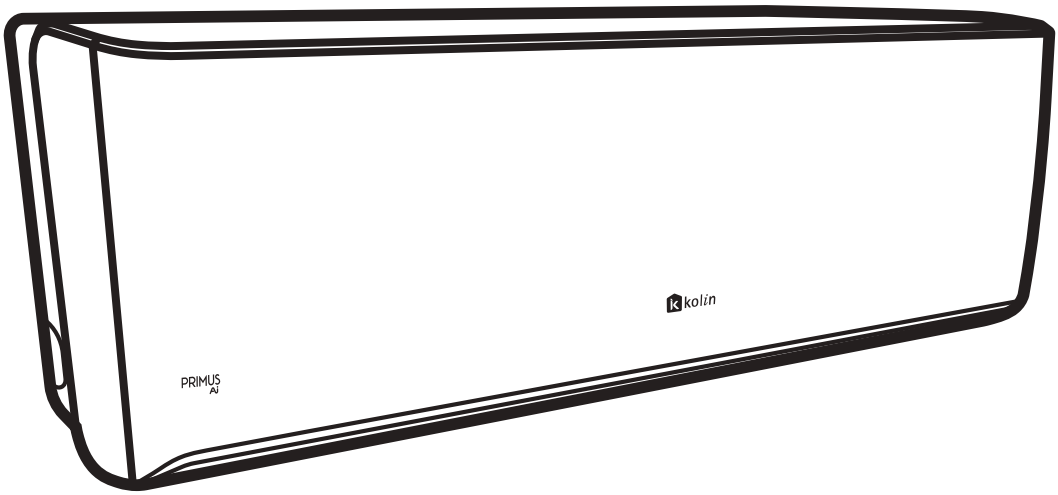
kolin

PRIMUS Ai

Full DC Inverter Split Type Air Conditioner

OWNER'S MANUAL



MODEL:

KS-IW10-GPAI13P1M32
KS-IW15-GPAI13P1M32
KS-IW20-GPAI13P1M32
KS-IW25-GPAI13P1M32
KS-IW30-GPAI13P1M32

Thank you for purchasing our air conditioner. Please read this manual carefully before operating your new air conditioning unit. Make sure to save this manual for your reference.

Kolin Philippines International, Inc.

TABLE OF CONTENTS

Please carefully read and retain this manual for future reference. This manual has undergone thorough verification, but in the event of any misprints or misleading information, we reserve the right to provide the correct interpretation. Additionally, please note that our products are subject to continuous updates, which may include changes in technology, appearance, color, etc., without prior notice. The actual product and its nameplate will always take precedence. Any changes will be reflected in the updated version of the manual.

SAFETY PRECAUTIONS

Read Safety Precautions Before Operation and Installation

Incorrect installation due to ignored instructions may cause serious damage or injury.
The seriousness of potential damage or injury is classified as either a **WARNING** or **CAUTION.**

WARNING

This symbol indicates a potential risk of personal injury or loss of life.

CAUTION

This symbol indicates a potential risk of property damage or serious consequences.

WARNING

This appliance can be used by children aged 8 years and older, as well as individuals with reduced physical, sensory, or mental abilities, or those lacking experience and knowledge, provided they have received supervision or instruction on how to use the appliance safely and understand the potential hazards. Children must not play with the appliance. Cleaning and maintenance should not be performed by children without supervision.

This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or those lacking experience and knowledge, unless they have received proper supervision or instruction from a responsible individual. Children should be supervised to prevent them from playing with the appliance.

EXCEPTION CLAUSES

The manufacturer assumes no liability for personal injury or property loss caused by the following:

- Damage to the product due to improper use or misuse.
- Alteration, modification, or maintenance of the product, or use with other equipment, without following the instruction manual.
- Product defects directly caused by corrosive gas.
- Defects resulting from improper handling during product transportation.
- Operation, repair, or maintenance performed without following the instruction manual or related regulations.
- Problems or disputes caused by the quality, specifications, or performance of parts and components produced by other manufacturers.
- Damage caused by natural disasters, harsh operating environments, or force majeure.

- For your safety, please contact your dealer or a local authorized service center before installing, moving, or performing maintenance on this air conditioner. These tasks must be handled exclusively by appointed professionals. Unauthorized handling poses a high risk of significant equipment damage, severe personal injury, and/or fatal accidents.
- If a refrigerant leak occurs or if the system needs to be drained (discharged) during installation, maintenance, or disassembly, the process must be managed by certified professionals. All work must strictly comply with your local laws and environmental regulations.

INSTALLATION

WARNING **CAUTION**

General Requirements

- Installation and maintenance must be performed only by qualified professionals.
- The appliance must be installed in accordance with national wiring regulations.
- Follow all local safety regulations; ensure the use of a qualified power supply circuit and a compatible circuit breaker, please refer to ***Table 1. Standard Circuit Breaker Ampere Ratings and Equivalent Stranded Wire Sizes.***
- All wiring for both the indoor and outdoor units must be connected by a professional.
- Instructions for the installation and use of this product are provided.

Electrical Safety

- Always disconnect the power supply before proceeding with any work related to electricity or safety.
- Ensure the power supply matches the specific requirements of the air conditioner.
- An unstable power supply or incorrect wiring may result in electric shock, fire hazards, or equipment malfunction.
- Install proper power supply cables before operating the air conditioner.
- The grounding resistance must comply with national electrical safety regulations.
- The air conditioner is a Class I electric appliance and must be properly grounded using a specialized grounding device installed by a professional.
- Improper grounding may cause electric shock; ensure the unit is effectively grounded at all times.
- The yellow-green wire is the grounding wire and must not be used for any other purpose.

Components and Connections

- A circuit breaker must be installed. Failure to do so may cause a malfunction.
- The circuit breaker should include magnetic and thermal trip functions (magnet/heating buckle) to protect against overloads and short circuits.
- Fixed wiring must include an all-pole disconnection switch with a contact separation of at least 3mm in all poles.
- Do not use unqualified or substandard power cords.
- If the power cord is too short, contact Kolin Service Hotline or its Authorized Service Partners for a proper replacement rather than using extensions.
- Keep interconnection cables away from the copper tubing, as the refrigerant circuit reaches high temperatures.

Placement and Physical Setup

- Select an installation location that is out of reach of children and far away from animals or plants.
- If the location is accessible to the public, install a protective fence for safety.
- The indoor unit should be installed close to the wall.
- The appliance must be positioned so the plug remains accessible after installation.
- Important: Remove the three pieces of adhesive tape from the unit during installation.
- Caution: Do not touch the internal blades; they are sharp and may cause injury.

OPERATION AND MAINTENANCE

WARNING **CAUTION**

- This appliance can be used by children aged 8 years and above, as well as persons with reduced physical, sensory, or mental capabilities or a lack of experience and knowledge, provided they are supervised or have been instructed on how to use the appliance safely and understand the hazards involved.
- Children must not play with the appliance. Cleaning and user maintenance should not be performed by children without adult supervision.
- If the supply cord is damaged, contact Kolin Service Hotline or its Authorized Service Partners for replacement to avoid hazards.
- Electrical Hazards
  - Do not connect the air conditioner to a multi-purpose socket, as this may cause a fire hazard.
  - Always disconnect the power supply before cleaning the unit to avoid electric shock.
  - Do not wash the air conditioner with water or spray water on the indoor unit, as this may cause an electric shock or malfunction.
- Do not attempt to repair the air conditioner yourself; contact Kolin Service Hotline or its Authorized Service Partners for service to avoid electric shock or damage.
- After removing the filter, do not touch the fins to avoid injury.
  - Do not insert fingers or objects into the air inlet or outlet, as this may cause personal injury or equipment damage.
  - Do not step on the top panel of the outdoor unit or place heavy objects on it.
- Do not spill water on the remote controller, as it may break.
  - Do not use a fire or a hairdryer to dry the filter, as this can cause deformation or a fire hazard.
  - Ensure the air outlet and inlet are never blocked to prevent malfunctions.
- Turn off the air conditioner and disconnect the power immediately, then contact Kolin Service Hotline or its Authorized Service Partners if any of the following occur:
  - The power cord is overheating or damaged.
  - There are abnormal sounds during operation.
  - The circuit breaker trips frequently.
  - The unit gives off a burning smell.
  - The indoor unit is leaking.

Table 1. Standard Circuit Breaker Ampere Ratings and Equivalent Stranded Wire Sizes

MODEL	Wire Type	Equivalent Stranded Wire Size (mm^2)	Ampere Rating
KS-IW10-GPAI13P1M32 KS-IW15-GPAI13P1M32 KS-IW20-GPAI13P1M32	THHN/ THWN	2.0 mm^2	15 A
KS-IW25-GPAI13P1M32 KS-IW30-GPAI13P1M32		3.5 mm^2	20 A

European Disposal Guidelines

This marking shown on the product or its literature, indicates that waste electrical and electronic equipment should not be mixed with general household waste.

Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires special collection and treatment. **DO NOT** dispose of this product as household waste or unsorted municipal waste.
When disposing of this appliance, you have the following options:

- Dispose of the appliance at designated municipal electronic waste collection facility.
- When buying a new appliance, the retailer will take back the old appliance free of charge.
- The manufacturer will take back the old appliance free of charge.
- Sell the appliance to certified scrap metal dealers.

SPECIAL NOTICE

Disposing of this appliance in the forest or other natural surroundings endangers your health and others and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.

Appliance filled with flammable gas R32 refrigerant.

Before using the appliance, read the owner’s manual first.

Before installing the appliance, read the installation manual first.

Before repairing the appliance, read the service manual first.

THE REFRIGERANT

- To enable the proper functioning of the air conditioner unit, a special refrigerant circulates within the system. The refrigerant used is R32 fluoride, which undergoes special purification. R32 is a flammable and odorless refrigerant. Under certain conditions, it may lead to an explosion. However, its flammability is very low and can only be ignited by an open flame.
- Compared to common refrigerants, R32 is an environmentally friendly option that does not harm the ozone layer. It also has a lower impact on the greenhouse effect. Additionally, R32 has excellent thermodynamic properties, resulting in high energy efficiency. As a result, the units require a smaller refrigerant charge.

⚠ Warning

- Do not use any method to accelerate the defrosting process or to clean the appliance other than those recommended by the manufacturer. If repairs are needed, contact Kolin Service Hotline or its Authorized Service Partners. Repairs performed by unauthorized or unqualified personnel can be dangerous.
- The appliance must be stored in a room without any continuously operating ignition sources (e.g., open flames, gas appliances, or electric heaters).
- Do not pierce or burn the appliance.
- The appliance must be installed, used, and stored in a room with a floor area larger than X m².
- This appliance uses flammable refrigerant gas R32. Repairs must be carried out strictly in accordance with the manufacturer's instructions.
- Be aware that some refrigerants may not have a noticeable odor.
- Always refer to the specialist’s manual for guidance.

SAFETY OPERATION OF FLAMMABLE REFRIGERANT

Qualification requirement for installation and maintenance man

- All personnel involved in servicing the refrigeration system must hold valid certification from a recognized authority, as well as the necessary industry-approved qualifications for working with refrigeration systems.
- If additional technicians are required for maintenance or repair, they must be supervised by a certified individual authorized to handle flammable refrigerants.
- Repairs must be performed only using methods approved by the equipment provider or in accordance with official technical guidelines.

Installation Notes

- The air conditioner must not be used in rooms with an active flame (e.g., open fire, operating gas appliances, or heaters).
- Drilling or applying heat to the refrigerant piping is strictly prohibited.
- The air conditioner must be installed in a room that meets or exceeds the minimum room size specified on the nameplate or in Table A.
- A leak test is mandatory after installation.

Table A - Minimum Room Area *(m^2)*

Charge Amount *(kg)*	**Minimum Room Area *(m^2)***			
	Floor Location	Window Mounted	Wall Mounted	Ceiling Mounted
≤ 1.2	/	/	/	/
1.3	14.5	5.2	1.6	2.6
1.4	16.8	6.1	1.9	2.8
1.5	19.3	7.0	2.1	3.0
1.6	22.0	7.9	2.4	3.2
1.7	24.8	8.9	2.8	3.4
1.8	27.8	10.0	3.1	3.6
1.9	31.0	11.2	3.4	3.8
2.0	34.3	12.4	3.8	4.0
2.1	37.8	13.6	4.2	4.2
2.2	41.5	15.0	4.6	4.4
2.3	45.4	16.3	5.0	4.6
2.4	49.4	17.8	5.5	4.8
2.5	53.6	19.3	6.0	5.0
2.6	58.1	20.9	6.5	5.2
2.7	62.6	22.6	7.0	5.4
2.8	67.4	24.3	7.5	5.6
2.9	72.3	26.0	8.1	5.8
3.0	77.3	27.9	8.6	6.0
3.1	82.6	29.8	9.2	6.2
3.2	88.0	31.7	9.8	6.6
3.3	93.6	33.7	10.4	7.0
3.4	99.3	35.8	11.1	7.4
3.5	105.2	37.9	11.7	7.9
3.6	111.3	40.1	12.4	8.3
3.7	117.6	42.4	13.1	8.8
3.8	124.0	44.7	13.8	9.3
3.9	130.7	47.1	14.6	9.8
4.0	137.4	49.4	15.3	10.3

Maintenances Notes

- Check if the maintenance or room area meets the requirements stated on the nameplate. Operation is only permitted in rooms that comply with the nameplate specifications.
- Ensure the maintenance area is well-ventilated. Continuous ventilation must be maintained throughout the operation.
- Check for any fire sources or potential ignition sources in the maintenance area. Open flames are strictly prohibited, and a ***"No Smoking"*** warning sign must be clearly displayed.
- Inspect the appliance warning labels. Replace any labels that are unclear or damaged.

Welding

- If cutting or welding of the refrigerant system pipes is required during maintenance, please follow the steps below:
  a. Shut down the unit and disconnect the power supply.
  b. Recover or eliminate the refrigerant safely.
  c. Perform vacuuming.
  d. Clean the system using Nitrogen (N_2) gas.
  e. Proceed with cutting or welding as needed.
  f. Transport the unit to the service location for welding.
- The refrigerant should be recovered into a designated storage tank.
- Ensure there are no open flames near the vacuum pump outlet, and make sure the area is well-ventilated.

Filling the refrigerant

- Use refrigerant filling equipment specifically designed for R32. Ensure that different types of refrigerants do not mix.
- Keep the refrigerant tank upright while filling.
- Attach a label to the system after filling—whether completed or not.
- Do not overfill.
- After filling, perform a leak test before running the system. Perform another leak test when the system is removed.

Safety Instructions for transportation and storage

- Use a flammable gas detector to check for gas leaks before unloading and opening the container.
- Keep the area free of fire sources and do not smoke.
- Follow all applicable local laws and regulations.

- The following checks shall be applied to installations using flammable refrigerants:
  - The charge size is in accordance with the room size within which the refrigerant containing parts are installed;
  - The ventilation machinery and outlets are operating adequately and are not obstructed;
  - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
  - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
  - Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.
- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.
- Initial safety checks shall include:
  - That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
  - That no live electrical components and wiring are exposed while charging, recovering or purging the system;
  - That there is continuity of earth bonding.
- Checks to the area
  - Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, DD.4.3 to DD.4.7 shall be completed prior to conducting work on the system.
- Work procedure Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.
- General work area
  - All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.
- Checking for presence of refrigerant
  - The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
- Presence of fire extinguisher
  - If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO_2 fire extinguisher adjacent to the charging area.
- Ventilated area
  - Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

- Checks to the refrigerating equipment
  - Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.
  - The following checks shall be applied to installations using flammable refrigerants:
    - The actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed;
    - The ventilation machinery and outlets are operating adequately and are not obstructed;
    - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
    - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
    - Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.
- Checks to electrical devices
  - Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with.If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used.This shall be reported to the owner of the equipment so all parties are advised.
  - Initial safety checks shall include:
    - That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
    - That no live electrical components and wiring are exposed while charging, recovering or purging the system;
    - That there is continuity of earth bonding.
- No ignition sources
  - No person carrying out work in relation to a refrigerating system which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. "No Smoking" signs shall be displayed.
- Repairs to sealed components
  - During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
  - Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected:
    - This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
    - Ensure that the apparatus is mounted securely.

        - Ensure that seals or sealing materials have not degraded to the point that they no longer serve the purpose of preventing the ingress of flammable atmospheres.
        - Replacement parts shall be in accordance with the manufacturer's specifications.
    - NOTE: The use of silicon sealant can inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.
- Repair to intrinsically safe components
    - Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
    - Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating.
    - Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.
- Cabling
    - Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects.
    - The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- Leak detection methods
    - Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.
- Detection of flammable refrigerants
    - Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.
    - The following leak detection methods are deemed acceptable for all refrigerant systems:
        - Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
        - Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
        - Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.
- Removal and evacuation
    - When breaking into the refrigerant circuit to make repairs - or for any other purpose - conventional procedures shall be used. However, for flammable refrigerants it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:
        - Remove refrigerant;
        - Purge the circuit with inert gas (optional for A2L);
        - Evacuate (optional for A2L);
        - Purge with inert gas (optional for A2L);
        - Open the circuit by cutting or brazing.
    - The refrigerant charge shall be recovered into the correct recovery cylinders.

- The refrigerant charge shall be recovered into the correct recovery cylinders. For appliances containing flammable refrigerants other than A2L refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process may need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.
- For appliances containing flammable refrigerants, other than A2L refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.
- Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

- Charging procedures
  - In addition to conventional charging procedures, the following requirements shall be followed:
    - Ensure that contamination of different refrigerants does not occur when using charging equipment.
    - Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
    - Cylinders shall be kept in an appropriate position according to the instructions.
    - Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
    - Label the system when charging is complete (if not already).d out prior to leaving the site.
    - Extreme care shall be taken not to overfill the refrigerating system.
  - Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

- Decommissioning
  - Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

(a) Become familiar with the equipment and its operation.
(b) Isolate system electrically.
(c) Before attempting the procedure, ensure that:
- Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- All personal protective equipment is available and being used correctly;
- The recovery process is supervised at all times by a competent person;
- Recovery equipment and cylinders conform to the appropriate standards.

(d) Pump down refrigerant system, if possible.
(e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
(f) Make sure that cylinder is situated on the scales before recovery takes place.
(g) Start the recovery machine and operate in accordance with manufacturer's instructions.

(h) Do not overfill cylinders (No more than 80% volume liquid charge).
(i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
(j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
(k) Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.

- Labelling
  - Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing flammable refrigerants, ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.
- Recovery
  - When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.
  - When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
  - The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of all appropriate refrigerants including, when applicable, flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
  - The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
  - If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.
- General
  - That the installation of pipe-work shall be kept to a minimum.
  - That compliance with national gas regulations shall be observed.
  - That mechanical connections made in accordance with 22.118 shall be accessible for maintenance purposes.

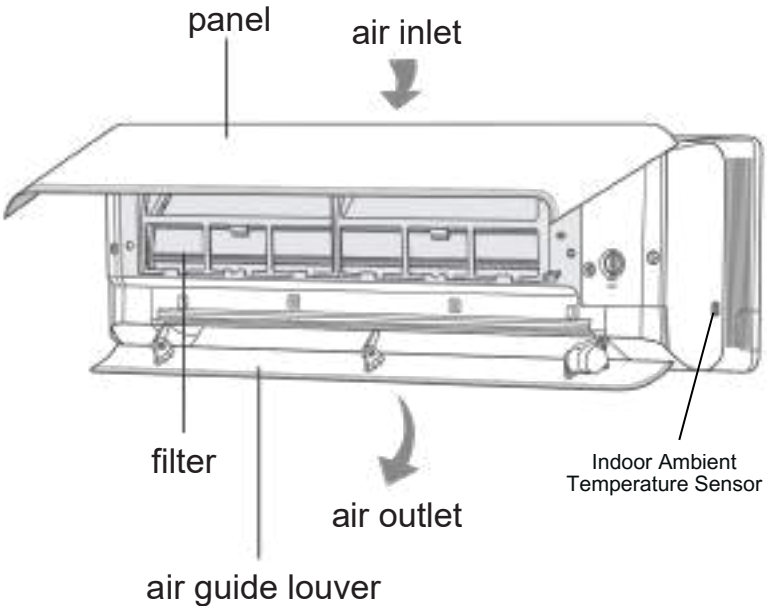
Thank you for choosing KOLIN as your trusted brand for Split-Type Wall Mounted Air Conditioners. We truly appreciate your confidence in our products.

Before installing and operating your Split-Type Wall Mounted Air Conditioners, we kindly ask that you read and understand this instruction manual carefully. Doing so will help you operate and maximize the performance of your unit.

Our goal is to provide clear and helpful guidance to ensure your convenience and satisfaction.

INTRODUCTION AND PARTS IDENTIFICATIONS

INDOOR UNIT

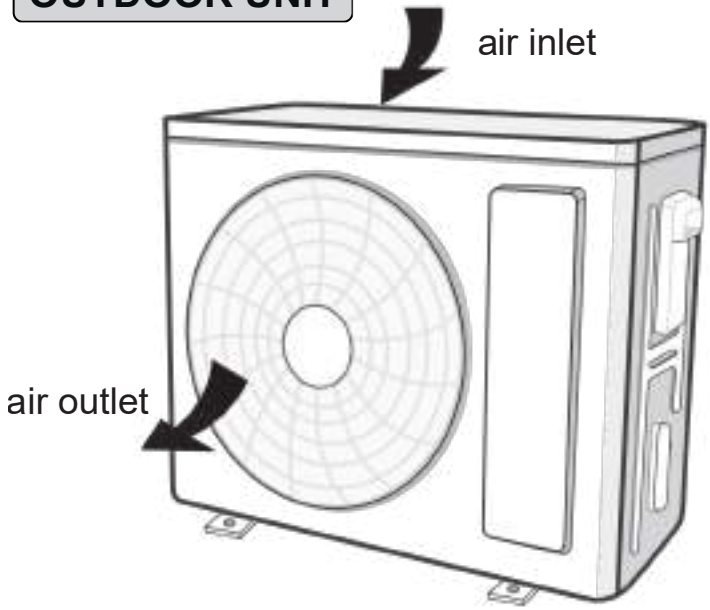


DISPLAY

Cool Mode	❄
Dry Mode	💧
Temp. Indicator	25
Power Indicator	⏻
Humidity Indicator	%

This is a general introduction only. Indicator and display content are for reference and may differ from the actual display. Please refer to the actual unit.

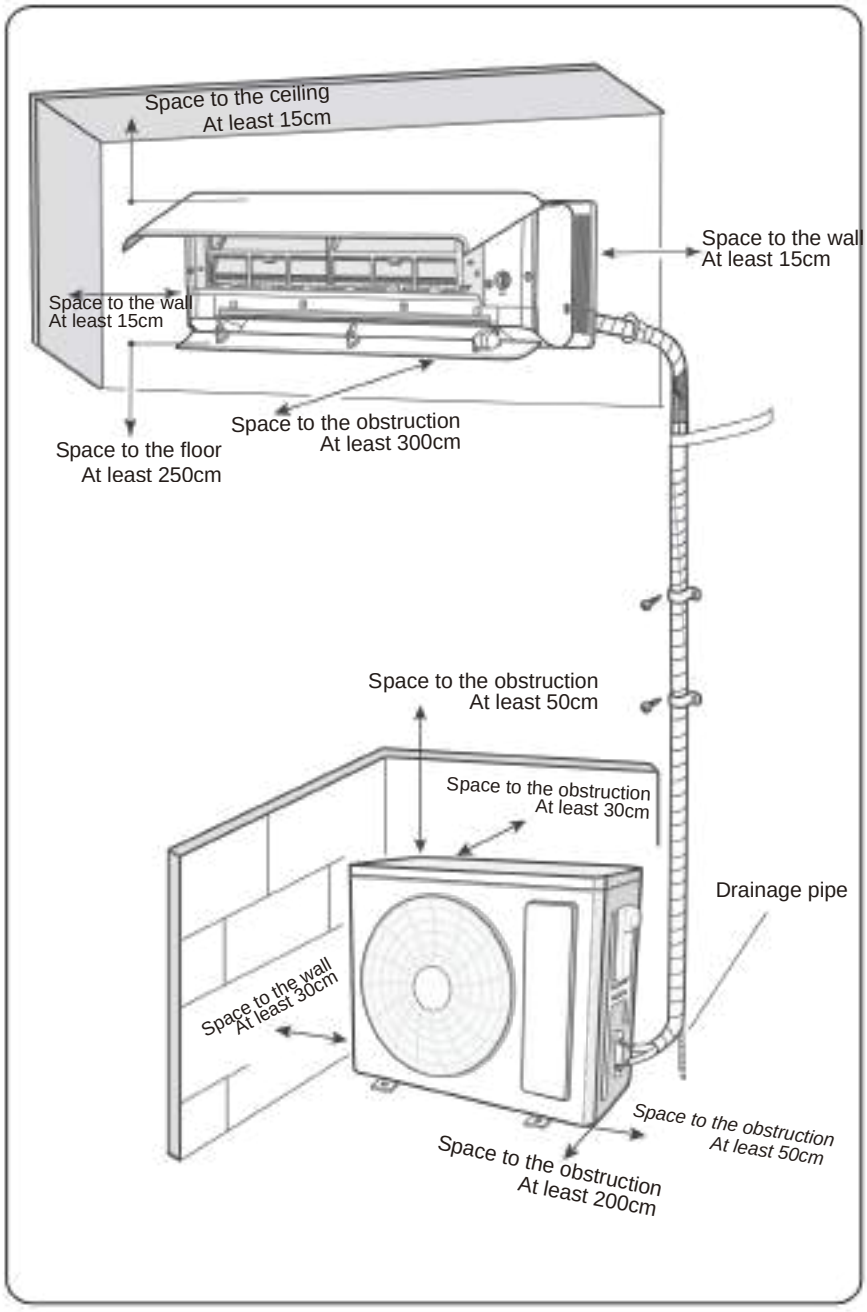
OUTDOOR UNIT



The graphics illustrated above are for reference only and may differ from the actual product. Please refer to the actual product.

INSTALLATION

Installation Notice



Safety Precautions for Installing and Relocating the Unit

To ensure safety, please be mindful of the following precautions.

WARNING

- When installing or relocating the unit, be sure to keep the refrigerant circuit free from air or substances other than the specified refrigerant. Any presence of air or other foreign substance in the refrigerant circuit will cause system pressure rise or compressor rupture, resulting in injury.
- When installing or moving this unit, do not charge the refrigerant which is not comply with that on the nameplate or unqualified refrigerant. Otherwise, it may cause abnormal operation, wrong action, mechanical malfunction or even serious safety accident.

- When refrigerant needs to be recovered during relocating or repairing the unit, be sure that the unit is running in cooling mode. Then, fully close the valve at high pressure side (liquid valve). About 30-40 seconds later, fully close the valve at low pressure side (gas valve), immediately stop the unit and disconnect power. Please note that the time for refrigerant recovery should not exceed 1 minute. If refrigerant recovery takes too much time, air may be sucked in and cause pressure rise or compressor rupture, resulting in injury
- During refrigerant recovery, make sure that liquid valve and gas valve are fully closed and power is disconnected before detaching the connection pipe. If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.
- When installing the unit, make sure that connection pipe is securely connected before the compressor starts running. If compressor starts running when stop valve is open and connection pipe is not yet connected, air will be sucked in and cause pressure rise or compressor rupture, resulting in injury.
- Prohibit installing the unit at the place where there may be leaked corrosive gas or flammable gas. If there is leaked gas around the unit, it may cause explosion and other accidents.
- Do not use extension cords for electrical connections. If the electric wire is not long enough, please contact a local service center authorized and ask for a proper electric wire. Poor connections may lead to electric shock or fire.
- Use the specified types of wires for electrical connections between the indoor and outdoor units. Firmly clamp the wires so that their terminals receive no external stresses. Electric wires with insufficient capacity, wrong wire connections and insecure wire terminals may cause electric shock or fire.

Tools for Installation

1. Level Meter
2. Screw Driver
3. Impact Drill
4. Drill Head
5. Pipe Expander
6. Torque Wrench
7. Open-end Wrench
8. Pipe Cutter
9. Leakage Detector
10. Vacuum Pump
11. Pressure Meter
12. Universal Meter
13. Inner Hexagon Spanner
14. Measuring Tape

NOTICE

- Installation must be performed only by qualified and certified professionals. Please contact the Kolin Service Hotline or an Authorized Service Partner for installation.
- Do not use uncertified power cords; use only those that meet the manufacturer's specifications.

Selection of Installation Location

Basic Requirement

- Installing the unit in the following places may cause malfunction. If it is unavoidable, please contact Kolin Service Hotline or its Authorized Service Partners for assistance:
  - The place with strong heat sources, vapors, flammable or explosive gas, or volatile objects spread in the air.
  - The place with high-frequency devices (such as welding machine, medical equipment).
  - The place near coast area.
  - The place with oil or fumes in the air.
  - The place with sulfureted gas.
  - Other places with special circumstances.
  - The appliance shall **NOT** be installed in the laundry.
  - It's **NOT** allowed to be installed on the unstable or motive base structure (such as truck) or in the corrosive environment (such as chemical factory).

Indoor Unit

- There should be no obstruction near air inlet and air outlet.
- Select a location where the condensation water can be dispersed easily and won't affect other people.
- Select a location which is convenient to connect the outdoor unit and near the power socket.
- Select a location which is out of reach for children.
- The location should be able to withstand the weight of indoor unit and won't increase noise and vibration.
- The appliance must be installed 2.5m above floor.
- **DO NOT** install the indoor unit right above the electric appliance.
- Please try your best to keep away from fluorescent lamp.

Outdoor Unit

- Select a location where the noise and outflow air emitted by the outdoor unit will not affect neighborhood.
- The location should be well ventilated and dry, in which the outdoor unit won't be exposed directly to sunlight or strong wind.
- The location should be able to withstand the weight of outdoor unit.
- Make sure that the installation follows the requirement of installation dimension diagram.
- Select a location which is out of reach for children and far away from animals or plants. If it is unavoidable, please add the fence for safety purpose.

SAFETY PRECAUTION

- Must follow the electric safety regulations when installing the unit.
- According to the local safety regulations, use qualified power supply circuit and circuit breaker.
- Requirements for electric connection
- Make sure the power supply matches with the requirement of air conditioner. Unstable power supply or incorrect wiring or malfunction. Please install proper power supply cables before using the air conditioner.
- Properly connect the live wire, neutral wire and grounding wire of power socket.
- Be sure to cut off the power supply before proceeding any work related to electricity and safety.
- Do not put through the power before finishing installation.
- If the supply cord is damaged, contact Kolin Service Hotline or its Authorized Service Partners for replacement in order to avoid a hazard.

- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- The appliance shall be installed in accordance with national wiring regulations.

Grounding Requirement

- The air conditioner is the first class electric appliance. It must be properly grounded with specialized grounding device by a professional. Please make sure it is always grounded effectively, otherwise it may cause electric shock.
- The yellow-green wire in air conditioner is grounding wire, which can't be used for other purposes.
- The grounding resistance should comply with national electric safety regulations.
- The appliance must be positioned so that the plug is accessible.
- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.

Circuit Breaker Capacity

- When installing the unit, you must include a circuit breaker with the appropriate capacity as shown in the table below. This circuit breaker must be equipped with both magnetic and thermal trip functions to provide reliable protection against short circuits and electrical overloads.
- *Caution: Do not rely on a fuse alone for circuit protection.*

MODEL	CIRCUIT BREAKER CAPACITY
KS-IW10-GPAI13P1M32	15 A
KS-IW15-GPAI13P1M32	15 A
KS-IW20-GPAI13P1M32	15 A
KS-IW25-GPAI13P1M32	20 A
KS-IW30-GPAI13P1M32	20 A

Safety Requirements for the Circuit Breaker:

- Qualified Installation: A professional must install a qualified power supply circuit and the corresponding circuit breaker according to local safety regulations.
- All-Pole Disconnection: The fixed wiring must be connected to an all-pole disconnection switch that maintains a contact separation of at least 3mm across all poles.
- Pre-Operation Check: Always verify that the circuit breaker is in good working condition before each use-season.
- Safety Shutdown: If the circuit breaker trips frequently during operation, immediately turn off the air conditioner, disconnect the power, and contact Kolin Service Hotline or its Authorized Service Partners for service.

Additional Notes:

- The indoor ambient temperature sensor is located on the left side of the indoor unit. Ensure that there are no obstructions or external factors that could affect accurate temperature sensing. Do not install or position the unit near heat sources or high-temperature areas.

INSTALLATION OF INDOOR UNIT

STEP 1

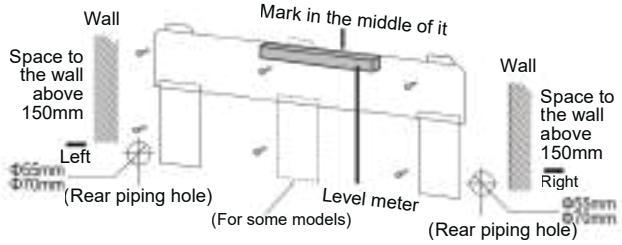
Choose Installation Location

- Recommend the installation location to the client and then confirm it with the client.

STEP 2

Install Wall-mounting Frame

1. Hang the wall-mounting frame on the wall; adjust it in horizontal position with the level meter and then point out the screw fixing holes on the wall.
2. Drill the screw fixing holes on the wall with impact drill (the specification of drill head should be the same as the plastic expansion particle) and then fill the plastic expansion particles in the holes.
3. Fix the wall-mounting frame on the wall with tapping screws and then check if the frame is firmly installed by pulling the frame. If the plastic expansion particle is loose, please drill another fixing hole nearby.



STEP 3

Open Piping Hole

1. Choose the position of piping hole according to the direction of outlet pipe. The position of piping hole should be a little lower than the wall-mounted frame, shown as below.

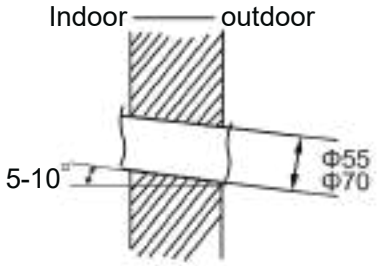
NOTE

- *The wall panel is for illustrative purposes only, please refer to the actual installation.*
- *Please refer to the actual circumstances for the number of screws and the position of screws.*

2. When installation is finished, pull the mounting plate with hand to confirm whether it is fixed tightly. The force distribution for all screws should be uniform.
3. Open a piping hole with the diameter of Ø55 or Ø70 on the selected outlet pipe position. In order to drain smoothly, slant the piping hole on the wall slightly downward to the outdoor side with the gradient of 5-10°.

NOTE

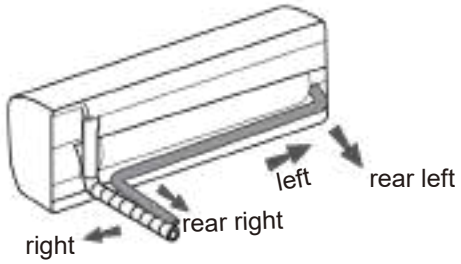
- *Pay attention to dust prevention and take relevant safety measures when opening the hole.*



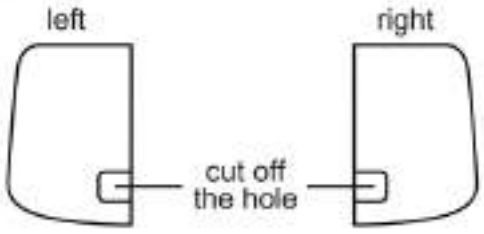
STEP 4

Outlet Pipe

1. The pipe can be led out in the direction of right, rear right, left or rear left.



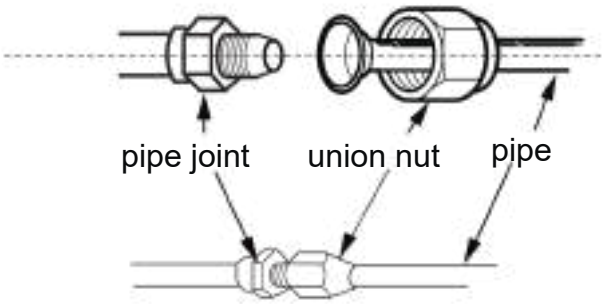
2. When select leading out the pipe from left or right, please cut off the corresponding hole on the bottom case.



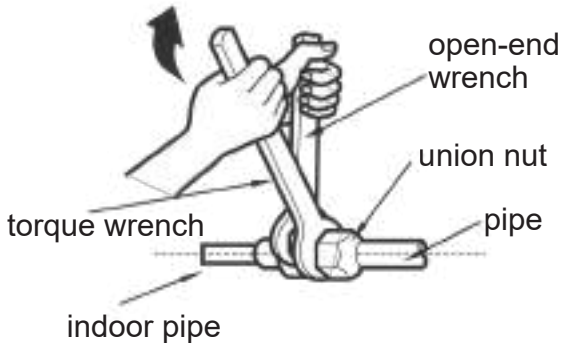
STEP 5

Connect the Pipe of Indoor Unit

1. Aim the pipe joint at the corresponding bellmouth.
2. Pre-tighten the union nut with hand.

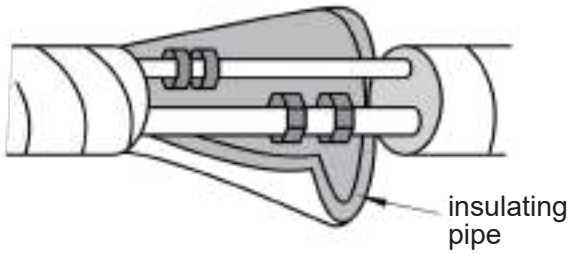


3. Adjust the torque force by referring to the following sheet. Place the open-end wrench on the pipe joint and place the torque wrench on the union nut. Tighten the union nut with torque wrench.



Hex Nut Diameter	Tightening Torque (N·m)
1/4"	15 ~ 20
3/8"	30 ~ 40
1/2"	45 ~ 55
5/8"	60 ~ 65
3/4"	70 ~ 75

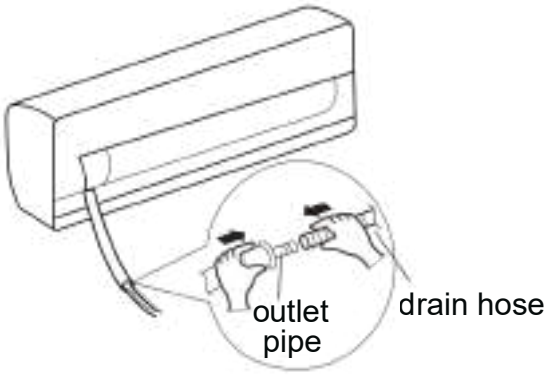
4. Wrap the indoor pipe and joint of connection pipe with insulating pipe, and then wrap it with tape.



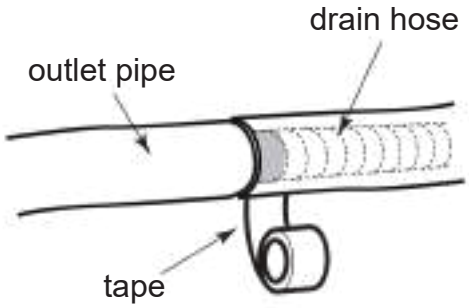
STEP 6

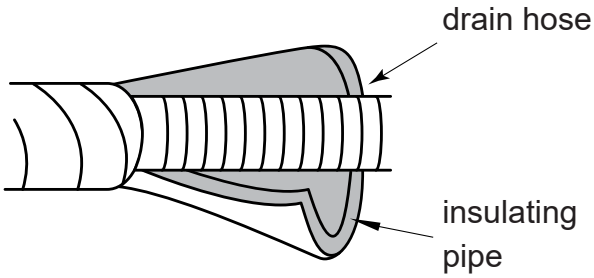
Install Drain Hose

1. Connect the drain hose to the outlet pipe of indoor unit.



2. Bind the joint with tape.





NOTE

- *Add insulating pipe in the indoor drain hose in order to prevent condensation.*
- *The plastic expansion particles are not provided.*

STEP 7

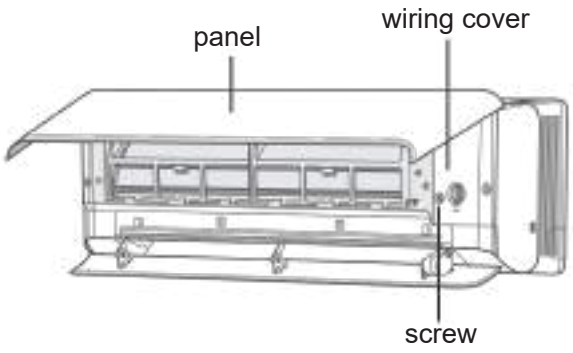
Connect Wire of Indoor Unit

NOTE

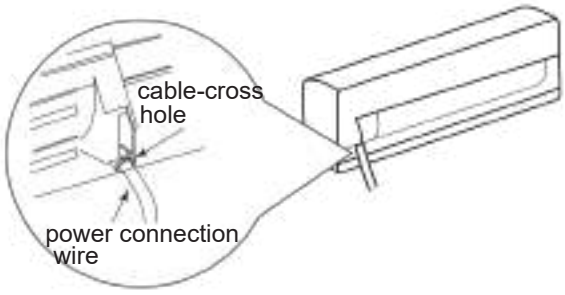
- *All wiring between the indoor and outdoor units must be performed by a licensed professional.*
- *If the power cable is too short, contact Kolin Service Hotline or its Authorized Service Partners for replacement. Do not attempt to splice or extend the wires yourself.*
- *Ensure the power outlet remains easily accessible once the installation is complete.*

- *For units without a plug, the system must be connected directly to a dedicated circuit breaker. The circuit breaker must provide all-pole disconnection. The internal contact separation distance must be at least 3mm to ensure complete electrical isolation when switched off.*

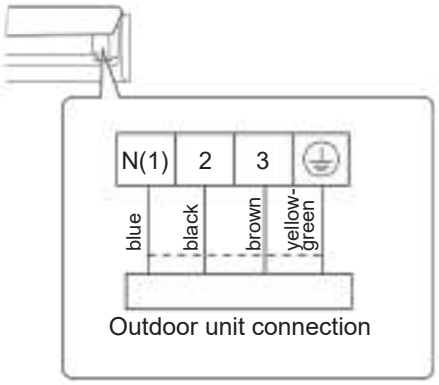
1. Open the panel, remove the screw on the wiring cover and then take down the cover.



2. Make the power connection wire go through the cable-cross hole at the back of indoor unit and then pull it out from the front side.



3. Remove the wire clip; connect the power connection wire to the wiring terminal according to the color; tighten the screw and then fix the power connection wire with wire clip.



NOTICE

- *The wiring board is for reference only, please refer to the actual one.*

NOTICE

- *The wiring board is for reference only, please refer to the actual one.*

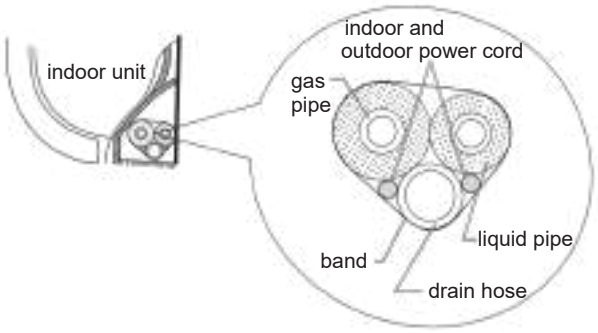
4. Put wiring cover back and then tighten the screw.

5. Close the panel.

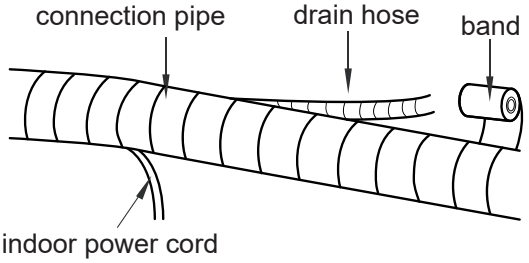
STEP 8

Bind up Pipe

1. Bind up the connection pipe, power cord and drain hose with the band.



2. Reserve a certain length of drain hose and power cord for installation when binding them. When binding to a certain degree, separate the indoor power and then separate the drain hose.



3. Bind them evenly.

4. The liquid pipe and gas pipe should be bound separately at the end.

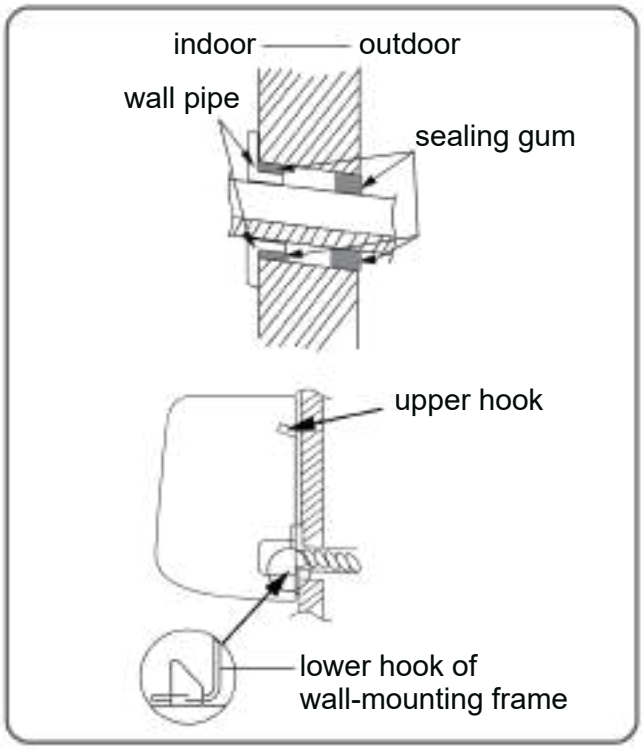
NOTICE

- *The power cord and control wire can't be crossed or winding.*
- *The drain hose should be bound at the bottom.*

STEP 9

Hang the Indoor Unit

1. Put the bound pipes in the wall pipe and then make them pass through the wall hole.
2. Hang the indoor unit on the wall-mounting frame.
3. Stuff the gap between pipes and wall hole with sealing gum.
4. Fix the wall pipe.
5. Check if the indoor unit is installed firmly and closed to the wall.
6. When mechanical connectors are reused indoors, sealing parts shall be renewed.
7. When flared joints are reused indoors, the flare part shall be re-fabricated.



NOTICE

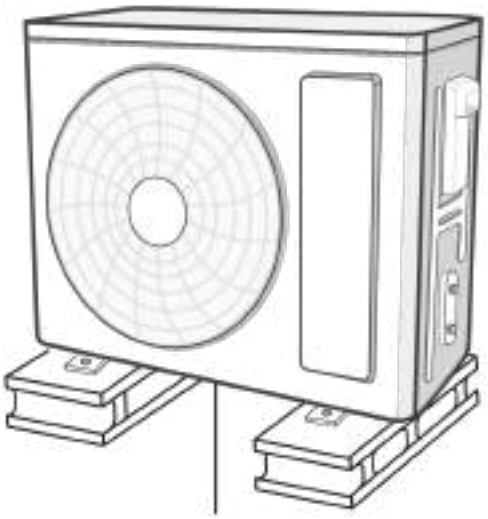
- *Do not bend the drain hose too excessively in order to prevent blocking.*

INSTALLATION OF OUTDOOR UNIT

STEP 1

Fix the Support of Outdoor Unit *(select it according to the actual installation situation)*

1. Select installation location according to the house structure.
2. Fix the support of outdoor unit on the selected location with expansion screws.



NOTICE

- *Take sufficient protective measures when installing the outdoor unit.*
- *Make sure the support can withstand at least four times of the unit weight.*
- *The outdoor unit should be installed at least 3cm above the floor in order to install drain joint. (for the model with heating tube, the installation height should be no less than 20cm.)*
- *For the unit with cooling capacity of 2300W~5000W, 6 expansion screws are needed; for the unit with cooling capacity of 6000W~8000W, 8 expansion screws are needed; for the unit with cooling capacity of 10000W~16000W, 10 expansion screws are needed.*

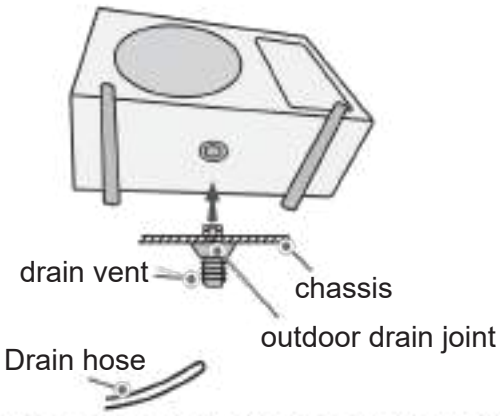
STEP 2

Install drain joint *(only for some models)*

1. Connect the outdoor drain joint into the hole on the chassis, as shown in the picture below.
2. Connect the drain hose into the drain vent.

NOTICE

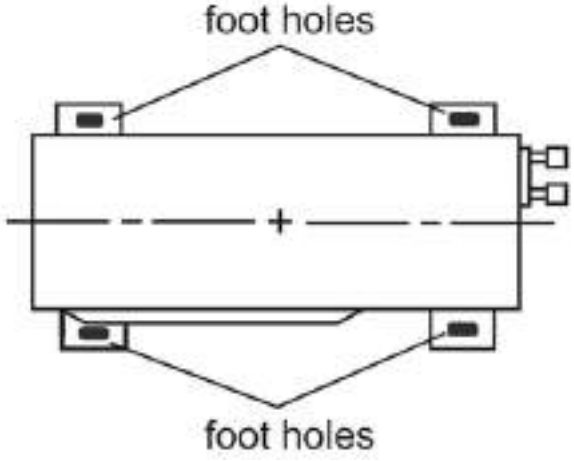
- *As for the shape of drainage joint, please refer to the current product. Do not install the drainage joint in the severe cold area. Otherwise, it will be frosted and then cause malfunction.*



STEP 3

Fix Outdoor Unit

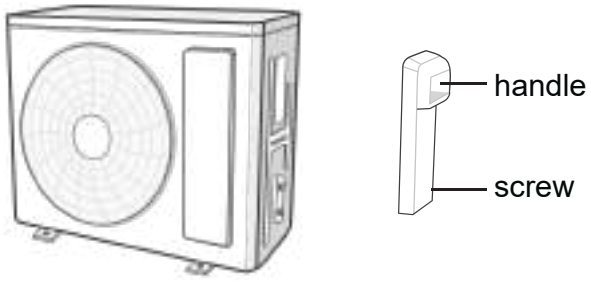
1. Place the outdoor unit on the support.
2. Fix the foot holes of outdoor unit with bolts.



STEP 4

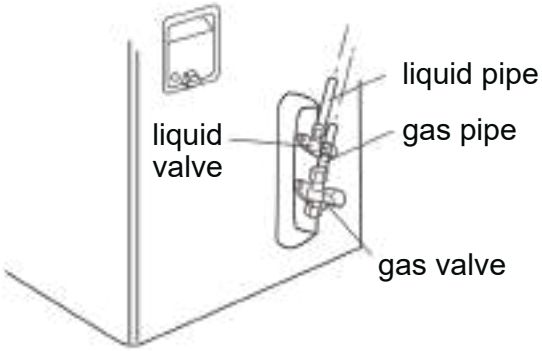
Connect Indoor and Outdoor Pipes

1. Remove the screw on the right handle of outdoor unit and then remove the handle.

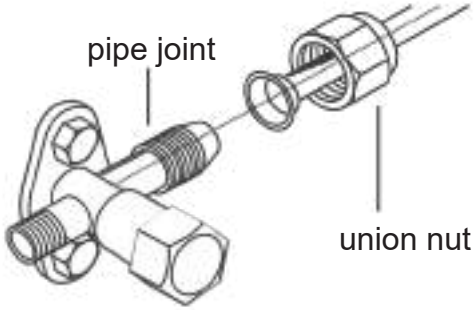


1. Remove the screw cap of valve and aim the pipe joint at the bellmouth of pipe.

3.



1. Pre-tighten the union nut with hand.



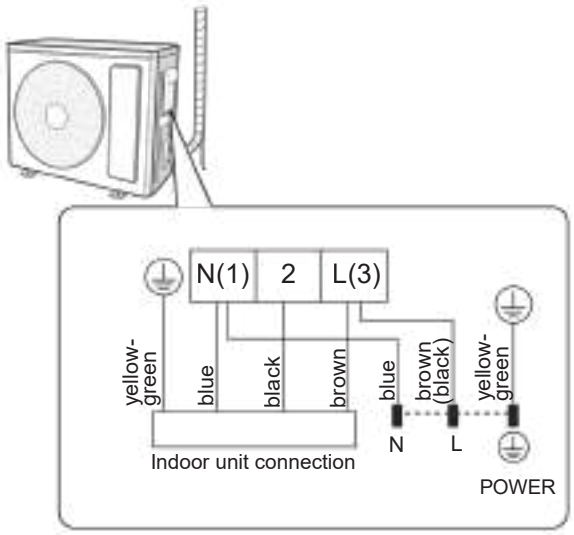
1. Tighten the union nut with torque wrench by referring to the sheet below.

Hex Nut Diameter	Tightening Torque (N·m)
1/4"	15 ~ 20
3/8"	30 ~ 40
1/2"	45 ~ 55
5/8"	60 ~ 65
3/4"	70 ~ 75

STEP 5

Connect Outdoor Electric Wire

1. Remove the wire clip; connect the power connection wire and signal control wire (only for cooling and heating unit) to the wiring terminal according to the color; fix them with screws.



NOTICE

- *The wiring board is for reference only, please refer to the actual one.*

1. Fix the power connection wire and signal control wire with wire clip (only for cooling and heating unit).

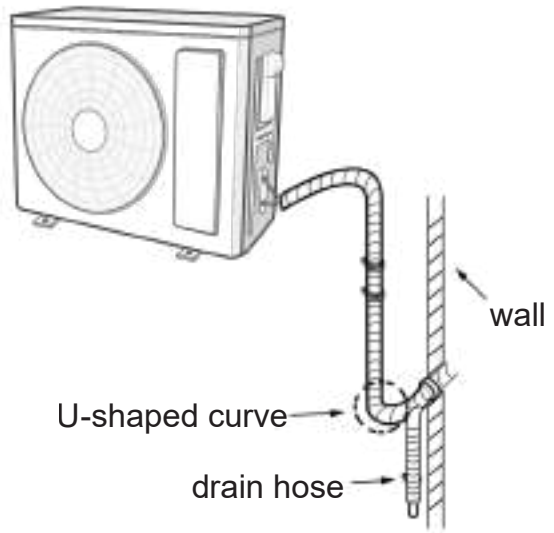
NOTICE

- *After tighten the screw, pull the power cord slightly to check if it is firm.*
- *Never cut the power connection wire to prolong or shorten the distance.*

STEP 6

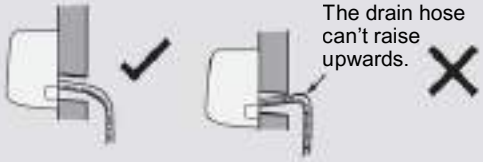
Neaten the pipes

1. The pipes should be placed along the wall, bent reasonably and hidden possibly. Min. semidiameter of bending the pipe is 10cm.
2. If the outdoor unit is higher than the wall hole, you must set a U-shaped curve in the pipe before pipe goes into the room, in order to prevent rain from getting into the room.

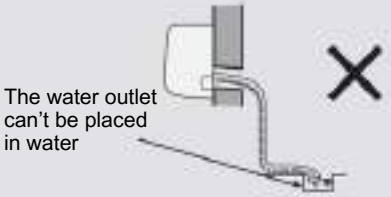


NOTICE

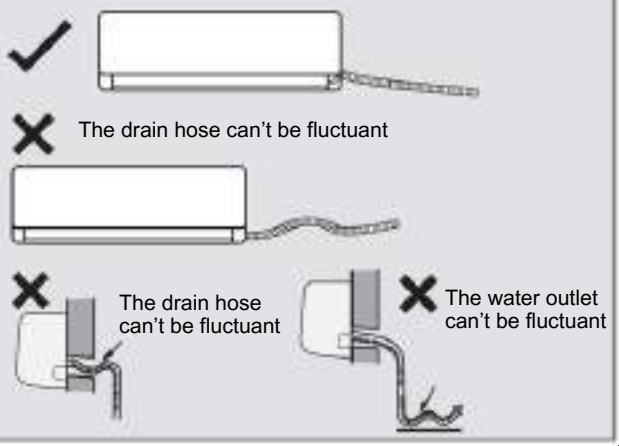
- The through-wall height of drain hose should not be higher than the outlet pipe hole of indoor unit.



- The water outlet can't be placed in water in order to drain smoothly.

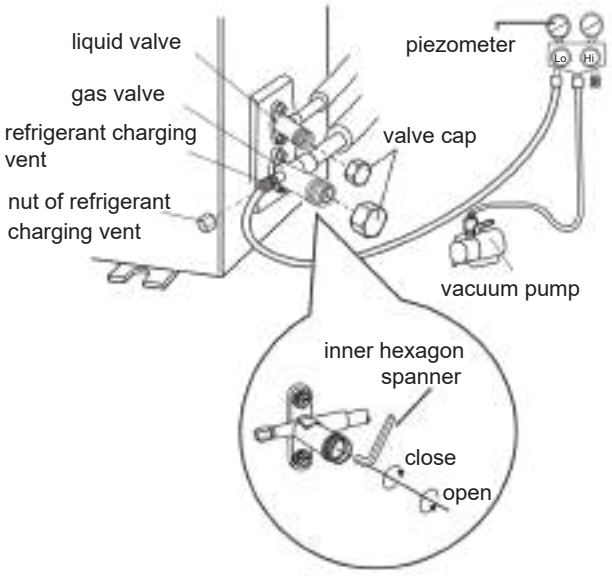


- Slant the drain hose slightly downwards. The drain hose can't be curved, raised and fluctuant, etc.



Use Vacuum Pump

1. Remove the valve caps on the liquid valve and gas valve and the nut of refrigerant charging vent.
   Connect the charging hose of piezometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.
3. Open the piezometer completely and operate for 10-15min to check if the pressure of piezometer remains in -0.1MPa.
4. Close the vacuum pump and maintain this status for 1-2min to check if the pressure of piezometer remains in -0.1MPa. If the pressure decreases, there may be leakage.
5. Remove the piezometer, open the valve core of liquid valve and gas valve completely with inner hexagon spanner.
6. Tighten the screw caps of valves and refrigerant charging vent.
7. Reinstall the handle.



Leakage Detection

1. With leakage detector: Check if there is leakage with leakage detector.
2. With soap water: If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming out of this position, there's a leakage.

Check after Installation

- Check according to the following requirement after finishing installation.

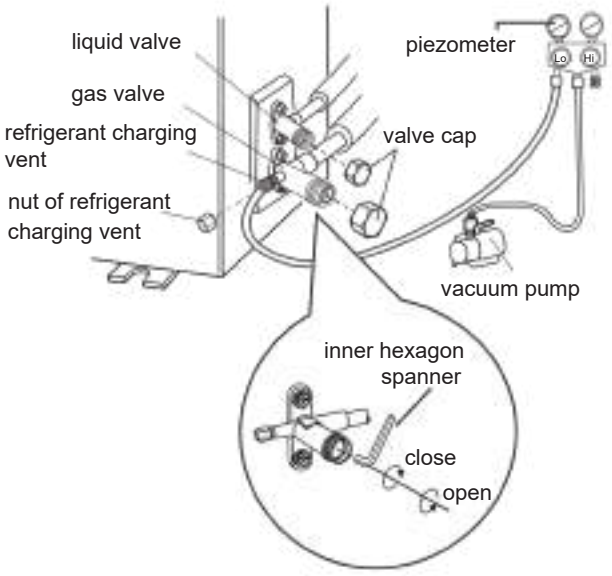
Items to be Checked	Possible Malfunction
Has the unit been installed firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling capacity.
Is heat insulation of pipeline sufficient?	It may cause condensation and water dripping.
Is water drained well?	It may cause condensation and water dripping.
Is the voltage of power supply according to the voltage marked on the nameplate?	It may cause malfunction or damage the parts.
Is electric wiring and pipeline installed correctly?	It may cause malfunction or damage the parts.
Is the unit grounded securely?	It may cause electric leakage.
Does the power cord follow the specification?	It may cause malfunction or damage the parts.
Is there any obstruction in the air inlet and outlet?	It may cause insufficient cooling capacity.
The dust and sundries caused during installation are removed?	It may cause malfunction or damage the parts.
The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling capacity.
Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling capacity or waste electricity.

Test Operation

1. Preparation of test operation
   - The client approves the air conditioner.
   - Specify the important notes for air conditioner to the client.
2. Method of test operation
   - Put through the power, press " On/Off " button on the remote controller to start operation.
   - Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
   - If the ambient temperature is lower than 16°C the air conditioner can't start cooling.

Use Vacuum Pump

1. Remove the valve caps on the liquid valve and gas valve and the nut of refrigerant charging vent.
   Connect the charging hose of piezometer to the refrigerant charging vent of gas valve and then connect the other charging hose to the vacuum pump.
3. Open the piezometer completely and operate for 10-15min to check if the pressure of piezometer remains in -0.1MPa.
4. Close the vacuum pump and maintain this status for 1-2min to check if the pressure of piezometer remains in -0.1MPa. If the pressure decreases, there may be leakage.
5. Remove the piezometer, open the valve core of liquid valve and gas valve completely with inner hexagon spanner.
6. Tighten the screw caps of valves and refrigerant charging vent.
7. Reinstall the handle.



Leakage Detection

1. With leakage detector: Check if there is leakage with leakage detector.
2. With soap water: If leakage detector is not available, please use soap water for leakage detection. Apply soap water at the suspected position and keep the soap water for more than 3min. If there are air bubbles coming out of this position, there's a leakage.

Check after Installation

- Check according to the following requirement after finishing installation.

Items to be Checked	Possible Malfunction
Has the unit been installed firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling capacity.
Is heat insulation of pipeline sufficient?	It may cause condensation and water dripping.
Is water drained well?	It may cause condensation and water dripping.
Is the voltage of power supply according to the voltage marked on the nameplate?	It may cause malfunction or damage the parts.
Is electric wiring and pipeline installed correctly?	It may cause malfunction or damage the parts.
Is the unit grounded securely?	It may cause electric leakage.
Does the power cord follow the specification?	It may cause malfunction or damage the parts.
Is there any obstruction in the air inlet and outlet?	It may cause insufficient cooling capacity.
The dust and sundries caused during installation are removed?	It may cause malfunction or damage the parts.
The gas valve and liquid valve of connection pipe are open completely?	It may cause insufficient cooling capacity.
Is the inlet and outlet of piping hole been covered?	It may cause insufficient cooling capacity or waste electricity.

Test Operation

1. Preparation of test operation
- The client approves the air conditioner.
- Specify the important notes for air conditioner to the client.

2. Method of test operation
- Put through the power, press " On/Off " button on the remote controller to start operation.
- Press MODE button to select AUTO, COOL, DRY, FAN and HEAT to check whether the operation is normal or not.
- If the ambient temperature is lower than 16°C the air conditioner can't start cooling.

Configuration of Connection Pipe

1. Standard length of connection pipe: 3 meters
2. Minimum length of connection pipe is 3 meters
3. Maximum length of connection pipe is shown as below.

Maximum Length and Height of Connection Pipes

MODEL	Cooling Capacity	Maximum Length of Connection Pipe (m)	Maximum Height of Connection Pipe (m)
KS-IW10-GPAI13P1M32	10,010 kJ/h (2.78 kW)	20 m	10 m
KS-IW15-GPAI13P1M32	13,741 kJ/h (3.82 kW)	20 m	10 m
KS-IW20-GPAI13P1M32	22,023 kJ/h (6.12 kW)	25 m	10 m
KS-IW25-GPAI13P1M32	27,235 kJ/h (7.56 kW)	25 m	10 m
KS-IW30-GPAI13P1M32	29,721 kJ/h (8.26 kW)	25 m	10 m

4. The calculation method of additional refrigerant oil and refrigerant charging amount after prolonging connection pipe.

- After the length of connection pipe is prolonged for 10m at the basis of standard length, you should add 5ml of refrigerant oil for each additional 5m of connection pipe.
- The calculation method of additional refrigerant charging amount (on the basis of liquid pipe):
  a. Additional refrigerant charging amount = prolonged length of liquid pipe × additional refrigerant charging amount per meter
  b. Basing on the length of standard pipe, add refrigerant according to the requirement as shown in the table. The additional refrigerant charging amount per meter is different according to the diameter of liquid pipe. See Sheet.

Additional Refrigerant Charging Amount for R32

Piping Size		Indoor Unit Throttle Cooling only *(g/m)*	Outdoor Unit Throttle Cooling only *(g/m)*
Liquid Pipe	Gas Pipe		
1/4"	3/8" or 1/2"	16	12
1/4" or 3/8"	5/8" or 3/4"	40	12
1/2"	3/4" or 7/8"	80	24
5/8"	1" or 1 1/4"	136	48
3/4"	-	200	200
7/8"	-	280	280

NOTICE

- *The additional refrigerant charging amount in Sheet is recommended value, not compulsory.*

Pipe Expanding Method

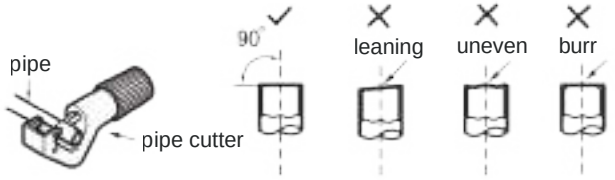
NOTICE

- *Improper pipe expanding is the main cause of refrigerant leakage. Please expand the pipe according to the following steps:*

A

Cut the Pipe

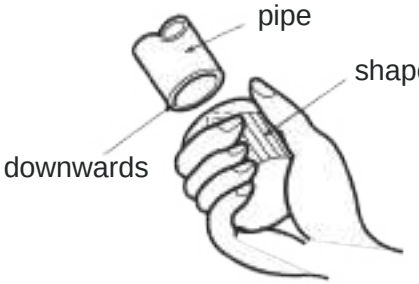
- Confirm the pipe length according to the distance of indoor unit and outdoor unit.
- Cut the required pipe with pipe cutter.



B

Remove the Burrs

- Remove the burrs with shaper and prevent the burrs from getting into the pipe.



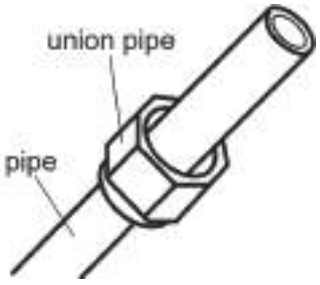
C

Put on Suitable Insulating Pipe

D

Put on the Union Nut

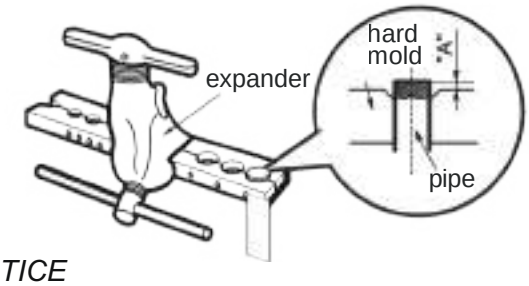
- Remove the union nut on the indoor connection pipe and outdoor valve; install the union nut on the pipe.



E

Expand the port

- Expand the port with expander.



NOTICE

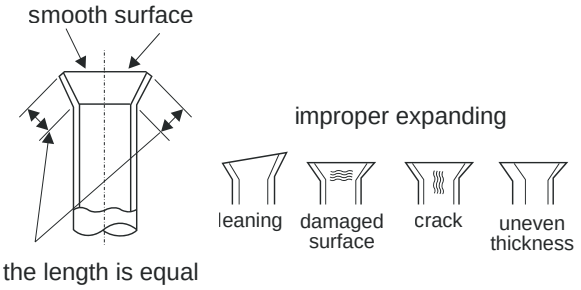
- *"A" is different according to the diameter, please refer to the sheet below:*

Outer Diameter *(mm)*	A *(mm)*	
	Max	Min
Ø6 - 6.35 (1/4")	1.3	0.7
Ø9 - 9.52 (3/8")	1.6	1.0
Ø12 - 12.7 (1/2")	1.8	1.0
Ø15.8 - 16.0 (5/8")	2.4	2.2

F

Inspection

- Check the quality of expanding port. If there is any blemish, expand the port again according to the steps above.



WORKING TEMPERATURE RANGE

Maximum Cooling	Indoor Side	Outdoor Side
Dry Bulb Temp	32°C	43°C
Wet Bulb Temp	23°C	26°C

NOTE

- *The operating temperature range (Outdoor Temperature) for cooling only unit is 18°C - 43°C.*

REMOTE OPERATIONS

NOTES:

- Ensure there are no obstructions between the remote controller and the signal receiver.
- Do not drop or throw the remote controller.
- Keep the remote controller away from liquids, direct sunlight, and high-temperature areas.
- This is a general-purpose remote controller. Pressing a button not supported by the unit will not change its current operating status.

Buttons and Functions

BUTTON	DESCRIPTIONS
	POWER BUTTON: Turn the unit ON or OFF.
	TEMP UP: Increases temperature by 1(°C or °F) *Note: Maximum temperature is 30°C / 86°F.*
	TEMP DOWN: Decreases temperature by 1(°C or °F). *Note: Minimum temperature is 16°C / 61°F.*
Mode	**MODE:** Cycles between Auto, Cool, Dry, Fan and Heat modes. ***Heat Mode is not functional on some models***
Fan	**FAN**: Sets the fan speed from Auto, Quiet, five speed levels, and turbo mode.
	WIFI: Turns WiFi connectivity on or off.
	HEALTH: Activates the Cold Plasma and/or UV Lamp functions
	UD-SWING: Activates and controls the position of horizontal louvers for up and down swing motion.
	HUMIDITY: Activates the dehumidifying function of the air conditioner.
	LR-SWING: Activates and controls the position of vertical louvers for left and right swing motion.
	TIMER: Sets a time to automatically turn the unit on or off.
	SLEEP: Activates the three sleep modes feature.
	LIGHT: Turns the display light on or off and activates the AUTO LED feature

**Please refer to the page 33 for detailed explanations of the functions and how to activate them.*

***Functions listed are model-dependent and may not be available on all units.*

Additional Functions

BUTTONS	DESCRIPTIONS
In Cool Mode Mode +	**ENERGY SAVING FUNCTIONS:** Activates the energy saving function. Optimizes performance to maintain comfort with the lowest possible electricity use. ***Available on Cool Mode only**
In Cool Mode Mode +	**POWER REDUCTION MODE:** Activates the power limiting functions. Caps the unit's maximum power draw to prevent electrical overloads and save energy. ***Not available on Fan Mode**
+	**FAST COOL FUNCTION:** Activates the 25°C and 16°C fast cool function. Forces the system to maximum capacity to drop room temperature instantly. ***Available on Cool Mode only**
+ (For 3 secs)	**LOCK FUNCTION:** Freezes the remote control button functions to prevent accidental or unauthorized setting changes.
In Standby Mode Mode + (For 5 secs)	**AUTO CLEAN / SELF CLEAN:** Activates the four-stage cleaning process of the air conditioner.
Remote/Unit is OFF Mode + (For 3 secs)	**TEMPERATURE DISPLAY SWITCHOVER FUNCTION:** Toggles the unit display between Celsius and Fahrenheit .
+	**I FEEL FUNCTION:** Uses the remote control's location as the temperature reference point rather than the indoor unit, ensuring the air around you is perfect.
Mode +	**VOLUME CONTROL OF INDOOR UNIT BUZZER:** Adjusts or mutes the "beep" sound made when changing settings.
+	**INDOOR AMBIENT TEMPERATURE OR HUMIDITY DISPLAY:** Shows the Indoor Ambient Temperature and Humidity levels of the room on the unit's panel.
+ Fan	**CLEAN REMINDER FUNCTION OF FILTER:** Notifies you automatically when the air filters need to be clean.
Mode +	**TWO-WAY VENTILATION:** Swaps stale indoor air for fresh outdoor air to improve room oxygen levels.
In Standby Mode Mode + (For 1 sec)	**Resetting Wi-Fi:** Required for app connectivity. For detailed instruction, please refer to the ***Smart Controller Manua***l.

**Please refer to the page 40 for detailed explanations of the additional functions and how to activate them.*

***Functions listed are model-dependent and may not be available on all units.*

Remote Screen Display Indicators

Information is displayed in the remote control.

Note: All indicators shown above are for information purposes only. During actual operation, only the relevant indicators will be shown on the display.

MODE Display: Displays the current mode

AUTO	COOL	DRY	FAN	HEAT

FAN SPEED

Auto	→ FAN AUTO	***Medium***	→ FAN
Quiet	→ FAN	***Medium-High***	→ FAN
Low	→ FAN	***High***	→ FAN
Low-Medium	→ FAN	***Turbo***	→ FAN

OPER

Remote Signal Indicator

88

Displays the set temp (default), and ambient room temp.

°F *UNIT (Fahrenheit)*

°C *UNIT (Celsius)*

% *Humidity Value*

Dehumidification Icon

Indoor Ambient Temperature/ Humidity

Power Limiting Operation

HOUR ON OFF 88:88

Displays time for Timer ON and Timer OFF, and for setting Custom Sleep

Horizontal Louver Swing

Vertical Louver Swing

Sleep Function | *Fast Cool Function* | *X-Fan Function* | *Two-Way Ventilation* | *Health Function*

WiFi *WiFi Function* | *LED ON Function* | *AUTO LED Function* | *I-Feel Function* | *Normal Sleep* | *Auto Sleep* | *Custom Sleep*

**NA - Not applicable for this model*

***Other functions and features are only applicable for some models*

HOW TO USE BASIC FUNCTIONS

NOTES:

- Make sure there are no obstacles between the remote controller and the receiver on the unit.
- Do not drop or throw the remote controller.
- Keep the remote away from liquids, direct sunlight, and high temperatures.
- This is a general-use remote controller designed for multifunction air conditioners. If you press a button that your model doesn't support, the unit will continue operating normally without any changes.
- When power is connected, the air conditioner will emit a sound and the power indicator will light up. You can then use the remote controller to operate the unit.
- When the unit is ON, pressing a button on the remote will make the signal icon blink once, and the unit will emit a “di” sound to confirm the signal was received.

Mode MODE BUTTON

- Pressing this button cycles through the modes shown below. The mode indicator will display on remote to show which mode is active.

AUTO MODE

- Automatically selects the appropriate mode based on the room or set temperature.

COOL MODE

- Cools the room to your desired temperature.

HEAT MODE

- Heats the room to your set temperature.
- ***This feature is not supported on this model. The unit will not start if the power button is pressed while the remote controller is set to Heat Mode.***

DRY MODE

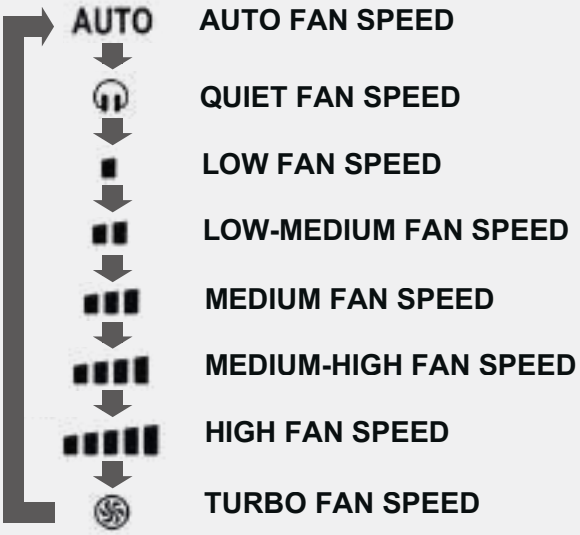
- Reduces humidity in the room without a major change in temperature.
- *Note: Fan speed is fixed at low speed and cannot be adjusted.*

FAN MODE

- Circulates air without cooling.

Fan FAN BUTTON

- Pressing this button cycles through the fan speeds shown below.



X-FAN FUNCTION

- X-FAN helps remove moisture from the indoor unit after shutdown by keeping the fan running briefly.
- In Cool or Dry mode, press and hold the Fan button for 2 seconds to activate X-FAN. The X-FAN icon will appear on the display. The indoor fan will continue running for a few minutes after the unit is turned off to ***help dry the evaporator*** and ***prevent mold growth***. By default, X-FAN is off when the unit is powered on. *This function is not available in Auto, Fan, or Heat modes.*

When X-FAN is ON:

- After turning off the unit using the **POWER button**, the indoor fan will continue operating at low speed for a few minutes. To stop the fan immediately during this time, press and hold fan speed button for 2 seconds.

When X-FAN is OFF:

- After turning off the unit using the **POWER button**, the entire unit will shut down immediately.

The X-Fan function indicator will appear on the screen to confirm it is activated.

The X-Fan function is only available for some models.

WIFI BUTTON

- This button controls your air conditioner's WIFI connection.

To turn WIFI ON

- Press the **WIFI button**. The WIFI icon will appear on the remote.

To turn WIFI OFF

- Press and hold the **WIFI button** again for 5 seconds. The WIFI icon will disappear.

To reset WIFI

- When the ***unit is OFF***, press and hold both the **MODE and WIFI buttons** at the same time for 1 second. This resets the WIFI settings.

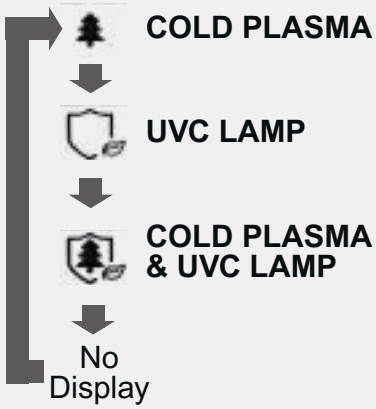
WiFi *The WiFi function indicator will appear on the screen to confirm it is activated.*

NOTE:

- For detailed instructions on installation, connection, and full functionality, please refer to the ***Smart Controller Manual*** corresponding to this model.

HEALTH BUTTON

- Press this button to activate the Cold Plasma and UVC Lamp functions. Each time you press the button, the system will cycle to the next mode and enable the corresponding function. Continue pressing until the desired function is selected.



COLD PLASMA

- Produces both positive and negative ions in the airflow. These ions attach to airborne particles such as dust, smoke, odors, and some microorganisms. The particles then become heavier and either get captured by the air filter or fall to the ground, helping reduce airborne contaminants.

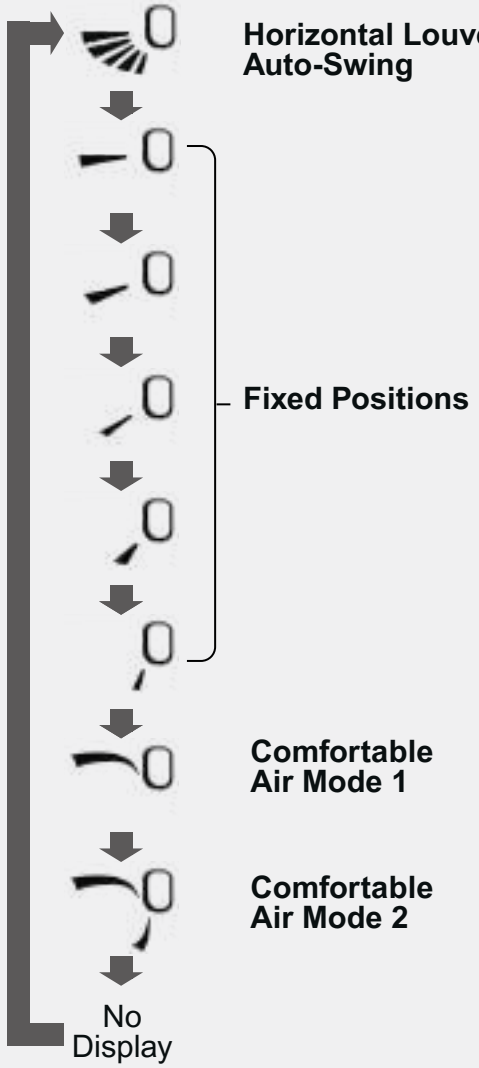
UVC LAMP

- Uses ultraviolet-C light inside the air conditioner to irradiate the coil or passing air. The UV energy helps reduce the activity of microorganisms on internal surfaces and in the airflow.

**The UVC Lamp function is only available for some models.*

UP-DOWN SWING BUTTON

- Press this button to adjust the horizontal louver position. Each press will cycle through the available louver angles in sequence.



AUTO-SWING

- Automatically adjusts airflow up and down for better circulation.

FIXED POSITIONS

- Set and hold the louver at a specific angle for direct cooling.

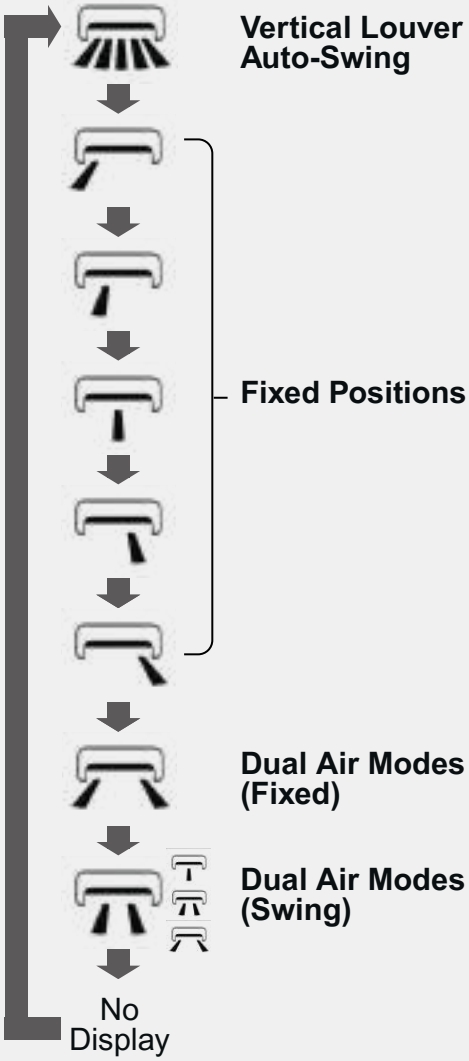
COMFORTABLE AIR MODES

- Pre-programmed modes optimized for personalized comfort.

**Louver functionality varies by model; certain features may be restricted or unavailable on specific units.*

LEFT-RIGHT SWING BUTTON

- Press this button to adjust the vertical louver position. Each press will cycle through the available louver angles in sequence.



AUTO-SWING

- Automatically adjusts airflow left and right for better circulation.

FIXED POSITIONS

- Set and hold the louver at a specific angle for direct cooling.

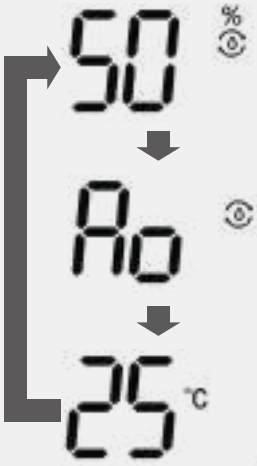
**Louver functionality varies by model; certain features may be restricted or unavailable on specific units.*

**For models without Dual Air Mode support, the 'Fixed' setting retains its previous position while the 'Swing' setting remains automatic.*

HUMIDITY BUTTON

In **COOL MODE**

- Pressing this button will cycle on this humidity modes.



Humidity Control with Cooling Mode

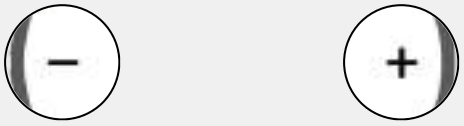
Smart Dehumidification with Cooling Mode

General Cooling Mode

Humidity Control with Cooling Mode

- This functions as a manual balance between temperature and moisture. You have the flexibility to adjust the temperature and set a specific humidity target between 40% and 80%.

While the Humidity Control with Cooling Mode is active (blinking), you can set the humidity level between 40% to 80% with an interval of 5%.



Decrease Set Humidity

Increase Set Humidity

Wait for the blinking to stop to automatically save the set humidity.

This icon will show up on the remote to know that this function is active.

Smart Dehumidification with Cooling Mode

- This is an "autopilot" comfort mode. The system displays "Ao" and automatically calculates the ideal humidity based on human body comfort. You can still adjust the temperature, but the unit handles the moisture levels for you.

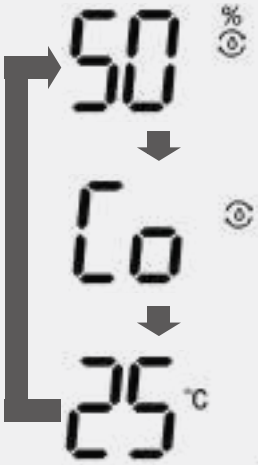
The humidity setting is saved automatically once the blinking ends.

This icon will show up on the remote to know that this function is active.

The unit will also display this for 5 secs to know it is active.

In **DRY MODE**

- Pressing this button will cycle on this humidity modes.



Humidity Control with Dry Mode

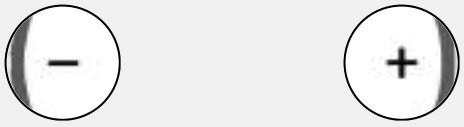
Continuous Dehumidification with Dry Mode

General Dry Mode

Humidity Control with Dry Mode

- This functions as a dedicated manual dehumidifier. You can set a specific humidity level between 30% and 70%, but the temperature is locked and cannot be adjusted.

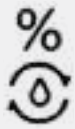
While in the Humidity Control with Dry Mode, you can set the humidity level between 30% to 70% with an interval of 5%.



Decrease Set Humidity

Increase Set Humidity

Once you select Humidity Control with Dry Mode, the setting is saved automatically. In this mode, the unit locks into its preset parameters, and the temperature cannot be manually adjusted.



This icons will show up on the remote to know that this function is active.

Continuous Dehumidification w/ Dry Mode

- This is the "maximum power" setting for damp environments. The system displays "Co" and runs the dehumidification process constantly regardless of the current room level. In this mode, both temperature and humidity settings are locked and cannot be changed.

Once you switch to Continuous Dehumidification with Dry Mode, the setting is locked in and the mode starts automatically.

This icon will show up on the remote to know that this function is active.

The unit will also display this for 5 secs to know it is active.

NOTE

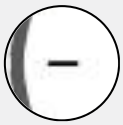
- Temperature control is the main function of this unit, while humidity control serves as a secondary feature. Performance may vary based on environmental factors, room sealing, and airflow.
- The set humidity cannot be reached if it is higher than the current atmospheric humidity.
- If the humidity sensor fails, the unit will bypass humidity settings and operate in standard Cooling or Dry mode.

**The Humidity function is only available for some models.*

TIMER BUTTON

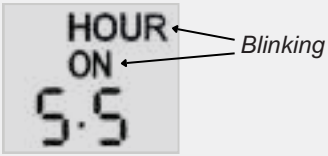
TIMER ON

- To set timer ON, the ***unit must be on standby mode*** and ***the remote is turned OFF***.
- Press the TIMER button once, the HOUR and ON icons on remote display will be blinking. While blinking press the TEMP UP and TEMP DOWN button to choose the desired time to turn ON the unit.
- ***Time range from 0.5 hr to 24 hr with 0.5 hr increment.***



Decreased Time

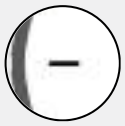
Increased Time



- Once you have selected the desired time, press the TIMER button again to save the TIMER ON settings. The time and corresponding icons will be displayed on the remote and will begin counting down. When the set time is reached, the unit will turn on and the timer icons will disappear from the display.
- *If the icons are blinking and you do not press the TIMER button, the setting will be automatically canceled. Additionally, if you have saved a setting and then press the TIMER button again, that setting will also be canceled.*

TIMER OFF

- To set timer OFF, the ***unit must be powered ON*** and ***the remote is turned ON***.
- Press the TIMER button once, the HOUR and OFF icons on remote display will be blinking. While blinking press the TEMP UP and TEMP DOWN button to choose the desired time to turn OFF the unit.
- ***Time range from 0.5 hr to 24 hr with 0.5 hr increment.***



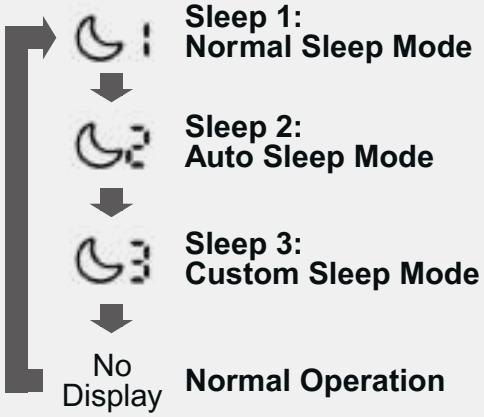
Decreased Time

Increased Time

- Once you have selected the desired time, press the TIMER button again to save the TIMER OFF settings. The time and corresponding icons will be displayed on the remote and will begin counting down. When the set time is reached, the unit will turn off and the timer icons will disappear from the display.
- *If the icons are blinking and you do not press the TIMER button, the setting will be automatically canceled. Additionally, if you have saved a setting and then press the TIMER button again, that setting will also be canceled.*

SLEEP BUTTON

- In **COOL MODE**, pressing this button will cycle through the following sleep modes.



SLEEP 1: Normal Sleep Mode

- This mode automatically adjusts the temperature based on the elapsed time to improve comfort. In Cool mode, the temperature increases by 1 degree after one hour and by 2 degrees after two hours.

SLEEP 2: Auto Sleep Mode

- The air conditioner operates according to a factory-preset temperature curve designed for sleep cycles.

Sleep 3: Custom Sleep Mode

- This is a manual "Do-It-Yourself" mode where the user can program a custom temperature for each hour of an 8-hour sleep period.

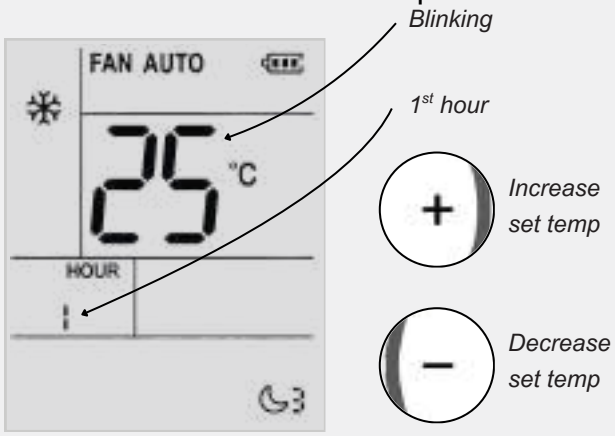
Setting Custom Sleep Mode

While on Sleep 3: Custom Sleep Mode, press and hold the **HEALTH button** for atleast 3 secs.

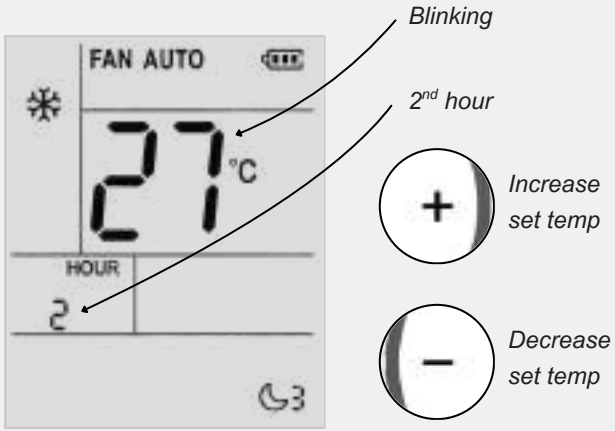
Press and Hold for 3 secs

It will enter the customization setting for sleep mode 3.

While the temperature display is blinking, press the **TEMP UP or TEMP DOWN buttons** in order to set desired temperature for the 1st hour of custom sleep mode.



Press the **HEALTH button** again once, then set the temperature for the 2nd hour.



Follow the same steps to set the temperature for the 3rd through 8th hours. Once finished, press the Health button again to save your settings. If no buttons are pressed for 10 seconds, the system will save your settings automatically.

Night Mode Operation

To activate Night Mode on the outdoor unit, ensure the system is in Cooling mode, then enable Sleep Mode and set the fan to "Low" or "Quiet."

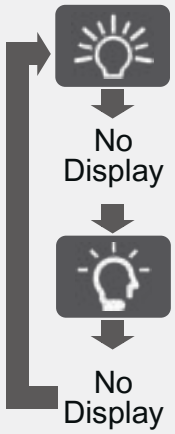
Important Notes:

- If you find the cooling is insufficient, exit Night Mode by changing the fan speed or pressing the "Sleep" button.
- This feature only operates within standard outdoor temperature ranges.

Night Mode is model-specific and may not be available on all units.

LIGHT BUTTON

- Press this button to control the LED status on the unit's display. The LED will cycle through the following:



LED ON

Unit's LED display will not light up

Auto LED

Unit's LED display will not light up

LED ON

- The display stays constantly lit at all times, regardless of the room's lighting or device activity.

Auto LED

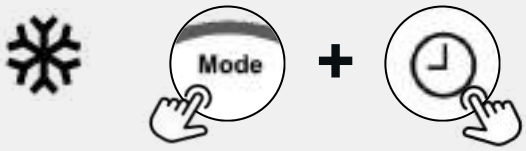
- The display dims or turns off automatically based on the room's brightness to reduce glare.

This function is only available for some models.

ADDITIONAL FUNCTIONS

ENERGY SAVING FUNCTION

- In **COOL MODE**, press the **MODE and TIMER buttons** simultaneously to turn the Energy-Saving function ON or OFF.



- When activated, “SE” will appear on the remote controller. The air conditioner will automatically adjust the set temperature based on factory settings to achieve optimal energy efficiency.

While Energy-Saving mode is active:

- *Fan speed is fixed to Auto and cannot be adjusted.*
- *Set temperature cannot be changed.*
- *Note: Sleep mode and Energy-Saving mode cannot run at the same time.*
- *If Energy-Saving mode is active and you press the SLEEP button, Energy-Saving mode will be canceled.*
- *If Sleep mode is active and you enable Energy-Saving mode, Sleep mode will be canceled.*

Only functional in Cooling Mode; heating is not supported.

This function is only available for some models.

POWER REDUCTION MODE

- Pressing the **MODE and SLEEP buttons** simultaneously will activate and cycles through power reduction modes. This function limits the maximum power consumption of the entire air conditioning unit.

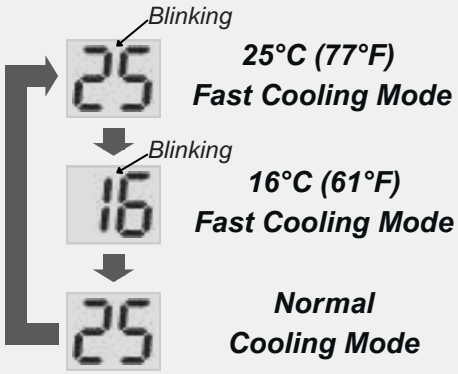
	**Power Reduction 1:** Medium power limit, balancing energy saving with comfort.
	**Power Reduction 2:** Lowest power limit for maximum energy savings.
No Display	**Normal Operation:** No power limit; unit runs at full capacity for maximum cooling.

NOTES

- If you want to cancel the power limiting function, press the button until the "No Setting" icon is displayed.
- If the remote controller is turned off, the power limiting function will be canceled. To reactivate it, you must press the button again after turning the remote back on.
- If the current power consumption is already lower than the maximum power limit you select, the unit's power will not be further limited.
- Not available on fan mode.
- *This function is only available for specific models.*

FAST COOL FUNCTION

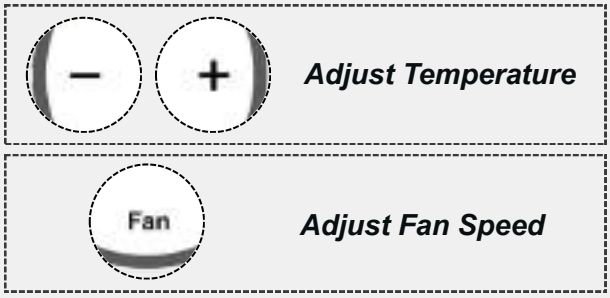
- When in Cool mode, pressing the **POWER and TEMP UP buttons** simultaneously will cycle and activate the fast cooling modes:



This icon indicates that the Fast Cool function has been selected and is currently active.

Fast Cooling Mode

- When entering a fast cooling mode, the ***fan speed automatically sets to AUTO***, and the target temperature becomes ***25°C (77°F) or 16°C (61°F).***
- The set temperature will blink on the display for 5 seconds. During this blinking period, you can press the **TEMP UP or TEMP DOWN buttons** to adjust the set temperature, or the FAN button to adjust the fan speed.



- If no adjustments are made within the 5-second blinking period, the remote and indoor unit will operate at the current set temperature and fan speed for 20 minutes. After 20 minutes, both the remote and the unit will revert to the settings they had before entering fast cooling mode.

NOTE

- If you adjust the set temperature or fan speed while in fast cooling mode, the unit will exit fast cooling mode and continue operating under the newly adjusted settings.
- *This function is only applicable to certain models. If your indoor unit does not support this function, after 20 minutes, the remote controller will revert to its state before the last cooling mode, and the indoor unit will continue its current operation, potentially causing a display discrepancy between the unit and the remote.*

LOCK FUNCTION

- Press and hold **TEMP DOWN and POWER buttons** together simultaneously for 3 seconds to lock the remote keyboard. Press together simultaneously again for 3 seconds to unlock.

This icon will show to know that the lock function is active.

If you operate the remote controller, this icon will blink three times to show that the lock function is active.

AUTO CLEAN / SELF CLEAN

Auto Clean / Self Clean

- It is an automated maintenance cycle that removes dust and moisture from the air conditioner's internal coils. By freezing and then rapidly melting moisture on the evaporator/condenser, it flushes away dirt and bacteria. This process prevents mold growth and musty odors, ensuring the air stays fresh and the unit runs efficiently.

How to Use Auto Clean / Self Clean

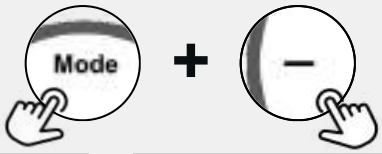
- Ensure the air conditioner is in **STANDBY MODE.** Press and hold both the **MODE and UD-SWING buttons** at the same time for 5 seconds. You will see "CL" appear on the indoor unit's display. Once finished, the unit will automatically go into standby mode.

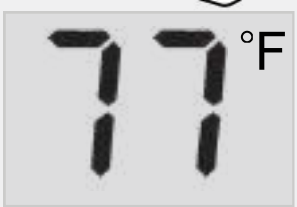
This function is only available for some models.

TEMPERATURE DISPLAY SWITCHOVER FUNCTION

- Ensure the ***remote is off***, press the **MODE and TEMP DOWN buttons** simultaneously for 3 secs to switch the temperature display between °C and °F.

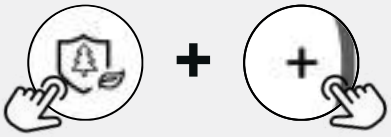
REMOTE/UNIT IS OFF





I FEEL FUNCTION

- Press the **HEALTH and TEMP UP button** simultaneously to activate the I FEEL function. The I FEEL icon will appear on the remote display, and the remote will begin sending the detected ambient temperature to the indoor unit. The air conditioner will then automatically adjust the indoor temperature based on this reading.



- Press the button again to cancel the I FEEL function. The icon will disappear.
- For accurate temperature detection, keep the remote near the user and away from hot or cold objects. Make sure the remote stays within the range of the indoor unit to ensure proper signal transmission.

The I-Feel function indicator will appear on the screen to confirm it is activated.

This function is only available for some models.

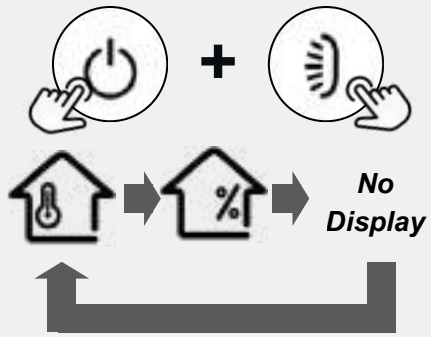
VOLUME CONTROL OF INDOOR UNIT BUZZER

- Pressing the **MODE and LR-SWING** buttons simultaneously, will activate the function that reduces the sound level of the indoor unit buzzer.

This function is only available for some models.

INDOOR AMBIENT TEMPERATURE OR HUMIDITY DISPLAY

- Pressing the **POWER and UD-SWING** buttons will cycle through the following.



	Display the **Indoor Ambient Temperature** in the unit's LED display
	Display the **Indoor Ambient Humidity** in the unit's LED Display
No Display	Display the **Set Temperature** in the unit's LED Display

***The ambient humidity value is for reference only. There may be some measuring deviation for humidity detection and photosensitivenes detection.*

This function is only available for some models.

CLEAN REMINDER FUNCTION OF FILTER

How to Enable the Reminder

- By default, this feature is OFF. To activate it: Press and hold the **POWER and FAN buttons** at the same time for 5 seconds. You will hear a short beep (0.5s) and the display will light up for 3 seconds to confirm it is active.

- Once enabled, the unit tracks its running time. When it is time to clean the filter, the display will flash for 30 seconds every time you turn the AC on.
- After cleaning the filter, you need to reset the timer: Press and hold the **POWER and FAN buttons** together for 5 seconds. This clears the current alert and starts a new countdown for the next cleaning cycle.

TWO-WAY VENTILATION FUNCTION

- You can toggle the two-way ventilation feature whether the air conditioner is currently running or powered off. Press and hold the **MODE and HEALTH buttons** at the same time to turn the function on or off.

- When active, this icon appears on the remote screen, and the indicator light on the ventilation system will illuminate.
- Fan Speed:
  - While AC is ON: The ventilation fan speed automatically matches the air conditioner's current fan setting.
  - While AC is OFF: You can manually adjust the ventilation fan speed using the "Fan" button on the remote.

Note: This feature is model-specific and may not be supported by all units.

Remote - Care and Maintenance

To keep your remote control in good working condition, follow these guidelines:

KEEP IT CLEAN

- Wipe the surface with a soft, dry cloth.
- Avoid using water, alcohol, or harsh chemicals.
- Keep buttons and the battery compartment free of dust and dirt.

HANDLE WITH CARE

- Do not drop or subject the remote to strong impact.
- Avoid placing it in direct sunlight or near heat sources.

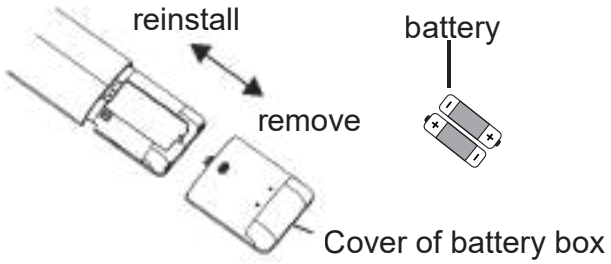
BATTERY MAINTENANCE

- Replace batteries when the display dims or the remote becomes unresponsive.
- Use only the recommended battery type.
- If it will not be used for an extended period, remove the batteries to prevent leakage and damage.
- Always insert batteries with the correct polarity (+/-).

AVOID MOISTURE

- Do not expose the remote to water or operate it with wet hands.
- Keep it away from liquids and humid environments.

REPLACEMENT OF BATTERIES IN REMOTE CONTROLLER



1. Press the back side of remote controller marked with embossed lines, as shown in the fig, and then push out the cover of battery box along the arrow direction.
2. Replace two AAA 1.5V dry batteries, and make sure the position of "+" polar and "-" polar are correct.
3. Then, reinstall the cover of battery box.

NOTE FOR REMOTE

- During operation, point the remote control signal sender at the receiving window on the indoor unit.
- The distance between signal sender and receiving window should be no more than 8m, and there should be no obstacles between them.
- Signal may be interfered easily in the room where there is a fluorescent lamp or wireless telephone; remote controller should be close to indoor unit during operation.
- Replace new batteries of the same model when replacement is required.
- When you don't use the remote controller for a long time, please take out the batteries.
- If the display on remote controller is blurry or there is no display, please replace batteries.

Remote - Troubleshooting

The following problems are not a malfunction and in most situations will not require repairs.

Issue	Possible Causes	Solution
Remote not responding	Batteries are dead or installed incorrectly	Replace or reinstall batteries correctly
No display on screen	Batteries are exhausted or missing	Insert new batteries
Signal not received by the unit	Remote is too far, or not pointed at unit	Move closer and aim directly at the unit
Interference with signal	Obstacle between remote and indoor unit	Remove obstruction
Some buttons not working	Dust or dirt under buttons	Clean surface and try again
Functions not performing as expected	Wrong mode selected or timer is active	Reset settings or cancel timer
Remote beeps but nothing happens	Indoor unit is off or in error mode	Ensure unit is powered on and not showing error code

Note: If the problem still persists, refer to your air conditioner's user manual or contact Kolin Service Hotline or its Authorized Service Partners for assistance.

CARE AND MAINTENANCE

WARNING

- Turn off the air conditioner and disconnect the power before cleaning the air conditioner to avoid electric shock.
- Do not wash the air conditioner with water to avoid electric shock.
- Do not use volatile liquid to clean the air conditioner.
- Do not use liquid or corrosive detergent to clean the appliance and do not splash water or other liquid onto it, otherwise, it may damage the plastic components, even cause electric shock.

Clean Surface of Indoor Unit

- When the surface of indoor unit is dirty, it is recommended to use a soft dry cloth or wet cloth to wipe it.

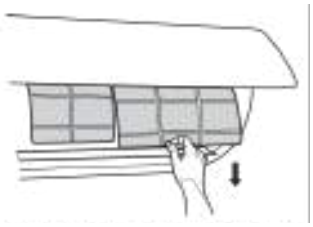
Clean Filter

1 OPEN PANEL

Pull out the panel to a certain angle as shown in the fig.

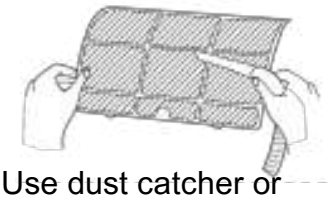
NOTICE
- Do not remove the panel when cleaning it.

2 REMOVE FILTER



Remove the filter as indicated in the fig.

3 CLEAN FILTER



Use dust catcher or water to clean the filter.

When the filter is very dirty, use the water (below 45°C) to clean it, and then put it in a shady and cool place to dry.

4 INSTALL FILTER

Install the filter and then close the panel cover tightly.

WARNING

- The filter should be cleaned every three months. If there is much dust in the operation environment, clean frequency can be increased.
- After removing the filter, do not touch fins to avoid injury.
- Do not use fire or hair dryer to dry the filter to avoid deformation or fire hazard.

NOTICE: Checking before use-season

1. Check whether air inlets and air outlets are blocked.
2. Check whether air switch, plug and socket are in good condition.
3. Check whether filter is clean.
4. Check whether mounting bracket for outdoor unit is damaged or corroded. If yes, please contact dealer.
5. Check whether drainage pipe is damaged.

NOTICE: Checking after use-season

1. Disconnect power supply.
2. Clean filter and indoor unit's panel.
3. Check whether mounting bracket for outdoor unit is damaged or corroded. If yes, please contact dealer.

NOTICE FOR RECOVERY

1. Many packing materials are recyclable materials. Please dispose them in appropriate recycling unit.
2. If you want to dispose the air conditioner, please contact local dealer or consultant service center for the correct disposal method

Operation Tips

OPERATION FOR COMFORT AND ECONOMY

- Do not overcool the room temperature. This is neither good for your health nor energy-efficient.
- Keep blinds or curtains closed. Do not allow direct sunlight to enter the room when the air conditioner is in operation.
- Maintain a uniform room temperature. Adjust the horizontal and vertical airflow direction to ensure even temperature distribution throughout the room. Air should not be discharged in the direction of the air intake.
- Ensure that doors and windows are tightly closed. Avoid opening them as much as possible to retain conditioned air within the room.
- Clean the air filter regularly. Blockages in the air filter reduce dehumidifying effects. Clean the air filter at least once every two weeks.
- Ventilate the room occasionally. Since windows are kept closed, it's advisable to open them and ventilate the room periodically. When starting the unit, curtains or windows should be closed to prevent cool air leakage.

OPERATION FOR SAFETY AND HEALTH

- The plug must be accessible after the appliance is positioned.
- Do not use this appliance in the laundry.
- If the power cord is damaged, it must be replaced to avoid hazards. Contact Kolin Service Hotline or its Authorized Service Partners for replacement.
- Do not pull out the power cord. Damage to the cord may result in serious electric shocks.
- Do not use the air conditioner for other purposes such as drying clothes, preserving food, or cultivating vegetables.
- Do not block the air intake and outlet vents. This causes lowered performance and irregular operation.
- Do not insert sticks or other objects into these vents, as it is dangerous to touch the electric components and the fan.
- Select the most appropriate temperature. Pay attention to adjusting the temperature to suit the conditions. Rooms occupied by infants, the elderly, or the sick should be kept at an appropriate temperature.
- Do not use heating apparatuses in the vicinity. The air conditioner's plastic parts will melt if exposed to excessive heat.
- Avoid exposing the body directly to a continuous, unidirectional airflow for long periods. This is not recommended for health reasons.

ADDITIONAL NOTE

- Always wait at least 3 minutes before switching the air conditioner on again after you have switched it off during cooling.

TROUBLESHOOTING

SAFETY PRECAUTIONS

If ANY of the following conditions occurs, turn off your unit immediately!

- The power cord is damaged or abnormally warm
- You smell a burning odor
- The unit emits loud or abnormal sounds
- A power fuse blows or the circuit breaker frequently trips
- Water or other objects fall into or out of the unit

DO NOT ATTEMPT TO FIX THESE YOURSELF! CONTACT A KOLIN SERVICE HOTLINE OR ITS AUTHORIZED SERVICE PARTNERS IMMEDIATELY!

Error codes

When air conditioner status is abnormal, temperature indicator on indoor unit will blink to display corresponding error code. Please refer to below list for identification of error code.

MALFUNCTION CODE	SOLUTION
U8	It can be eliminated after restarting the unit. If not, please contact Kolin Service Hotline or its Authorized Service Partners for service.
H6	
H3	
E1	
E5	
E6	
E8	
C5	Please contact Kolin Service Hotline or its Authorized Service Partners for service.
F0	
F1	
F3	

NOTE: If there're other error codes, please contact Kolin Service Hotline or its Authorized Service Partners for service.

NOTE:

- If you have checked all of the above items and taken the recommended measures but the air conditioner still does not operate properly, stop using the unit immediately and contact Kolin Service Hotline or its Authorized Service Partners. Only qualified service personnel should inspect and repair the unit.

Checked items before maintenance

Please check below items before asking for maintenance. If the malfunction still can't be eliminated, please contact local dealer or qualified professionals.

Indoor unit can't receive remote controller's signal or remote controller has no action.	Whether it's interfered severely (such as static electricity, stable voltage?)	Pull out the plug. Reinsert the plug after about 3min, and then turn on the unit again.
	Whether remote controller is within the signal receiving range?	Signal receiving range is 8m.
	Whether there are obstacles?	Remove obstacles.
	Whether remote controller is pointing at the receiving window?	Select proper angle and point the remote controller at the receiving window on indoor unit.
	Is sensitivity of remote controller low; fuzzy display or no display?	Check the batteries. If the power of batteries is too low, please replace them.
	No display when operating remote controller?	Check whether remote controller appears to be damaged. If yes, replace it.
	Fluorescent lamp in room?	Take the remote controller close to indoor unit. Turn off the fluorescent lamp and then try it again.
No air emitted from indoor unit	Air inlet or air outlet of indoor unit is blocked?	Eliminate obstacles.
Air conditioner can't operate	Power failure?	Wait until power recovery.
	Is plug loose?	Reinsert the plug.
	Air switch trips off or fuse is burnt out?	Ask professional to replace air switch or fuse.
	Wiring has malfunction?	Ask professional to replace it.
	Unit has restarted immediately after stopping operation?	Wait for 3min, and then turn on the unit again.
	Whether the function setting for remote controller is correct?	Reset the function.
Mist is emitted from indoor unit's air outlet	Indoor temperature and humidity is high?	Because indoor air is cooled rapidly. After a while, indoor temperature and humidity will be decrease and mist will disappear.

Odours are emitted	Whether there's odour source, such as furniture and cigarette, etc.	Eliminate the odour source. Clean the filter.
Set temperature can't be adjusted	Your required temperature exceeds the set temperature range?	Set temperature range: 16°C~30°C. Set temperature range in HEAT mode: 8°C~30°C.
Cooling (heating) effect is not good.	Voltage is too low?	Wait until the voltage resumes normal.
	Filter is dirty?	Clean the filter.
	Set temperature is in proper range?	Adjust temperature to proper range.
	Door and window are open?	Close door and window.
Air conditioner operates abnormally	Whether there's interference, such as thunder, wireless devices, etc.	Disconnect power, put back power, and then turn on the unit again.
"Water flowing" noise	Air conditioner is turned on or turned off just now?	The noise is the sound of refrigerant flowing inside the unit, which is a normal phenomenon.
Cracking noise	Air conditioner is turned on or turned off just now?	This is the sound of friction caused by expansion and or contraction of panel or other parts due to the change of temperature.
Air guide louver can't be closed normally	Whether the air guide louver has been adjusted?	Disconnect the power for 3s and then connect the power; if the problem still exits, disconnect the power, reinstall the air guide louver and then connect the power.

WARNING

- When below phenomenon occurs, please turn off air conditioner and disconnect power immediately, and then contact Kolin Service Hotline or its Authorized Service Partners for service
  - Power cord is overheating or damaged.
  - There's abnormal sound during operation.
  - Air switch trips off frequently.
  - Air conditioner gives off burning smell.
  - Indoor unit is leaking.
- Do not repair or refit the air conditioner by yourself. Doing so may cause injury, damage to the unit and may void your warranty. Only qualified service personnel should inspect and repair the unit.
- If the air conditioner operates under abnormal conditions, it may cause malfunction, electric shock or fire hazard. If this occurs, stop using the unit immediately and contact Kolin Service Hotline or its Authorized Service Partners.

The design and specifications are subject to change without prior notice for product improvement. Any updates to the manual will be uploaded to the Kolin official website, please check for the latest version.

If you have any concerns, please contact us at the following:

Customer hotline: **(02) 8852-6868**
Text hotline: **+63 917-881-8982**
Email: **service@kolinphil.com.ph**

Also, please like and follow us on social media accounts:

Facebook: kolinphilippines
Instagram: kolinphilippines
Youtube: kolinphilippines
Tiktok: kolinphilippines
Website: www.kolinphil.com.ph

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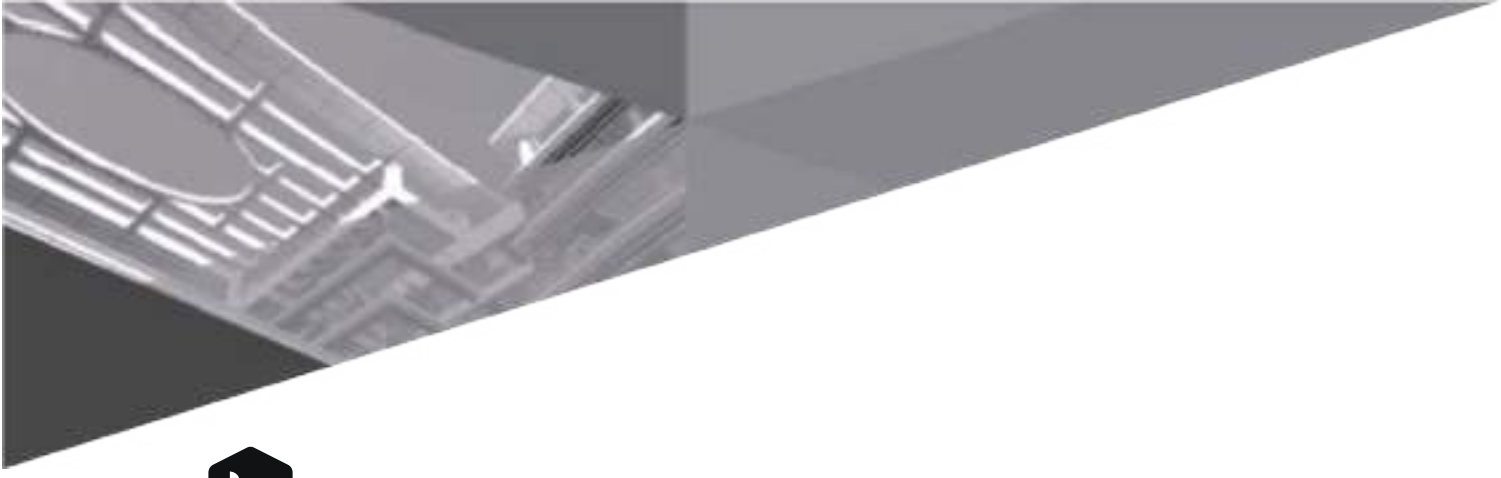

Kolin Philippines International, Inc.

SERVICE CENTERS

BRANCH	ADDRESS	TEL. NO.
Bacolod	Door #A-2 & A-3 UTC Bldg.,Alunan St., Brgy. 36, Bacolod City	(034) 466-9145
Cagayan De Oro	Door #3 De Oro Land Bldg.,Julio Pacana St., Puntod, Cagayan de Oro City	(088) 557 - 7353
Cebu	Lot 758-B-1, P. Suico St. Upper Tabok, Mandaue City, Cebu	(032) 234 - 1844
Dagupan	Unit #1 107 Caranglaan District, Dagupan City, Pangasinan	(075) 529 - 0587
Davao	Blk 17 Lot 9, Calamansi St.,Juna Subd., Matina, Davao City	(082) 272 - 0048
Iloilo	Door# 4,5 & 7, D' Appliance Arcade,South Fundidor, Molo, Iloilo City	(033) 337 - 5914
Pampanga	LRK Commercial Bldg., Jose AbadAve., Lagundi, Mexico, Pampanga	(045) 455 - 2934

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