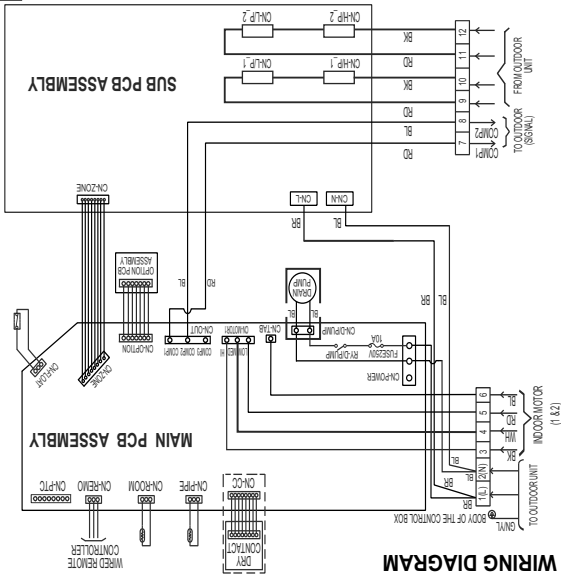
EBY43304432

Wiring Diagram Unit : 90K BT/UH

OUTDOOR WIRING DIAGRAM



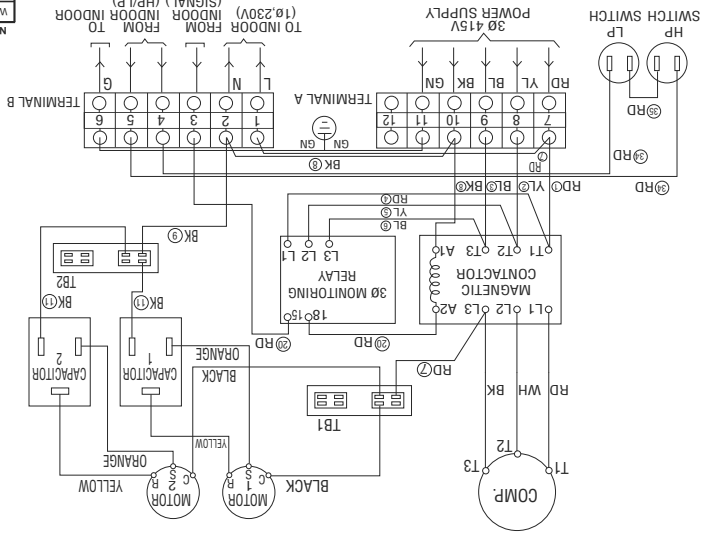
INDOOR WIRING DIAGRAM



BK	BLACK	OR	ORANGE	BR	BROWN
RD	RED	YL	YELLOW	WH	WHITE
GN/YL	GREEN/YELLOW	BL	BLUE	GN	GREEN

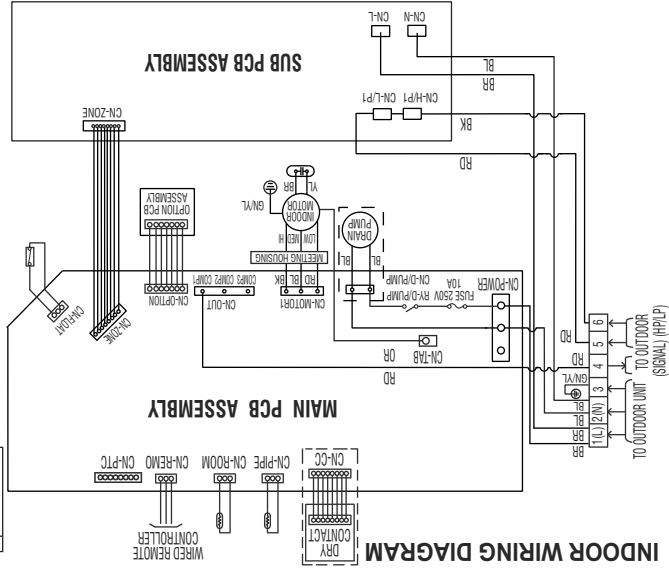
EBY43304428

OUTDOOR WIRING DIAGRAM



Wiring diagram for the In door & Out door connection detail. The diagram shows two terminal blocks. The left block has terminals 1 (PHASE), 2 (NEUTRAL), 3 (COMP), 4 (H/L/P), 5 (H/L/P), 6 (H/L/P), and 7 (GND). The right block has terminals 1 (PHASE), 2 (NEUTRAL), 3 (COMP), 4 (H/L/P), 5 (H/L/P), 6 (H/L/P), and 7 (GND). Wires connect the terminals between the two blocks. A label 'Terminal No.' is placed between the two blocks. Below the terminal blocks, there are labels for 'INDOOR' and 'OUTDOOR' with arrows pointing to the respective blocks. At the bottom, a label reads 'In door & Out door connection detail'.

INDOOR WIRING DIAGRAM

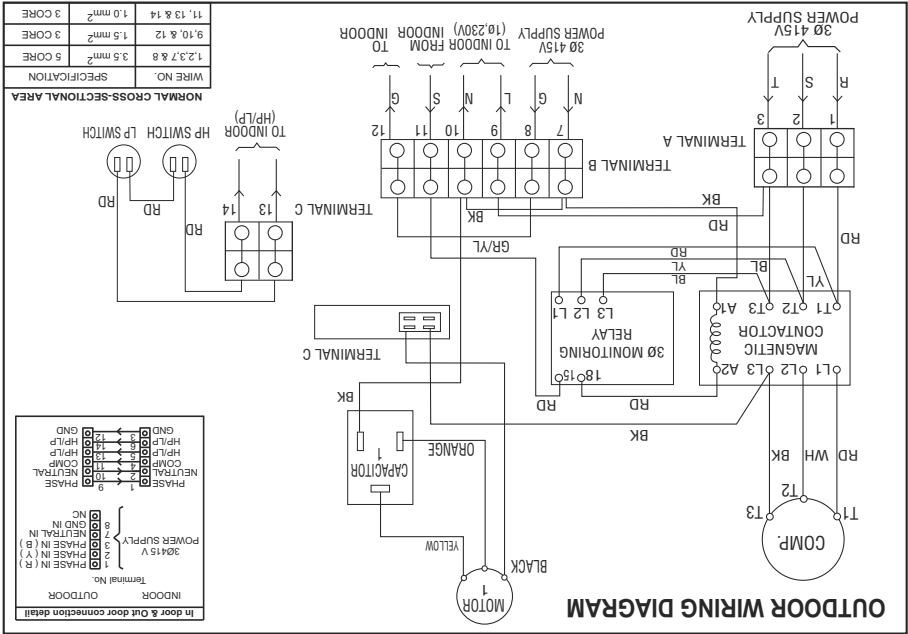
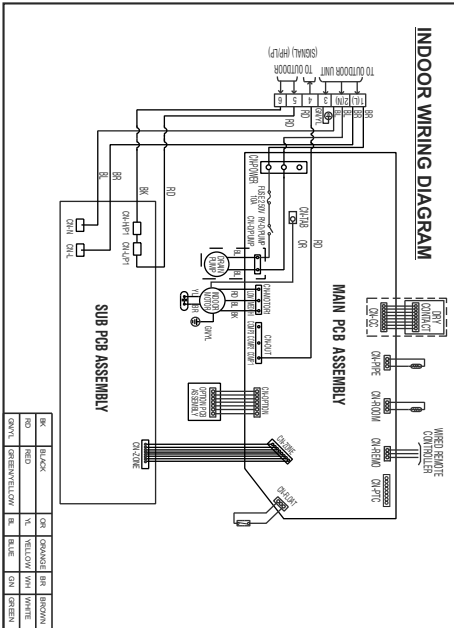
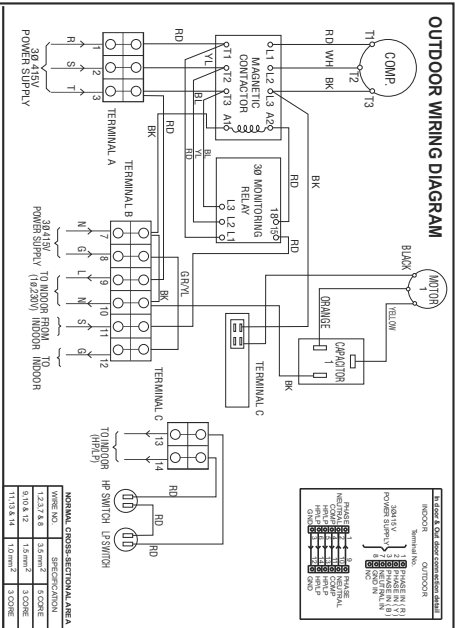


Indoor Motor Connection Detail				
COMMON	WIRE COLOR FOR SPEED		MODEL	LB-60907DC/3 TON
	HI SPEED			
	MEDIUM SPEED			
	LOW SPEED			
OR	BL	BK	YL	LB-60422DC/4 TON
OR	RD	BL	BK	LB-60520DC/5 TON
OR	BL	BK	YL	

NORMAL CROSS-SECTIONAL AREA		
WIRE NO.	SPECIFICATION	
7.8, 9, 10 & 11	3.5 mm ²	5 CORE
1.2 & 6	1.5 mm ²	3 CORE
3.4 & 5	1.0 mm ²	3 CORE

BK	BLACK	OR	ORANGE	BR	BROWN
RD	RED	YL	YELLOW	WH	WHITE
GN/YL	GREEN/YELLOW	BL	BLUE	GN	GREEN

Wiring Diagram
Unit : 36K BTU/H

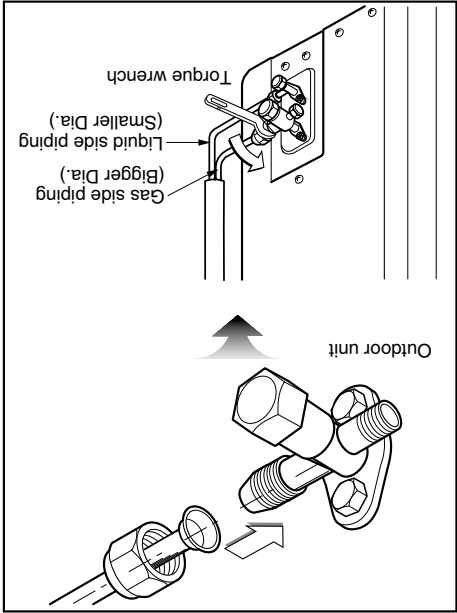


4. Connecting Pipes to the Outdoor Unit

1) Connecting the pipes to the Outdoor unit

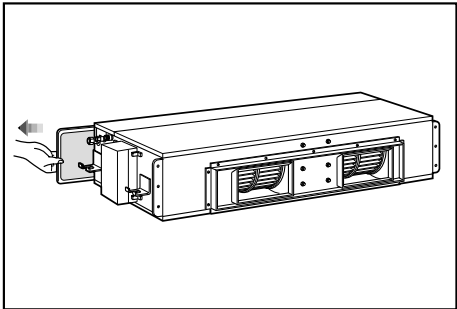
1. Align the center of the piping and sufficiently tighten the flare nut with fingers.
2. Finally tighten the flare nut with torque wrench. When tightening the flare nut with torque wrench, ensure the direction for tightening follows the arrow on the wrench.

Pipe size	Torque
1/4"	1.8kg.m
3/8"	4.2kg.m
1/2"	5.5kg.m
5/8"	6.6kg.m
3/4"	6.6kg.m



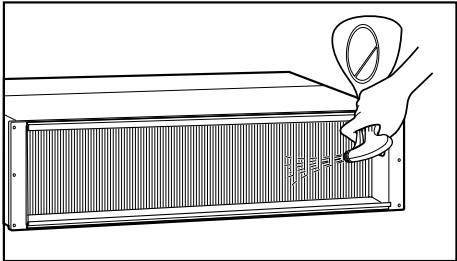
1) Checking the Drainage

1. Remove the Air Filter



2. Check the drainage.

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



6) Pipe bending

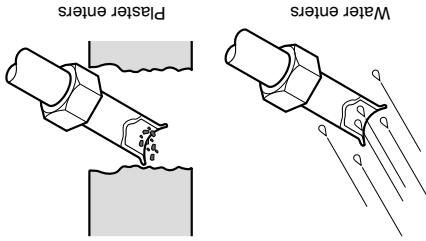
Annealed copper pipe with small diameter (ø6.35 or ø9.52) can be easily bent manually. In this case, secure large R(radius) for the bend section and gradually bend pipe. If annealed copper pipe is large in diameter (ø12.7, ø15.88 or ø19.05), bend pipe with bender. Use bender appropriate for the pipe diameter.

7) Brazing

In refrigerant piping, bending (in particular, acute bending) must be minimized to reduce piping resistance. Bending is, however, necessary in some places by virtue of the installation position of devices or of the building structure, piping distance or finishing appearance. Perform brazing using ready-made elbow. Aside from this function, brazing perform brazing using ready-made elbow. Aside from this function, brazing also serves to connect straight pipes, generally using ready-made sockets. While brazing, protect piping against heat with wet cloth to avoid damaging valve packing or burning thermal insulator with burner heat. While brazing, blow inert gas (nitrogen gas or carbonic gas) to prevent formation of oxidation film in copper piping; otherwise, the refrigerant circuit will clog. The blowing of nitrogen gas (or carbonic gas) through 3-way valves is described in the following:

8) Refrigerant piping(Flare piping)

When connecting piping, be sure to keep piping dry(keep piping away from water), clean (keep piping away from dust) and airtight (avoid refrigerant leakage). When connecting piping on rainy days or making a through-hole in wall, take due care to prevent water or plaster from entering piping.



CAUTION

- This procedure is designed to prevent formation of oxidation film by filling piping with inert gas. Note that excessive gas pressure will generate pinholes at brazed points.
- (Nitrogen gas: Supply pressure 0.05~0.1kg/cm²G)
- When supplying inert gas, be sure to open one end of piping.

3. Connecting Pipes to the Indoor Unit

3-1. Preparation of Piping

Main cause of gas leakage is defect in flaring work. Carry out correct flaring work in the following procedure.

1) Cut the pipes and the cable.

■ Use the accessory piping kit or the pipes

■ Measure the distance between the

indoor and the outdoor unit.

■ Cut the pipes a little longer than

measured distance.

■ Cut the cable 1.5m longer than the pipe

length.

2) Burrs removal

■ Completely remove all burrs from the cut

cross section of pipe/tube.

■ Put the end of the copper tube/pipe to

downward direction as you remove burrs

in order to avoid to let burrs drop in the

tubing.

3) Putting nut on

■ Remove flare nuts attached to indoor

and outdoor units, then put them on

pipe/tube having completed burr

removal.

(Not possible to put them on after flaring

work)

4) Flaring work

■ Carry out flaring work using flaring tool

as shown below.

Outside Diameter	1/4"
	0~0.5
	3/8"
	0.5~0.8
	1/2"
	0.5~0.8
	5/8"
	0.8~1.0
	3/4"
	1.0~1.3

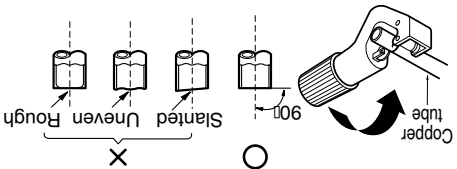
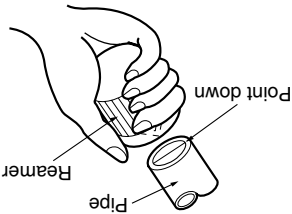
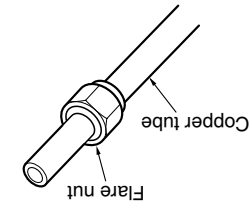
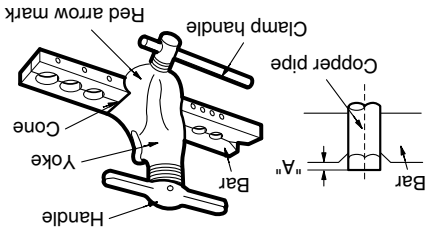
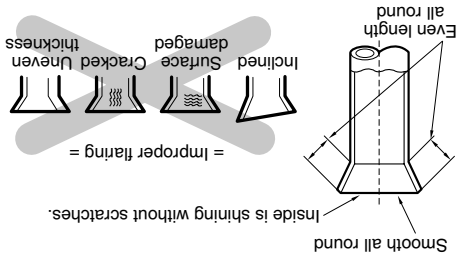
Firmly hold copper tube in a bar(die) as indicated dimension in the table above.

5) Check

⑦ Compare the flared work with figure.

If flare is noted to be defective, cut off

again.



ELECTRICAL WIRING

Perform the electrical wiring work according to the electrical wiring connection.

- All wiring must comply with local requirements.
- Select a power source that is capable of supplying the current required by the air conditioner.
- Use a recognized circuit breaker between the power source and the unit. A disconnection device to adequately disconnect all supply lines must be fitted.
- Capacity of circuit breaker

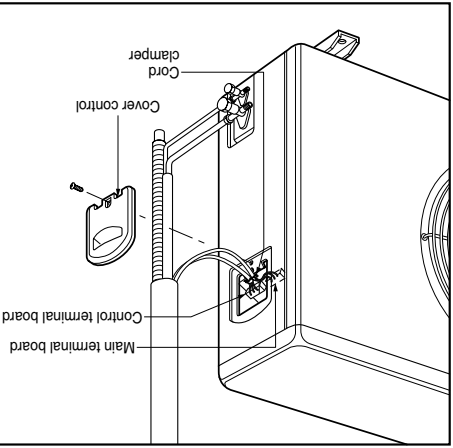
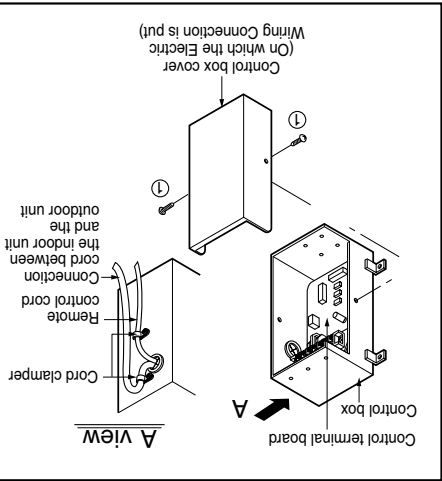
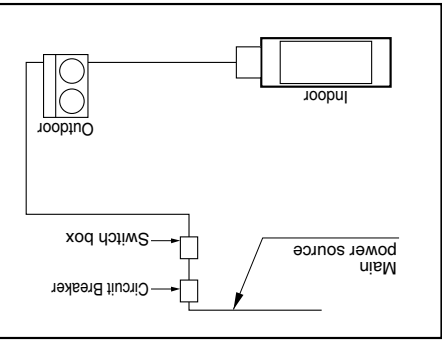
Capacity	MCB Rating (3 Phase)
36K BTU/h	25A
51K BTU/h	32A
66K BTU/h	32A
90K BTU/h	40A
102K BTU/h	50A
132K BTU/h	63A
198K BTU/h	80A
264K BTU/h	125A

WIRING CONNECTION

- Remove the control box cover for indoor and outdoor unit.
(Remove crews)
• Use the cord clamp to fix the cord.

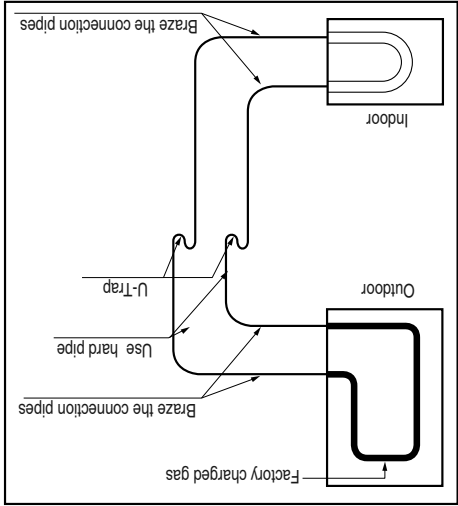
OUTDOOR UNIT

- Remove the control cover for wiring connection.
- Use the cord clamp to fix the cord.
- Earthing work
Connect the cable of diameter $\geq 1.6\text{mm}^2$ or more to the earthing terminal provided in the control box and do earthing.
- ※ Please check !!



REFRIGERANT PIPING

- Braze the joints
- Perform air purge with R-22 or vacuum drying.
- When piping work is finished, check all joints.
- Add refrigerant if piping is over 7.5m. (See page 4 for details)
- U-trap is to be provided for every 5 mtr. increase in the vertical length of the pipe.



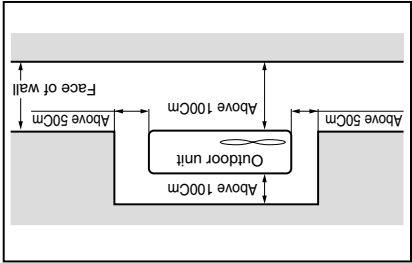
INSTALLATION OF OUT DOOR UNIT

Select a location that satisfies the following conditions. Install the unit firmly in place.

■Select the following location

- A place where the air conditioner can get good ventilation.
- A place where it shall not annoy the neighbors.
- A place where the unit shall be leveled and that can support the weight of unit and withstand its vibrations.

■Keep a maintenance space



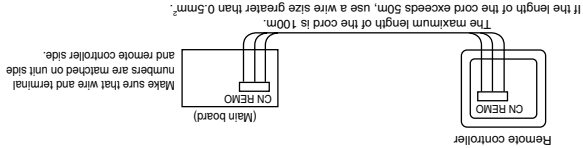
INSTALLATION OF REMOTE CONTROL BOX

Install the remote control box and cord correctly.

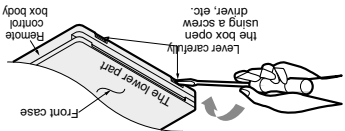
POINT OF REMOTE CONTROLLER INSTALLATION

- Although the room temperature sensor is in the indoor unit, the remote control box should be installed in such places away from direct sunlight and high humidity.
- **ROUTING OF THE REMOTE CONTROL CORD**
 - Keep the remote control cord away from the refrigerant piping and the drain piping.
 - To protect the remote control cord from electrical noise, place the cord at least 5cm away from other power cables.
 - If the remote control cord is secured to a wall, provide a trap at the top of the cord to prevent water droplets from running.
- **INSTALLATION OF THE REMOTE CONTROL BOX**
 - Select places that is not splashed by water.
 - Select control position after receiving customer approval.
 - The room temperature sensor of the thermostat for temperature control is built in the indoor unit.
 - This remote controller equipped with liquid crystal display. If this position is higher or lower, display is difficult to see. (The standard height is 1.2~1.5m high)

ELECTRICAL WIRING TO THE INDOOR UNIT

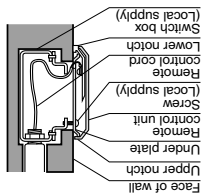


DISASSEMBLING OF THE REMOTE CONTROLLER



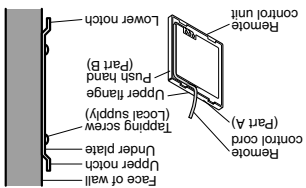
WHEN THE REMOTE CONTROL BOX IS INSTALLED WITH THE CORD BURIED.

- PROCEDURE OF INSTALLATION**
1. Fix the under plate on the switch box by screws(Local supply). In this case, fit the under plate on the wall, and be careful of deformation.
 2. Receive the remote control cord in the switch box.
 3. Hook the remote control unit on the under plate.



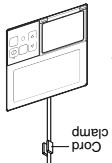
WHEN THE REMOTE CONTROL BOX IS INSTALLED WITH THE CORD EXPOSED.

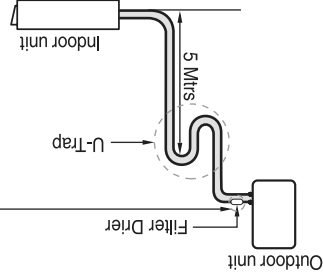
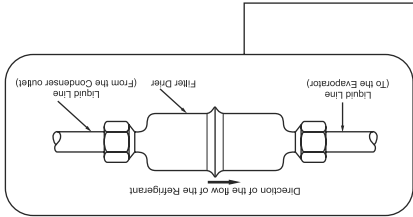
- PROCEDURE OF INSTALLATION**
1. Fix the under plate on the wall by self tapping screws (accessory).
 2. Make a slit (Part A) at the top side of the remote control box by nipper.
 3. Rout the cord as shown in the following figure. In this case, push the cord into the around of case(Part B).
 4. Hook the remote control unit on the under plate.



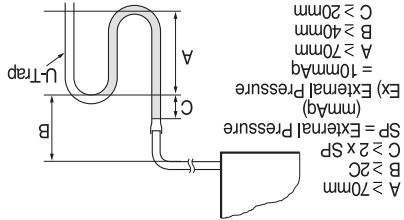
FIXING OF REMOTE CONTROL CORD

1. Fix the cord clamps on the wall by $\phi 3$ tapping screws(Local supply).
2. Fix the remote control cord.





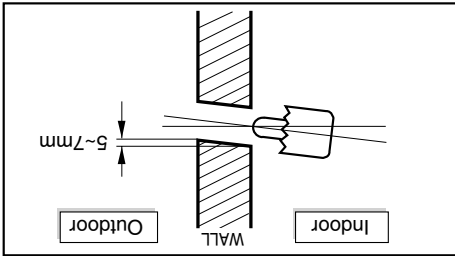
Applied U-Trap Dimension



SP = External Pressure
 C $\geq$ 2 x SP
 B $\geq$ 2C
 A $\geq$ 70mm
 Ex) External Pressure (mmHg)
 = 10mmHg
 A $\geq$ 70mm
 B $\geq$ 40mm
 C $\geq$ 20mm

• For every 5 mtrs. increase in vertical length of the piping, U-Trap is to be provided.

- Drill the piping hole with 70mm dia, hole core drill.
- Piping hole should be slightly slant to the outdoor side.



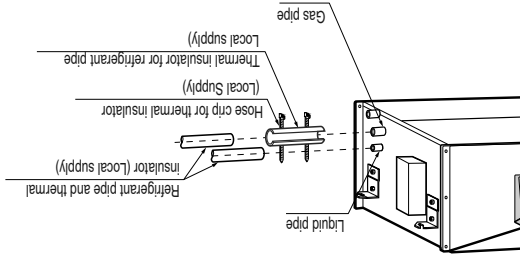
INSULATION, OTHERS

Insulate the joint and tubes completely.

THERMAL INSULATION

All thermal insulation must comply with local requirement.

INDOOR UNIT

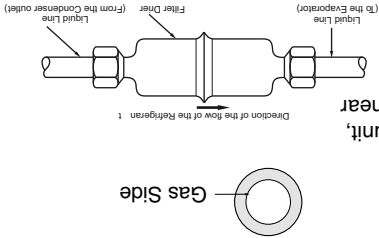


REFRIGERANT PIPE

- Insulate gas side pipe
- No insulation of liquid pipe

Note :

- Filter Drivers, recommended to be used with the unit, are to be fitted in the liquid line using flare nuts, near the respective indoor units at a position where they are accessible for servicing.
- The direction of flow of the refrigerant must match the flow direction indicator on the filter driers.



TEST AND CHECK

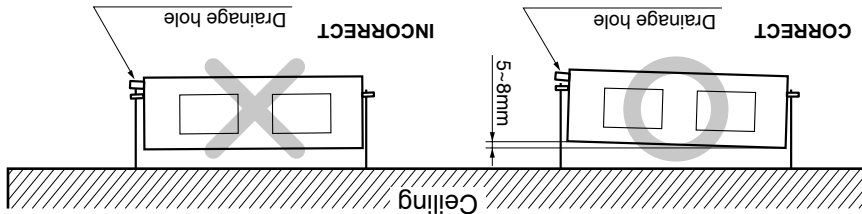
- After all workings are finished, check the working and operation.**
- Air distribution _____ Is the air circulation good?
 - Drain _____ Is the drainage smoothly and no sweating?
 - Gas leakage _____ Is the piping connection correctly?
 - Wiring _____ Is the wiring connection correctly?

CAUTION

1. **Install declination** of the indoor unit is very **important for the drain** of the duct type air conditioner.
2. Minimum thickness of the insulation for the connecting pipe shall be 5mm.

Front of view

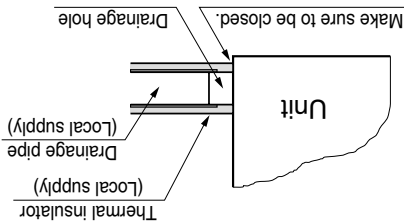
- The unit must be horizontal or declined to the drain hose connected when finished installation.



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 (1/50 to 1/100).
- Prevent any upward flow or reverse flow in any part.
- 5mm or thicker formed thermal insulator shall always be provided for the drain pipe.

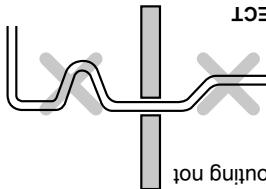


Make sure to be closed.

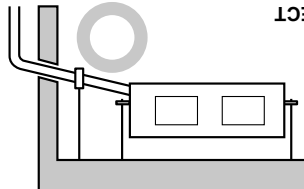
Drainage hole

Thermal insulator
Drainage pipe (Local supply)
Drainage pipe (Local supply)

- Upward routing not allowed

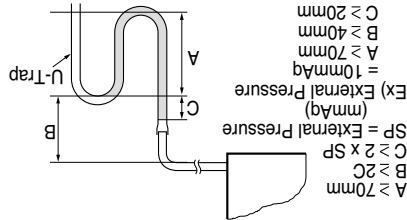


INCORRECT



CORRECT

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

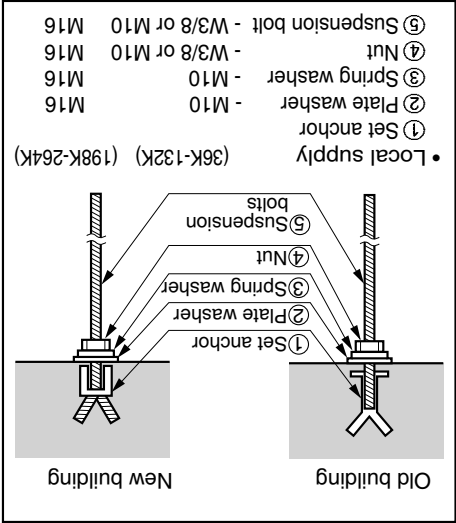
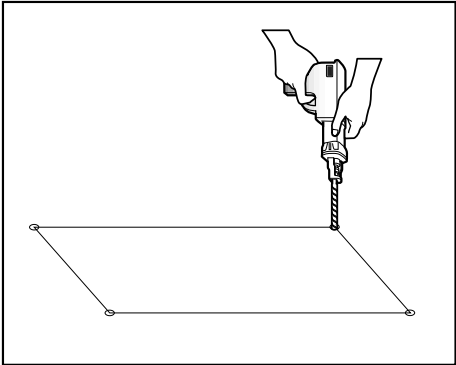


Applied U-Trap Dimension

A $\geq 70\text{mm}$
B $\geq 2\text{C}$
C $\geq 2 \times \text{SP}$
SP = External Pressure
(mmAq)
Ex) External Pressure
= 10mmAq

A $\geq 70\text{mm}$
B $\geq 40\text{mm}$
C $\geq 20\text{mm}$

- 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

Tighten the nut and bolt to prevent unit falling.

2. Indoor unit installation

■ Installation of Unit

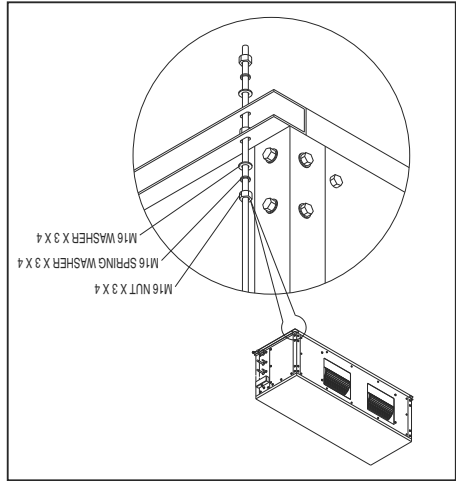
Install the unit above the ceiling correctly.

POSITION OF SUSPENSION BOLT

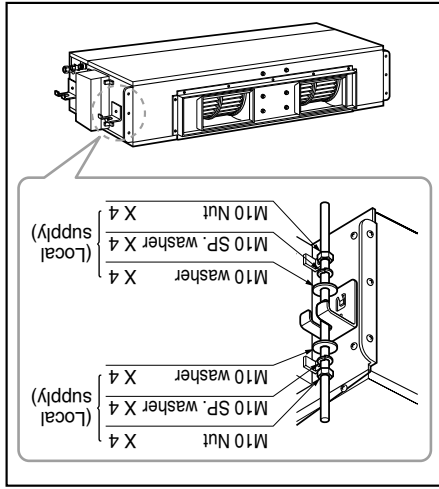
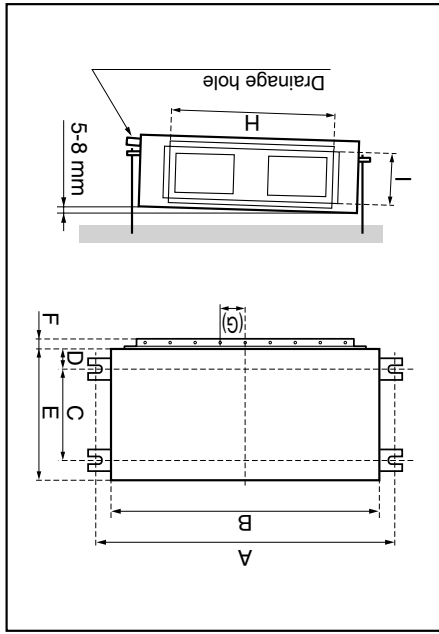
- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.
- Install the unit leaning to a drainage hole side as a figure for easy water drainage.

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.



For 198K-264K



Note: Dirty or clogged coils will reduce the operating efficiency of the system and cause higher operating costs.



Dimension	Capacity	Model	Indoor Unit (mm)		Outdoor Unit (mm)	
			IDU	W	ODU	W
66K BTU/H	LB-R0551QC	1	1230	590	380	899
						355
						1135

Caution: Before performing any maintenance, turn off the main power to the system.

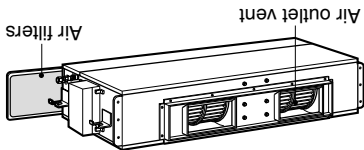
Indoor Unit

Grille, Case, and Remote Control:

- Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

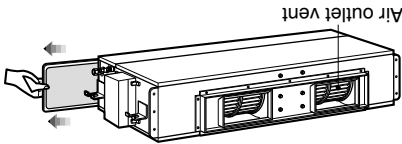
Note:

Supply power must be disconnected before cleaning the indoor unit.



Air Filter:

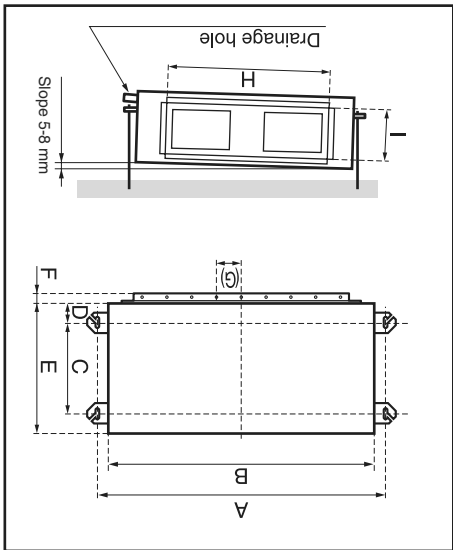
The air filters behind indoor unit (the suction side) should be checked and cleaned once every 2 weeks or more often if necessary.



Indoor Unit Dimensions (mm)

Capacity		66k BTU/H	LB-R05510C
Dimension	Model	A	B
	Capacity	1291	1230
		380	57.5
		590	30
		130	1005
		I	H

- Slope of about 5-8 mm is to be provided at the drain hole side of the indoor unit for proper drainage.
- After installation the slope can be measured using a spirit level.



□ Cleaning Tips:

- 1 Clean the filter with a vacuum or warm, soapy water.
- 2 If very dirty, wash with a solution of detergent in lukewarm water.
- 3 If hot water (50°C or more) is used, filter may be deformed.
- 4 After washing with water, dry well in the shade.
- 5 Re-install the air filter.



- Never use any of the followings:
 - Water hotter than 40°C
 - Could cause deformation and/or discoloration.
 - Volatile substances
 - Could damage the surfaces of the air conditioner.

2. Installation of Indoor, Outdoor Unit

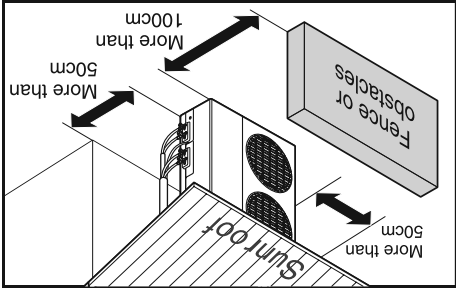
1. Selection of the best location

1) Indoor unit

- Select location
- Install the air conditioner in the location that satisfies the following conditions.
 - 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

2) Outdoor unit

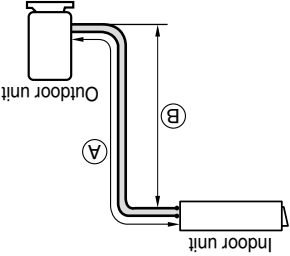
- If an awning is built over the unit to prevent direct sunlight or rain exposure, be careful that heat radiation from the condenser is not restricted.
- There should not be any animals or plants which could be affected by hot air discharged.
- Ensure the spaces indicated by arrows from the wall, ceiling, fence or other obstacles.



3) Piping length and the elevation

Capacity	Indoor Unit (nos)	Indoor Unit (nos)	Pipe Size (Diameter: Ø)	Length A(m)	Elevation B(m)	*Additional refrigerant (g/m)
66k BTU/h	1	1	7/8"	Standard	Standard	5
			1 1/2"	Standard	Max.	10
			7.5	Standard	Max.	30
			7.5	Standard	Max.	70

- Capacity is based on standard length and maximum allowance length is on the basis of reliability.



1. The following should be always observed for safety

- Please report to or take consent by the supply authority before connecting to the system.
- Be sure to read "THE FOLLOWING SHOULD BE ALWAYS OBSERVED FOR SAFETY" before installing the air conditioner.
- Be sure to observe the cautions specified here as they include important items related to safety.
- The indications and meanings are as follows.

Could lead to death, serious injury, etc.	 WARNING
Could lead to serious injury in particular environments when operated incorrectly.	 CAUTION

- After reading this manual, be sure to keep it together with the owner's manual in an accessible place.

WARNING

Do not install it yourself (customer).

- Incomplete installation could cause injury due to fire, electric shock, the unit falling or a leakage of water. Consult the dealer from whom you purchased the unit or special installer.

Install the unit securely in a place which can bear the weight of the unit.

- When installed in an insufficient strong place, the unit could fall causing injured.

Use the specified wires to connect the indoor and the outdoor units securely and attach the wires firmly to the terminal board connecting sections so the stress of the wires is not applied to the sections.

- Incomplete connecting and fixing could cause fire.

Check that the refrigerant gas do not leak after installation is completed.

Attach the electrical part cover to the indoor unit and the service panel to the outdoor unit securely.

- If the electrical part cover if the indoor unit and/or the service panel if the outdoor unit are not attached securely, it could result in a fire or electric shock due to dust, water, etc.

Perform electrical work according to the installation manual and be sure to use an exclusive circuit.

- If the capacity of the power circuit is insufficient or there is incomplete electrical work, it could result in a fire or an electric shock.

Be sure to use the part provided or specified parts for the installation work.

- The use of defective parts could cause an injury or leakage of water due to a fire, electric shock, the unit falling, etc.

CAUTION

Perform the drainage/piping work securely according to the installation manual.

- If there is a defect in the drainage/piping work, water could drop from the unit and household goods could be wet and damaged.

Do not install the unit in a place where an inflammable gas leaks.

- If gas leaks and accumulates in the area surrounding the unit, it could cause an explosion.

OUT-LINE OF INSTALLATION

1.The following should be always observed for safety..... 3

Installation works	Installation Parts	Required tools
--------------------	--------------------	----------------

2. Installation of Indoor, Outdoor Unit..... 4

- 1) Selection of the best location.....4

2) Indoor unit installation.... 5
- Four Type "A" screws
 - Connecting cable
 - Level
 - Screw driver
 - Electric drill
 - Hole core drill (ø70mm)

3. Connecting Pipes to the Indoor Unit.....15

- 1) Preparation of Piping...15
- Pipes: Gas side 3/4", 5/8", 7/8", 1-1/8" • Flaring Tools set
 - Liquid side 1/4", 1/2", 5/8", 3/4" • Pipe is to be used for
 - Insulated drain hose
 - Insulation materials
- installing 5.5 TR

4. Connecting Pipes to the Outdoor Unit.....17

- 1) Connecting the pipes to the Outdoor Unit 17
- Additional Drain hose (inner Dia.....25mm)

5. Checking the Drainage.....17

6. Connecting Cables between Indoor Unit and Outdoor Unit..... 27

- Screw driver

- 1) Connecting cables to the Indoor Unit.....27

2) Connecting cables to the Outdoor Unit 28

3) Form the pipings.....29

7. Air Purging of the Connecting Pipes and the Indoor Unit..... 30

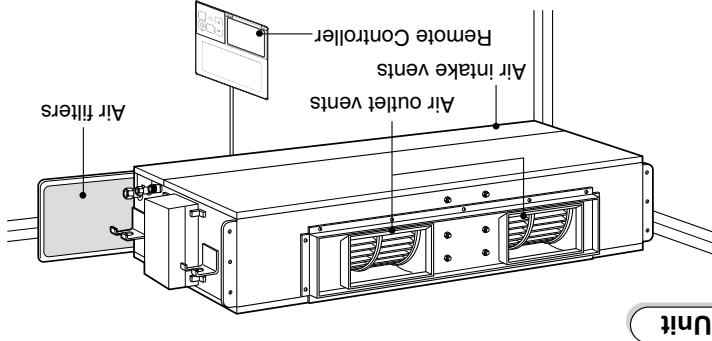
- Hexagonal Wrench (4mm/5mm)
- Gas-leak Detector

8. Group Control 31

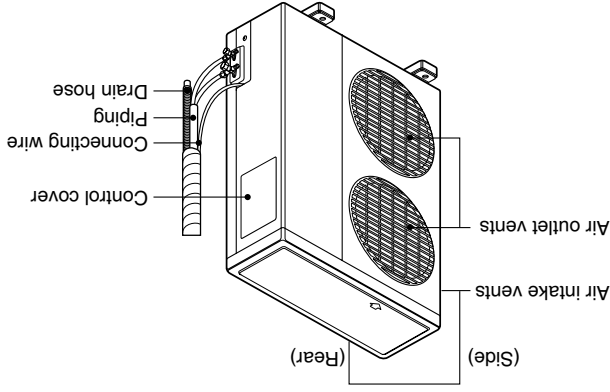
9. Two Thermistor System..... 31

CEILING DUCT TYPE AIR CONDITIONERS INSTALLATION INSTRUCTIONS

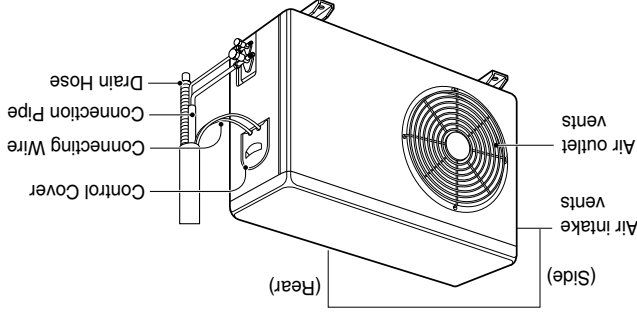
- Please read this instruction sheet completely before installing the product.
- When the power cord is wanted to replace, replacement work shall be performed by authorized personnel only.
- Installation work must be performed in accordance with national wiring standards by authorized personnel only.



Indoor Unit



Outdoor Unit



LG Electronics India Pvt. Ltd.

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