



EG4 ELECTRONICS

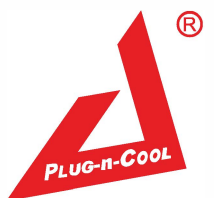
Split System Air Conditioner Installation & Owner's Manual



IMPORTANT NOTE:

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

Version 1.2



Contents

1	Safety Precautions	
	Warnings	2
	Cautions	4
2	Parts Overview	
	display code meaning	5
	components supplied	6
3	Operating Instructions	
	Operating Temperature	7
	Manual Operation	8
	Airflow Directional Control	9
	Special Functions	9
4	Care and Maintenance	
	Before Maintenance	10
	Cleaning the Unit	10
	Clean the Air Filter(s)	10
	Preparation for Extended Non-Operation	11
	Pre-Season Inspection	11
5	Indoor Unit Installation	
	Selecting an installation location	12
	Attach mounting plate to wall	13
	Drill wall hole for connective piping	14
	Prepare refrigerant piping	14
	Connect drain hose	16
	Connect signal cable	17
	Wrap piping	19
6	Outdoor Unit Installation	
	Installation location	21
	Install drain joint	22
	Anchor outdoor unit	23
	Connect signal and power cables	24
	Installation instructions for quick Connector Plug-N-Cool Kits	26
	Releasing the refrigerant into the system	26
7	Electrical and Gas Leak Checks	27
8	Test Run	28
9	Operation	30
	Remote control operation	30
	Android or I phone app	32

Safety Precautions

Read Before Using

Incorrect usage may cause serious damage or injury.

The symbols below are used throughout this manual to indicate instructions that should be followed closely or actions that should be avoided to prevent death, injury, and/or property damage.



WARNING

This symbol indicates ignoring instructions may cause death or serious injury.



CAUTION

This symbol indicates ignoring instructions may cause bodily injury, damage to the unit, or other surrounding property.



This symbol indicates that you should **NEVER** perform the indicated action.



WARNING

DISCLAIMER: You are assuming risk by handling materials containing refrigerants under pressure, that if not handled properly can cause bodily injury. If you do not feel comfortable performing this installation process, we recommend you retain the services of a qualified HVAC professional.

******ELECTRICAL WORK MUST BE COMPLETED BY A QUALIFIED ELECTRICAL TECHNICIAN******

- ⊘ ***DO NOT*** share the electrical circuit with other appliances. You must use an independent power supply. An improper or insufficient power supply could cause fire or electrical shock.
- ⊘ ***DO NOT*** allow any substances or gases to enter the unit when connecting the refrigerant piping. The presence of other gases or substances will lower the unit's capacity, and may cause abnormally high pressure during the operation cycle. This could cause an explosion and/or injury.
- ⊘ ***DO NOT*** allow children to play with the air conditioner. Children should be supervised around the unit at all times.
- ⊘ ***DO NOT*** insert your fingers, rods, or other objects into the air inlet or outlet. The fan within the unit could be rotating at high speeds and could cause injury.
- ⊘ ***DO NOT*** use flammable sprays such as hair spray, lacquer, or paint near the unit. These could cause fire and/or an explosion.
- ⊘ ***DO NOT*** operate the unit in places where it could be exposed to or near combustible gas. Emitted gas could collect around the unit and cause an explosion.
- ⊘ ***DO NOT*** operate the unit in a room where it could be exposed to excessive amounts of water (such as a bathroom or laundry room). Too much exposure to water can cause electrical components to short circuit.
- ⊘ ***DO NOT*** expose your skin or body directly to the cool air coming from the unit for a prolonged period of time.
- ⊘ ***DO NOT*** install the unit within 3 ft (1 m) of any combustible gas if the unit is equipped with an auxiliary heater.
- ⊘ ***DO NOT*** operate the air conditioner with wet hands. This could cause electrical shock.
- ⊘ ***DO NOT*** turn on the power until the installation has been completed.

Safety Precautions

WARNING

- ⊘ **DO NOT** pull the power cord to unplug the unit. Hold the plug firmly and pull it from the outlet. Pulling directly on the cord can damage it, which could lead to fire and/or electric shock.
- ⊘ **DO NOT** modify the length of the power supply or use an extension cord to power the unit.
 1. Installation must be performed according to the installation instructions. Improper installation could cause water leakage, electrical shock, fire, and could void the warranty.
 2. If the unit operates abnormally (emits strange noises or a burning smell), immediately turn off the unit and disconnect the power in order to avoid electric shock, fire, and/or injury. Call your local dealer, for further assistance
 3. In North America, service or repair must be performed in accordance with the requirements of NEC and CEC (by authorized personnel or authority having jurisdiction only). Contact an authorized service technician for repair or maintenance of the unit.
 4. Only use the included accessories and specified parts for installation. Using non-standard parts can cause water leakage, electrical shock, fire, and may cause the unit to fail.
 5. Install the unit in a firm, stable location that can support its weight. If the installation location cannot support the weight of the unit, it could fall and cause serious injury and/or damage.
 6. Appropriate wiring standards, regulations, and the installation manual must be followed for all electrical work.
 7. If connecting power to fixed wiring, the following must be incorporated within it, in accordance with the wiring rules; an all-pole disconnection device (which has at least 3 mm of clearances in all poles), and have a leakage current that may exceed 10 mA, the residual current device (RCD) having a rated residual operating current not exceeding 30 mA, all must be present.
 8. For all electrical work, fuse the specified cables. Connect cables tightly and clamp them securely to prevent external forces from damaging the terminal. Improper electrical connections could overheat, causing fire and/or electrical shock.
 9. All wiring must be properly arranged to ensure that the control board cover can close properly. If the control board cover is not closed properly, it can lead to corrosion, which can cause the connection points on the terminal to overheat, which could result in fire and/or electric shock.
 10. In certain functional environments (such as kitchens and server rooms etc.), the use of specially designed air-conditioning units is highly recommended.
 11. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or a similarly qualified person in order to avoid a hazard.
 12. This appliance can be used by children (8 years and older) and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge if they have been given instruction concerning the use of the appliance and understand the hazards involved. Children should not play with the appliance. Cleaning and user maintenance should not be performed by children.
 13. If the air conditioner is used together with burners or other heating devices, thoroughly ventilate the room in order to avoid an oxygen deficiency.
 14. Contact an authorized service technician for repair or maintenance of this unit.
 15. Install drainage piping according to the instructions in this manual. Improper drainage may cause water damage to your home and property.
 16. When moving or relocating the air conditioner, consult experienced service technicians for disconnection and re-installation of the unit.
 17. The product must be properly grounded during installation or electrical shock could occur.
 18. For more information on how to install the appliance to its support, please refer to the indoor unit installation and outdoor unit installation sections of this manual.
 19. Keep the power plug clean and remove dust or grime that accumulates around the plug. A dirty plug could cause fire or electric shock.

Safety Precautions

WARNING for Using R-32/R-290 Refrigerant

- When flammable refrigerants are employed, the appliance should be stored in a well-ventilated area where the size of the room corresponds to the area size required for the operation of the unit.
 - For R-32 refrigerant models:**
The appliance should be installed, operated, and stored in a room with a floor area larger than 4m². The appliance should not be installed in an unventilated space, if the space is smaller than 4m².
 - For R-290 refrigerant models, the minimum room size needed:**
 - For units with a capacity less than or equal to 9,000 Btu/h: 13m²
 - For units with a capacity greater than 9,000 Btu/h and less than or equal to 12,000 Btu/h: 17 m²
 - For units with a capacity greater than 12,000 Btu/h and less than or equal to 18,000 Btu/h: 26 m²
 - For units with a capacity greater than 18,000 Btu/h and less than or equal to 24,000 Btu/h: 35 m²
- Reusable mechanical connectors and flared joints are not allowed indoors (EN Standard Requirements).
- Mechanical connectors used indoors should have a rate of not more than 3g/year at 25% of the maximum allowable pressure. When mechanical connectors are reused indoors, sealing parts should be renewed. When flared joints are reused indoors, the flared end should be re-fabricated (IEC Standard Requirements).

Note about Fluorinated Gases:

- This unit contains fluorinated greenhouse gases.
- For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself.
- Service, maintenance, and repair of this unit must be performed by a certified technician.
- Product un-installation and recycling must be performed by a certified technician.
- For equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO₂ equivalent or more, but less than 50 tonnes of CO₂ equivalent, and has a leak-detection system installed, it must be checked for leaks at least every 24 months.
- Keeping a record of all leak checks for the lifetime of the unit is strongly recommended.

IMPORTANT!

Maximum Line Set Length and Height Specifications*

System Capacity	09K/12K System	18K System	24K System	36K System
Maximum line set length	49 ft (15 m)	66 ft (20 m)	66 ft (25 m)	98 ft (30 m)
Maximum height difference between indoor & outdoor unit	26 ft (8 m)	33ft (10 m)	33ft (10 m)	66 ft (20 m)

Units: feet (meters)

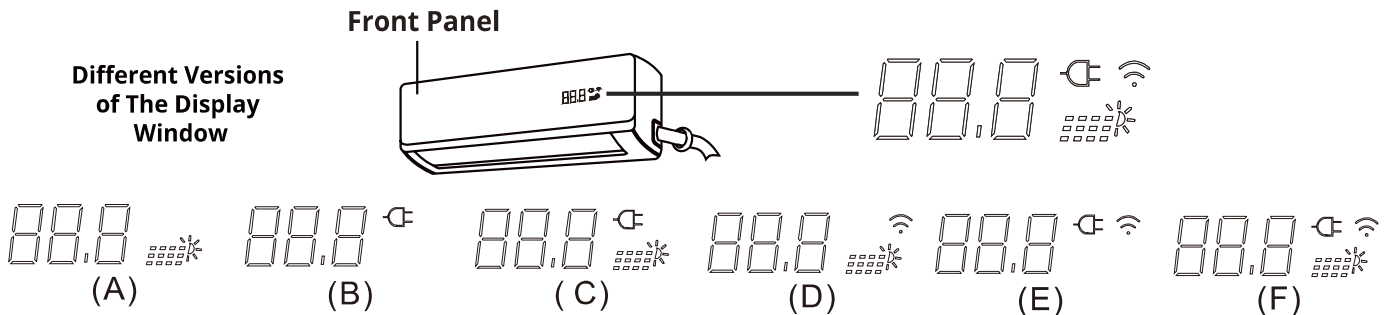
* The table above represents the maximum length and height that the refrigerant line sets can be for each system based on its respective capacity. In order to achieve some of these lengths, line set coupler kits and additional line sets must be used (not included, sold separately). Any attempt to increase the line set length beyond what is specified in the table above, could result in reduced heating/cooling performance, system damage or failure, and **WILL VOID THE WARRANTY.**

DISCLAIMER: You are assuming the risk by handling materials containing refrigerants under pressure, that if not handled properly, can cause bodily injury. If you do not feel comfortable conducting this installation process, we recommend you retain the services of a qualified HVAC professional.
Electrical work must be completed by a qualified electrical technician.





Overview-Indoor Unit Display

NOTE: Different models will have a different front panel and display window. Not all of the features listed below will be equipped on the unit you have purchased. Please check the indoor unit display window of the unit purchased to see which of these features your unit has.

Illustrations in this manual are for explanatory and demonstration purposes only. The actual shape of your and size of your indoor unit may be different.



Display Code Meanings

-  The light is displayed when the photovoltaic controller is working (some units)
-  This will display when the Wireless Control feature is activated (some units).
-  When connected to the AC power, the light shows white. When the AC power limiting function is enabled, the light shows blue.
-  This is the temperature display and will also display operational features and error codes:
- H5* Will display when the unit is defrosting(cooling&heating units)

Error Code List

Description	CODE
Indoordata wrong	01
Indoorand OutdoorunitCommunicationwrong	03
IndoorKeys stuck	04
Outdoordata wrong	05
Indoorfan motorwrong	06
Indoorair temperaturesensor wrong	31
Indoorevaporatortemperaturesensor wrong	32
Outdoorair temperaturesensor wrong	35
Outdoorcondenser temperaturesensor wrong	36
Air outlettemperaturesensor wrong	37
Indoorfan motorlost speed	51
Compressor feedback wrong	55
Outdoorfan motorwrong	58
High voltageprotection	72
Current inputlimitation	73
Compressor high temperatureprotection	75
Low Voltageprotection	76
Demagnetizationprotectioncontrolfailure	79
PFC over current	81
TotalPower protection	82
AD Abnormaldetection	83
Unstable current	84
Compressor settingdata wrong	85
IPM_FO Edge fault	86
IPM_FO Level fault	87
IPM over temperature	91
Compressor lack of phase	92
Compressor lost speed	93
IPM over voltage	94
IPM Over current	95
IPM currentshortage	96

Overview-Indoor Unit Display

Accessories

The listing below shows the accessories and parts (these may vary depending on purchase & options). Use all of the installation parts and accessories to install the system. Improper installation may result in water leakage, electrical shock, fire, and/or equipment failure.

Components Supplied		
Number	Quantity	Name
1	1	Indoor unit
2	1	Indoor unit Mounting plate(find on backside of indoor unit)
3	1	Remote Controller
4	2	AAA battery
5	1	Connecting cord
6	1	Outdoor unit
7	1	Wrapping tape weather protection
8	1	Drain pipe 1.5 meters 15 mm diameter
9	1	Wall sleeve
10	1	Sealant putty
11	1	Installation manual
12	1	Connecting pipe 5 meters with quick connect fitting
13	1	Connecting wire

Operating Instructions

Operating Temperature Ranges

	COOL Mode	HEAT Mode	DRY Mode
Room Temperature	16 °C-32 °C (61 °F-90 °F)	0 °C-32 °C (32 °F-90 °F)	10 °C-32 °C (50 °F-90 °F)
Outdoor Temperature	0 °C-55 °C (32 °F-131 °F)	-15 °C-30 °C (5 °F-86 °F)	0 °C-50 °C (32 °F-122 °F)

NOTES:

- If the air conditioner operates for extended periods in cooling mode and the humidity is high (over 80%), condensed water may drip out of the unit. If this occurs, set the vertical airflow louver to its maximum angle (vertical toward the floor), and set it to **HIGH** fan mode.
- Optimum performance will be achieved within the above operating temperatures. If the air conditioner is operated outside of the above temperatures, certain safety protection features might be activated and cause the unit to function abnormally.
- **FOR OUTDOOR UNITS WITH AUXILIARY ELECTRIC HEATER:** When the outside temperature is below 32°F (0°C), we strongly recommend keeping the unit plugged in at all time to ensure smooth ongoing performance.

Manual Operation (without remote)

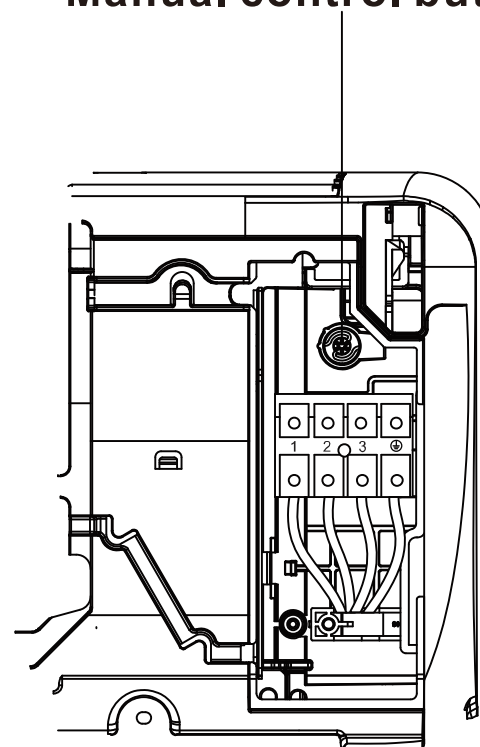
! CAUTION

The manual control button is intended for testing purposes and emergency operation only. Please do not use this function unless the remote control is lost and it is absolutely necessary. To restore regular operation, use the remote control to activate the unit. **THE UNIT MUST BE TURNED OFF BEFORE THE MANUAL OPERATION FUNCTION CAN BE ACTIVATED.**

To operate the unit manually, follow these steps:

1. Open the front panel of the indoor unit.
2. Locate the **MANUAL CONTROL BUTTON** on the right-hand side of the unit.
3. Press the **MANUAL CONTROL BUTTON** one time to activate the **FORCED AUTO MODE**.
4. Press the **MANUAL CONTROL BUTTON** a second time to activate the **FORCED COOLING FUNCTION**.
5. Press the **MANUAL CONTROL BUTTON** a third time to turn the unit off.
6. Close the front panel.

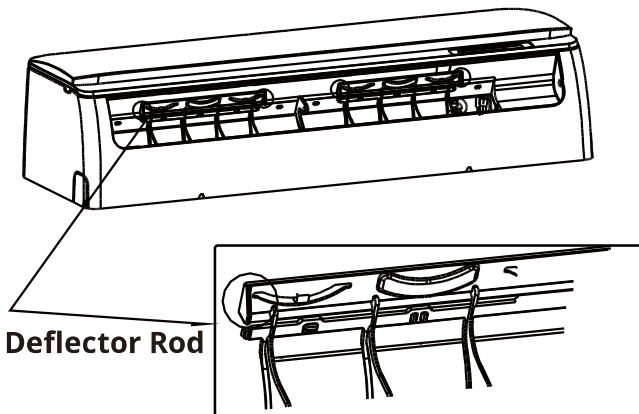
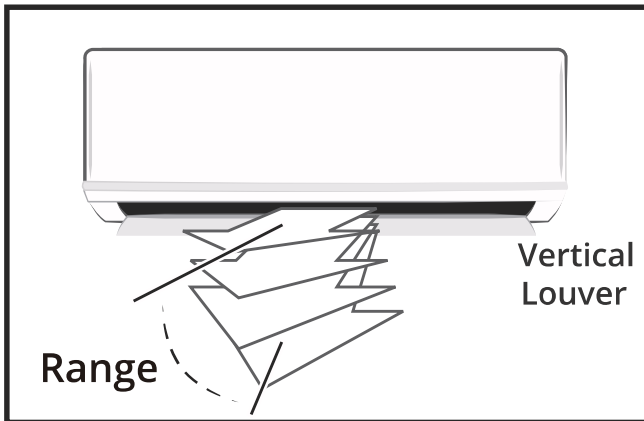
Manual control button



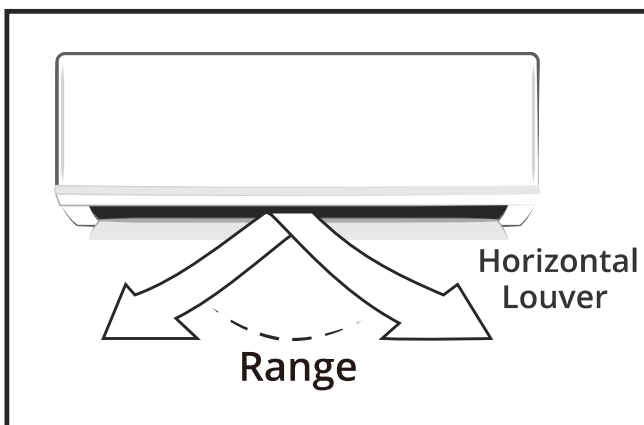
Operating Instructions

Airflow Directional Control

- Adjustment of the vertical and horizontal louvers will change airflow direction of the indoor unit to prevent discomfort and/or uneven room temperatures.
- **Adjust the vertical louver using the remote.**
- **Adjust the horizontal louver manually by hand.**



Horizontal Louver
(Horizontal Airflow
Grill inside)



Adjust Vertical Airflow (Up/Down) using Vertical Louver

This function is performed by using the **SWING/DIRECT** button on the remote control, while the unit is operating. The Vertical louver can move in small increments for each press, or continuously swing up and down automatically. Please refer to the "**Remote Control User Manual**" for further details.

Adjust Horizontal Airflow (Left/Right) using Horizontal Louver

The angle of the horizontal louver must be set manually. Move the deflector rod, located on the underside of the unit, by pushing the tab to manually adjust the airflow from side to side as desired. For some units, the horizontal angle of the airflow can be set by the remote control. Please refer to the "**Remote Control User Manual**" for further details.

! CAUTION

- ⊘ **DO NOT** put your fingers into the panel of the blower and suction side. The high speed fan inside may cause injury.
- ⊘ **DO NOT** operate the unit for extended periods of time in COOL or DRY mode with the vertical airflow direction set with too much of a downward angle. This could cause condensation to form on the surface of the vertical louver and allow moisture/water droplets to drop onto furnishings or the floor.
- ⊘ **DO NOT** move the vertical louver manually, as this could cause it to become out of sync. If this occurs, follow these steps:

1. Turn off the power to the unit.
2. Remove the wireless module from the back of the front cover.
3. Turn off the power to the circuit at the breaker.
4. Wait a few seconds and turn the power back on at the breaker.
5. Reinstall the wireless module into the front cover.
6. Turn the power to the unit back on.

NOTE: After a quick restart, the vertical louver may remain static for approximately 10 seconds.

NOTE: The open angle of the vertical louver should not be set too small when using COOL or HEAT mode, as it will restrict airflow and reduce performance of the unit.

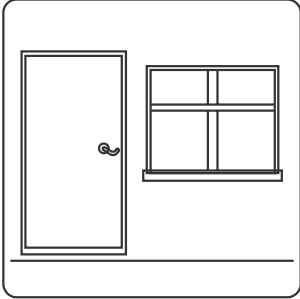
Operating Instructions

Optimal Operation

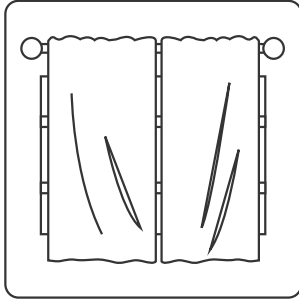
To achieve optimal performance, please note the following:

⊘ ***DO NOT*** put any objects near the air inlets/outlets. Doing this would impair performance and could cause the unit to shut down.

- Adjust the airflow direction correctly, so that it is not towards people or at an extreme angle.
- Adjust the temperature to achieve moderate comfort levels. An excessively low or high temperature setting wastes energy.
- Keep windows and doors closed, as this will improve performance.
- Limit energy usage (run time) using the TIMER function.
- Inspect the air filters periodically, and clean them as needed.



Doors and windows should be kept closed.



Closing the curtains while heating also helps keep the heat in

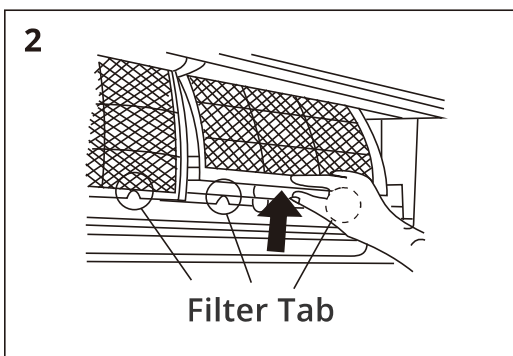
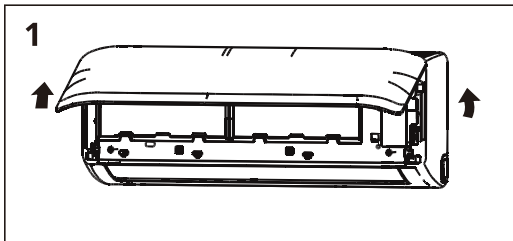
Care and Maintenance

! CAUTION

The power supply must be disconnected before attempting any kind of cleaning or service. Before performing maintenance, turn the power off to the unit and then disconnect the power to the circuit at the breaker. Failure to do this could cause electrical shock and injury.

- ⊘ **DO NOT** use benzene, thinner, polishing powder, or similar solvents for cleaning. These could cause the plastic to deform and/or crack.
- ⊘ **DO NOT** clean the unit with excessive amounts of water.
- ⊘ **DO NOT** touch the metal parts of the unit when removing the filter. Injuries can occur when handling the sharp metal edges.
- ⊘ **DO NOT** use water to clean the inside of the unit. Exposure to water can destroy the insulation, which could lead to electric shock.

- ⊘ **DO NOT** use a chemically treated cloth or duster to clean the unit.
- ⊘ **DO NOT** touch the air freshening (Plasma) filter for at least 10 minutes after turning off the unit.
- ⊘ **DO NOT** clean the unit with combustible cleaning agents. These could cause fire and/or deformation of the unit.
- ⊘ **DO NOT** wash the air filter with water hotter than 104°F (40°C).
- ⊘ **DO NOT** expose the filter to direct sunlight, as this could cause it to shrink. Allow the filter to dry in the shade.



Cleaning the Unit:

Wipe the unit with a soft dry cloth. If the unit is very dirty, wipe it with a cloth soaked in warm water.

- ⊘ **DO NOT** use bleach or abrasives.

Cleaning the Air Filter and Air Freshener:

NOTE: A clogged air filter can greatly reduce heating and cooling efficiency of this unit. It is recommended to clean the unit every 2 weeks.

1. Open the front by carefully lifting both ends at the same time. As you continue lifting, at a certain angle there will be an audible click and the lid will become self-supporting. Some models are equipped with suspension bars that are required to prop the lid open.
2. Use the filter tabs to lift filter slightly upward and then pull it toward you.

Care and Maintenance

3. Then, extract the filter by gently drawing it downward. Replace as necessary.
4. Unclip the small air freshening filter from the larger air filter. Replace if necessary. Otherwise, clean it with a vacuum and clip it back into place after cleaning the larger air filter as outlined in step 5.
5. Clean the large air filter with warm, soapy water. Be sure to use a mild detergent and rinse with fresh water. Shake off the excess water and allow it to dry in a cool area.
6. Re-clip the small air freshening filter into the large air filter.
7. Re-fit air filter back into the unit by reversing steps 2 and 3 by gently pushing the top of the filter up into the unit and then lowering the bottom portion into place.
8. Close the front panel of the unit. Make sure that it buckles securely and the panel is completely closed.

Preparation for Extended Non-Operation:

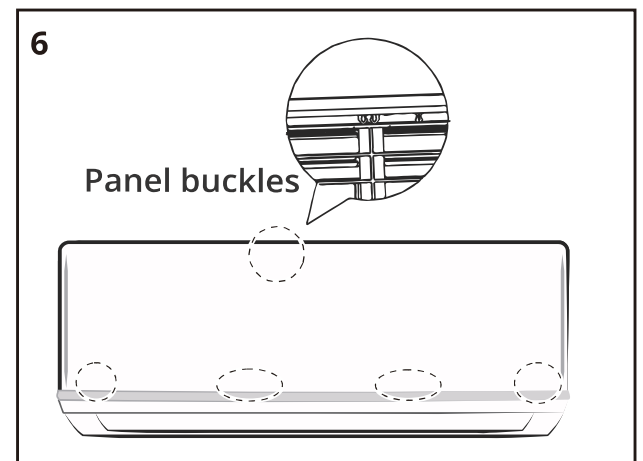
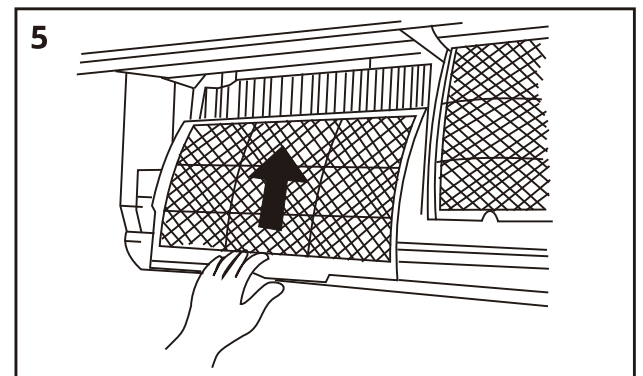
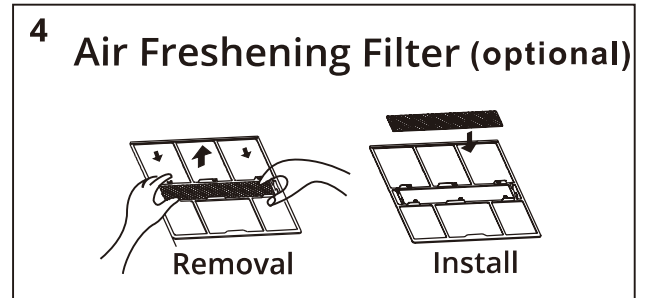
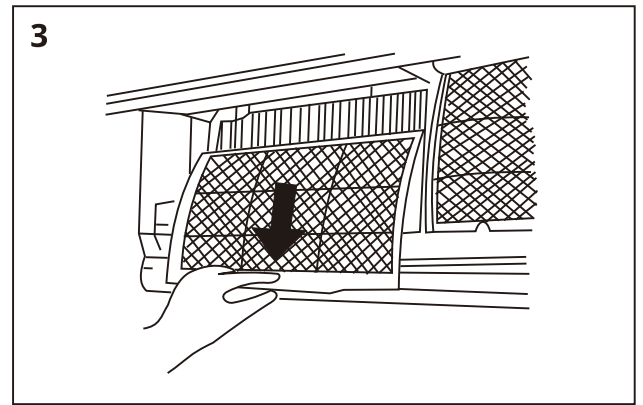
If you plan to not run the unit for an extended period of time (e.g. from the end of summer to the beginning of the following summer), perform the following:

1. Clean the indoor unit and filters as outlined in the previous steps.
2. Operate the unit in **FAN-Only** mode for at least 8 hours to dry out the inside of the unit.
3. Turn off the unit. Then, turn off the power to the circuit at the breaker. The unit should be the only appliance on this circuit.
4. Remove the batteries from the remote control.
5. The outdoor unit also requires periodic maintenance. However, it is highly recommended you contact a qualified service professional to perform this. Please do not attempt to do this on your own.

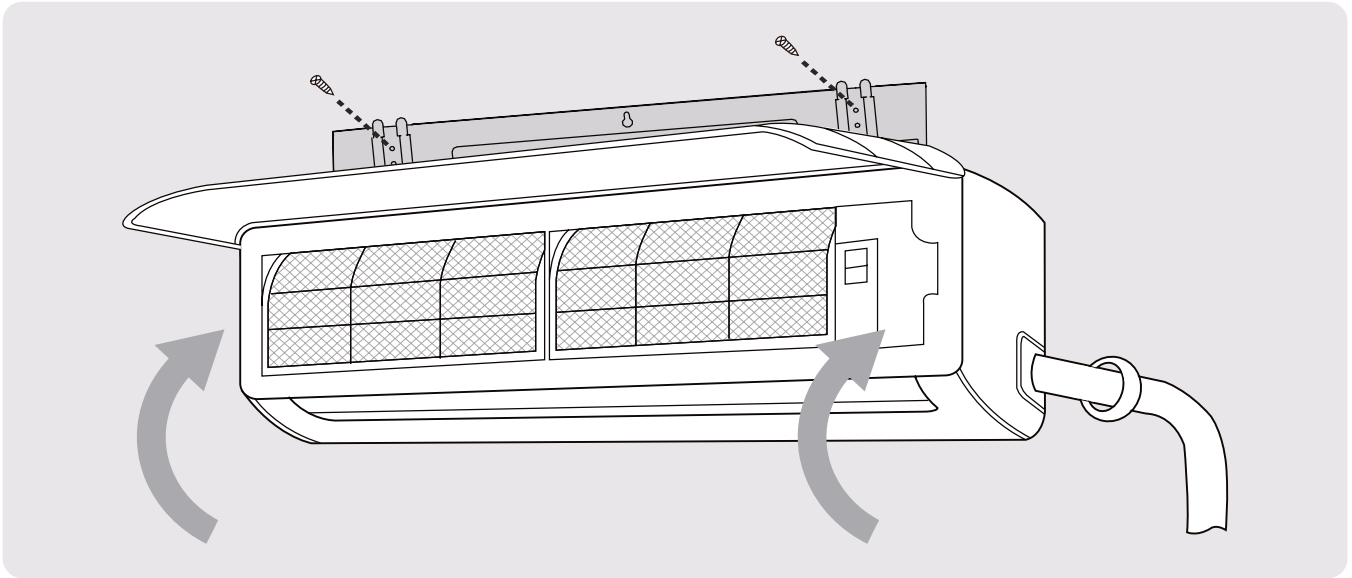
Pre-Season Inspection:

After prolonged non-operation perform the following:

1. Check for damaged or disconnected wires.
2. Clean the indoor unit and filters.
3. Check for water and oil leaks.
4. Check for blockages in the airflow inlet and outlet.
5. Replace batteries in the remote control.



Indoor Unit Installation



Installation Instructions – Indoor Unit

PRIOR TO INSTALLATION:

Before installing the indoor unit, refer to the label on the product box to make sure that the model numbers of the indoor unit and outdoor unit match.

Step 1: Selecting an installation location

Before installing the indoor unit, you must choose an appropriate location. The following standards and guidelines will help you choose an appropriate location for the unit.

Proper installation locations should meet the following standards:

- Good air circulation
- Convenient drainage
- Noise from the unit will not disturb other people
- Firm and solid location that will not vibrate
- Strong enough to support the weight of the unit.
- A location that is at least 1 meter from all other electronic devices (e.g., TV, radio, computer)

DO NOT install the indoor unit in the following locations:

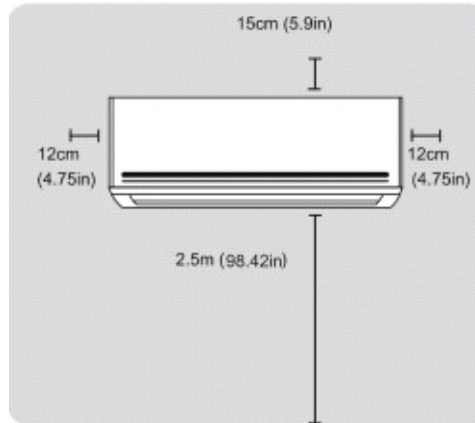
- Near any source of heat, steam, or combustible gas.
- Near flammable items such as curtains or clothing.
- Near any obstacles that could block air circulation.
- Near a doorway or where outside air may blow directly on the indoor unit.
- In a location subject to direct sunlight exposure.

NOTE ABOUT WALL HOLE

If there is no fixed refrigerant piping: While choosing a location, be sure that you leave ample room for a wall hole (see the Drill Wall Hole for Connective Piping step on the following pages) for the signal cable and refrigerant piping, which connect the indoor and outdoor units. The default position for all piping is the right-hand side of the indoor unit (while facing the front of the unit). After the piping and signal wire are installed, use the provided neoprene (spray foam can be used instead, if you prefer) to pack the space left in hole, in order to seal it and make it airtight.

Indoor Unit Installation

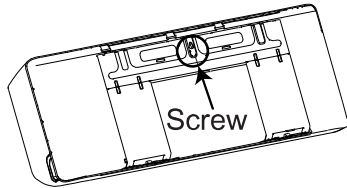
Refer to the following diagram to ensure proper distance from walls and ceiling:



Step 2: Attach mounting plate to wall

The mounting plate is the device on which you will mount the indoor unit.

1. Remove the screw that attaches the mounting plate to the back of the indoor unit.



2. Place the mounting plate against the wall in a location that meets the standards in the Select Installation Location step. (See Mounting Plate Dimensions for detailed information on mounting plate sizes.)
3. Drill holes for mounting screws in places that:
 - have studs and can support the weight of the unit
 - correspond to screw holes in the mounting plate
4. Secure the mounting plate to the wall with the screws provided.
5. Make sure that mounting plate is flat against the wall.

NOTE FOR CONCRETE OR BRICK WALLS:

If the wall is made of brick, concrete, or similar material, drill 0.2 in diameter (5 mm diameter) holes in the wall and insert the sleeve anchors provided. Secure the mounting plate to the wall by tightening the screws directly into the clip anchors.

Step 3: Drill wall hole for connective piping

You must drill a hole in the wall for refrigerant piping, the drainage pipe, and the signal cable that will connect the indoor and outdoor units.

1. Determine the location of the wall hole based on the position of the mounting plate. Refer to Mounting Plate Dimensions on the next page to help you determine the optimal position. Refer to Fig. 4.3 wall hole diameter and install at a slight angle to facilitate drainage.
2. Using a core drill [3.5 in (76.2 mm) for 24K & 36K units, 2.5 in (65 mm) for all others], drill a hole in the wall. Make sure that the hole is drilled at a slight downward angle, so that the outdoor end of the hole is lower than the indoor end by about 0.2 to 0.275 in (5 mm-7 mm). This will ensure proper water drainage. (See Fig. 4.2)

NOTE: When the gas side connective pipe is 5/8 in (16 mm) or more, the wall hole should be 3.54 in (90 mm).

3. Place the protective wall cuff in the hole. This protects the edges of the hole and will help seal it when you finish the installation process

! CAUTION

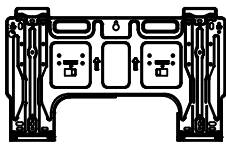
When drilling the wall hole, be sure to avoid wires, plumbing, and other sensitive components.

Indoor Unit Installation

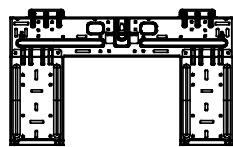
MOUNTING PLATE DIMENSIONS

Different models have different mounting plates. For the different customization requirements, the shape of the mounting plate may be slightly different. However, the installation dimensions are the same for the same size of indoor unit. See the illustrations for Type A and Type B below for an example. In order to ensure that you have ample room to mount the indoor unit, the diagrams to the right show different types of mounting plates along with the following dimensions:

- Height & Width of mounting plate
- Height & Width of indoor unit relative to plate
- Recommended position of wall hole (both to the left and right of mounting plate)
- Relative distances between screw holes

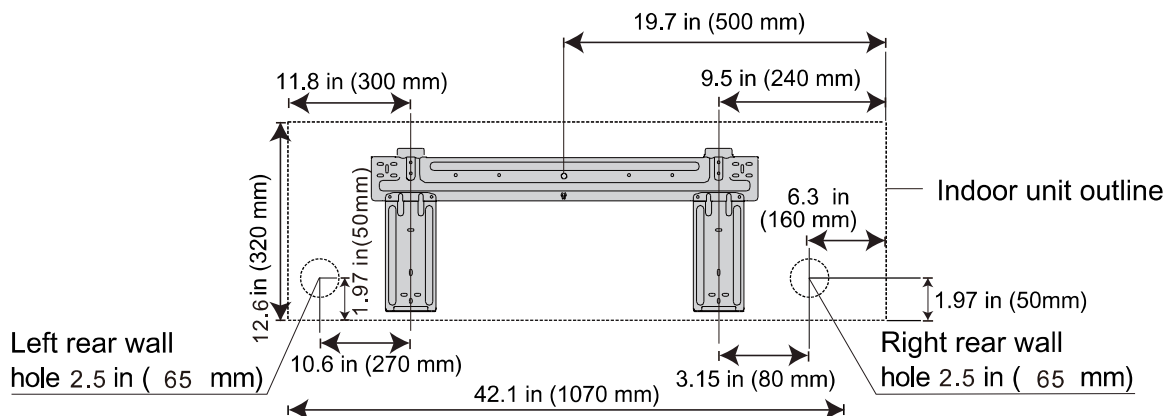
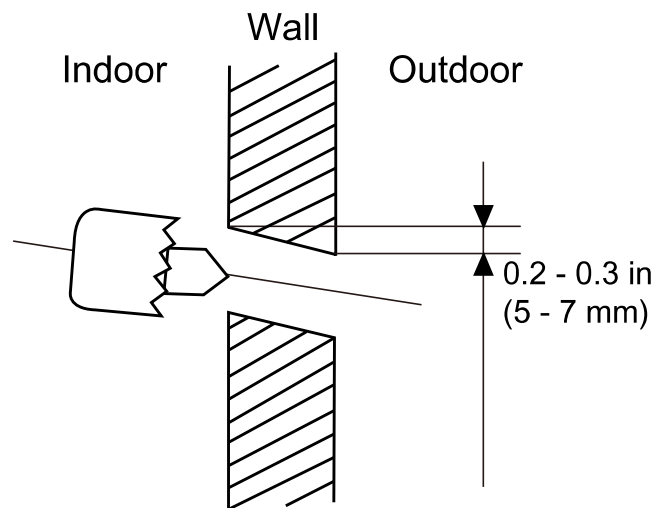
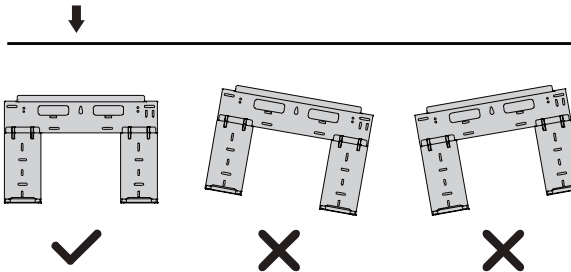


Type A



Type B

Correct orientation of Mounting Plate

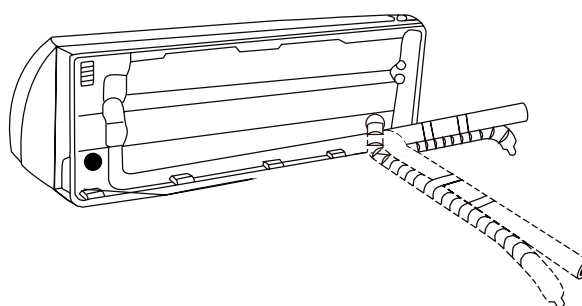
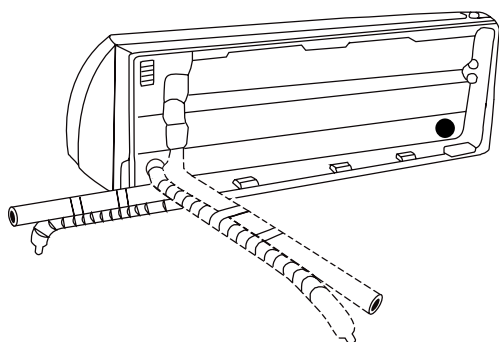
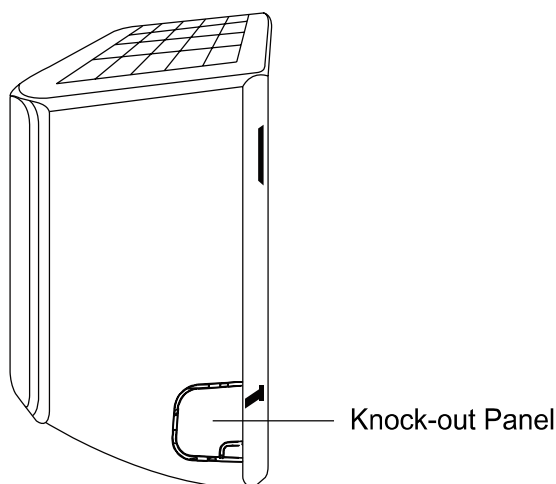


Indoor Unit Installation

Step 4: Prepare refrigerant piping

The refrigerant piping is inside an insulating attached to the back of the unit. You must prepare the piping before passing it through the hole in the wall. Refer to the Refrigerant Piping Connection section of this manual for detailed instructions on pipe flaring and flare torque requirements, technique, etc.

1. Based on the position of the wall hole relative to the mounting plate, choose the side from which the piping will exit the unit.
2. If the wall hole is behind the unit, keep the knock-out panel in place. If the wall hole is to the side of the indoor unit, remove the plastic knock-out panel from that side of the unit. This will create a slot through which your piping can exit the unit. Use needle nose pliers if the plastic panel is too difficult to remove by hand.



3. Use scissors to cut down the length of the insulating sleeve to reveal about 6 in (15 cm) of the refrigerant piping. This serves two purposes:

To facilitate the Refrigerant Piping Connection process

To facilitate Gas Leak Checks and enable you to check for dents

4. If existing connective piping is already embedded in the wall, proceed directly to the Connect Drain Hose step. If there is no embedded piping, connect the indoor unit's refrigerant piping to the connective piping that will join the indoor and outdoor units. Refer to the Refrigerant Piping Connection section of this manual for detailed instructions.
5. Based on the position of the wall hole relative to the mounting plate, determine the necessary angle of your piping.
6. Grip the refrigerant piping at the base of the bend.
7. Slowly, with even pressure, bend the piping towards the hole. **DO NOT** dent or damage the piping during the process.

NOTE ON PIPING ANGLE

Refrigerant piping can exit the indoor unit from four different angles:

- Left-hand side
- Left rear
- Right-hand side
- Right rear

CAUTION

Be extremely careful not to dent or damage the piping while bending them away from the unit. Any dents in the piping will affect the unit's performance.

Indoor Unit Installation

Step 5: Connect drain hose

By default, the drain hose is attached to the left-hand side of unit (when you're facing the back of the unit). However, it can also be attached to the right-hand side.

1. To ensure proper drainage, the drain hose must exit the unit on the same side as the refrigerant piping.
2. Wrap the connection point firmly with Teflon tape to ensure a good seal and to prevent leaks.
3. For the portion of the drain hose that will remain indoors, wrap it with foam pipe insulation to prevent condensation.
4. Remove the air filter and pour a small amount of water into the drain pan to make sure that water flows from the unit smoothly.

NOTE ON DRAIN HOSE PLACEMENT

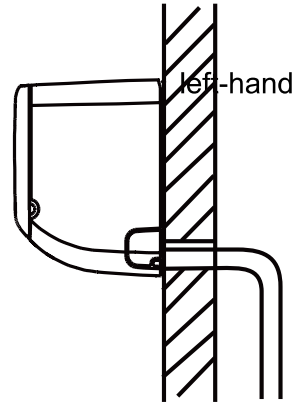
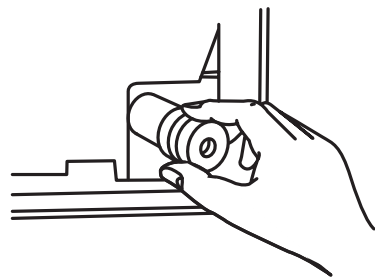
! CAUTION

Make sure to arrange the drain hose according to Fig. 4.6a.

- ⊘ DO NOT kink the drain hose.
- ⊘ DO NOT create a water trap.
- ⊘ DO NOT put the end of drain hose in water or a container that will collect water.

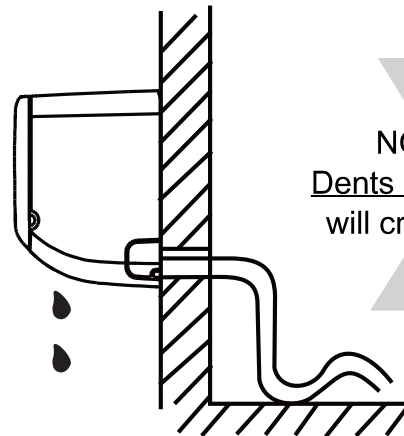
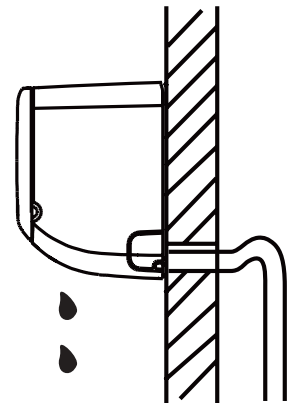
ENSURE UNUSED DRAIN HOLE IS PLUGGED

To prevent unwanted leaks be sure that the factory installed rubber plug is in the unused drain hole.



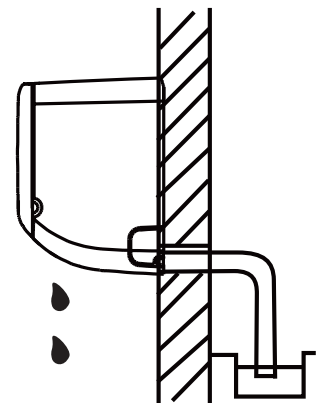
Make sure there are **NO** kinks or dents in the hose to ensure proper drainage.

NOT CORRECT
Kinks in the drain hose will create water traps.



NOT CORRECT
Dents in the drain hose will create water traps.

NOT CORRECT
DO NOT place the end of the drain hose in water or in containers that collect water. This will prevent proper drainage.



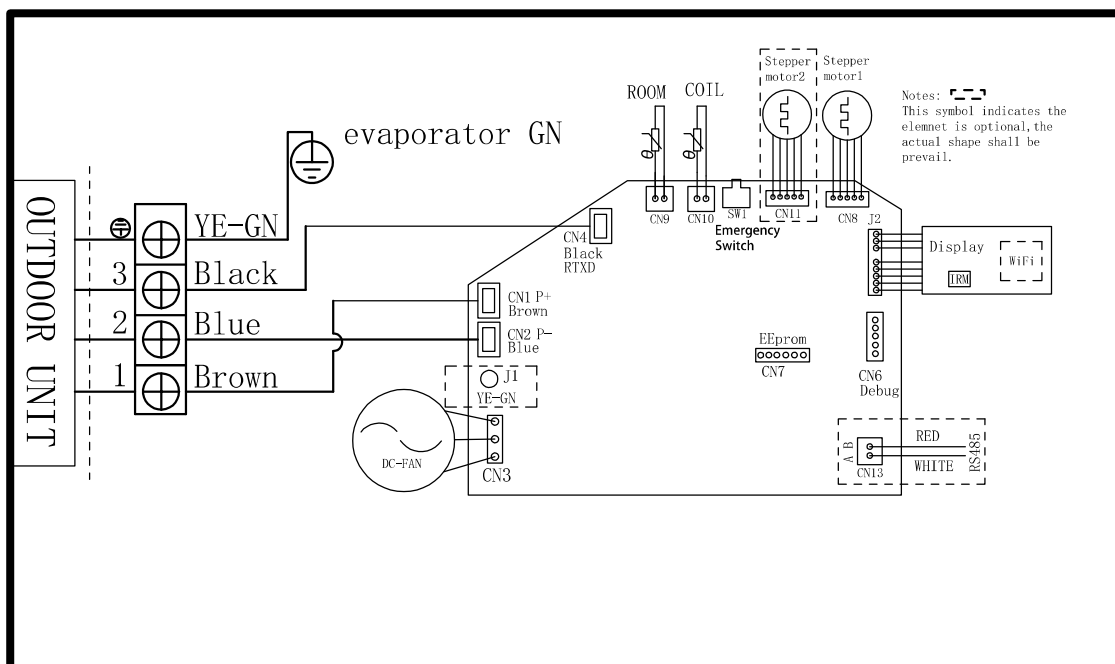
Indoor Unit Installation

! BEFORE PERFORMING ELECTRICAL WORK, READ THESE REGULATIONS

1. All wiring must comply with local and national electrical codes, and must be installed by a licensed electrician.
 2. All electrical connections must be made according to the Electrical Connection Diagram located on the panels of the indoor and outdoor units.
 3. If there is a serious safety issue with the power supply, stop work immediately. Explain your reasoning to the client, and refuse to install the unit until the safety issue is properly resolved.
 4. Power voltage should be within 90-110% of rated voltage. Insufficient power supply can cause a malfunction, electrical shock, or fire.
 5. Circuit, including any switches, should have a capacity 1.5 times the maximum unit current (amps).
 6. If connecting power to fixed wiring, the qualified technician must use an approved circuit breaker or switch that disconnects all poles and has a contact separation of at least 1/8 in (3 mm). It must be incorporated into the fixed wiring.
 7. Make sure to properly ground the air conditioner.
 8. Every wire must be firmly connected. Loose wiring can cause the terminal to overheat, resulting in malfunction and possible fire.
 9. If the unit has an auxiliary electric heater, it must be installed at least 40 in (1 meter) away from any combustible materials.
 10. To avoid getting an electric shock, never touch the electrical components soon after the power supply has been turned off. Always wait 10 minutes or more before touching the electrical components once the power has been turned off.
 11. If connecting power to fixed wiring, a surge protector and main power switch should be installed.
- ⊘ **DO NOT** connect another appliance to the same circuit. Only connect the unit to an individual branch circuit outlet.
- ⊘ **DO NOT** let wires touch or rest against refrigerant tubing, the compressor, or any moving parts within the unit.

! WARNING

BEFORE PERFORMING ANY ELECTRICAL WORK, TURN OFF ALL POWER TO THE SYSTEM.



Indoor Unit Installation

Step 6: Connect signal cable

CHOOSE THE APPROPRIATE CABLE SIZE

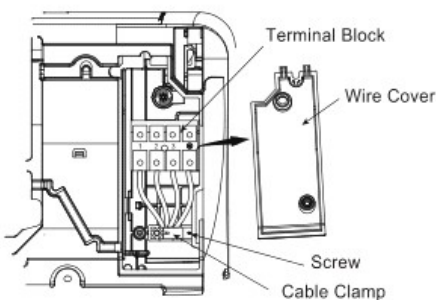
The size of the power supply cable, signal cable, fuse, and switch needed is determined by the maximum unit current. The maximum unit current is indicated on the nameplate located on the side panel of the unit. Refer to this nameplate to choose the right cable, fuse, or switch.

NOTE: In North America, please choose the right cable size according to the Minimum Circuit Ampacity indicated on the nameplate of the unit.

TAKE NOTE OF FUSE SPECIFICATIONS

The air conditioner's circuit board (PCB) is designed with a fuse to provide overcurrent protection. The specifications of the fuse are printed on the circuit board, such as: T3.15A/250VAC, T5A/250VAC, etc.

1. Prepare the cable for connection:
2. Open front panel of the indoor unit.
3. Using a screwdriver, open the wire box cover on the right side of the unit. This will reveal the terminal block.



See picture on previous page for wiring diagram.
Wiring diagram also found inside lid of interior unit

4. Unscrew the cable clamp below the terminal block and place it to the side.
5. Facing the back of the unit, remove the plastic panel on the bottom left-hand side.
6. Feed the signal wire (protected by conduit) through this slot, from the back of the unit to the front.
7. Facing the front of the unit, match the wire colors with the labels on the terminal block, connect the u-lug and firmly screw each wire to its corresponding terminal.

! CAUTION

⊘ DO NOT MIX UP LIVE AND NULL WIRES

This is dangerous, and can cause the air conditioning unit to malfunction.

8. After checking to make sure every connection is secure, use the cable clamp to fasten the signal cable to the unit. Screw the cable clamp down tightly.
9. Replace the wire cover on the front of the unit, and the plastic panel on the back.

! WARNING

THE WIRING CONNECTION PROCESS MAY DIFFER SLIGHTLY BETWEEN UNITS AND REGIONS.

North America

Model Series (Indoor Unit)	Appliance Amps (A)	
	MCA	MOP
All Capacity Wall Mounted Air Handlers	3	15

! WARNING

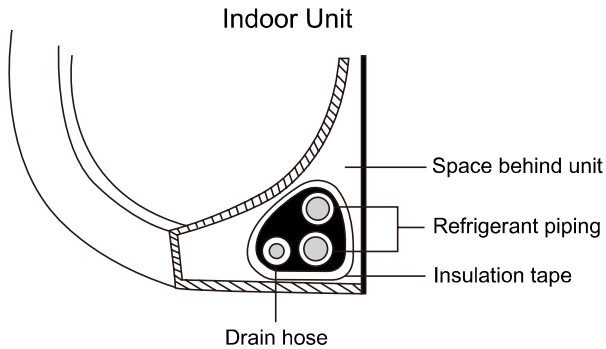
All wiring must be performed in accordance with the wiring diagram Fig. 4.7a shown on the previous page.

Indoor Unit Installation

Step 7: Wrap piping

Before passing the piping and drain hose through the wall hole, you must bundle them together to protect them, insulate them, and save space.

1. Bundle the drain hose and refrigerant pipes



DRAIN HOSE MUST BE ON BOTTOM

Make sure that the drain hose is at the bottom of the bundle. Putting the drain hose at the top of the bundle can cause the drain pan to overflow, which may lead to fire or water damage.

SIGNAL CABLE PROTECTION

The signal cable must be protected by conduit before being pushed through the wall hole.

2. Using vinyl tape, attach the drain hose to the underside of the refrigerant pipes.
3. Using insulation tape, wrap the refrigerant pipes and drain hose tightly together.

DO NOT WRAP ENDS OF PIPING

When wrapping the bundle, keep the ends of the piping unwrapped. You need to access them to test for leaks at the end of the installation process (refer to Electrical Checks and Leak Checks section of this manual).

Step 8: Mount indoor unit

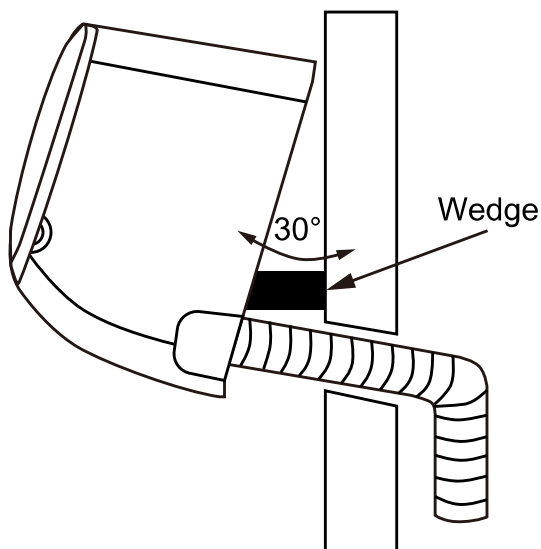
If you installed new connective piping to the outdoor unit, do the following:

1. If you have already passed the refrigerant piping through the hole in the wall, proceed to Step 4.
2. Otherwise, double-check that the ends of the refrigerant pipes are sealed to prevent dirt or foreign material from entering the pipes.
3. Slowly pass the wrapped bundle of refrigerant pipes and drain hose through the hole in the wall.
4. Hook the top of the indoor unit on the upper hook of the mounting plate.
5. Check that unit is hooked firmly on mounting plate by applying slight pressure to the left and right-hand sides of the unit. The unit should not jiggle or shift.
6. Using even pressure, push down on the bottom half of the unit. Keep pushing down until the unit snaps onto the hooks along the bottom of the mounting plate.
7. Again, check that the unit is firmly mounted by applying slight pressure to the left and the right-hand sides of the unit.

Indoor Unit Installation

If refrigerant piping is already embedded in the wall, do the following:

1. Hook the top of the indoor unit on the upper hook of the mounting plate.
2. Use a bracket or wedge to prop up the unit, giving you enough room to connect the refrigerant piping, signal cable, and drain hose.



3. Connect drain hose and refrigerant piping (refer to Refrigerant Piping Connection section of this manual for instructions).
4. Keep piping connections exposed to perform the leak test (refer to Electrical Checks and Leak Checks section of this manual).
5. After the leak test, wrap the piping connection points with insulation tape.
6. Remove wedge bracket or wedge that is propping up the unit.
7. Using even pressure, push down on the bottom half of the unit. Keep pushing down until the unit snaps onto the hooks along the bottom of the mounting plate.

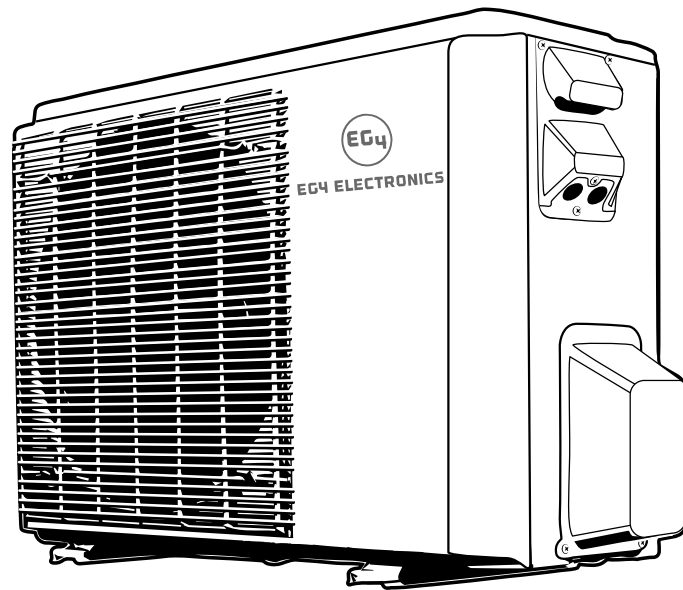
UNIT IS ADJUSTABLE

Keep in mind that the hooks on the mounting plate are smaller than the holes on the back of the unit. If you find that you do not have ample room to connect embedded pipes to the indoor unit, the unit can be adjusted left or right by about 1.25 in - 1.95 in (30 mm - 50 mm), depending on the model.



Move to left or right

Outdoor Unit Installation



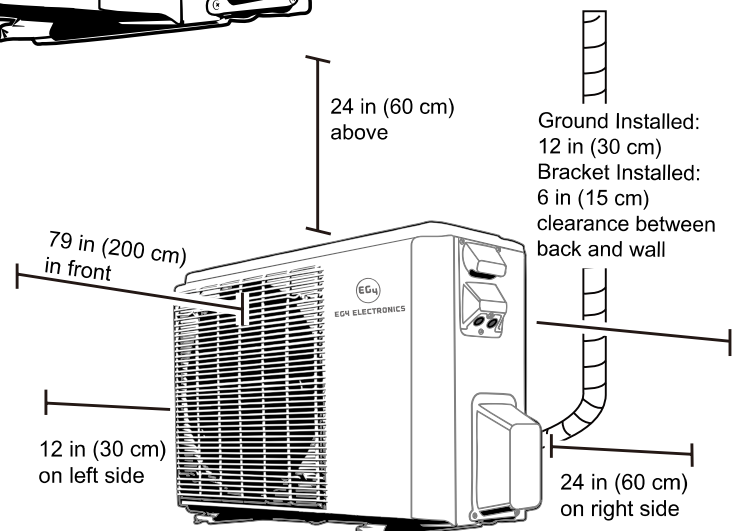
Installation Instructions – Outdoor Unit

Step 1: Select installation location

Before installing the outdoor unit, you must choose an appropriate location. The following standards will help you choose an appropriate location.

Proper installation locations meet the following standards:

- Meets all spatial requirements shown in Installation Space Requirements.
- Good air circulation and ventilation.
- Firm and solid location that can support the unit and will cause vibration.
- Noise from the unit will not disturb others.
- Protected from prolonged periods of direct sunlight or rain.
- Where snowfall is anticipated, raise the unit above the base pad to prevent ice buildup coil damage. Mount the unit high enough to be above the average accumulated area snowfall. The minimum height must be 18 inches.



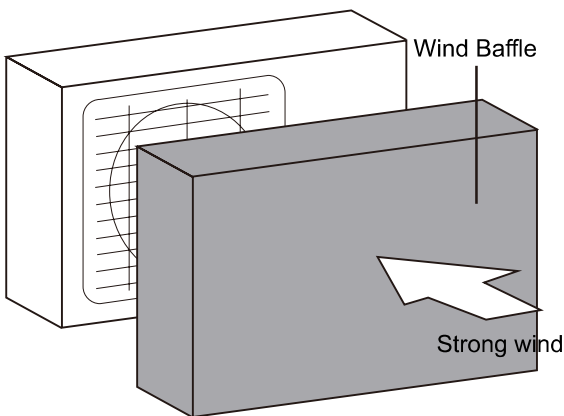
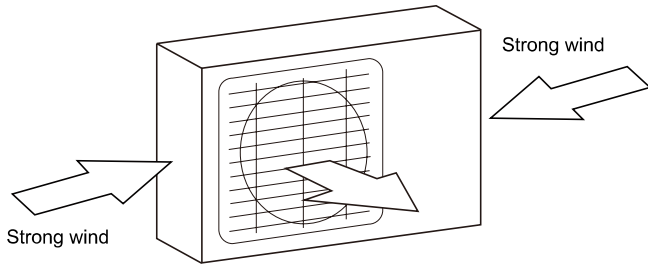
DO NOT

- Near an obstacle that will block air inlets and outlets
- Near a public street, crowded areas, or where noise from the unit will disturb others
- Near animals or plants that will be harmed by hot air discharge
- Near any source of combustible gas or in a location that is exposed to large amounts of dust
- In a location exposed to a excessive amounts of salty air

Outdoor Unit Installation

SPECIAL CONSIDERATIONS FOR EXTREME WEATHER

If the unit is exposed to heavy wind: Install unit so that air outlet fan is at a 90° angle to the direction of the wind. If needed, build a barrier in front of the unit to protect it from extremely heavy winds. Ensure the wind barrier does not block necessary airflow.



If the unit is frequently exposed to **heavy rain or snow**:

Build a shelter above the unit to protect it from the rain or snow. Be careful not to obstruct air flow around the unit.

If the unit is frequently exposed to salty air (seaside):

Use the outdoor unit that is specially designed to resist corrosion.

Step 2: Install drain joint

Heat pump units require a drain joint. Before bolting the outdoor unit in place, you must install the drain joint at the bottom of the unit.

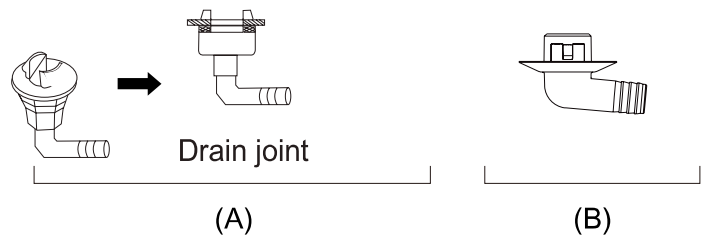
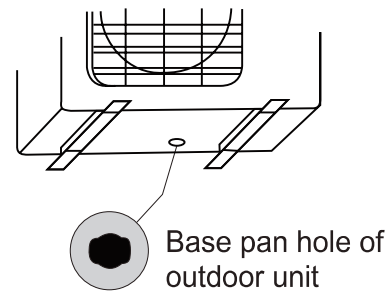
NOTE: that there are two different types of drain joints depending on the type of outdoor unit.

If the drain joint comes with a rubber seal, do the following:

1. Insert the drain joint into the hole in the base pan of the unit.
2. Rotate the drain joint 90° until it clicks in place facing the front of the unit.
3. Connect a drain hose extension (not included) to the drain joint to redirect water from the unit during heating mode.

If the drain joint doesn't come with a rubber seal, do the following:

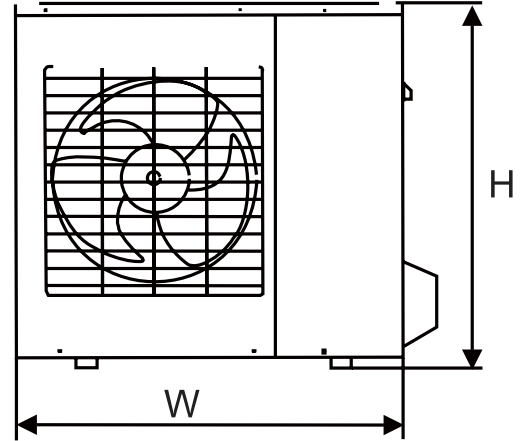
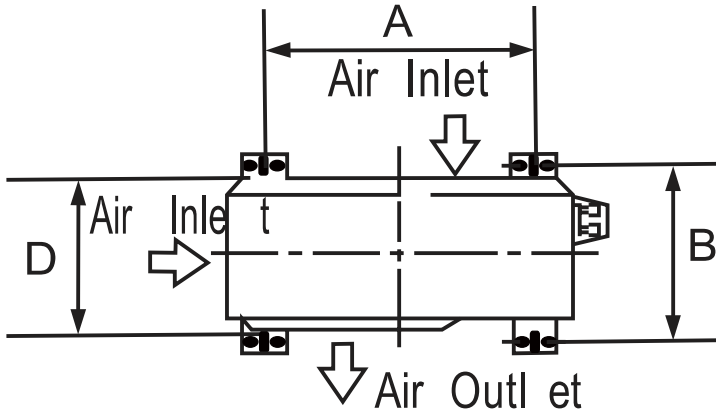
1. Insert the drain joint into the hole in the base pan of the unit. The drain joint will click in place.
2. Connect a drain hose extension (not included) to the drain joint to redirect water from the unit during heating mode.



! CAUTION

In cold climates, make sure that the drain hose is as vertical as possible to ensure swift water drainage. If water drains too slowly, it can freeze in the hose and flood the unit.

Outdoor Unit Installation



Step 3: Anchor outdoor unit

The outdoor unit can be anchored to the ground or to a wall-mounted bracket with bolts (M10). Prepare the installation base of the unit according to the dimensions below.

UNIT MOUNTING DIMENSIONS

The following is a list of different outdoor unit sizes and the distance between their mounting feet. Prepare the installation base of the unit according to the dimensions below.

Units: Inches (millimeters)

Outdoor Unit Dimensions		Mounting Dimensions	
Width (W) x Height (H) x Depth (D)		Width (A)	Depth (B)
DGWA3-09K & DGWA3-12K	31.1x 22.0x11.5 in. (790X560x291 mm)	21.2 in. (539 mm)	12.9 in. (327 mm)

If you will install the unit on the ground or on a concrete mounting platform, do the following:

1. Mark the positions for four expansion bolts based on dimensions in the Unit Mounting Dimensions chart.
2. Pre-drill holes for expansion bolts.
3. Clean concrete dust away from holes.
4. Place a nut on the end of each expansion bolt.
5. Hammer expansion bolts into the pre-drilled holes.

6. Remove the nuts from expansion bolts, and place outdoor unit on the bolts.
7. Put a washer on each expansion bolt, then replace the nuts.
8. Using a wrench, tighten each nut until snug.

WARNING

WHEN DRILLING INTO CONCRETE, EYE PROTECTION IS RECOMMENDED AT ALL TIMES.

Outdoor Unit Installation

If you will install the unit on a wall-mounted bracket, do the following:

CAUTION

Before installing a wall-mounted unit, make sure that the wall is made of solid brick, concrete, or of similarly strong material. The wall must be able to support at least FOUR times the weight of the unit.

1. Mark the position of bracket holes based on dimensions in the Unit Mounting Dimensions chart.
2. Pre-drill the holes for the expansion bolts.
3. Clean dust and debris away from holes.
4. Place a washer and nut on the end of each expansion bolt.
5. Thread expansion bolts through holes in mounting brackets, put mounting brackets in position, and hammer expansion bolts into the wall.
6. Ensure that the mounting brackets are level.
7. Carefully lift the unit and place its mounting feet on the brackets.
8. Using a wrench, bolt the unit firmly to the brackets.

TO REDUCE VIBRATION OF WALL-MOUNTED UNIT



If allowed, you can install the wall-mounted unit with rubber gaskets to reduce vibration and noise.

Step 4: Connect signal and power cables

The outside unit's terminal block is protected by an electrical wiring cover on the side of the unit. A comprehensive wiring diagram is printed on the inside of the wiring cover.



BEFORE PERFORMING ELECTRICAL WORK, READ THESE REGULATIONS

1. All wiring must comply with local and national electrical codes, and must be installed by a licensed electrician.
 2. All electrical connections must be made according to the Electrical Connection Diagram located on the panels of the indoor and outdoor units.
 3. If there is a serious safety issue with the power supply, stop work immediately. Explain your reasoning to the client, and refuse to install the unit until the safety issue is properly resolved.
 4. Power voltage should be within 90-100% of rated voltage. Insufficient power supply can cause malfunction, electrical shock, or fire.
 5. Circuit, including any switches, should have a capacity 1.5 times the maximum unit current (amps).
 6. The qualified technician must use an approved circuit breaker or switch that disconnects all poles and has a contact separation of at least 1/8 in (3 mm).
 7. Make sure to properly ground the air conditioner.
 8. Every wire must be firmly connected. Loose wiring can cause the terminal to overheat, resulting in malfunction and possible fire.
 9. If the unit has an auxiliary electric heater, it must be installed at least 40 in (1 meter) away from combustible materials.
-  **DO NOT** connect another appliance to the same circuit.
-  **DO NOT** let wires touch or rest against refrigerant tubing, the compressor, or any moving parts within the unit.

Outdoor Unit Installation

WARNING

BEFORE PERFORMING ANY ELECTRICAL OR WIRING WORK, TURN OFF THE MAINPOWER TO THE SYSTEM.

1. Prepare the cable for connection:

USE THE RIGHT CABLE

- See table below for gauge requirements

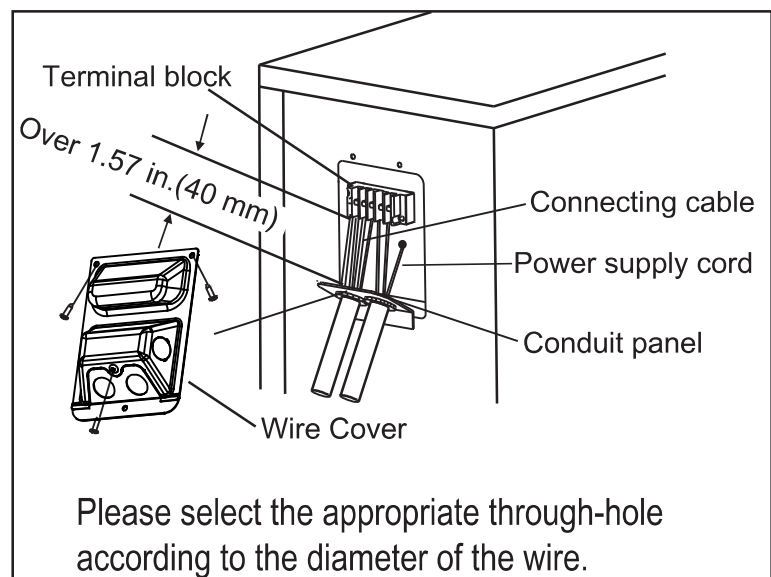
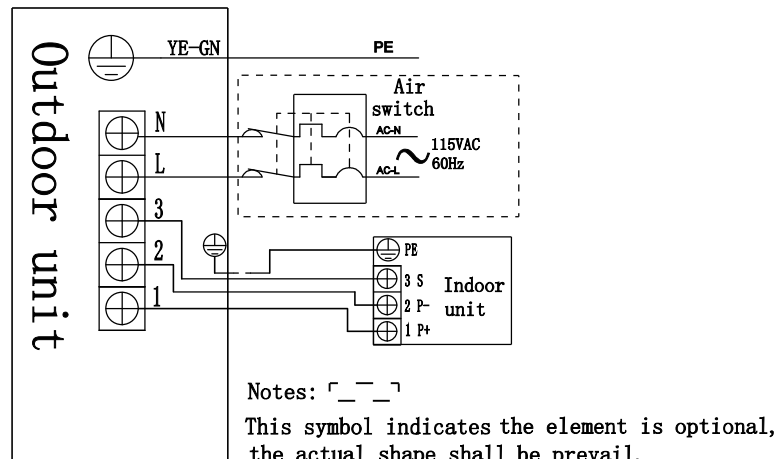
North America
Minimum Wire Gauge for Power Cables

	Model Capacity (BTU/hr)	Appliance Amps (A)		AWG	
		MCA	MOP	Min.	Pref.
115V	9K	15	20	14	12
	12K	15	20	14	12
208/ 230V	9K	10	15	14	14
	12K	15	15	14	12
	18K	15	20	14	12
	24K	20	25	12	10
	36K	25	35	10	8

2. Remove the electrical wiring cover from the unit by loosening the 3 retaining screws.
3. Remove the caps on the conduit panel.
4. Temporarily mount the conduit tubes (not included) on the conduit panel.
5. Properly connect both the power supply and low voltage lines to the corresponding terminals on the terminal block.
6. Ground the unit in accordance with local codes.
7. Be sure to size each wire so that it allows for it to be several inches longer than the required length for wiring.
8. Use lock nuts to secure the conduit tubes.
9. Replace the wire cover and reinstall the 3 screws.

WARNING

ALL WIRING MUST PERFORMED STRICTLY IN ACCORDANCE WITH THE WIRING DIAGRAM LOCATED INSIDE THE OUTDOOR UNIT'S WIRE COVER.



Installation instructions for quick Connector Plug-N-Cool Kits

The quick connector tubing is factory fabricated and tested to ensure leak free connections. The connection system is a double sealing system with an automatic safety valve that releases the refrigerant only when the Outdoor unit is connected and sealed.

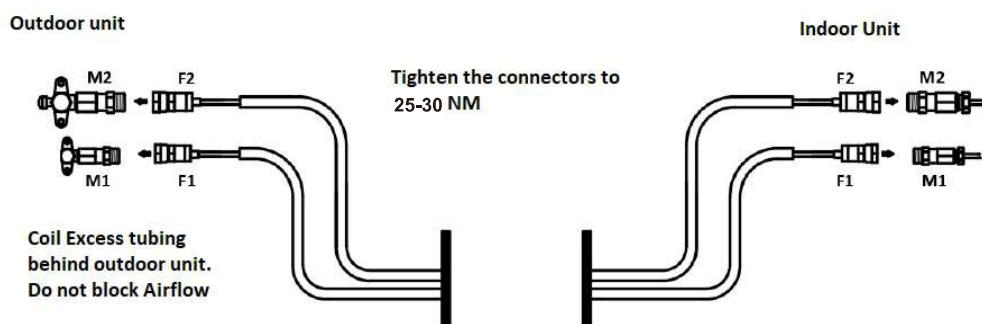
Note: Alteration of the supplied length of tubing is not recommended. Excess tubing can be coiled behind the outdoor unit, taking care not to block its airflow.



Care must be taken not to kink the tubing, to prevent leaks.

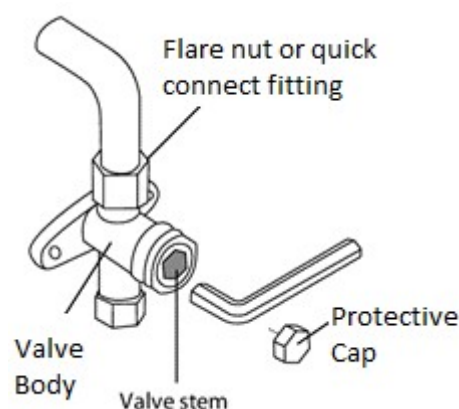
The ends of the tubing have protective covers on them, and care must be taken to prevent any dirt or debris causing a leak of refrigerant gases!

1. Remove the protective covers from the F2/M2 connector on the Indoor unit.
2. Connect the tubing to the Indoor unit and tighten to 25-30 NM.
3. Repeat for the F1/M1 connectors on the indoor unit.
4. Coil the excess tubing behind the outdoor unit.
5. Remove the protective covers from the M2/F2 connectors on the outdoor unit.
6. Connect the tubing to the Outdoor unit and tighten to 25-30 NM.
7. Repeat for the M1/F1 connectors on the outdoor unit.



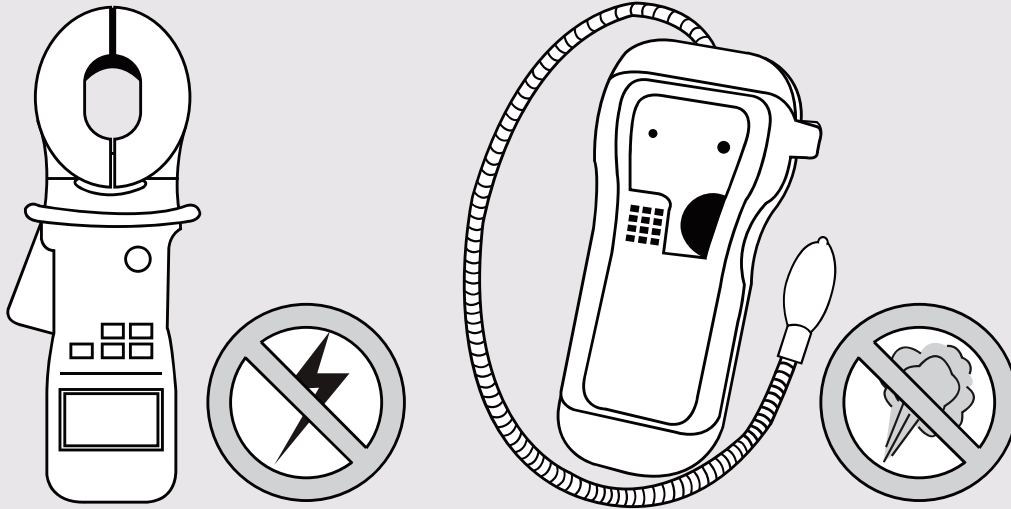
Releasing the refrigerant into the system

At the outdoor unit remove the protective cap. Insert a hex key wrench and turn the bottom valve anti-clockwise until it seats against the outer seal. Reinstall the protective cap and tighten it to 30 - 40 NM. (snug) Take care not to overtighten.



Repeat for the second valve.

Electrical and Gas Leak Checks



Electrical Safety Checks

After installation, confirm that all electrical wiring is installed in accordance with local and national regulations, and according to the Installation Manual.
BEFORE TEST RUN

Check Grounding Work

Measure grounding resistance by visual detection and with grounding resistance tester. Grounding resistance must be less than 4.

Note: This may not be required for some locations in the US.

DURING TEST RUN

Check for Electrical Leakage

During the Test Run, use an electro-probe and multimeter to perform a comprehensive electrical leakage test.

If electrical leakage is detected, turn off the unit immediately and call a licensed electrician to find and resolve the cause of the leakage.

Note: This may not be required for some locations in the US.



ELECTRIC SHOCK

ALL WIRING MUST COMPLY WITH LOCAL AND NATIONAL ELECTRICAL CODES, AND MUST BE INSTALLED BY A LICENSED ELECTRICIAN.

Gas Leak Checks

There are two different methods to check for gaseous leaks.

Soap and Water Method

Using a soft brush, apply soapy water or liquid detergent to all pipe connection points on the indoor unit and outdoor unit. The presence of bubbles indicates a leak.

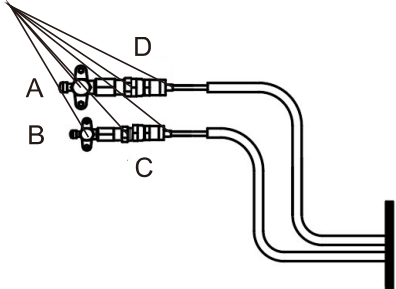
Leak Detector Method

If using leak detector, refer to the device's operation manual for proper usage instructions.

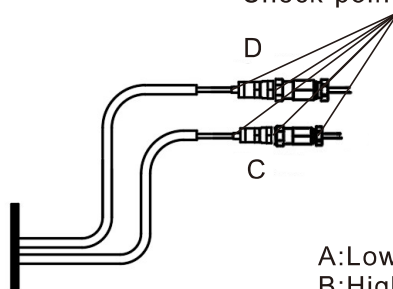
AFTER PERFORMING GAS LEAK CHECKS

After confirming that the all pipe connection points **DO NOT** leak, replace the valve cover on the outside unit.

Check-point of outdoor unit



Check-point of indoor unit



A: Low Pressure stop valve
B: High pressure stop valve
C&D: connector

Test Run

Before Test Run

Only perform test run after you have completed the following steps:

- Electrical Safety Checks – Confirm that the electrical system is safe and operating properly
- Gas Leak Checks – Check all flare nut connections and confirm that the system is not leaking
- Confirm that gas and liquid (high and low pressure) valves are fully open

Test Run Instructions

You should perform the Test Run for at least 30 minutes.

1. Connect power to the unit.
2. Press the ON/OFF button on the remote controller to turn it on.
3. Press the MODE button to scroll through the following functions, one at a time:
 - COOL – Select lowest possible temperature
 - HEAT – Select highest possible temperature
4. Let each function run for 5 minutes, and perform each of the checks listed in the table to the right:

List of Checks to Perform	PASS/FAIL	
No electrical leakage		
Unit is properly grounded		
All electrical terminals properly covered		
Indoor and outdoor units are solidly installed		
All pipe connection points do not leak	Outdoor (2):	Indoor (2):
Water drains properly from drain hose		
All piping is properly insulated		
Unit performs COOL function properly		
Unit performs HEAT function properly		
Indoor unit louvers rotate properly		
Indoor unit responds to remote control		

Testing

DOUBLE-CHECK PIPE CONNECTIONS

During operation, the pressure of the refrigerant circuit will increase. This may reveal leaks that were not present during your initial leak check. Take time during the Test Run to double-check that all refrigerant pipe connection points do not have leaks. Refer to Gas Leak Check section for instructions.

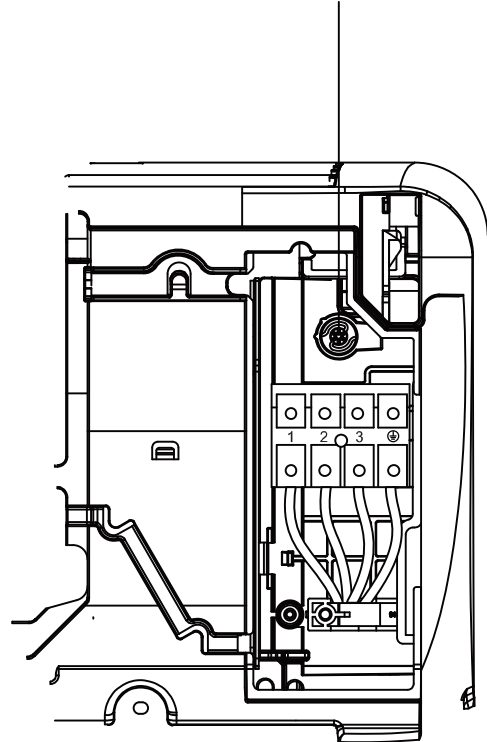
5. After the Test Run is successfully complete, and you confirm all check points in List of Checks to Perform have PASSED, do the following:
 - a. Using remote control, return unit to normal operating temperature.
 - b. Using insulation tape, wrap the indoor refrigerant pipe connections that you left uncovered during the indoor unit installation process.

IF AMBIENT TEMPERATURE IS BELOW 60.8°F (16°C)

You cannot use the remote controller to turn on the COOL function when the ambient temperature is below 60.8°F. In this instance, you can use the MANUAL CONTROL button to test the COOL function.

1. Lift the front panel of the indoor unit, and raise it until it clicks in place.
2. The MANUAL CONTROL button is located on the right-hand side of the unit. Press it 2 times to select the COOL function.
3. Perform Test Run as normal.

Manual control button

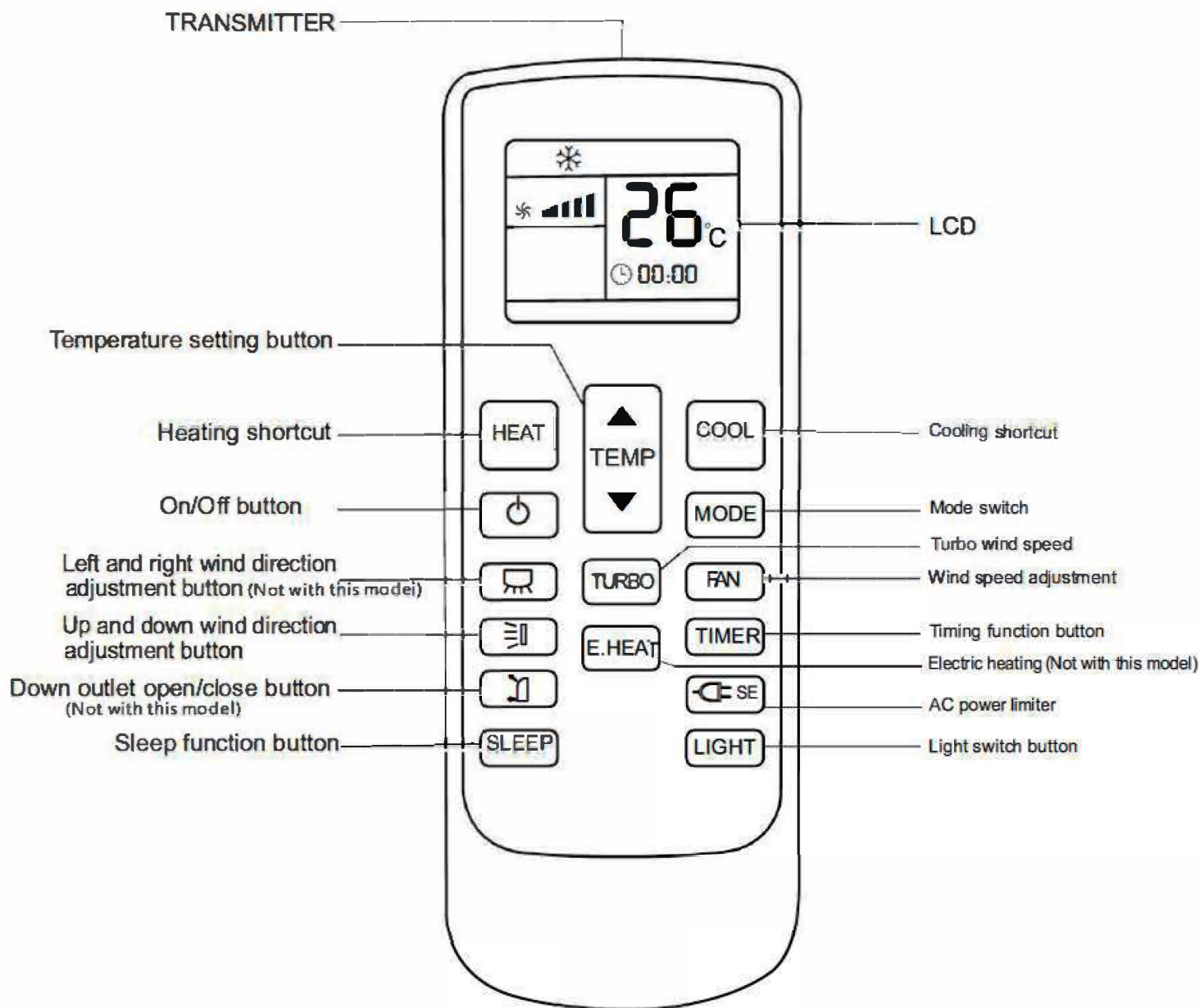


Operation

The air conditioner has an infrared remote and an android or I phone app.

Remote control operation

Some functions may not be available in all units.



Changing temperature readout from Celsius to Fahrenheit (and vice versa):

The unit will be shipped with one of two remotes. Both remotes look structurally the same, however, each unit will have a different sequence of button presses to change the temp. readout. One method requires you to simply press the Temp Up and Down buttons simultaneously. For the other remote, you would need to power down the remote and hold both the Temp Up button and the Fan button for ~5 seconds.

remote control continued

● "ON" button	Press the "ON" button to switch the air conditioner
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● "Mode" button	Press the "Mode" button and select the "Auto/Cooling/Dehumidifying/Air Supply/Heating" mode.
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● "COOL" button	<p>This button is used to set the air conditioner to enter the cooling mode, and the set temperature is 26°C.</p> <ol style="list-style-type: none">1. When the air conditioner is on or off, just press the button, the air conditioner will enter cooling mode and set the temperature to 26°C.2. In the timing on state, press this button to cancel the timing on setting and turn on in advance. Run cooling mode, set temperature to 26°C.3. In sleep state, press this button to run the cooling mode, set the temperature to 26°C.
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● "HEAT" button	<p>This button is used to set the air conditioner into heating mode, and set the temperature to 24°C.</p> <ol style="list-style-type: none">1. When it is turned on or off, as long as you press this button, the air conditioner will enter the heating mode and the set temperature is 24°C for operation.2. In the timing on state, press this button to cancel the timing on setting and turn on in advance. Run heating mode, set temperature to 24°C3. In sleep state, press this key to run heating mode, and set temperature to 24°C
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● "TEMP" button	<p>In cooling, heating, and dehumidification modes, press the "▲", "▼" keys to adjust the temperature degree, range 16-32°C Note: The temperature is not adjustable in the air supply mode.</p>
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● "FAN" button	<p>Press the "Wind Speed" button to select the wind speed of "Breeze/ Low Wind/Mid Low Wind/Stroke/High Wind/Auto". Note: There is no automatic wind speed in air supply mode.</p>
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● "E-SE" button	<p>When connected to the mains, press the "E-SE" button, the one-key power saving logo of the internal unit will turn green, and enter Power saving mode.</p>
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Android or I phone app

1. The indoor unit has a QR code that can be scanned to download the app.



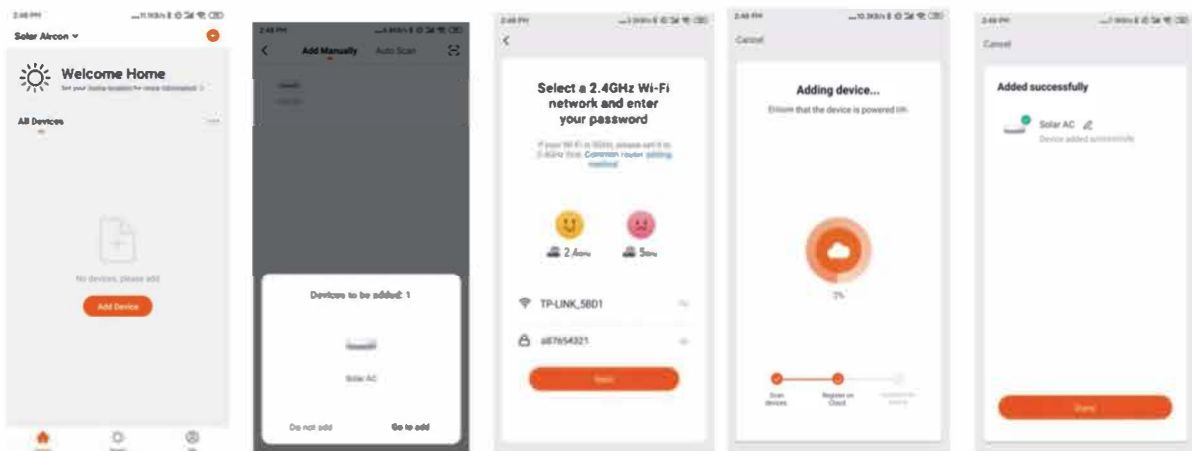
iOS and
Android

Download the app and register your phone number.

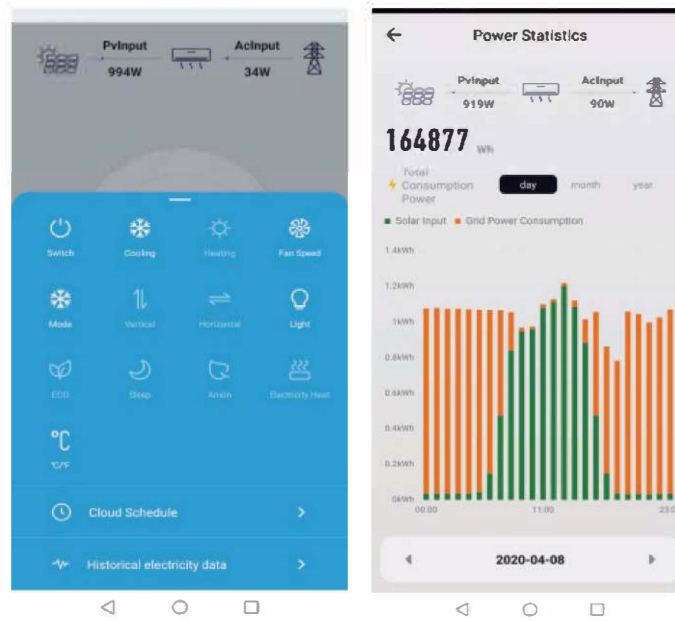
2. Turn the Solar air conditioner on, use the remote control and press the “LIGHT” button 8 times or more withing 10 seconds. When you hear “Di” the wi fiindicator should be flashing.



3. Turn the WiFi on your phone on and connect to the home WiFi.
4. Open the app on and it should automatically detect the Solar air conditioner. Confirm the device, enter the home WiFi password and start the connection.



5. Use the app to control the air conditioner anywhere via WIFI. Observe the power saving data and view the power consumption by hour/day/month/year.



Warning

Disassembly of the units can result in an electric shock hazard. This unit employs multiple sources of supply and care must be taken that all supplies are turned off and energy storage devices disconnected

Common Issues. Please check the following before contacting a repair company.

Issue	Possible Causes
Unit does not turn on when pressing the on off button	The Unit has a 3-minute protection feature that prevents the unit from overloading. The unit will not restart within three minutes of being turned off.
The unit changes from COOL/HEAT mode to FAN mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will continue operating when the temperature fluctuates again
The indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
The indoor unit makes noises	A rushing air sound may occur when the louver resets its position.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit's plastic parts.
Both the indoor unit and outdoor unit make noises	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.
	Low hissing sound when the system starts, has just stopped running, or is defrosting: This noise is normal and is caused by the refrigerant gas stopping or changing direction.
	Squeaking sound: Normal expansion and contraction of plastic and metal parts caused by temperature changes during operation can cause squeaking noises.
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.
Dust is emitted from either the indoor or outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The unit emits a bad odour	The unit may absorb odours from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The unit's filters have become mouldy and should be cleaned.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.
Operation is erratic, unpredictable, or unit is unresponsive	Interference from cell phone towers and remote boosters may cause the unit to malfunction. In this case, try the following: <ul style="list-style-type: none"> • Disconnect the power, then reconnect. • Press ON/OFF button on remote control to restart operation.

Problem	Possible Causes	Solutions
Poor Cooling Performance	Temperature setting may be higher than ambient room temperature	Lower the temperature setting
	The heat exchanger on the indoor or outdoor unit is dirty	Clean the affected heat exchanger
	The air filter is dirty	Remove the filter and clean it according to instructions
	The air inlet or outlet of either unit is blocked	Turn the unit off, remove the obstruction and turn it back on
	Doors and windows are open	Make sure that all doors and windows are closed while operating the unit
	Excessive heat is generated by sunlight	Close windows and curtains during periods of high heat or bright sunshine
	Too many sources of heat in the room (people, computers, electronics, etc.)	Reduce amount of heat sources
	SLEEP function is activated	SLEEP function can lower product performance by reducing operating frequency. Turn off SLEEP function.
Solar power is not enough. grid power is off, air conditioner runs only on solar panels.	Turn on the grid power.	
The unit is not working	Both solar and grid power is off	Turn on grid and solar power
	Remote control batteries are dead	Replace batteries
	Timer is activated	Turn timer off
Poor heating performance	The outdoor temperature is lower than 7°C (44.5°F)	Use auxiliary heating device
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
Error code appears in the window display of indoor unit: • E0, E1, E2... • P1, P2, P3... • F1, F2, F3... • Lo/Lp	The unit may stop operation or continue to run safely. If the indicator light continues to display an error code, wait for about 10 minutes. The problem may resolve itself. If not, disconnect both solar and grid power, then connect it again 2 minutes later. Turn the unit on. If the problem persists, turn off the unit and contact an authorized service centre	