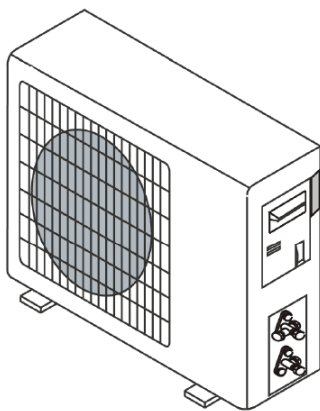




Mini Split Air Conditioner



Instruction Manual











Model: CL-09HA1, CL-12HA1









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In line with the company's policy of continual product improvement, the aesthetic and dimensional characteristics, technical data and accessories of this appliance may be changed without notice.


SAFETY RULES AND RECOMMENDATIONS FOR INSTALLATION


-  Read this guide before installing and using the appliance.
-  Restrict children's access to the work area during the installation of indoor and outdoor units to prevent unforeseen accidents.
-  Make sure that the base of the outdoor unit is firmly secured.
-  Ensure that air is unable to enter the refrigerant system and inspect for refrigerant leaks when relocating the air conditioner.
-  Run a test cycle after installing the air conditioner and record the operating data.
-  The user should safeguard the indoor unit using a fuse with an appropriate capacity matching the maximum input current or utilize another overload protection device.
-  Verify that the main voltage matches the specification on the rating plate. Keep the switch or power plug free of dirt. Insert the power plug accurately and securely into the socket to prevent the potential hazards of electric shock or fire caused by inadequate contact.
-  Check that the socket is suitable for the plug, otherwise have the socket changed.
-  The appliance should have a disconnection mechanism from the main power supply. This mechanism should include contact separation in all poles, ensuring complete disconnection under overvoltage category III conditions. Additionally, these disconnection features must be integrated into the fixed wiring in adherence to wiring rules.
-  The air conditioner must be installed by professional or qualified person.


-  Avoid installing the appliance within a distance less than 20 inches from flammable substances such as alcohol and pressurized containers like spray cans.
-  When using the appliance in areas without ventilation options, take precautions to prevent any refrigerant gas leaks. This is essential to avoid the accumulation of gas in the environment, which could pose a fire hazard.
-  Dispose of the packaging materials in separate waste bins as they are recyclable. At the end of the air conditioner's lifespan, take it to an authorized waste collection center for proper disposal.
-  Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition and situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation, and maintenance.
-  The appliance must be installed in accordance with applicable national regulations.
-  Disconnect all power circuits from the power supply before accessing the terminals.
-  Installation must be performed in accordance with the requirements of NEC and CEC by authorized personnel only.
-  This appliance is suitable for use by individuals aged 8 years and older, as well as individuals with reduced physical, sensory, or mental capabilities or those lacking experience and knowledge, provided they have received supervision or instruction on the safe use of the appliance and understand the associated hazards. Children should not play with the appliance, and cleaning or user maintenance tasks should not be undertaken by children without supervision.


SAFETY RULES AND RECOMMENDATIONS FOR THE USER


 Do not try to install the air conditioner alone; always contact specialized technical personnel.


 Specialized technical personnel should conduct cleaning and maintenance tasks. Always disconnect the appliance from the mains electricity supply before initiating any cleaning or maintenance procedures.


 Verify that the mains voltage matches the specification on the rating plate. Keep the switch or power plug free of dirt. Insert the power plug accurately and securely into the socket to prevent the potential hazards of electric shock or fire caused by inadequate contact.


 Avoid pulling out the plug to switch off the appliance while it is in operation, as this action could generate a spark and potentially lead to a fire or other hazards.


 This appliance has been made for air conditioning domestic environments and must not be used for any other purpose, such as for drying clothes, cooling food, etc.


 Dispose of the packaging materials in separate waste bins as they are recyclable. At the end of the air conditioner's lifespan, take it to an authorized waste collection center for proper disposal.


 Always operate the appliance with the air filter installed. Using the air conditioner without the air filter may result in an excessive buildup of dust or debris on the internal components, potentially leading to subsequent malfunctions.


 The user is accountable for hiring a qualified technician to install the appliance. The technician should ensure that the appliance is properly grounded according to current regulations and install a thermomagnetic circuit breaker.


 Dispose of the batteries in the remote control through proper recycling methods. For the disposal of scrap batteries, discard them as sorted municipal waste at the accessible collection point.


 Avoid prolonged exposure to the direct flow of cold air, as it can be potentially harmful to your health. Exercise caution in rooms where there are children, elderly individuals, or individuals with health conditions.


 If the appliance emits smoke or there is a burning smell, promptly disconnect the power supply and get in touch with an authorized service center.


 The prolonged use of the device in such conditions could cause fire or electrocution.


 Have repairs carried out only by an authorized Service Center. Incorrect repair could expose the user to the risk of electric shock, etc.

 Disconnect the automatic switch if you anticipate not using the device for an extended period. Ensure the proper adjustment of the airflow direction.

 The flaps must be directed downwards in the heating mode and upwards in the cooling mode.

 Follow the instructions provided in this booklet for using the air conditioner. Note that these instructions may not cover every conceivable condition or situation. Therefore, exercise common sense and caution in the installation, operation, and maintenance of the appliance, as is prudent with any electrical household device.

 Make sure to disconnect the appliance from the power supply if it remains inactive for an extended period and before conducting any cleaning or maintenance procedures.

 Selecting the most suitable temperature can prevent damage to the appliance.

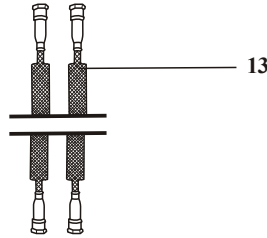
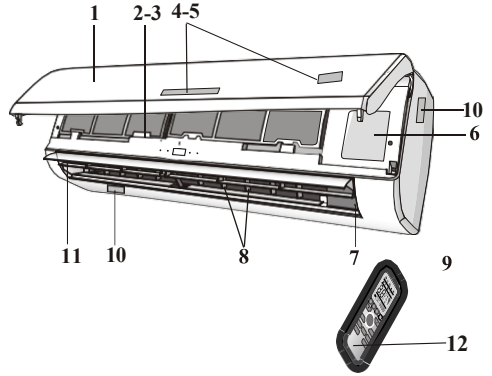
SAFETY RULES AND PROHIBITIONS

- ⊖ Avoid bending, tugging, or compressing the power cord, as this may lead to damage. A damaged power cord can result in electrical shocks or fire. Only specialized technical personnel should replace a damaged power cord.
- ⊖ Do not use extension cords or surge protectors.
- ⊖ Do not touch the appliance when barefoot or parts of the body are wet or damp.
- ⊖ Avoid blocking the air inlet or outlet of both the indoor and outdoor units. Obstructing these openings can lead to a decrease in the operational efficiency of the air conditioner, potentially causing failures or damage.
- ⊖ In no way alter the characteristics of the appliance.
- ⊖ Do not install the appliance in environments where the air could contain gas, oil, or sulfur or near sources of heat.
- ⊖ This appliance is not meant for use by individuals (including children) with diminished physical, sensory, or mental capabilities or those lacking experience and knowledge, unless they are under the supervision or instruction of a person responsible for their safety.
- ⊖ Do not climb onto or place any heavy or hot objects on top of the appliance.
- ⊖ Do not leave windows or doors open when the air conditioner is operating.
- ⊖ Do not direct the airflow onto plants or animals.
- ⊖ A long direct exposition to the flow of cold air of the conditioner could have negative effects on plants and animals.
- ⊖ Do not put the conditioner in contact with water. The electrical insulation could be damaged and thus causing electrocution.
- ⊖ Do not climb onto or place any objects on the outdoor unit.
- ⊖ Never insert your finger, a stick, etc., into the air inlet / outlet. Doing so could cause injury.
- ⊖ Supervise children to prevent them from playing with the appliance. If the supply cord is damaged, it should be replaced by the manufacturer, its service agent, or similarly qualified individuals to avoid potential hazards.

PARTS

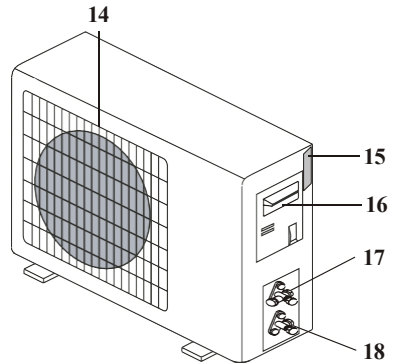
INDOOR UNIT

No.	Description
1	Front Panel
2	Air filter
3	Optional Filter (if installed)
4	LED Display
5	Signal Receiver
6	Terminal Block Cover
7	Ionizer Generator (if installed)
8	Deflectors
9	Emergency button
10	Indoor Unit Rating Label (position may vary)
11	Airflow Direction Flaps
12	Remote Control



OUTDOOR UNIT

No.	Description
13	Pipe Connections (optional)



OUTDOOR UNIT

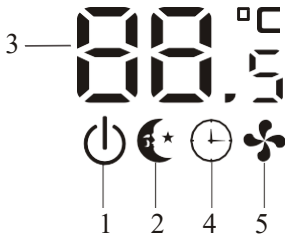
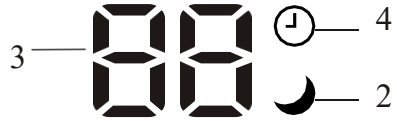
No.	Description
14	Air Outlet Grille
15	Outdoor Unit Rating Label
16	Cover
17	Gas Valve
18	Liquid Valve

WALL AIR-CONDITIONER

- The air conditioner consists of two or more units interconnected by copper pipes (appropriately insulated) and an electrical connecting cable.
- The indoor unit is installed on the walls of the room to be conditioned.
- The outdoor unit is installed on the floor or on the wall on suitable brackets.
- Technical data of the air conditioner are printed on the labels placed on the indoor and outdoor units.
- The remote control has been designed for easy use.

Note: The figures above are intended to serve as basic diagrams of the appliance and may not accurately represent the appearance of the purchased unit.

INDOOR UNIT DISPLAY



No.	Led		Function
1	POWER		The symbol appears when power on.
2	SLEEP		SLEEP mode
3	Temperature display (if present) /Error code		(1) Lights up during Timer operation when the air conditioner is operational. (2) Displays the malfunction code when fault occurs.
4	TIMER		Lights up during Timer operation.
5	RUN		The symbol appears when the unit is turned on and disappears when the unit is turned off.

The shape and position of switches and indicators may be different according to the model, but their function is the same.

According to the model, it may only show 2 numbers on the indoor display though there are 3 numbers on display of the remote controller. (Example: it is 28.5 on the display of the remote controller but 28 on the indoor display.)

EMERGENCY FUNCTION & AUTO-RESTART FUNCTION


EMERGENCY FUNCTION

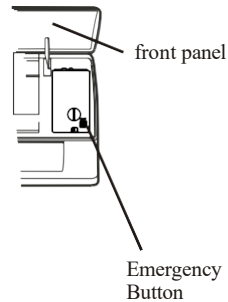
In case of remote-control failure or the need for maintenance, follow these steps:

1. Open and lift the front panel to an angle where you can access the emergency button.
2. For heating models:
 - Press the emergency button for the first time to activate the COOL mode.
 - Press the emergency button a second time within 3 seconds to switch to HEAT mode.
 - Press the emergency button a third time after 5 seconds to turn off the unit.
3. For cooling-only models:
 - Press the emergency button for the first time to activate the COOL mode.
 - Press the emergency button again to turn off the unit.

AUTO-RESTART FUNCTION


The appliance comes with a built-in auto-restart function. If there is an abrupt power failure, the module will remember the settings before the power outage. Upon power restoration, the unit will automatically restart, retaining the previous settings stored in its memory.


 *The shape and position of the emergency button may be different according to the model, but their function is the same.*





The emergency button is located on E-box cover of the unit under the front panel.

REMOTE CONTROL (ILLUSTRATION ON PAGE 8)

No.	Button	Function
1		To turn on/off the air conditioner.
2	∨	To decrease temperature, time setting or choose the function.
3	∧	To increase temperature, time setting or choose the function.
4	MODE	To select the mode of operation (AUTO, COOL, DRY, FAN, HEAT).
5	ECO	To activate/deactivate the ECO function.
6	TURBO	To activate/deactivate the Super function which enables the unit to reach the preset temperature in the shortest time.
7	FAN	To select the fan speed of auto/low/mid/high.
8	TIMER	To set the automatic switch-on/off time.
9	SLEEP	To switch-on/off the function SLEEP.
10	DISPLAY	To switch-on/off the LED display.
11	SWING	To switch-on/off the auto-swing function of the flaps.
12	MUTE	To switch-on/off the Mute function.
13	I FEEL	To switch-on/off the follow me function.
14	AH	To switch-on/off the 8 C heating function.

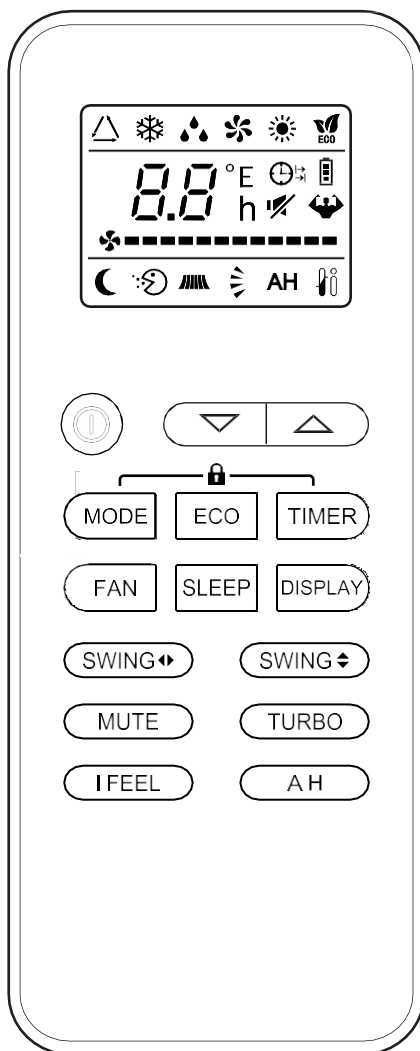
 *The display and some functions of the remote control may vary according to the model.*

 *The shape and position of buttons and indicators may vary according to the model, but their function is the same.*

 *The unit confirms the correct reception of each button with a beep.*

REMOTE CONTROL

















- ⚠ The display and some functions of the remote control may vary according to the model.
- ⚠ The shape and position of buttons and indicators may vary according to the model, but their function is the same.
- ⚠ The unit confirms the correct reception of each button with a beep.



REMOTE CONTROL

Remote control DISPLAY

Meaning of symbols on the liquid crystal display

No.	Symbols	Meaning
1		Battery indicator
2		Auto Mode function indicator
3		Cooling Mode indicator
4		Dry Mode indicator
5		Fan only Mode indicator
6		Heating Mode indicator
7		ECO Mode indicator
8		Timer indicator
9		Temperature indicator
10		Fan speed indicator: Auto/low/mid/high
11		Mute function indicator
12		SUPER function indicator
13		Up-down auto swing indicator
14		Left-right auto swing indicator
15		SLEEP function indicator
16		I FEEL functions indicator
17	AH	8°C heating functions indicator



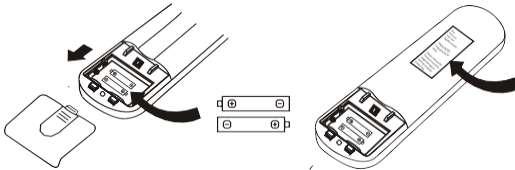
The display and some functions of the remote control may vary according to the model.

REMOTE CONTROL

Battery Replacement

Remove the battery cover plate from the rear of the remote control, by sliding it in the direction of the arrow. Install the batteries according to the direction (+ and -) shown on the Remote Control. Reinstall the battery cover by sliding it into place.

⚠ Use 2 LRO3 AAA (1.5V) batteries. Do not use rechargeable batteries. Replace the old batteries with new ones of the same type when the display is no longer legible. Do not dispose batteries as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.



Please remove batteries to avoid leakage damage when not using for a long time.

For certain models, when inserting batteries into the remote controller for the first time, it's necessary to set the control type, either Cooling only or Heating pump. Follow these steps after inserting the batteries:

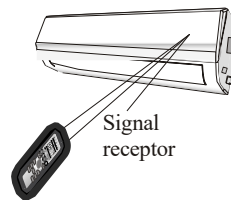
1. When the (❄) is displayed, push any button, to set the Cooling only type remote control.
2. When the (☀) is displayed, push any button, to set the Heating pump type remote controller.

NOTE: If you set the remote control in cooling mode, it will not be possible to activate the heating function in units with a heating pump. If you need to reset, take out the batteries and install again.

Change C to F: To enter the change mode, press and hold the TURBO button for 5 seconds. Continue holding the TURBO button until it changes from C to F. Release the button and wait for 5 seconds; the selected function will then be activated.

To Operate the unit with the Remote Control:

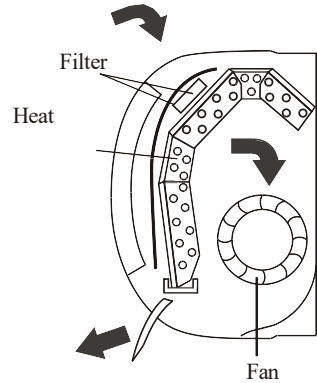
1. Aim the remote control towards the air conditioner.
2. Ensure there are no objects obstructing the signal path between the remote control and the signal receptor in the indoor unit.
3. Avoid exposing the remote control to direct sunlight.
4. Maintain a distance of at least 1 foot between the remote control and the television or other electrical appliances.



OPERATING INSTRUCTIONS

The air sucked by the fan enters from the grill and passes through the filter, then it is cooled/dehumidified or heated through the heat exchanger.

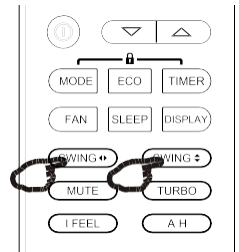
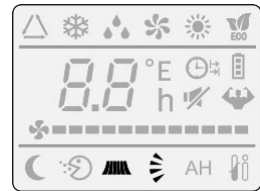
The direction of the air outlet is motorized up and down by flaps, and manually moved right and left by the vertical deflectors, for some models, the vertical deflectors could be controlled by motor as well.



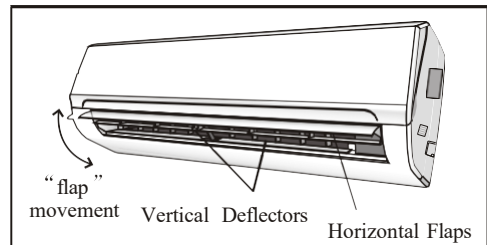
SWING or SELF-CLEAN function

1. Press the button SWING to activate the louver, Press to activate the horizontal flaps to swing from up to down. Press again to stop the swing movement at the current angle.
Press to activate the vertical deflectors to swing from left to right. Press again to stop the swing movement at the current angle.
2. If the vertical deflectors are positioned manually positioned under the flaps, they allow to move the air flow directly to rightward or leftward.
3. In certain inverter heating models, simultaneously press the horizontal SWING and vertical SWING buttons to activate the Self-Clean function.

Note: The Self-Clean function is a pre-set program that initiates both frosting and defrosting of the indoor unit to clean the surface of the indoor evaporator.



- This adjustment must be made while the appliance is switched off.
- Never position Flaps manually, the delicate mechanism might be seriously damaged!
- Never poke fingers, sticks or other objects in the air inlet or outlet vents. Such accidental contact with live parts might cause unforeseeable damage or injury.



OPERATING INSTRUCTIONS

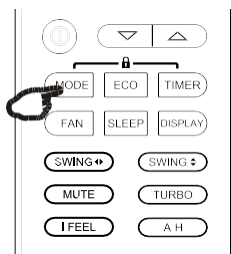
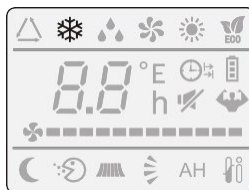
COOLING MODE

COOL

The cooling function allows the air conditioner to cool the room and at the same time reduces Air humidity.

To activate the cooling function (COOL), press the **MODE** button until the symbol ❄️ appears on the display.

With the button ▼ or ▲ set a temperature lower than that of the room.



HEATING MODE

HEAT

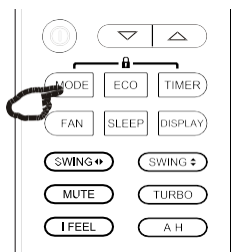
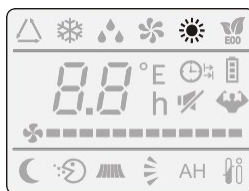
The heating function allows the air conditioner to heat the room.

To activate the heating function (HEAT), press the **MODE** button until the symbol ☀️ appears on the display.

With the button ▼ or ▲ set a temperature higher than that of the room.



In HEATING operation, the appliance can automatically activate a defrost cycle, which is essential to clean the frost on the condenser to recover its heat exchange function. This procedure usually lasts for 2-10 minutes. During defrosting, indoor unit fan stop operation. After defrosting, it resumes to HEATING mode automatically.




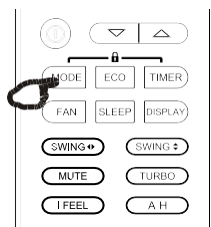
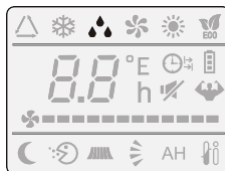
OPERATING INSTRUCTIONS

DRY MODE

DRY

This function reduces the humidity of the air to make the room more comfortable.


To set the DRY mode, Press **MODE** until  appears in the display. An automatic function of pre-setting is activated.

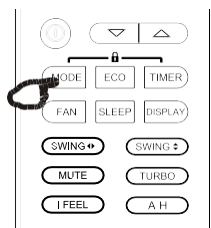
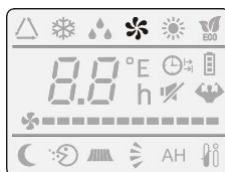


FAN MODE (Not FAN button)

FAN

Fan mode, air ventilation only.


To set the FAN mode, press **MODE** until  appears on the display.



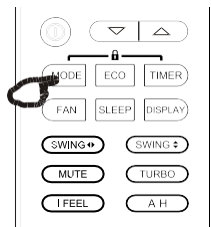
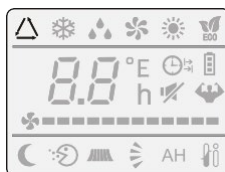
AUTO MODE

AUTO

Automatic mode.

To set the AUTO mode, press **MODE** until  appears on the display.

In AUTO mode the run mode will be set automatically according to the room temperature.



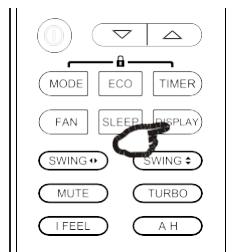
OPERATING INSTRUCTIONS

DISPLAY function (Indoor display)

DISPLAY

Switch ON/OFF the LED display on panel.


Press **DISPLAY** button to switch off the LED display on the panel. Press again to switch on the LED display.



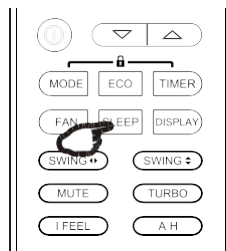
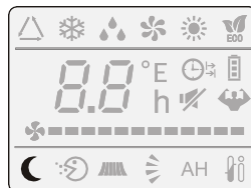
SLEEP function

SLEEP

Pre-setting automatic operating program.

Press **SLEEP** button to activate the SLEEP function and  appears on the display. Press again to cancel this function.

After 10 hours running in sleep mode, the air conditioner will change to the previous setting mode.

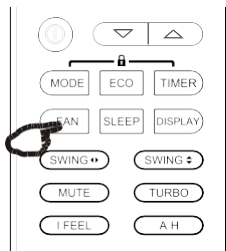


FAN function (FAN button)

FAN

Change the operating fan speed.

Press **FAN** button to set the running fan speed, it can be set to AUTO/LOW/MID/HIGH speed.




OPERATING INSTRUCTIONS

ECO function

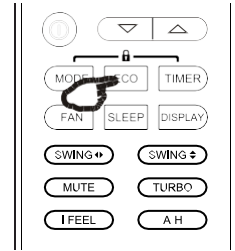
ECO

In this mode the appliance automatically sets the operation to save energy.

Press the **ECO** button, the  appears on the display, and the appliance will run in ECO mode. Press again to cancel it.


NOTE:

The ECO function is available in both COOLING and HEATING modes.

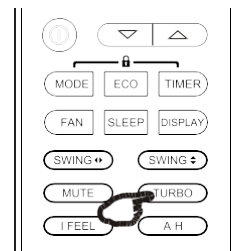


Turbo Function

TURBO

To activate turbo function, press the **TURBO** button, and  will appear on the display. Press again to cancel this function.

In COOL/HEAT mode, when you select TURBO feature, the appliance will operate at the highest fan speed to blow the strong airflow.



OPERATING INSTRUCTIONS

TIMER function --- TIMER ON

TIMER To automatic switch on the appliance.

When the unit is switched off, you can set the TIMER ON.

To set the time of automatic switch-on, as below:

1. Confirm the appliance is OFF. And press the **TIMER** button at first time to set the needed mode and fan speed, the $\odot \rightarrow$ will appear on the display.
2. Set the needed mode (Cool/Heat/Auto/Fan/Dry), by press the **MODE** button. And set the needed fan speed, by pressing **FAN** button. And press \wedge or \vee to set the needed operation temperature.
3. Press **TIMER** button the second time to set the switch-on. Press \wedge or \vee to set the needed timer.
4. Press **TIMER** button at the third time to confirm.

CANCEL it by pressing **TIMER** button.

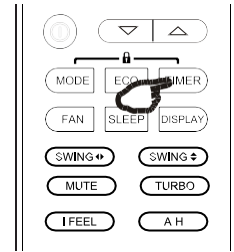


Figure1, Timer-on when switch off

TIMER function --- TIMER OFF

TIMER To automatic switch off the appliance.

When the unit is switched on, you can set the TIMER OFF.

To set the time of automatic switch-off:

1. Confirm the appliance is ON.
2. Press the **TIMER** button at first time to set the switch-off. Press \wedge or \vee to set the needed timer.
3. Press **TIMER** button a second time to confirm.

CANCEL it by pressing the **TIMER** button.

Note: All programming should be completed within 5 seconds, otherwise the setting will be cancelled.

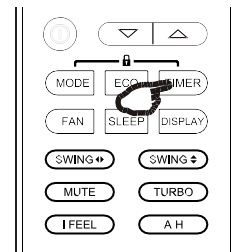
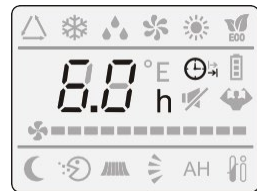



Figure2, Timer-off when switch-on.

OPERATING INSTRUCTIONS

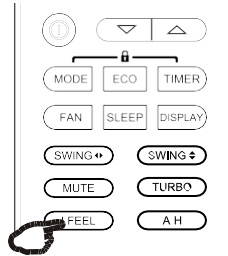
I FEEL Function (Optional)

I FEEL

Press **I FEEL** button to activate the function, the  will appear on the remote display.

Press the button again to deactivate this function.


This function enables the remote control to measure the temperature at its current location and send the signal to the air conditioner to optimize the temperature around you and ensure comfort. It will automatically deactivate after 2 hours.



SELF-CLEAN function (Optional)

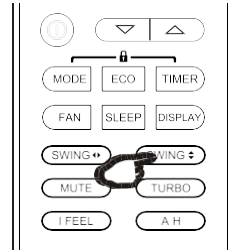
This option is only available on heating pump inverter models.

To activate this function, press **SWING+** and **SWING-** button at the same time, until hear a beep from indoor unit.

1. This function helps carry away the accumulated dirt, bacteria, etc. from the indoor evaporator.
2. This function will run for about 30 minutes, and it will return to the pre-setting mode. You can press  button to cancel this function during the process. You will hear 2 beeps when it's finished or cancelled.
3. It's normal if there is some noise during this function process, as plastic materials expand with heat and contract with cold.
4. We suggest operating this function at the following ambient conditions to avoid certain safety protection features.

Indoor unit	Temp < 86°F (30°C)
Outdoor unit	41°F (5°C) < Temp < 86°F (30°C)

5. It's suggested to utilize this function every 3 months.



OPERATING INSTRUCTIONS

8°C Heating Function (Optional)


AH

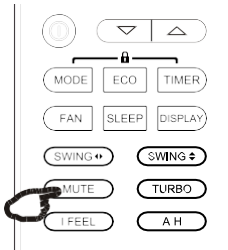
1. Press **AH** button to activate this function, and AH will appear on the remote display.
Do it again to deactivate this function.
2. If the unit is standby, this function will automatically start the heating mode when the room temperature is equal or lower than 8°C (46°F), and it will return to standby if the temperature reaches 9°C (48°F).
3. If the room temperature is higher than 18°C (64°F), the appliance will cancel this function automatically.



MUTE Function (Optional)

MUTE

1. Press **MUTE** button to activate this function, and  will appear on the remote display.
Do it again to deactivate this function.
2. When the MUTE function runs, the remote controller will display the auto fan speed, and the indoor unit will operate at lowest fan speed to be quiet feeling.
3. Press FAN/TURBO/SLEEP button and the MUTE function will be cancelled. MUTE function cannot be activated under Dry Mode.



PROTECTION


The protective device may stop the appliance when the ambient temperature is off range as listed below.

Fix air conditioner:

MODE Temperature	Cooling operating	Heating operating	Drying operating
Room temperature	63°F - 89°F	32°F - 80°F	63°F - 89°F
Outdoor temperature	59°F - 109°F For T1 Climate	23°F - 75°F	59°F - 109°F For T1 Climate
	59°F - 125°F For T3 Climate		59°F - 125°F For T3 Climate

Inverter air conditioner:

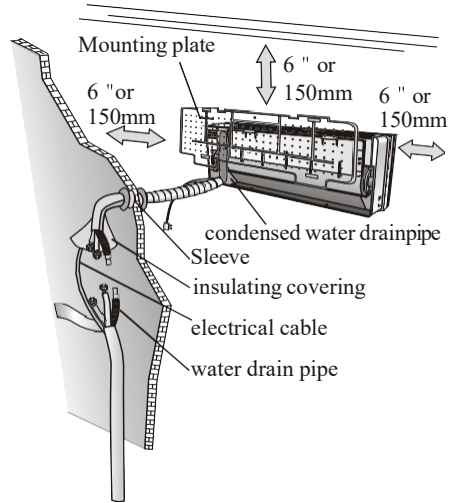
MODE Temperature	Cooling operating	Heating operating	Drying operating
Room Temperature	63°F - 89°F	32°F - 86°F	63°F - 89°F
Outdoor Temperature	59°F - 127°F	23°F - 75°F	59°F - 127°F
	5°F - 127°F For models with low temperature cooling system	-13°F - 86°F For models with low temperature heating system	

 After stopping and restarting the air conditioner or after changing the mode during operation, the system does not restart immediately, until after 3 minutes (protection function for the compressor).

INSTALLATION---Selecting the Installation Location

INDOOR UNIT

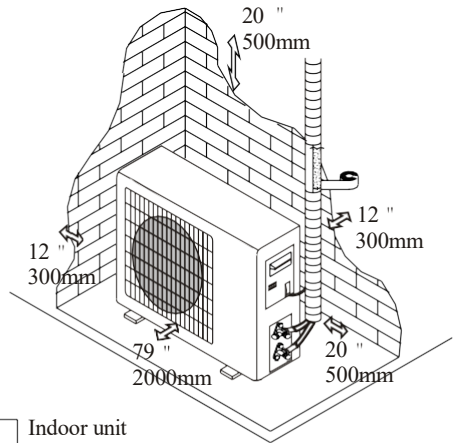
- Install the indoor unit level on a strong wall that is not subject to vibrations.
- The inlet and outlet ports should not be obstructed: the air should be able to blow all over the room.
- Do not install the unit near a source of heat, steam, or flammable gas.
- Install the unit near an electric socket or private circuit.
- Do not install the unit where it will be exposed to direct sunlight.
- Install the unit where connection between indoor and outdoor unit is as easy as possible.
- Install the unit where it is easy to drain the condensed water.
- Check the machine operation regularly and leave the necessary space (as shown in the picture).
- Install the indoor unit where the filter can be easily accessible.



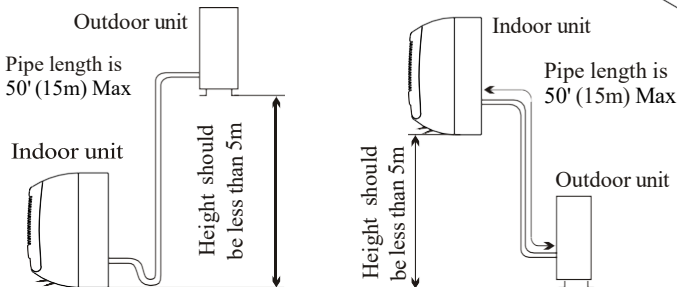
Minimum required installation space

OUTDOOR UNIT

- Do not install the outdoor unit near sources of heat, steam or flammable gas.
- Do not install the unit in too windy or dusty places.
- Do not install the unit where people often pass. Select a place where the air discharge and operating sound level will not disturb neighbors.
- Avoid installing the unit where it will be exposed to direct sunlight (other wise use a protection, if necessary, that should not interfere with the air flow).
- Leave space as shown in the picture for the air to circulate freely.
- Install the outdoor unit in a safe and solid place.
- If the outdoor unit is subject to vibration, place rubber gaskets onto the feet of the unit.



Installation Diagram



Only persons and/or companies qualified and experienced in the installation, service and repair of refrigerant products should be permitted to do so. The purchaser must ensure that the person and/or company who is to install, service or repair this air conditioner has qualifications and experience in refrigerant products.

INSTALLATION MANUAL---Indoor Unit

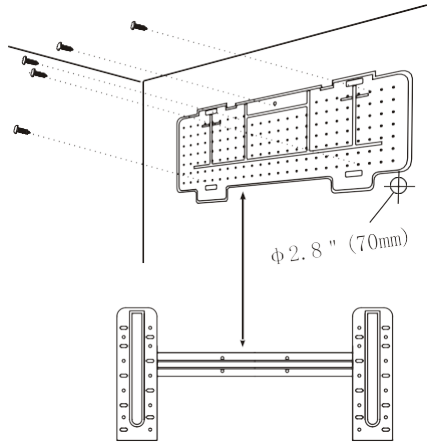
Before starting installation, decide on the position of the indoor and outdoor units, considering the minimum space required around the units.

- ⚠ Install the indoor unit in the room to be air-conditioned avoiding in corridors or communal areas.
- ⚠ Install the indoor unit at a height of at least 8 ft (2.5 m) from the ground.

To install, proceed as follows:

Installation of the mounting plate

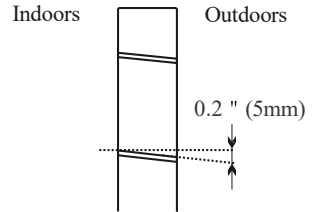
1. By using a level, put the mounting plate in a perfect square position vertically and horizontally.
 2. Drill 1.3 inch (32 mm) deep holes in the wall to fix the plate.
 3. Insert the plastic anchors into the hole.
 4. Fix the mounting plate by using the provided tapping screws.
 5. Check that the mounting plate is correctly fixed;
- Note: The shape of the mounting plate may be different from the one above, but installation method is similar.*



Drilling a hole in the wall for the piping

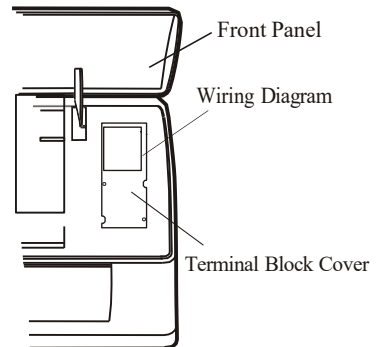
1. Decide where to drill the hole in the wall for the piping (if necessary) according to the position of the mounting plate;
 2. Install a flexible flange through the hole in the wall to keep the latter intact and clean.
- ⚠ The hole must slope downwards towards the exterior.

Note: Keep the drainpipe down towards the direction of the wall hole, otherwise leakage may occur.



Electrical connections---Indoor unit

1. Lift the front panel.
2. Take off the cover as indicated in the picture (by removing a screw or by breaking the hooks).
3. For the electrical connections, see the circuit diagram on the electrical cover.
4. Connect the cable to the wiring terminal by following the numbering. Use wire size suitable to the electric power input (see name plate on the unit) and according to all current national safety code requirements.
5. The cable connecting the outdoor and indoor units must be suitable for outdoor use.
6. The plug must be accessible also after the appliance has been installed so that it can be pulled out if necessary.
7. An efficient earth connection must be ensured.
8. If the power cable is damaged, it must be replaced by an authorized Service Centre.



Note: The cable wires has been connected to the main PCB of indoor unit by manufacturer according to the model without terminal block.

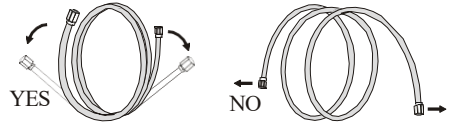
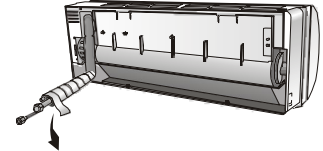
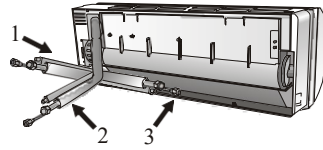
INSTALLATION MANUAL---Indoor Unit

Refrigerant Piping Connection

The piping can be run in 3 directions (indicated by numbers in the pictures). When the piping is run in direction 1 or 3, cut a notch along the groove on the side of the indoor unit with a cutter.

Run the piping in the direction of the wall hole and bind the copper pipes, the drain pipe and the power cables together with the tape with the drain pipe at the bottom, so that water can flow freely.

- Do not remove the cap from the pipe until connecting it, to avoid dampness or dirt from entering.
- If the pipe is bent or pulled too often, it will become stiff. Do not bend the pipe more than three times at one point.
- When extending the rolled pipe, straighten the pipe by unwinding it gently as shown in the picture.



Extending the rolled pipe

Connections to the indoor unit

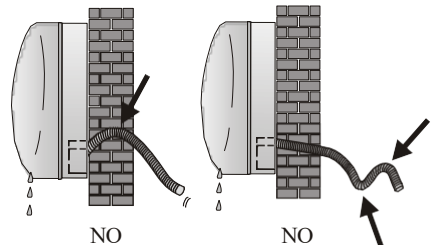
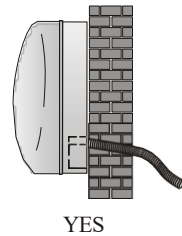
1. Remove the indoor unit pipe cap (check that there is no debris inside).
2. Insert the flare nut and create a flare at the extreme end of the connection pipe.
3. Tighten the connections by using two wrenches working in opposite directions.



Indoor Unit Condensed Water Drainage

The indoor unit condenser water drainage is fundamental for the success of the installation.

1. Place the drain hose below the piping, taking care not to create siphons.
2. The drain hose must slant downwards to aid drainage.
3. Do not bend the drain hose or leave it protruding or twisted and do not put the end of it in water. If an extension is connected to the drain hose, ensure that it is lagged when it passes into the indoor unit.
4. If the piping is installed to the right, the pipes, power cable and drain hose must be lagged and secured onto the rear of the unit with a pipe connection.
 - A) Insert the pipe connection into the relative slot.
 - B) Press to join the pipe connection to the base.

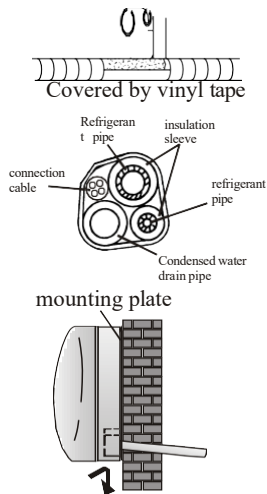


INSTALLATION MANUAL---Indoor Unit

INSTALLATION OF THE INDOOR UNIT

After having connected the pipe according to the instructions, install the connection cables. Now install the drain pipe. After connection, lag the pipe, cables and drainpipe with the insulating material.

1. Arrange the pipes, cables and drain hose well.
2. Lag the pipe joints with insulating material, securing it with vinyl tape.
3. Run the bound pipe, cables and drainpipe through the wall hole and mount the indoor unit onto the upper part of the mounting plate securely.
4. Press and push the lower part of the indoor unit tightly against the mounting plate.



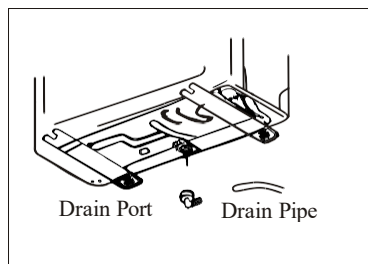
INSTALLATION MANUAL---Outdoor Unit

- The outdoor unit should be installed on a solid wall and fastened securely.
- The following procedure must be observed before connecting the pipes and connecting cables: decide which is the best position on the wall and leave enough space to be able to carry out maintenance easily.
- Fasten the support to the wall using screw anchors which are particularly suited to the type of wall.
- Use a larger quantity of screw anchors than normally required for the weight they must bear to avoid vibration during operation and remain fastened in the same position for years without the screws becoming loose.
- The unit must be installed following national regulations.

Outdoor Unit Condensed Water Drainage (only optional for heat pump models)

The condensed water and the ice formed in the outdoor unit during heating operation can be drained through the drain pipe.

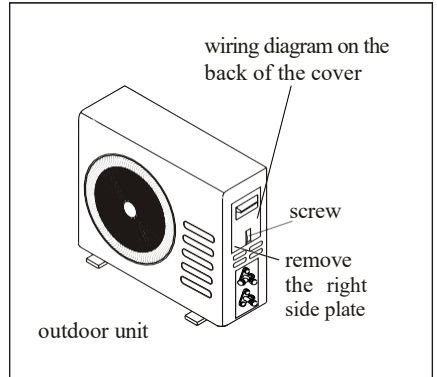
1. Fasten the drain port in the 1 inch (25mm) hole placed in the part of the unit as shown in the picture.
2. Connect the drain port and the drain pipe.
Make sure that water is drained in a suitable place.



INSTALLATION MANUAL---Outdoor nit

ELECTRICAL CONNECTIONS

1. Remove the handle on the right side plate of outdoor unit.
2. Connect the power connection cord to the terminal board.
Wiring should fit that of indoor unit.
3. Fix the power connection cord with wire clamp.
4. Confirm if the wire has been fixed properly.
5. An efficient earth connection must be ensured.
6. Recover the handle.

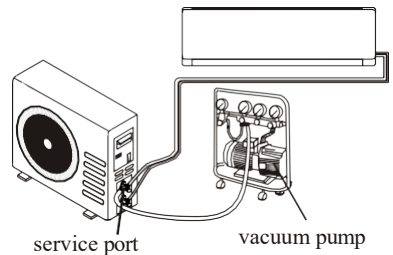
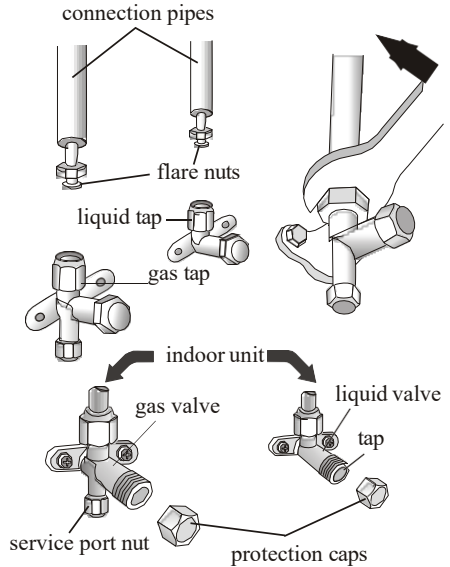


CONNECTING THE PIPES

Screw the flare nuts to the outdoor unit coupling with the same tightening procedures described for the indoor unit.

To avoid leakage, pay attention to the following points:

1. Tighten the flare nuts using two wrenches. Pay attention not to damage the pipes.
2. If the tightening torque is not sufficient, there will probably be some leakage. With excessive tightening torque there will also be some leakage, as the flange could be damaged.
3. The surest system consists in tightening the connection by using a fix wrench and a torque wrench.

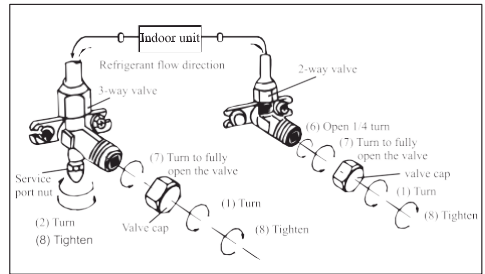
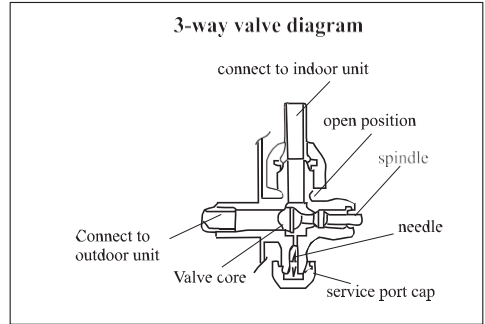


INSTALLATION MANUAL---Outdoor nit

BLEEDING

The air and humidity left inside the refrigerant circulation can cause compressor malfunction. After having connected the indoor and outdoor units, bleed the air and humidity from the refrigerant circulation using a vacuum pump.

- (1) Unscrew and remove the caps from the 2 - way and 3-way valves.
- (2) Unscrew and remove the cap from the service port.
- (3) Connect the vacuum pump hose to the service port.
- (4) Operate the vacuum pump for 10 - 15 minutes until an absolute vacuum of 10 mm Hg has been reached.
- (5) With the vacuum pump still in operation, close the low - pressure knob on the vacuum pump coupling. Stop the vacuum pump.
- (6) Open the 2 - way valve by 1/4 turn and then close it after 10 seconds. Check all the joints for leaks using liquid soap or an electronic leak device.
- (7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
- (8) Replace and tighten all the caps on the valves.



INSTALLATION MANUAL---operation test

1. **Wrap** insulating covering around the joints of the indoor unit and fix it with insulating tape.
2. Fix the exceeding part of the signal cable to the piping or to the outdoor unit.
3. Fix the piping to the wall (after **applying** insulating tape) using clamps or insert them into plastic slots.
4. Seal the hole in the wall through which the piping is passed so that no air or water can fill.

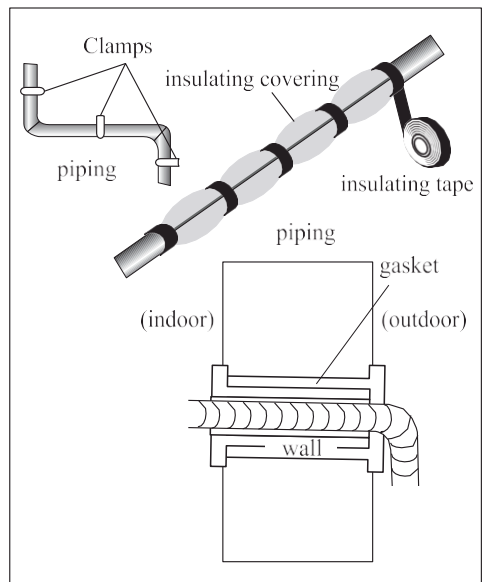
Indoor unit test

- Do the ON/OFF and FAN operate **correctly**?
- Does the MODE operate **correctly**?
- Do the set point and TIMER function properly?
- Does each lamp light **correctly**?
- Do the flap for air flow direction operate **correctly**?
- Is the condensed water drained regularly?

Outdoor unit test

- Is there any abnormal noise or vibration during operation?
- Could the noise, the air flow or the condensed water drainage disturb the neighbors?
- Is there any coolant leakage?

Note: the electronic controller allows the compressor to start only three minutes after voltage has reached the system.



INSTALLATION MANUAL---Information for the installer

North American INVERTER TYPE MODEL capacity (Btu/h)	9K	12K	18K	24K	36K
Liquid pipe diameter	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)
Gas pipe diameter	3/8 " (φ 9.52)	3/8 " (φ 9.52)	3/8 " (φ 9.52)	1/2 " (φ 12.7)	5/8 " (φ 15.88)
Length of pipe with standard charge	7.5m / 25ft	7.5m / 25ft	7.5m / 25ft	7.5m / 25ft	7.5m / 25ft
Maximum distance between indoor and outdoor unit	15m / 49ft	15m / 49ft	20m / 65ft	20m / 65ft	30m / 98ft
Additional refrigerant charge	20g/m 0.22oz/ft	20g/m 0.22oz/ft	20g/m 0.22oz/ft	20g/m 0.22oz/ft	30g/m 0.32oz/ft
Max. diff. in level between indoor and outdoor unit	10m / 33ft	10m / 33ft	15m / 49ft	15m / 49ft	20m / 65ft
Type of refrigerant	R410A	R410A	R410A	R410A	R410A

Latin American INVERTER TYPE MODEL capacity (Btu/h)	9K	12K	18K	24K	36K
Liquid pipe diameter	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)
Gas pipe diameter	3/8 " (φ 9.52)	3/8 " (φ 9.52)	1/2 " (φ 12.7)	1/2 " (φ 12.7)	5/8 " (φ 15.88)
Length of pipe with standard charge	5m	5m	5m	5m	5m
Maximum distance between indoor and outdoor unit	15m	15m	20m	20m	30m
Additional refrigerant charge	20g/m	20g/m	20g/m	20g/m	30g/m
Max. diff. in level between indoor and outdoor unit	10m	10m	15m	15m	20m
Type of refrigerant	R410A	R410A	R410A	R410A	R410A

ON-OFF Fixed Speed TYPE MODEL capacity (Btu/h)	9K	12K	18K	24K	36K
Liquid pipe diameter	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)	1/4 " (φ 6.35)
Gas pipe diameter	3/8 " (φ 9.52)	3/8 " (φ 9.52)	1/2 " (φ 12.7)	1/2 " (φ 12.7)	5/8 " (φ 15.88)
Length of pipe with standard charge	5m	5m	5m	5m	5m
Maximum distance between indoor and outdoor unit	10m	10m	10m	10m	10m
Additional refrigerant charge	20g/m	20g/m	20g/m	20g/m	30g/m
Max. diff. in level between indoor and outdoor unit	5m	5m	5m	5m	5m
Type of refrigerant	R410A	R410A	R410A	R410A	R410A

TIGHTENING TORQUE FOR PROTECTION CAPS AND FLANGE CONNECTION

PIPE	TIGHTENING TORQUE [N x m]	CORRESPONDING STRESS (using a 20 cm wrench)		TIGHTENING TORQUE [N x m]
1/4 " (φ 6.35)	15 - 20	wrist strength	Service port nut	7 - 9
3/8 " (φ 9.52)	31 - 35	arm strength	Protection caps	25 - 30
1/2 " (φ 12.7)	35 - 45	arm strength		
5/8 " (φ 16)	75 - 80	arm strength		

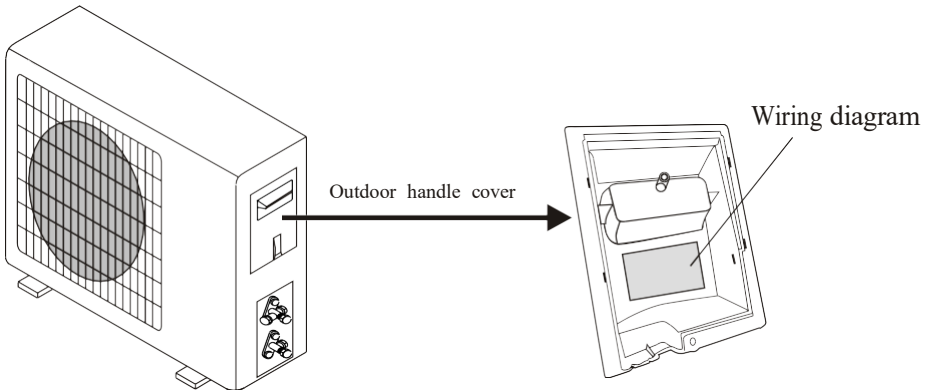
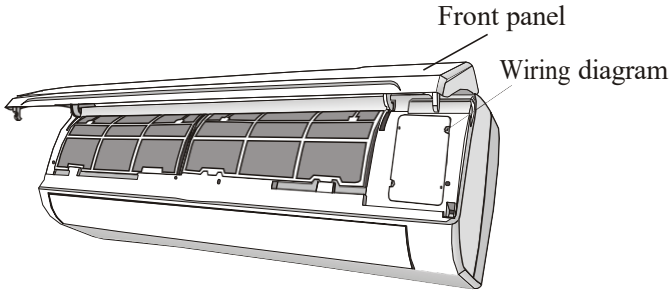
INSTALLATION MANUAL---Information for the installer

WIRING DIAGRAM

For different models, the wiring diagram may be different. Please refer to the wiring diagrams affixed to the indoor unit and outdoor unit respectively.

On the indoor unit, the wiring diagram is located under the front panel.

On the outdoor unit, the wiring diagram is located on the backside of the outdoor handle cover.



Note: For some models will have wires connected to the main PCB of the indoor unit without terminal block.

INSTALLATION MANUAL---Information for the installer

CABLE WIRES SPECIFICATION

North American INVERTER TYPE MODEL capacity (Btu/h)		9K- 115V	12K- 115V	9K- 230V	12K- 230V	18K	24K	36K
		sectional area (AWG)						
Power supply cable	N(L2)	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12
	L(L1)	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12
	⊕	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12	AWG12
Connection supply cable	3(L)	AWG 16	AWG 16	AWG 16	AWG 16	AWG 16	AWG 16	AWG 16
	2(N)							
	1(S)							
	⊕							

Latin American INVERTER TYPE MODEL capacity (Btu/h)		9K- 115V	12K- 115V	9K- 230V	12K- 230V	18K	24K	36K
		sectional area (mm2)						
Power supply cable	N(L2)	3x1.5	3x2.5	3x1.5	3x1.5	3x1.5	3x2.5	3x2.5
	L(L1)							
	⊕							
Connection supply cable	3(L)	4x0.75	4x0.75	4x0.75	4x0.75	4x0.75	4x0.75	4x0.75
	2(N)							
	1(S)							
	⊕							

ON-OFF Fixed Speed TYPE MODEL capacity (Btu/h)		9K- 115V	12K- 115V	9K- 230V	12K- 230V	18K	24K	36K
		sectional area (mm2)						
Power supply cable	Cooling	3x1.5	3x2.5	3x1.5	3x1.5	3x1.5	3x2.5	3x2.5
	Heating							
Connection supply cable	Cooling	3x1.5	3x1.5	3x1.0	3x1.0	3x1.5	4x0.75	4x0.75
	Heating							
			2x0.75	2x0.75	2x0.75	2x0.75	2x0.75	2x0.75

MAINTENANCE

Periodic maintenance is essential for keeping your air conditioner efficient.

Before carrying out any maintenance, turn the power supply off.

INDOOR UNIT

ANTIDUST FILTERS

1. Open the front panel (following the direction of the arrow).
2. Keeping the front panel raised with one hand, take out the air filter with the other hand.
3. Clean the filter with water; if the filter is soiled with oil, it can be washed with warm water, not exceeding 113°F (45°C).
Leave to dry in a cool and dry place.
4. Keeping the front panel raised with one hand, insert the air filter with the other hand.
5. Close front panel.

The electrostatic and the deodorant filter (if installed) cannot be washed and must be replaced with new filters once every 6 months.

CLEANING THE HEAT EXCHANGER

1. Open the front panel of the unit and remove by lifting up and unhooking it from the hinges to make the cleaning easier.
2. Clean the indoor unit using a cloth with water not higher than 104°F (40°C) and neutral soap. Never use aggressive solvents or detergents.
3. If the battery of the outdoor unit is clogged, remove any leaves or waste by hand and remove the dust with an air jet or a bit of water.

END OF SEASON MAINTENANCE

1. Disconnect the automatic switch or the plug.
2. Clean and replace the filters.
3. On a sunny day, let the air conditioner work on ventilation for several hours, so that the inside of the unit can dry completely.

REPLACING THE BATTERIES

When:

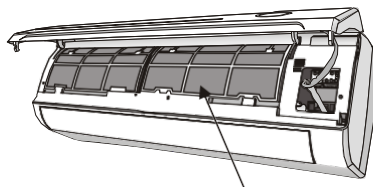
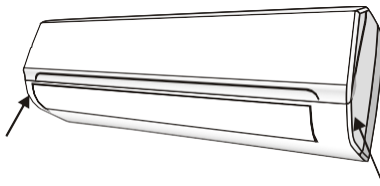
- There is no confirmation beep from the indoor unit.
- The LCD doesn't activate.

How:

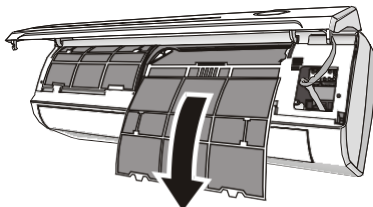
- Remove back cover plate.
- Place the new batteries respecting the symbols + and - .

Use only new batteries. Remove the batteries from the remote control when the air conditioner is not in operation.

WARNING! Do not throw batteries into common trash, they should be disposed of in special containers situated in collection points.



Anti-dust filter



MALFUNCTION	POSSIBLE CAUSES
The appliance does not operate	Power failure/plug pulled out.
	Damaged indoor/outdoor unit fan motor.
	Faulty compressor thermomagnetic circuit breaker.
	Faulty protective device or fuses.
	Loose connections or plug pulled out.
	It sometimes stops operating to protect the appliance.
	Voltage higher or lower than the voltage range.
	Active TIMER-ON function.
Damaged electronic control board.	
Strange odor	Dirty air filter.
Noise of running water	Back flow of liquid in the refrigerant circulation.
A fine mist comes from the air outlet	This occurs when the air in the room becomes very cold, for example in the “COOLING ” or “DEHUMIDIFYING/DRY ” modes.
A strange noise can be heard	This noise is made by the expansion or contraction of the front panel due to variations in temperature and does not indicate a problem.
Insufficient airflow, either hot or cold	Unsuitable temperature setting.
	Obstructed air conditioner intakes and outlets.
	Dirty air filter.
	Fan speed set at minimum.
	Other sources of heat in the room.
The appliance does not respond to commands	No refrigerant.
	Remote control is not close enough to indoor unit.
	The batteries of remote control need to be replaced.
The display is off	Obstacles between remote control and signal receiver in indoor unit.
	Activate LIGHT function.
Switch off the air conditioner immediately and cut off the power supply in the event of:	Power failure.
	Strange noises during operation.
	Faulty electronic control board.
	Faulty fuses or switches.
	Spraying water or objects inside the appliance.
	Overheated cables or plugs.
Very strong smells coming from the appliance.	

ERROR SIGNALS ON THE DISPLAY

In case of error, the display on the indoor unit shown the following error codes:

Display	Description of the trouble	Display	Description of the trouble
E1	Indoor temperature sensor fault	E8	Outdoor discharge temperature sensor fault
E2	Indoor pipe temperature sensor fault	E9	Outdoor IPM module fault
E3	Outdoor pipe temperature sensor fault	EA	Outdoor current detect fault
E4	Refrigerant system leakage or fault	EE	Outdoor PCB EEPROM fault
E5	Malfunction of indoor fan motor	EF	Outdoor fan motor fault
E7	Outdoor air temperature sensor fault	EH	Outdoor suction temperature sensor fault



CAN ICES-3 (B)/NMB-3(B)

FCC Caution

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC Warning

This device complies with industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

1-YEAR LIMITED WARRANTY

This unit is guaranteed to the original retail purchaser against defects in quality or workmanship for a period of one year from the date of original purchase. If this unit fails because of a manufacturing defect within 30 days of purchase, return the unit, with your receipt, to the retailer. After 30 days, but within the warranty period, if the unit was purchased within the continental United States, return it, freight prepaid, to KMS for repair or replacement. If the unit was purchased outside the continental United States, return the unit to the place of purchase. This warranty does not cover damage caused by misuse, abuse, overheating or alteration. Repairs made by anyone other than KMS are not covered in this warranty.

KMS will not be held liable for any losses due to neglectful operation. All implied warranties, including the warranties of merchantability and of fitness of purpose, if applicable, are hereby limited in duration to the period of one year from the date of original retail purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Incidental or consequential damages arising from a breach of either express or implied warranties are hereby disclaimed and excluded. Some states do not allow the exclusion of limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. Upon the expiration of this warranty all such liability will terminate. No other warranties are expressed or implied.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No informal dispute settlement mechanisms are available. This limited warranty is given in lieu of all other warranties.

If you have any questions or concerns about this product, don't hesitate to reach out to our Customer Service team.

You can contact us Monday through Friday 8AM to 5PM CST at 1-800-752-5262, extension 251, or send us an email at customerservice@1kms.com.