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LG

LG Concealed Duct Air Conditioner

OWNER'S MANUAL

Dear Owner
Thank you for installing LG Air Conditioner. Your best choice guarantees you a great performance and service to make your life comfortable & pleasant.

IMPORTANT

- **Please read this owner's manual carefully and thoroughly before installing and operating your room air conditioner.**
- **Please retain this owner's manual for future reference after reading it thoroughly.**

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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

■ Staple your receipt to this page in the event you need it to prove date of purchase or for warranty issues.

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.

PRECAUTION

- **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 using only genuine replacement parts.**
- **Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.**



Safety Precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

■ Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

⚠ **WARNING**	This symbol indicates the possibility of death or serious injury.
⚠ **CAUTION**	This symbol indicates the possibility of injury or damage.

⚠ WARNING

Always ground the product.

• There is a risk of electric shock.

Do not use a defective or underrated circuit breaker. Use the correctly rated breaker and fuse.

• There is risk of fire or electric shock .

Do not use a multi consent. Always use this appliance on a dedicated cicuit and breaker.

• Otherwise it can cause electric shock or fire.

For electrical work, contact the dealer, seller, a qualified electrician, or an Authorized Service Center. Do not disassemble or repair the product by yourself.

• There is risk of fire or electric shock.

Always ground the product as per the wiring diagram. Do not connect the ground wire to gas or water pipes lightening rod or telephone ground wire.

• 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 due to dust , water etc.

Use the correctly rated breaker or fuse.

• There is risk of fire or electric shock.

Do not modify or extend the power cable. If the power cable or cord has scrathes or skin peeled off or deteriorated then it must be replaced.

• There is risk of fire or electric shock.

For installation, removal or reinstall , 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. Be sure that the installation area does not deteriorate with age.

• It may cause product to fall.

Never install the outdoor unit on a moving base or a place from where it can fall down.

• The falling outdoor unit can cause damage or injury or even death of a person.

When the product is soaked (flooded or submerged) in water , contact an Authorized Service Center for repair before using it again.

• There is risk of fire or eletric shock.

Be sure to check the refrigerant to the used. Please read the label on the product.

• Incorrect refrigerant used can prevent the normal operation of the unit.

Don't use a power cord, a plug or a loose socket which is damaged.

• Otherwise it may cause a fire or electrical shock.

Do not touch , operate, or repair the product with wet hands. Hold the plug by hand when taking out

• There is risk of electric shock or fire.

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

• There is risk of fire and electric shock.

Do not allow water to run into electric parts. Install the unit away from water sources.

• There is risk of fire, failure of the product, or electric shock.

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

• There is risk of fire.

Indoor/outdoor wiring connections must be secured tightly and the cable should be routed properly so that there is no force pulling the cable from the connection terminals.

- Improper or loose connections can cause heat generation or fire.

Safely dispose off the packing materials. Like screws, nails, batteries, broken things etc after installation or svc and then tear away and thraw away the plastic packaging bags.

- Children may play with them and cause injury.

Make sure to check that the power cable plug is not dirty, loose or broken and then only insert the plug completely.

- Dirty, loose or broken power plug can cause electric shock or fire.

In outdoor unit the step-up capacitor supplies high voltage electricity to the electrical components. Be sure to discharge the capacitor completely before conducting the repair work.

- An charged capacitor can cause electrical shock.

When installing the unit, use the installation kit provided with the product.

- Otherwise the unit may fall and cause severe injury.

Be sure to use only those parts which are listed in the svc parts list. Never attempt to modify the equipment.

- The use of inappropriate parts can cause an electrical shock, excessive heat generation or fire.

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

- Oxygen deficiency could occur and hence harm your health.

Do not open the front grille 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.

If strange sounds, smell or smoke comes from product.Immediately turn the breaker off or disconnect the power supply cable.

- There is risk of electric shock or fire.

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

- Oxygen deficiency can occur and hence harm your health.

Turn the main power off and unplug the unit when cleaning or repairing the product.

- There is risk of electric shock.

When the product is not to 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 especially kids could step on or fall onto the outdoor unit.

- This could result in personal injury and product damage.

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 to turn the unit ON/OFF .

- There is risk of fire or electric shock.

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.

⚠ CAUTION

Two or more people must 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.

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

- A bad connection may cause water leakage.

Keep level even when installing the product.

- To avoid vibration or noise.

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

- It may cause a problem for your neighbors and hence dispute.

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

- Low refrigerant levels may cause failure of product.

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 or splashing water 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.

• There is risk of personal injury.

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

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

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

• A dirty filter reduces the efficiency.

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

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

Be cautious when unpacking and installing the product.

• Sharp edges could cause injury.

If the refrigerant gas leaks during the repair, do not touch the leakaing refrigerant gas.

• The refrigernat gas can cause frostbite (cold burn)

Do not tilt the unit when removing or uninstalling it.

• The condensed water inside can spill .

Do not mix air or gas other than the specified refrigerant used in the system .

• If air enters the refrigerant system, an excessively high pressure results, causing equipment damage or injury.

If the refrigerant gas leaks during the installation, ventilate the area immediately.

• Otherwise it can be harmfull for your health.

Dismantling the unit, treatment of the refrigerant oil and eventual parts should be done in accordance with local and national standards.

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 product failure.

Do not recharge or disassemble the batteries. Do not dispose off 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.

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.

Do not expose your skin or kids or plants to the cool or hot air draft.

• This could harm to your health.

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, maintaining or repairing the product at an height.

• Be careful and avoid personal injury.

OPERATING TEMPERATURE(°C) - Non Inverter Model

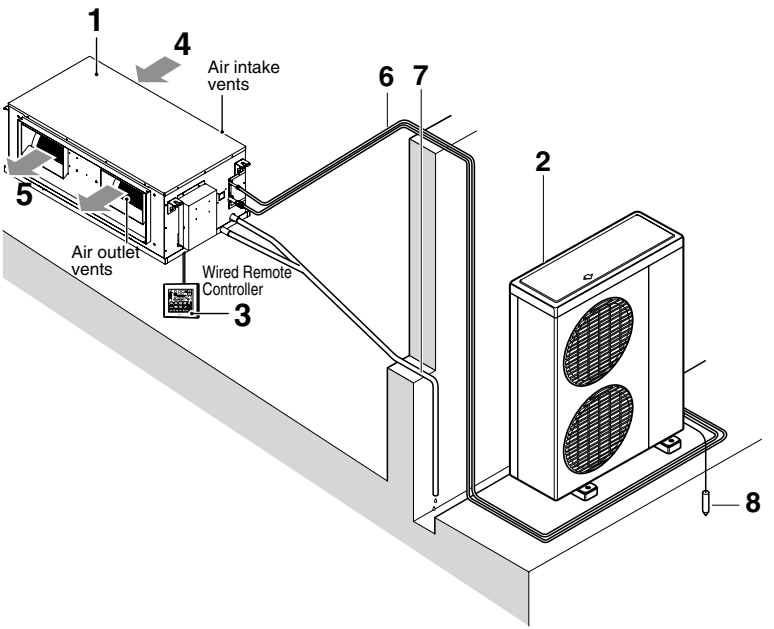
COOLING MODE			
INDOOR		OUTDOOR	
MAX.	MIN.	MAX.	MIN.
32°C	18°C	46°C	21°C
HEATING MODE			
INDOOR		OUTDOOR	
MAX.	MIN.	MAX.	MIN.
30°C	16°C	24°C	-5°C

OPERATING TEMPERATURE(°C) - Inverter Model

COOLING MODE			
INDOOR		OUTDOOR	
MAX.	MIN.	MAX.	MIN.
32°C	18°C	46°C	-10°C
HEATING MODE			
INDOOR		OUTDOOR	
MAX.	MIN.	MAX.	MIN.
30°C	16°C	24°C	-10°C

Product Introduction

Name and function of parts



1: Indoor unit

2: Outdoor unit

3: Wired Remote Controller

4: Inlet air

5: Discharge air

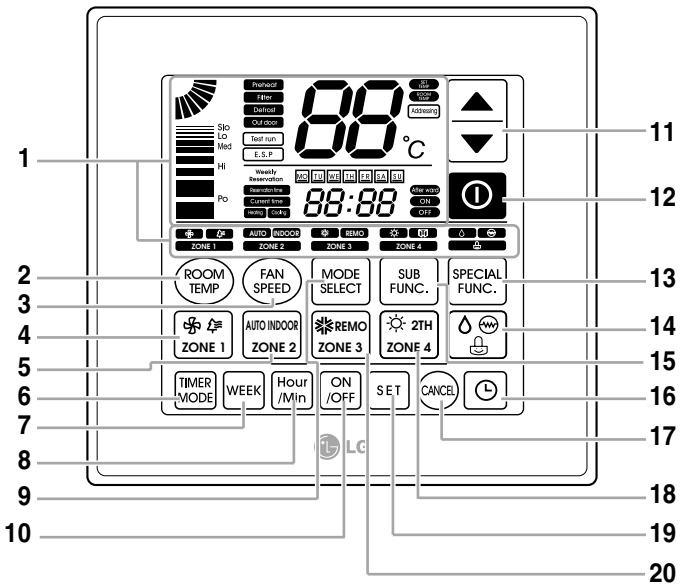
6: Refrigerant piping, connection electric wire

7: Drain pipe

8: Ground wire
wire to ground outdoor unit to prevent electrical shocks.

***The shape of products can be chaged as the model capacity and type.**

Deluxe wired remote controller



1. Operation display panel
2. Room temperature button
3. Fan speed button
4. Fan/ Plasma/ Zone1 button
5. Auto/ Indoor/ Zone2 button
6. Timer mode button
7. Date selection button
8. Hour/Minute button
9. Mode selection button
10. On/Off button for reservation
11. Temperature control button
12. On/Off button
13. Special function button
14. Dehumidification/ Heater/ Child lock button
15. Sub function button
16. Easy reservation button
17. Cancel button
18. Heating/ Two thermistor/ Zone4 button
19. Setting button
20. Cooling/ Remo/ Zone3 button

Each function will be shown on the display panel for three second or so when the initial power is on.

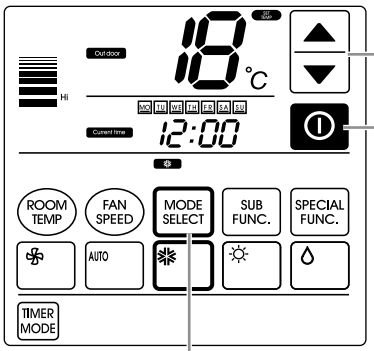
The analog panel enables you to use the remote controller with a touch of your own finger without pressing any extra button.

However, if you press more than one button at the same time, it may cause malfunction.

The above picture differ from model to model.

Owner's Instruction

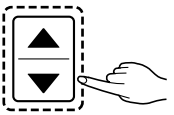
Cooling Mode



1 Press the ⏻ button and then press the ❄ button.



2 Press the ▲▼ button and set the expected temperature lower than the current room temperature. (18~30°C)

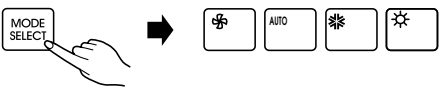


A click of the button will increase the expected temperature by 1°C

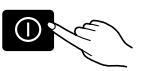
A click of the button will decrease the expected temperature by 1°C.

If the expected temperature is set higher than the current room temperature, the cooling function will not begin and just the blowing operation will continue.

3 Press the MODE SELECT button and choose one of the functions among ❄, AUTO, ☼, and 💧 if you want another operation mode during the operation.



4 If you press the ⏻ button, the cooling mode will stop.

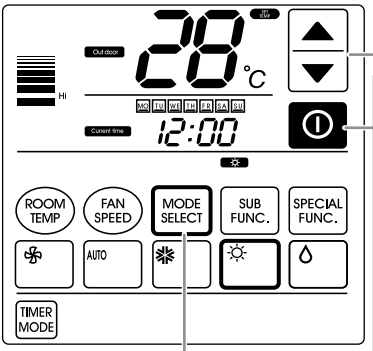


What is the three-minute delay function?

The function to protect the compressor delays the output of cool air when operating instantly after interrupting the cooling mode .
Cooling mode restarts after 3 minutes when the compressor starts to operate.

- You can choose the expected temperature from 18˚C to 30˚C.
- It is recommended that the ideal difference of the temperature between indoors and outdoors should be less than 5°C.

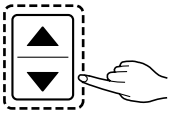
Heating Mode



1 Press the ⏻ button and then press the ☼ button.



2 Set the expected room temperature higher than the current room temperature. (16~30°C)

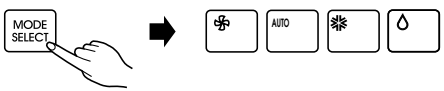


A click of the button will increase the expected temperature by 1°C

A click of the button will decrease the expected temperature by 1°C.

* If the expected temperature is set lower than the current room temperature, the heating operation will not begin and just the blowing operation will continue.

3 Press the MODE SELECT button and choose one of the functions among ❀, AUTO, ❄, and 💧 if you want another operation mode during the operation.



4 If you press the ⏻ button, the heating operation will stop.

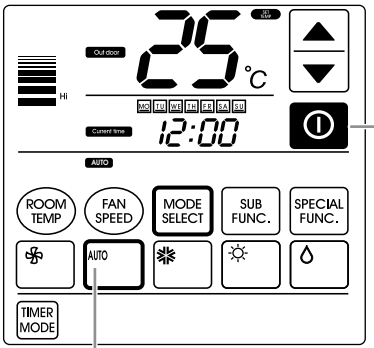


What is the three-minute delay function?

It will take a time for the product to blow warm air. The delay is just to protect the compressor.
The room will be heated with warm air after three minutes when the compressor begins operation.

■ The cooling-only model will not do heating function.

Auto Changeover Mode

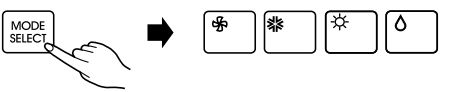


1 Press the ⏻ button and then press the AUTO button.

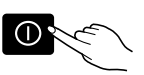


2 When the expected temperature is lower than the room temperature : Cooling Mode.
When the expected temperature is higher than the room temperature : Heating Mode

3 Press the MODE SELECT button and choose one of the functions among ❄, ❄, ☼, and 💧 if you want anotheroperation mode during the operation.

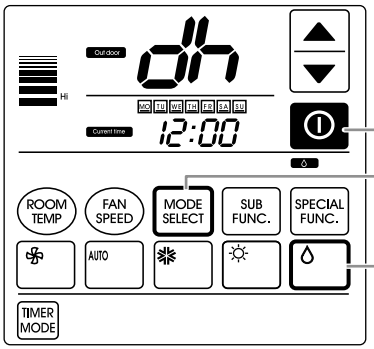


4 If you press the ⏻ button, the cooling mode will stop.



Dehumidification Mode

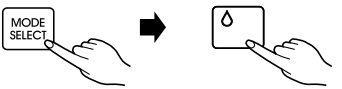
Dehumidification operation: Dehumidification by lowering temperature slightly



1 Press the ⏻ button on the remote controller.

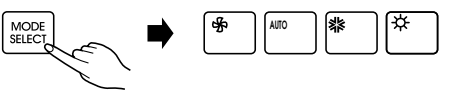


2 Select the dehumidification function by pressing the MODE SELECT button and the 💧 button.



3 When the dehumidification is being done, ”dh” will be shown on the display panel

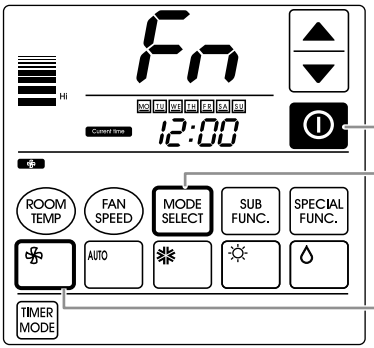
4 Press the MODE SELECT button and choose one of the functions among 🌀, AUTO, ❄, and ☼ if you want another operation mode during the operation.



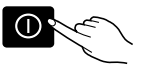
If used during the rainy season or high humidity, you can have both of effective dehumidifying and air conditioning effect.

❊ Temperature control is not available in the dehumidification operation.

Fan Mode



1 Press the ⏻ button on the remote controller.

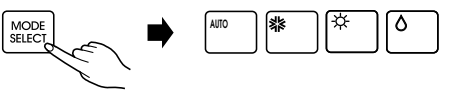


2 Select the fan function by pressing the MODE SELECT button and 🌀 button.



3 When the fan is being done, "Fn" will be displayed on the display panel.

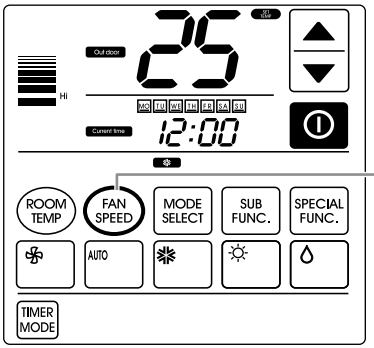
4 Press the MODE SELECT button and choose one of the functions among AUTO, ❄, ☼, and 💧 if you want another operation mode during the operation.



- When fan mode is operated, the outdoor compressor doesn't work.
- FAN operation doesn't bring out cold air but air from regular fan comes out.
- Have a function to circulate the indoor as it sends out the air that doesn't have much temperature difference with indoor.

Fan Speed Selection

You can easily control the fan speed.

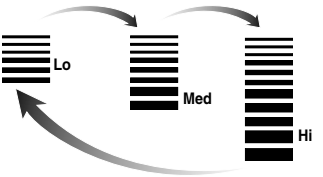


1 Select the proper fan speed which you want by pressing the (FAN SPEED) button on the remote controller.



- If you press the (FAN SPEED) button, the strength of the fan speed will change in the order of Low → Med →Hi .
- If the product is not compatible with the fan speed control, it will not function as your selection.

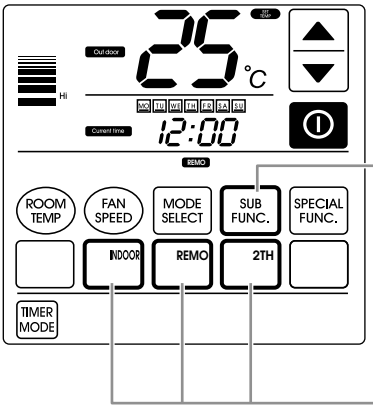
Fan Speed Selection



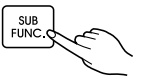
- If the indoor unit is compatible with the slo fan speed, you can adjust the air flow slow level.

Sub Function

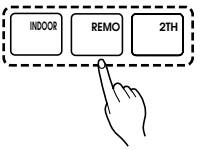
Thermistor



1 Press the SUB FUNC. button on the remote controller.



2 Set thermistor mode by pressing INDOOR, REMO, 2TH button.



Selected button	Function
INDOOR	Operation in indoor unit temperature sensor.
REMO	Operation in remote controller temperature sensor.
2TH	• Cooling Mode:Operating lower temperature sensor comparing the Remote Controller and Indoor Unit(or Remote Sensor) temperature. • Heating Mode:Operating higher temperature sensor comparing the Remote Controller and Indoor Unit(or Remote Sensor) temperature

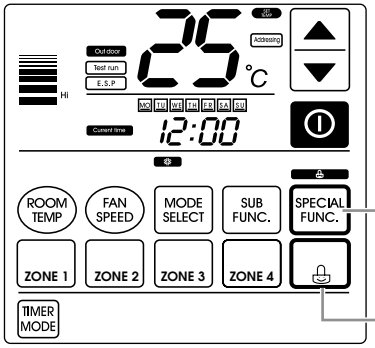
* System will use value that sensed indoor unit or remote controller.

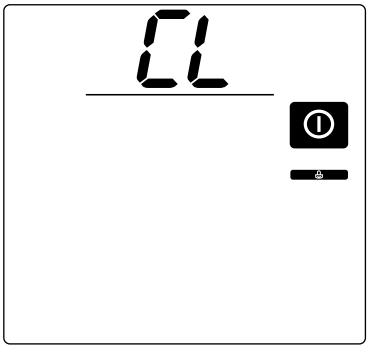
Special Function

This is a function to prevent tampering of settings by children or others.

Child Lock

You can use the child lock function.

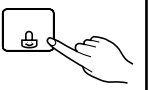




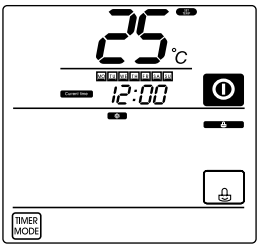
1 Press the SPECIAL FUNC. button of the remote controller.



2 Press button.



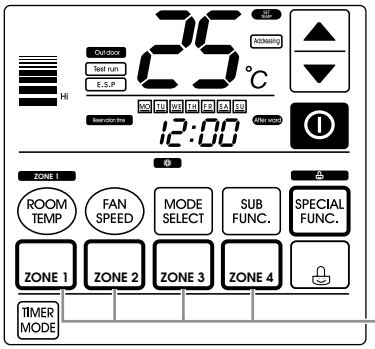
- A click of the child lock button will turn on/off the indicator.
- If you press another button while adjusting child lock function, the temperature display will show CL for three seconds and then the operation will come back to the original mode.
- If you want use the child lock function in off mode, select child lock and press the button within three seconds.



- If you want to cancel the child lock function in the off mode, just press button.

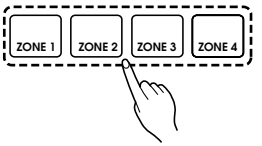
Damper control function

You can control zones when you've installed the Damper controller new type.



1 Press the SPECIAL FUNC. button.

2 Press ZONE 1, ZONE 2, ZONE 3, ZONE 4 button.



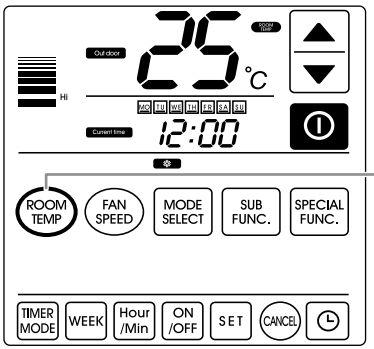
then select zone is displayed.

ZONE 1 ZONE 2 ZONE 3 ZONE 4

- A click of the desired zone will turn on/off it's indicator.
- At least one zone always is to be left on.
  This will not allow you to turn off the last zone operating.

❊ It can be activated from zone1 to zone 4 in the remote screen even if you do not use Damper Controller.

Room Temperature Check

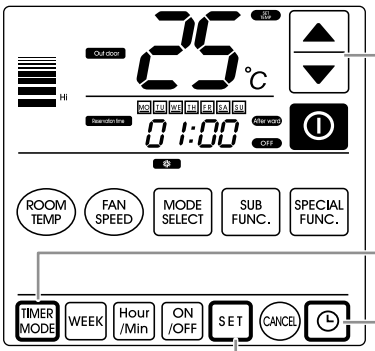


1 If you press ROOM TEMP button on the remote controller, the indoor temperature displays for 5 seconds. The display goes to a previous screen after 5 seconds.
Room temperature value is based on thermistor setting.



❊ 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.

Simple Reservation



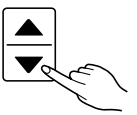
1 Press TIMER MODE button on the remote controller.



2 Press easy button.



3 You can change the values by pressing the control buttons. Choose a desired reservation time.



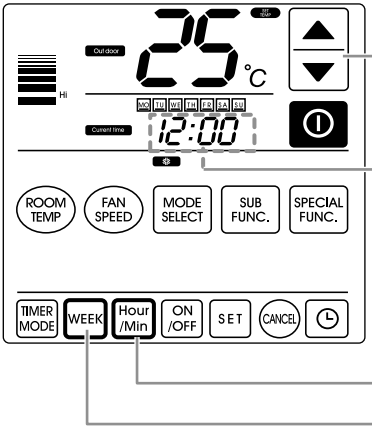
4 By pressing the SET button, set your simple reservation time turn-on reservation can be set only when not in operation
- You can set reservation from 1 to 24 hours



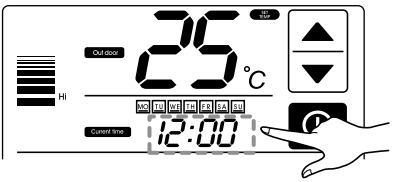
5 Turn-off reservation can be set only when in operation Turn-on reservation can be set only when in off mode.

- If turn-on reservation was set, it will start operating after the set time After work ON
- Turn-off reservation was set, it will stop operating after the set time After work OFF
- Excessive use of air conditioning is bad for your health. Please set a moderate amount of time for your reservation.
- It works deluxe wired remote controller's reservation time, if preset time by wrieless and deluxe wired remote controller at the same time .

Setting the current time



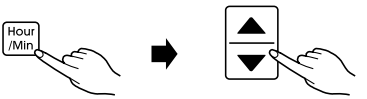
1 You can set the current time by pressing the time display.
When the time display is selected, a window for date and time setting shows up.



2 Press the WEEK button.
If you press the WEEK button, the day of the week will flash. Then you can choose the proper day in the order of Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday.



3 If you press the Hour /Min button, the hour digits will flash so that you can adjust it by pressing the ▲▼ button. If you press the Hour /Min button one more time, the minute digits will flash. You can adjust it by pressing the ▲▼ button.

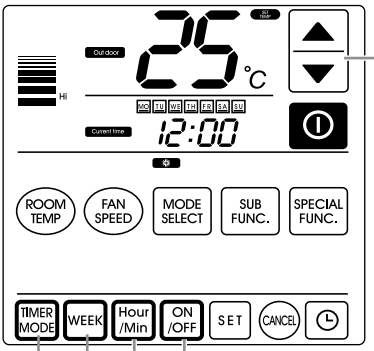


4 After adjusting time, press the SET button so that the current configuration can be saved.



Weekday reservation

Weekday reservation is the function to set the time to turn on and off for each day during the week from monday through sunday.



1 Press the TIMER MODE button on the control panel of the remote controller.



2 Select the day of week to set using the WEEK button.



3 After pressing the ⏻ button decide the time to turn off the air conditioner using the ON /OFF button.

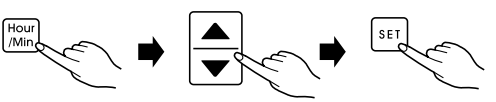
If the off icon blinks for a while and then stops on the time display panel, it is successfully set.



4 After selecting the day of week, select the time to turn on the product using the Hour /Min button.

Press the Hour /Min button one more time to set the minute using the ▲▼ button and press the SET button.





5 To set for other days of the week, press the WEEK button and set the time in the same procedure.
Press the TIMER MODE button to exit the reservation mode.



6 To cancel the weekday reservation function, press the CANCEL and then cancel.

If you see an outline box around the day of week, it means that time to start and end have been set. When selecting the reservation mode, other function button cannot be entered.

- It works deluxe wired remote controller's reservation time, if preset time by wrieless and deluxe wired remote controller at the same time .

Maintenance and Service

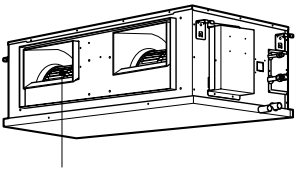
Indoor Unit

Grille, Case and Remote Control

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

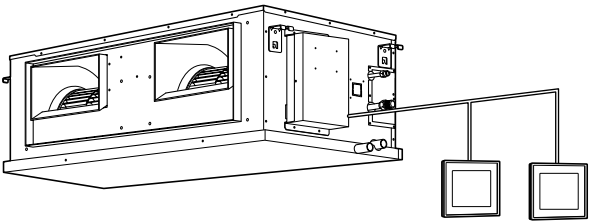
NOTE

Supply power must be disconnected before cleaning the indoor unit.



Two wired remote controller

- All wired remote controllers are displayed on identical information.
- Last used wired romote controller has priority on product's movement.



Call the service immediately in the following situations

1. Anything abnormal such as burning smell, loud noise etc. happen. Stop the unit and turn the breaker off. Never try to repair by yourself or restart the system in such cases.
2. Main power cord is too hot or damaged.
3. Error code is generated by self diagnosis.
4. Water leaks from indoor unit.
5. Any switch, breaker (safety, earth) or fuse fails to work properly

User must carry routine checkup & cleaning to avoid unit's poor performance.
In case of special situation, the job must be carried out by the only service person.

Operation Tips!

Do not overcool the room.

This is not good for the health and wastes electricity.

Keep blinds or curtains closed.

Do not let direct sunshine enter the room when the air conditioner is in cooling operation.

Make sure that the doors and windows are shut tight.

Avoid opening doors and windows as much as possible to keep the air conditioned air in the room.

Ventilate the room occasionally.

Since windows are kept closed, it is a good idea to open them and ventilate the room from time to time.

Filter

The units shipped without a filter and is the responsibility of the installer to secure a filter in the return air ductwork.

Filter must always be used and must be kept clean.

When filters become dirt laden, insufficient air will be delivered by the blower, decreasing your units efficiency and increasing operating costs and wear-and-tear on the units and controls.

Filters should be checked monthly especially since the unit may be used for both heating and cooling

When the air conditioner is not going....

When it is not going to be used for a long time.

1 Operate the air conditioner on Air circulation mode for 2 to 3 hours.
  • This will dry out the internal parts.

2 Turn off the circuit breaker.

CAUTION: Turn off the circuit breaker when the air conditioner is not going to be used for a long time.
Dirt may collect and may cause a fire.

3. Remove the batteries from the Remote Controller.

When the air conditioner is to be used again.

■ Check that the air inlet and outlet of the indoor/outdoor unit are not blocked.

Troubleshooting Tips! Save time and money!

Check the following points before requesting repairs or service.... If the malfunction persist, please contact your dealer.

Case	Explanation	See page
The air conditioner does not operate.	• Have you made a mistake in timer operation?	17
	• On first starting, the indoor unit operates in fifteen seconds.	
	• Has the fuse blown or has the circuit breaker been tripped?	
The room has a peculiar odor.	• Check that this is not a damp smell exuded by the walls, carpet, furniture or cloth items in the room.	-
It seems that condensate is leaking from the air conditioner.	• Condensation occurs when the airflow from the air conditioner cools the warm room air.	-
Air conditioner does not operate for about 3 minutes when restart.	• This is the protector of the mechanism.	-
	• Wait about three minutes and operation will begin.	
Does not cool or heat effectively.	• Is the air filter dirty? See air filter cleaning instructions.	-
	• The room may have been very hot when the room air conditioner was first turned on. Allow time for it to cool down.	
	• Has the setting temperature been set incorrectly?	8, 9
	• Are the indoor unit's air inlet or outlet vents obstructed?	
The air conditioner operation is noisy.	• For a noise that sounds like water flowing. -This is the sound of freon flowing inside the air conditioner unit. • For a noise that sounds like the compressed air releasing into atmosphere. -This is the sound of the dehumidifying water being processed inside the air conditioning unit.	-
Crack sound is heard.	• This sound is generated by the expansion/contraction of the inlet grille, etc. due to changes of temperature.	-
Remote control display is faint, or no display at all.	• Has the circuit breaker been tripped?	-



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