

INVERTER SERIE H5A

Installation and
owner's manual

MUPR-H5A



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IMPORTANT:

Thank you for selecting super quality Air Conditioners. To ensure satisfactory operation for many years to come, this manual should be read carefully before the installation and before using the air conditioner. After reading, store it in a safe place. Please refer to the manual for questions on use or in the event that any irregularities occur. This Air Conditioner should be used for household use.

This unit must be installed by a professional according to CE 795/2010.

WARNING:

The power supply must be SINGLE-PHASE (one phase (L) and one neutral (N)) with its grounded power (GND) and its manual switch. Any breach of these specifications involves a breach of the warranty conditions provided by the manufacturer.

NOTE:

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

OWNER'S MANUAL

Before using your air conditioner, please read this manual carefully and keep it for future reference..

INVERTER SPLIT-TYPE ROOM AIR CONDITIONER

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

Read This Manual:

Inside you will find many helpful hints on how to use and maintain your air conditioner properly.

Just a little preventative care on your part can save you a great deal of time and money over the life of your air conditioner.

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



CAUTION

- Contact an authorised service technician for repair or maintenance of this unit.
- Contact the authinstaller for installation of this unit.
- This appliance is not intended for use by persons(including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- If the power cord is to be replaced, replacement work shall be performed by authorised personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorised personnel only.

When using this air conditioner in the European countries, the following informations must be followed:

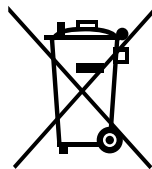
DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

It is prohibited to dispose of this appliance in domestic household waste.



For disposal, there are several possibilities:

- A) The municipality has established collection systems, where electronic waste can be disposed of at least free of charge to the user.
- B) When buying a new product, the retailer will take back the old product at least free of charge.
- C) The manufacture will take back the old appliance for disposal at least free of charge to the user.
- D) As old products contain valuable resources, they can be sold to scrap metal dealers.



Wild disposal of waste in forests and landscapes endangers your health when hazardous substances leak into the ground-water and find their way into the food chain.



To prevent injury to the user or other people and property damage, the following instructions must be followed. Incorrect operation due to ignoring of instructions may cause harm or damage. The seriousness is classified by the following indications.

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

■ Meanings of symbols used in this manual are as shown below.

	Never do this.
	Always do this.

WARNING

<p> Connect with the power properly.</p> <ul style="list-style-type: none"> Otherwise, it may cause electric shock or fire due to excess heat generation. 	<p> Do not operate or stop the unit by switching on or off the power.</p> <ul style="list-style-type: none"> It may cause electric shock or fire due to heat generation. 	<p> Do not damage or use an unspecified power cord.</p> <ul style="list-style-type: none"> It may cause electric shock or fire.
<p> Do not modify power cord length or share the outlet with other appliances</p> <ul style="list-style-type: none"> It may cause electric shock or fire due to heat generation. 	<p> Do not operate with wet hands or in damp environment.</p> <ul style="list-style-type: none"> It may cause electric shock. 	<p> Do not direct airflow at room occupants only.</p> <ul style="list-style-type: none"> This could damage your health.
<p> Always ensure effective earthing.</p> <ul style="list-style-type: none"> No earthing may cause electric shock. 	<p> Do not allow water to run into electric parts.</p> <ul style="list-style-type: none"> It may cause failure of machine or electric shock. 	<p> Always install circuit breaker and a dedicated power circuit.</p> <ul style="list-style-type: none"> No installation may cause fire and electric shock.
<p> Disconnect the power if strange sounds, smell, or smoke comes from it.</p> <ul style="list-style-type: none"> It may cause fire and electric shock. 	<p> Do not drink water drained from air conditioner.</p> <ul style="list-style-type: none"> It contains contaminants and could make you sick. 	<p> Do not open the unit during operation.</p> <ul style="list-style-type: none"> It may cause electric shock.
<p> Use the correctly rated breaker or fuse.</p> <ul style="list-style-type: none"> There is risk of fire or electric shock. 	<p> Do not use the power cord close to heating appliances.</p> <ul style="list-style-type: none"> It may cause fire and electric shock. 	<p> Do not disassemble or modify unit.</p> <ul style="list-style-type: none"> It may cause failure and electric shock.
<p> Ventilate room before operating air conditioner if there is a gas leakage from another appliance.</p> <ul style="list-style-type: none"> It may cause explosion, fire and, burns. 	<p> Do not use the power cord near flammable gas or combustibles, such as gasoline, benzene, thinner, etc.</p> <ul style="list-style-type: none"> It may cause an explosion or fire. 	

**CAUTION**

ⓘ When the air filter is to be removed, do not touch the metal parts of the unit.

- It may cause an injury.

ⓘ Do not clean the air conditioner with water.

- Water may enter the unit and degrade the insulation. It may cause an electric shock.

ⓘ Ventilate the room well when used together with a stove, etc.

- An oxygen shortage may occur.

ⓘ When the unit is to be cleaned, switch off, and turn off the circuit breaker.

- Do not clean unit when power is on as it may cause fire and electric shock, it may cause an injury.

ⓘ Do not put a pet or house plant where it will be exposed to direct air flow.

- This could injure the pet or plant.

ⓘ Do not use for special purposes.

- Do not use this air conditioner to preserve precision devices, food, pets, plants, and art objects. It may cause deterioration of quality, etc.

ⓘ Stop operation and close the window in storm or hurricane.

- Operation with windows opened may cause wetting of indoor and soaking of household furniture.

ⓘ Do not place obstacles around air-inlets or inside of air-outlet.

- It may cause failure of appliance or accident.

ⓘ Turn off the main power switch when not using the unit for a long time.

- It may cause failure of product or fire.

ⓘ Do not use strong detergent such as wax or thinner. Use a soft cloth for cleaning.

- Appearance may be deteriorated due to change of product color or scratching of its surface.

ⓘ Ensure that the installation bracket of the outdoor appliance is not damaged due to prolonged exposure.

- If bracket is damaged, there is concern of damage due to falling of unit.

ⓘ Always insert the filters securely. Clean filter once every two weeks.

- Operation without filters may cause failure.

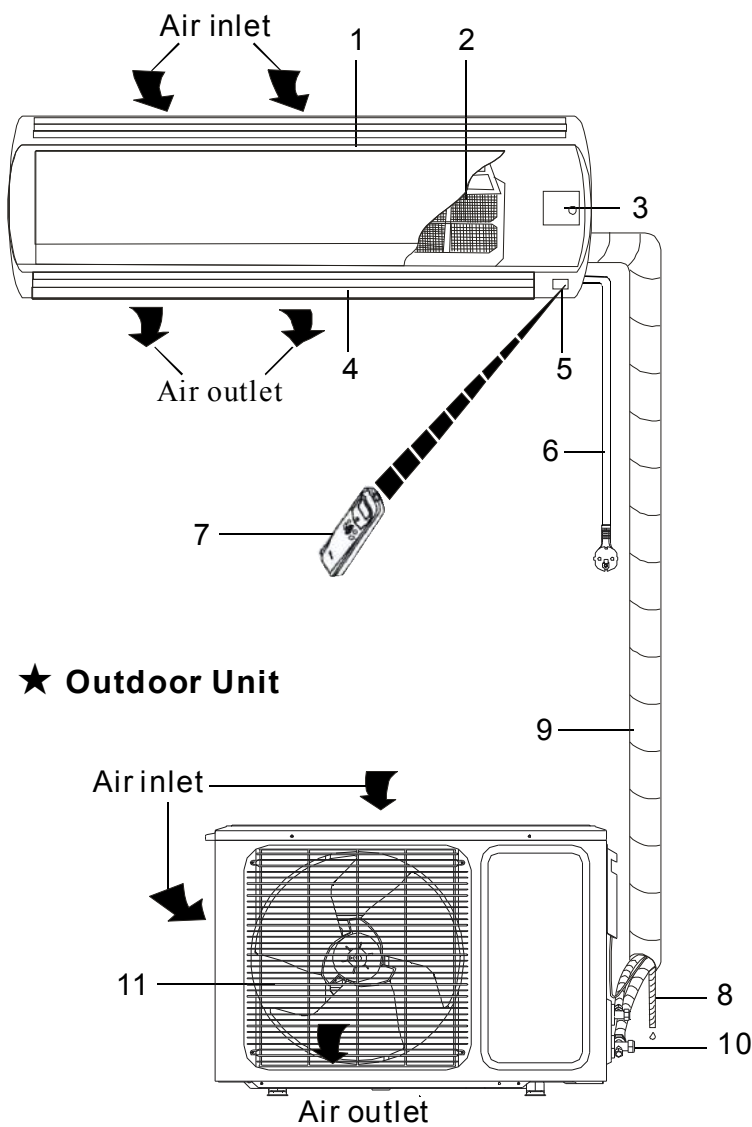
ⓘ Do not place heavy object on the power cord and take care so that the cord is not compressed.

- There is danger of fire or electric shock.

ⓘ Use caution when unpacking and installing. Sharp edges could cause injury.

ⓘ If water enters the unit, turn the unit off and disconnect the power, contact a qualified service technician.

★ IndoorUnit



Indoor Unit

- 1、Front panel
- 2、Air filter
- 3、Auto button
- 4、Louver
- 5、Signal receptor
- 6、Supply cord
- 7、Remote controller
- 8、Drain hose
- 9、Refrigerant gas/liquid pipe

★ Outdoor Unit

Outdoor Unit

- 10、Cut-off valve
- 11、Air outlet cover

NOTE:

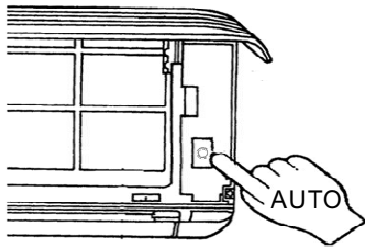
All the pictures in this manual are for explanation purpose only. Your air conditioner may be slightly different. The actual shape shall prevail.

Operating temperature

Cooling	Outdoor	$>47^{\circ}\text{C}$
	Indoor	$<18^{\circ}\text{C}$
Heating	Outdoor	$<-12^{\circ}\text{C}$
	Indoor	$>30^{\circ}\text{C}$

Manual operation

Manual operation can be used temporarily in case the remote controller is disabled or maintenance necessary.

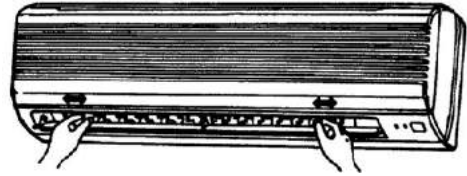


NOTE: The unit must be turned off before operating the manual control button. If the unit is operational, continue pressing the manual control button until the unit is off.

- ① Open and lift the front panel up to an angle until it remains fixed with a clicking sound.
- ② One press of the manual control button will lead to the forced AUTO operation.
 - a) As the unit is stopping, you can press the "Auto button" to start operating.
 - b) As the unit is operating, you can press the "Auto button" to stop operating.
- ③ Close the panel firmly to its original position.

Airflow direction control

- Adjust the air flow direction properly otherwise, it might cause discomfort or cause uneven room temperatures.
- Adjust the horizontal louver using the remote controller.
- Adjust the vertical louver manually.



To set the vertical air flow(Up--Down) direction
Perform this function while the unit is in operation.

Use the remote controller to adjust the air flow direction. The horizontal louver can be moved at a range for each press, or swing up and down automatically. Please refer to the ''REMOTE CONTROLLER OPERATION MANUAL'' for details.

To set the horizontal air flow direction (left - right)

- Move the vertical louver manually to adjust the air flow in the direction you prefer.

IMPORTANT :Before adjusting the vertical louvers, the supply power must be disconnected.

- For some models, the vertical louver can be adjusted by using the remote controller. Please refer to the ''REMOTE CONTROLLER OPERATION MANUAL'' for details.

CAUTION

- Do not operate the air conditioner for long periods with the air flow direction set downward in cooling or dehumidifying mode. Otherwise, condensation may occur on the surface of the horizontal louver causing moisture to drop on to the floor or on furnishings.
- Do not move the horizontal louver manually unless it is necessary. Always use the remote controller.
- When the air conditioner is started immediately after it was stopped, the horizontal louver might not move for approximately 10 seconds.
- Open angle of the horizontal louver should not be set too small, as COOLING or HEATING performance may be impaired due to too restricted air flow area.
- Do not operate unit with horizontal louver in closed position.
- When the air conditioner is connected to power (initial power), the horizontal louver may generate a sound for 10 seconds, this is a normal operation.

How the air conditioner works

AUTO operation

- When you set the air conditioner in AUTO mode, it will automatically select cooling, heating (cooling/heating models only), or fan only operation depending on what temperature you have selected and the room temperature.
- The air conditioner will control room temperature automatically round the temperature point set by you.
- If the AUTO mode is uncomfortable, you can select desired conditions manually.

Optimal operation

- To achieve optimal performance, please note the following:
- Adjust the air flow direction correctly so that it is not directed on people.
- Adjust the temperature to achieve the highest comfort level. Do not adjust the unit to excessive temperature levels.
- Close doors and windows on COOL or HEAT modes, or performance may be reduced.
- Use TIMER ON button on the remote controller to select a time you want to start your air conditioner.
- Do not put any object near air inlet or air outlet, as the efficiency of the air conditioner may be reduced and the air conditioner may stop running.
- Clean the air filter periodically, otherwise cooling or heating performance may be reduced.
- Do not operate unit with horizontal louvre in closed position.

Special functions

Auto-restart function (Optional)

In event of power interruption such as a blackout, the air conditioner stops once. But it restarts automatically and performs previous operation when the power supply is resumed.

Care and maintenance

Cleaning the Grille, Case and Remote Controller

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

NOTE: Supply power must be disconnected before cleaning the indoor unit.



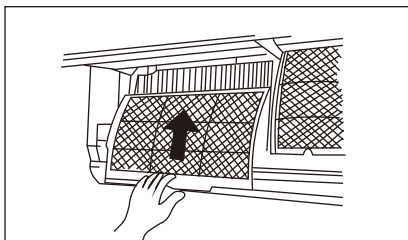
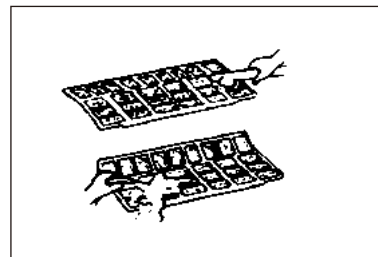
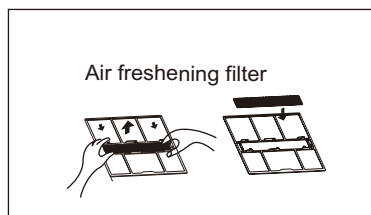
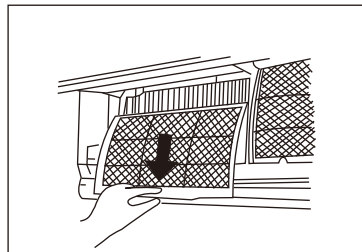
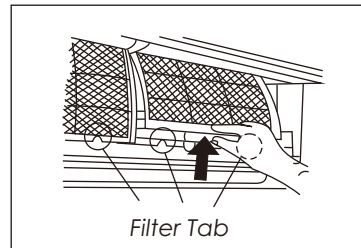
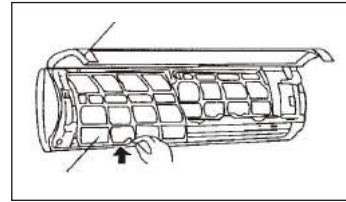
CAUTIONS

- A cloth dampened with cold water may be used on the indoor unit if it is very dirty. Then wipe it with a dry cloth.
- Do not use a chemically treated cloth or duster to clean the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
- Never use water hotter than 40°C/104°F to clean the front panel, it could cause deformation or discoloration.

Cleaning the air filter

A clogged air filter reduces the cooling efficiency of this unit. Please clean the filter once every 2 weeks.

1. Lift the indoor unit panel up to an angle until it stops with a clicking sound.
2. Take hold of the handle of the air filter and lift it up slightly to take it out from the filter holder, then pull it downwards.
3. Remove the AIR FILTER from the indoor unit.
 - Clean the AIR FILTER once two weeks.
 - Clean the AIR FILTER with a vacuum cleaner or water, then dry it up in cool place.
4. Remove the Air Freshening Filter from its support frame (on some models).
 - Clean the air freshening filter at least once a month, and replace it every 4-5 months.
 - Clean it with vacuum cleaner, then dry it in cool place.
5. Install the air freshening filter back into position.
6. Insert the upper portion of air filter back into the unit, taking care that the left and right edges line up correctly and place filter into position.



Maintenance

If you plan to idle the unit for a long time, perform the following:

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power. Remove the batteries from the remote controller.
- (3) The outdoor unit requires periodic maintenance and cleaning. Do not attempt to do this yourself. Contact your dealer or servicer.

Checks before operation

- Check that the wiring is not broken off or disconnected.
- Check that the air filter is installed.
- Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

**Caution**

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.

The following events may occur during normal operation.

1. Protection of the air conditioner.
Compressor protection
 - The compressor can't restart for 3 minutes after it stops.
Anti-cold air (Cooling and heating models only)
 - The unit is designed not to blow cold air on HEAT mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.
 - A) When heating has just starting.
 - B) Defrosting.
 - C) Low temperature heating.
 - The indoor or outdoor fan stop running when defrosting (Cooling and heating models only).
Defrosting (Cooling and heating models only)
 - Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high resulting in lower heating efficiency of the air conditioner.
 - During this condition air conditioner will stop heating operation and start defrosting automatically.
 - The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost build up on the outdoor unit.
2. A white mist coming out from the indoor unit
 - A white mist may generate due to a large temperature difference between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity.
 - A white mist may generate due to moisture generated from defrosting process when the air conditioner restarts in HEAT mode operation after defrosting.
3. Low noise of the air conditioner
 - You may hear a low hissing sound when the compressor is running or has just stopped running.
This sound is the sound of the refrigerant flowing or coming to a stop.
 - You can also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.
 - A noise may be heard due to louver restoring to its original position when power is first turned on.
4. Dust is blown out from the indoor unit.
This is a normal condition when the air conditioner has not been used for a long time or during first use of the unit.
5. A peculiar smell comes out from the indoor unit.
This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.
6. The air conditioner turns to FAN only mode from COOL or HEAT (For cooling and heating models only) mode.
When indoor temperature reaches the temperature setting on air conditioner, the compressor will stop automatically, and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode (For cooling and heating models only) to the set point.
7. Dripping water may generate on the surface of the indoor unit when cooling in a high relative humidity (relative humidity higher than 80%). Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.
8. Heating mode (For cooling and heating models only)
The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to larger difference between indoor and outdoor temperature. If a comfortable temperature can't be achieved by the air conditioner, we suggest you use a supplementary heating device.
9. Auto-restart function
Power failure during operation will stop the unit completely.
10. Lightning or a car wireless telephone operating nearby may cause the unit to malfunction.
Disconnect the unit with power and then re-connect the unit with power again. Push the ON/OFF button on the remote controller to restart operation.

Troubleshooting

If one of the following faults occurs, stop the air conditioner immediately, disconnect the power and then connect it in again. If the problem still exists, disconnect the power and contact the nearest customer service center.		
Trouble	OPERATION/RUN indicator or other indicators continue flashing.	
	Fuse blows frequently or circuit breaker trips frequently.	
	Other objects or water fall into the air conditioner.	
	The remote controller won't work or works abnormally.	
	If one of the following code appears on the display area : E1,E2,E3, E4, E5 o F0, F1, F2, F3, F4, F5, F6, F7, F8 o FA	
Malfunctions	Cause	What should be done?
Unit does not start	Power cut	Wait for power to be restored.
	Unit may have become unplugged.	Check that plug is securely in wall receptacle.
	Fuse may have blown.	Replace the fuse.
	Battery in Remote controller may have been exhausted.	Replace the battery.
	The time you have set with timer is incorrect.	Wait or cancel timer setting.
Unit not cooling or heating (Cooling/ heating models only) room very well while air flowing out from the air conditioner	Inappropriate temperature setting.	Set temperature correctly. For detailed method please refer to "Using remote control" section.
	Air filter is blocked.	Clean the air filter.
	Doors or Windows are open.	Close the doors or windows.
	Air inlet or outlet of indoor or outdoor unit has been blocked.	Clear obstructions away first, then restart the unit.
	Compressor 3 minutes protection has been activated.	Wait.
If the trouble has not been corrected, please contact a local dealer or the nearest customer service center. Be sure to inform them of the detailed malfunctions and unit model.		

Notes: Do not attempt to repair the unit yourself.

Always consult an authorised service provider.

INSTALLATION MANUAL

Before using your air conditioner, please read this manual carefully and keep it for future reference..

INVERTER SPLIT-TYPE ROOM AIR CONDITIONER

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Read This Manual:

Inside you will find many helpful hints on how to use and maintain your air conditioner properly.

Just a little preventative care on your part can save you a great deal of time and money over the life of your air conditioner.



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


INSTALLATION PRECAUTIONS


- Please read this installation manual carefully before operating the unit to ensure correct installation.
- If the power cord is damaged, replacement work shall be performed by authorised personnel only.
- Installation work must be performed in accordance with the national wiring standards by authorised personnel only.
- Contact an authorized service technician for repair, maintenance and installation of this unit.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by persons responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- All the pictures in the instructions are for explanation purposes only. The actual shape should prevail.
- The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

SAFETY PRECAUTIONS

- Please read these safety precautions carefully before installation
- Be sure to follow all the precautions below, they are all important for ensuring safety.

	<u>WARNING</u>	This symbol indicates the possibility of death or serious injury.
	<u>CAUTION</u>	This symbol indicates the possibility of injury or damage to property.

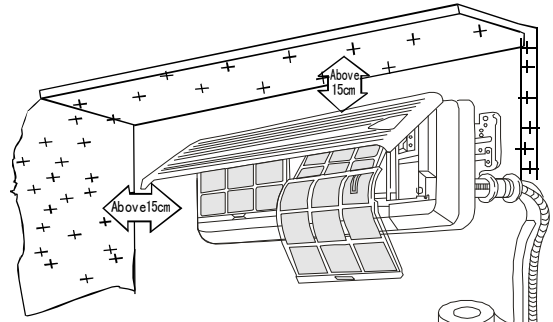
 <u>WARNING</u>
1) Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock, or fire.
2) Use the included accessories parts and specified parts for installation. otherwise, it will cause the set to fall, water leakage, electrical shock fire.
3) Install at a strong and firm location which is able to withstand the set's weight. If the strength is not enough or installation is not properly done, the set will drop and cause injury.
4) For electrical work, follow the local national wiring standard, regulation and this installation instructions. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock fire.
5) Use the specified cable and connect tightly and clamp the cable so that no external force will be acted on the terminal. If connection or fixing is not perfect, it will cause heat-up or fire at the connection.
6) Wiring routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will overheat at connection point of terminal, fire or electrical shock.
7) When carrying out piping connection, take care not to let air substances other than the specified refrigerant go into refrigeration cycle. Otherwise, it will cause lower capacity, abnormal high pressure in the refrigeration cycle, explosion and injury.
8) Do not modify the length of the power supply cord or use of extension cord, and do not share the single outlet with other electrical appliances. Otherwise, it will cause fire or electrical shock.

 <u>CAUTION</u>
1) This equipment must be grounded and installed with ground leakage current breaker. It may cause electrical shock if grounding is not perfect.
2) Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.
3) Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.

SELECT THE BEST LOCATION

Indoor unit

- There should not be any heat source or stream near the unit.
- There should not be any obstacles blocking the air circulation.
- A place where air circulation in the room is good.
- A place where drainage can be easily done.
- A place where noise prevention is taken into consideration.
- Do not install the unit near the door way.
- Ensure the spaces indicated by arrows from the wall, ceiling, fence or other obstacles.
- There should not be any direct sunlight. If unavoidable, sunlight prevention should be taken into consideration.



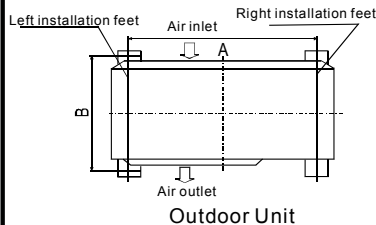
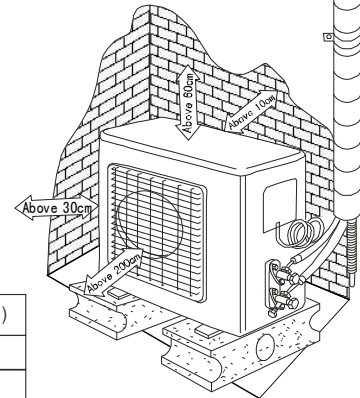
Outdoor unit

- If an awning is built over the unit to prevent direct sunlight or rain, be careful that heat radiation from the condenser is not obstructed.
- There should not be any animal or plant which could be affected by hot air discharged.
- Keep the spaces indicated by arrow from wall ceiling, fence or other obstacles.
- Do not place any obstacles which may cause a short circuit of the discharged air.

Settlement of outdoor unit

- Anchor the outdoor unit with a bolt and nut $\phi 10$ or $\phi 8$ tightly and horizontally on a concrete or rigid mount.

NOTE: The outdoor unit you purchase may be like one of the following. Install the outdoor unit according to the dimension as indicated in the table below:



Model	Outdoor Unit Size of Shape (mm) (WxDxH)	A (mm)	B (mm)
MUPR-09-H5A	720 X 260 X 540	539	287
MUPR-12-H5A	720 X 260 X 540	539	287
MUPR-18-H5A	802 X 298 X 535	546	316
MUPR-24-H5A	800 X 300 X 690	540	326

ACCESSORIES

Packing list of the indoor unit

NO.	Name	Unit	Quantity
1	Indoor unit	Set	1
2	Remote controller	PC	1
3	Instructions	PC	1
4	Batteries	PC	2
5	Drain pipe	PC	1

Packing list of the outdoor unit

NO.	Name	Unit	Quantity
1	Outdoor unit	Set	1
2	Plastic strap	ROLL	1
3	Pipe protection ring	PC	1
4	Luting (putty)	PACKET	1

NOTE: Except the above parts provided, the other parts needed during installation you must purchase.

1

INSTALLATION PLATE MOUNTING

NOTE:

The mounting wall is strong and solid enough to prevent it from the vibration.

- **Installation Plate Mounting**

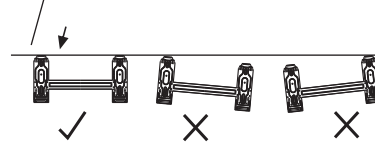
1. Fit the installation plate horizontally on structural parts of the wall with spaces around the installation plate.
2. If the wall is made of brick, concrete or the like, drill five or eight 5mm diameter holes in the wall. Insert Clip anchor for appropriate mounting screws
3. Fit the installation plate on the wall with five or eight type "A" screws.

NOTE:

Mount the Installation Plate and drill holes in the wall according to the wall structure and corresponding mounting points on the installation plate. The installation plate provided with the machine differ from appliance to appliance.

(Dimensions are in "mm" unless otherwise stated)

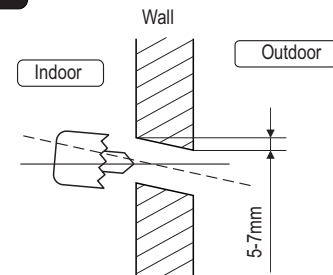
Correct orientation of Installation Plate



2

DRILL A HOLE IN THE WALL

1. Determine hole positions according to left and right side of the installation plate. The hole center is obtained by measuring the distance as shown in the diagram above.
2. Drill the piping plate hole with $\phi 65\text{mm}$ hole-core drill.
3. Drill the piping hole at either the right or the left and the hole should be slightly slanted to the outdoor side.
4. Always take steps to protect the pipe when drilling metal grid, metal plate or the like.

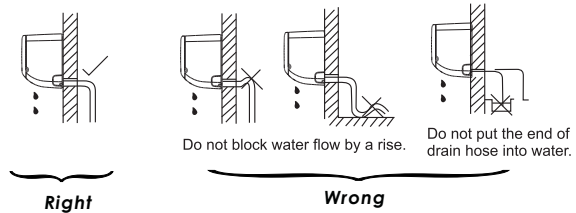


3

CONNECTIVE PIPE AND DRAINAGE INSTALLATION

Drainage

1. Run the drain hose sloping downward.
Do not install the drain hose as illustrated in wrong figures.
2. When connecting extension drain hose, insulate the connecting part of extension drain hose with a shield pipe, do not let the drain hose slack.

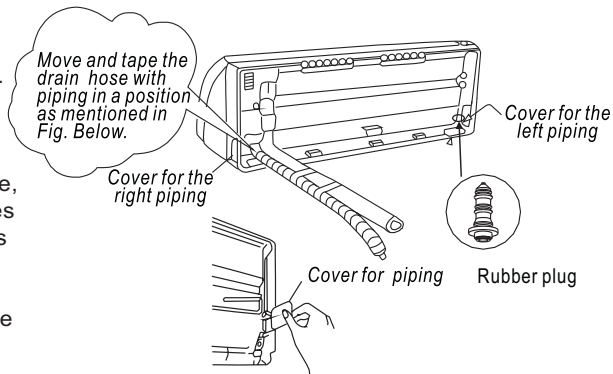
Connective pipe installation

1. For the left-hand and right-hand piping, remove the pipe cover from the side panel.
2. For the right back and left back piping, install the piping as shown.

NOTE: Both sides drainage structure is standard. For both sides drainage structure, it can be chosen for right, left or both sides drainage connection. If choosing both sides drainage connection, another proper drain hose is needed as there is only one drain hose offered by factory. If choosing one side drainage connection, make sure the drain hole on the other side is well plugged.

For 9k/12k models, if choosing left-hand or left-back piping, please choosing left side drainage connection. The connection of the drain hose is supposed to be done by qualified installer in case of water leakage.

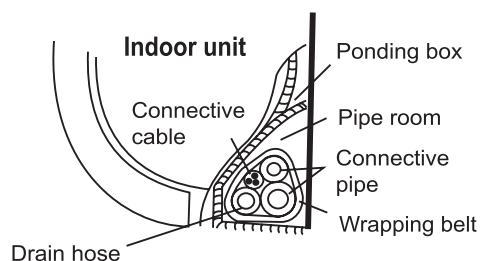
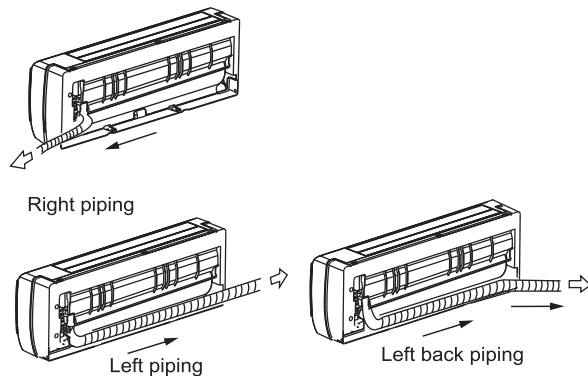
3. Bundle the tubing, connecting cable, and drain hose with tape securely, evenly as shown in Figure on the right.



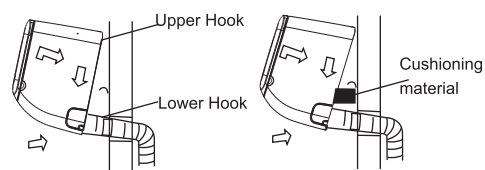
- Because the condensed water from rear of the indoor unit is gathered in ponding box and is piped out of room. Do not put anything else in the box.

CAUTION

- Connect the indoor unit first, then the outdoor unit.
- Do not allow the piping to let out from the back of the indoor unit.
- Be careful not to let the drain hose slack.
- Heat insulation should be done to the extension drain hose of indoor unit.
- Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause drain pan to overflow inside the unit.
- Never intercross nor intertwist the power wire with any other wiring.

Indoor unit installation

1. Pass the piping through the hole in the wall.
2. Hook the indoor unit onto the upper portion of installation plate (Engage the indoor unit with the upper edge of the installation plate). Ensure the hooks are properly seated on the installation plate by moving it in left and right.
3. Piping can easily be made by lifting the indoor unit with a cushioning material between the indoor unit and the wall. Get it out after finish piping.
4. Press the lower left and right side of the unit against the installation plate until hooks engages with their slots.



4

CONNECT THE CABLE TO THE INDOOR UNITElectrical work

Electric safety regulations for the initial Installation

1. If there is serious safety problem about the power supply, the technicians should refuse to install the air conditioner and explain to the client until the problem is solved.
2. Power voltage should be in the range of 90%~110% of rated voltage.
3. The surge protector and main power switch with a 1.5 times capacity of Max. Current of the unit should be installed in power circuit. Ensure the air conditioner is grounded well.
4. The appliance shall be installed in accordance with national wiring regulations. Do not operate your air conditioner in a wet room such as a bathroom or laundry room.
5. An all-pole disconnection device which has at least 3mm clearances in all poles, and have a leakage current that may exceed 10mA, the residual current device(RCD) having a rated residual operating current not exceeding 30mA, and disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.
6. For the unit adopts auxiliary electric heater, keep at least 1 meter away from the nearest combustible materials.
7. According to the attached Electrical Connection Diagram located on the panel of the indoor & outdoor unit to connect the wire.
8. All wiring must comply with local and national electrical codes and be installed by qualified and skilled electricians.

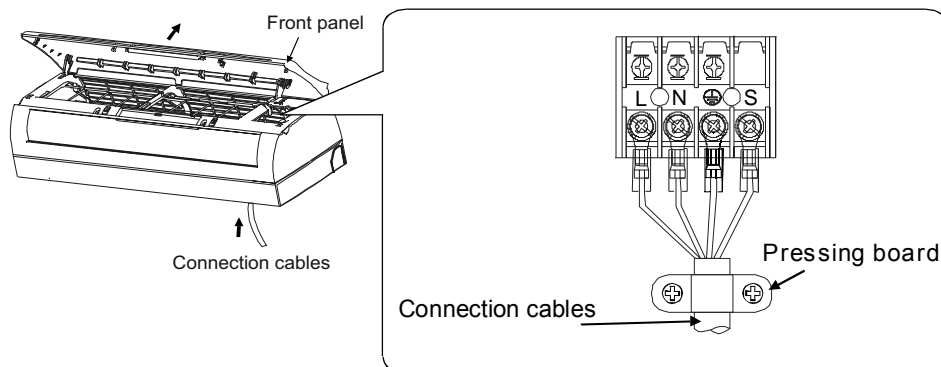
NOTE:

The wire size of power supply cord and interconnected wire and the current of the fuse or switch are determined by the maximum current indicated on the nameplate which located on the side panel of the unit. Please refer to the nameplate before selecting the wire size, fuse or switch.

Connect the cable to the indoor unit

NOTE: Before performing any electrical work, turn off the main power to the system.

1. The inside and outside connecting cable can be connected without removing the front grille.
2. The indoor power cord interconnected cord type is H07RN-F.
3. Lift the indoor unit panel up, remove the electrical box cover by loosening the screw.
4. Ensure the colour of wires of outdoor unit and the terminal Nos. are the same to the indoor's respectively.
5. Wrap those cables not connected with terminals with insulation tapes, so that they will not touch any electrical components. Secure the cable onto the control board with the cord clamp.



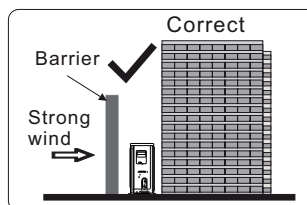
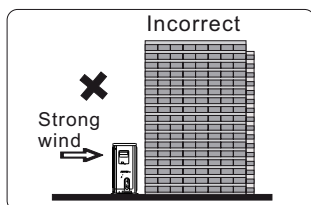
The power and the connection cable must meet minimum specifications:

Model	MUPR-09-H5A	MUPR-12-H5A	MUPR-18-H5A	MUPR-24-H5A
Power Supply	2 x 2.5 + T	2 x 2.5 + T	2 x 4 + T	2 x 4 + T
Connection	3 x 2.5 + T	3 x 2.5 + T	3 x 4 + T	3 x 4 + T

The power supply (230V - 50Hz) is connected only to the indoor unit.

1 OUTDOOR INSTALLATION PRECAUTION

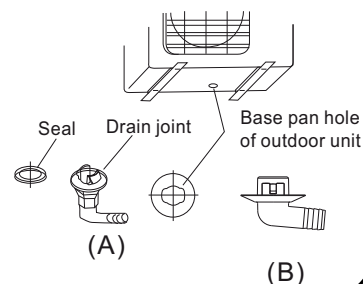
- Install the outdoor unit on a rigid base to prevent increasing noise level and vibration.
- Determine the air outlet direction where the discharged air is not blocked.
- In the case that the installation place is exposed to strong wind such as a seaside, make sure the fan operating properly by putting the unit lengthwise along the wall or using a dust or shield plates.
- Specially in windy area, install the unit to prevent the admission of wind. If need suspending installation, the installation bracket should accord with technique requirement in the installation bracket diagram. The installation wall should be solid brick, concrete or the same intensity construction, or actions to reinforce, damping supporting should be taken.
- The connection between bracket and wall, bracket and the air conditioner should be firm, stable and reliable.
- Be sure there is no obstacle which block radiating air.



2 DRAIN JOINT INSTALLATION

NOTE: The drain joint is slightly different according to the different outdoor unit.

For the drain joint with the seal (Fig.A), first fit the seal onto the drain joint, then insert the drain joint into the base pan hole of outdoor unit, rotate 90° to securely assemble them. To install drain joint as shown in Fig.B, insert the drain joint into the base pan hole of outdoor unit until it remains fixed with a clicking sound. Connecting the drain joint with an extension drain hose (Locally purchased), in case of the water draining off the outdoor unit during the heating mode.



3 REFRIGERANT PIPE CONNECTION

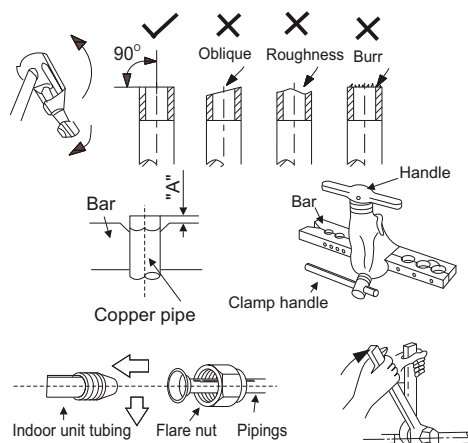
Flaring

1. Cut a pipe with a pipe cutter.
2. Put flare nuts on pipe/tube having completed burr removal and flare the pipe.
3. Firmly hold copper pipe in a die in the dimension shown in the table below.

Outer diam. (mm)	A(mm)	
	Max.	Min.
φ 6.35	1.3	0.7
φ 9.52	1.6	1.0
φ 12.7	1.8	1.0
φ 16	2.2	2.0

Tightening connection

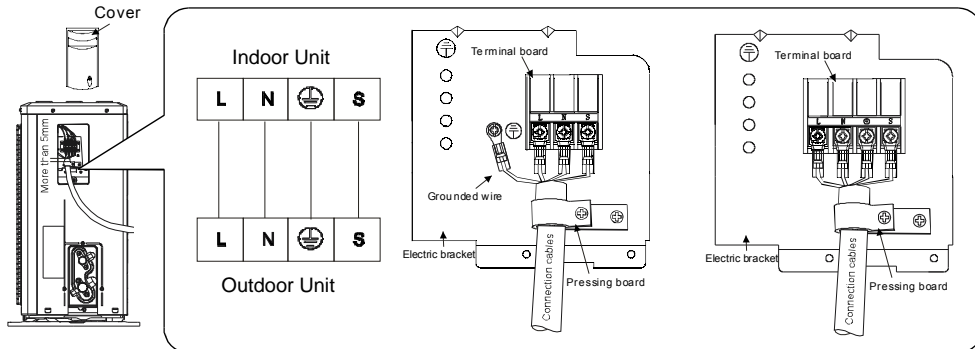
- Align pipes to be connected.
- Sufficiently tighten the flare nut with fingers, and then tighten it with a spanner and torque wrench as shown.
- Excessive torque can break nut depending on installation conditions.



Outer diam.	Tightening torque(N.cm)	Additional tightening torque(N.cm)
φ 6.35mm	1500 (153kgf.cm)	1600 (163kgf.cm)
φ 9.52mm	2500 (255kgf.cm)	2600 (265kgf.cm)
φ 12.7mm	3500 (357kgf.cm)	3600 (367kgf.cm)
φ 16mm	4500 (459kgf.cm)	4700 (479kgf.cm)

4 CONNECT THE CABLE TO THE OUTDOOR UNIT

1. Remove the electrical control board cover from the outdoor unit by loosening the screw.
2. Connect the connective cables to the terminals as identified with their respective matched numbers on the terminal block of indoor and outdoor units.
3. Secure the cable onto the control board with the cord clamp.
4. To prevent the ingress of water, form a loop of the connective cable as illustrated in the installation diagram of indoor and outdoor units.
5. Insulate unused cords (conductors) with PVC-tape. Process them so they do not touch any electrical or metal parts.



5 AIR PURGING AND TEST OPERATION

NOTE: Connective pipe length will affect the capacity and energy efficiency of the unit. The nominal efficiency is tested basing on the pipe length of 5 meters.

1. Air purging

- The indoor unit and tubing between the indoor and outdoor unit must be leak tested and evacuated to remove any noncondensables and moisture from the system.
- Check that each tube (both liquid and gas side tubes) between the indoor and outdoor units have been properly connected and all wiring for the test run has been completed.
- Pipe length and refrigerant amount:

The unit comes preloaded for liquid pipe lengths less than 5 m.

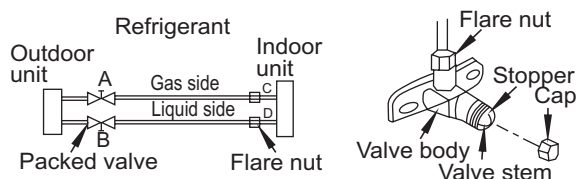
Dimensions, pipes length and additional refrigerant charge:

Model	Pipe		Max. Pipe Length	Max. Drop Height	Preload	Additional Charge $R410a = (Total\ Length - 5) * X$
	Liquid	Gas				
MUPR-09-H5A	1/4"	3/8"	20 m	10 m	5 m	$X = 20\ gr/m$
MUPR-12-H5A	1/4"	3/8"	20 m	10 m	5 m	$X = 25\ gr/m$
MUPR-18-H5A	1/4"	1/2"	25 m	15 m	5 m	$X = 30\ gr/m$
MUPR-24-H5A	3/8"	5/8"	25 m	15 m	5 m	$X = 40\ gr/m$

- For the R410A refrigerant model, make sure the refrigerant added into air conditioner is liquid form in any cases.
- When relocating the unit to another place, using vacuum pump to perform evacuation.

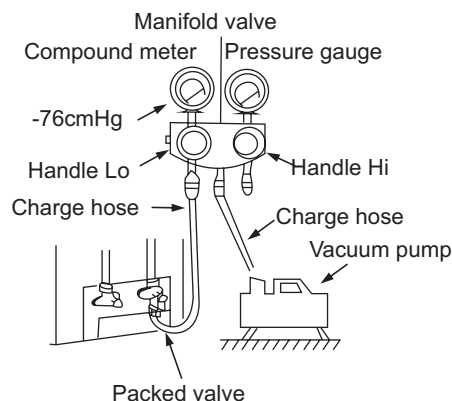
CAUTION

- Open the valve stem until it hits against the stopper. Do not try to open it further.
- Securely tighten the valve stem cap with a spanner or the like.



2. When using the Vacuum Pump

1. Completely tighten the flare nuts, A, B, C, D, connect the manifold valve charge hose to a charge port of the packed valve on the gas pipe side.
2. Connect the charge hose connection to the vacuum pump.
3. Fully open the handle Lo of the manifold valve.
4. Operate the vacuum pump to evacuate. After starting evacuation, slightly loose the flare nut of the packed valve on the gas pipe side and check that the air is entering. (Operation noise of the vacuum pump changes and a compound meter indicates 0 instead of minus)
5. After the evacuation is complete, fully close the handle Lo of the manifold valve and stop the operation of the vacuum pump.
 - Make evacuation for 15 minutes and more and check that the compound meter indicates -76cmHg ($-1.0 \times 10^5 \text{Pa}$).
6. Turn the stem of the packed valve B about 45° counter-clockwise for 6~7 seconds after the gas coming out, then tighten the flare nut again. Make sure the pressure display in the pressure indicator is a little higher than the atmosphere pressure.
7. Remove the charge hose from the Low pressure charge hose.
8. Fully open the packed valve stems B and A.
9. Securely tighten the cap of the packed valve.

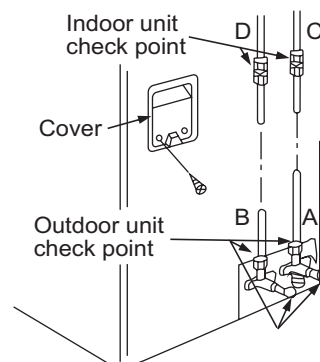


3. Safety and leakage check

1. Soap water method:
Apply a soap water or a liquid neutral detergent on the indoor unit connections and outdoor unit connections by a soft brush to check for leakage of the connecting points of the piping. If bubbles come out, it indicates that the pipes have leakage.
2. Leak detector
Use the leak detector to check for leakage.

CAUTION

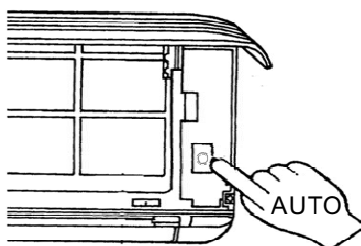
A: Lo packed valve B: Hi packed valve
C and D are ends of indoor unit connection.



4. Test running

Perform test operation after completing gas leak check at the flare nut connections and electrical safety check.

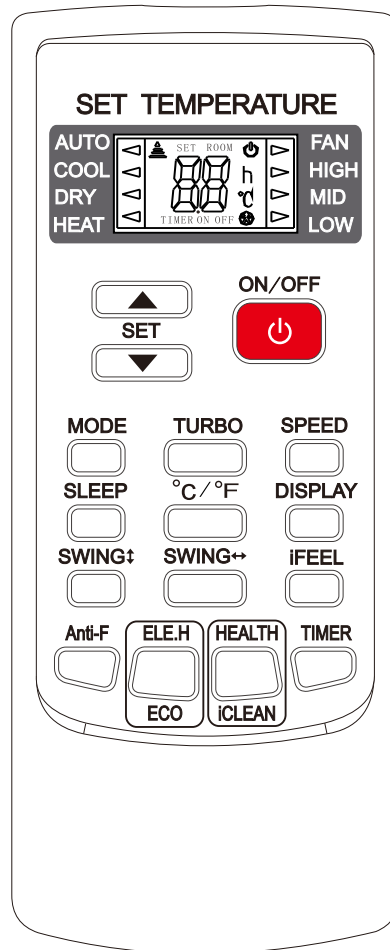
- Check that all tubing and wiring have been properly connected.
 - Check that the gas and liquid side service valves are fully open.
1. Connect the power, press the ON/OFF button on the remote controller to turn the unit on.
 2. Use the MODE button to select COOL, HEAT, AUTO and FAN to check if all the functions works well.
 3. When the ambient temperature is too low (lower than 18°C), the unit cannot be controlled by the remote controller to run at cooling mode, manual operation can be taken. Manual operation is used only when the remote controller is disable or maintenance necessary.
 - Hold the panel sides and lift the panel up to an angle until it remains fixed with a clicking sound.
 - Press the Manual control button to select the AUTO, the unit will operate under Forced AUTO mode.
 4. The test operation should last about 30 minutes.



REMOTE CONTROLLER

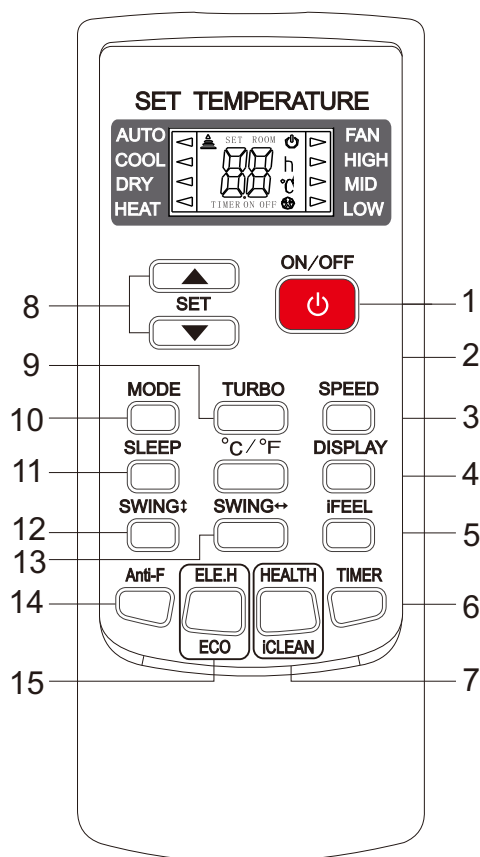
Please read this Owner's Manual carefully before operation.
Save this manual in a safe place for future reference.

AIR-CONDITIONER REMOTE CONTROLLER INSTRUCTIONS



- Read this “instructions” carefully so that you can use the air-conditioner safely and correctly.
- Take good care of the “instructions” so that it can be referred to at any time.

Buttons description



Note:
The remote controller display all symbols during power-on and only those corresponding to current operation the rest of the time.

1. ON/OFF

- * Press this button to turn on/off the unit.
- * This will clear the existing timer and SLEEP settings.

2. °C/°F

- * Press this button to set the temperature display to Fahrenheit, which is displayed by default in Celsius. The “°C” will not be displayed on the LCD.
- * Press this button again to restore the temperature display to Celsius.

Note: Temperature display in Fahrenheit is not available for some models. When temperature is displayed in Fahrenheit on the remote controller, it might be in Celsius on the unit, the function and operation of which will not be affected.

3. SPEED

- * Press this button, you can select the fan speed as follows:

Low — Mid — High — Auto

Note: AUTO air speed is not available in FAN mode.

4. DISPLAY

- * Press this button to turn on/off the display. This is for the convenience of users who are unconformable sleeping with the backlight on.

5. iFEEL

- * Press this button to set the temperature display on the remote controller to ambient temperature and press this button again to set it to preset temperature.

6. TIMER

- * With the unit ON, press this button to set OFF timer or with it OFF to set ON timer.
- * Press this button once, a "ON(OFF)" will flash. Press "▲" or "▼" to set the number of hours in which the unit will be turned ON/OFF, with an interval of 0.5 hour if less than 10 hours, or 1 hour if longer than 10 hours , and a range of 0.5-24 hours.
- * Press it again to confirm the setting, the "ON (OFF)" will stop flashing.
- * If the timer button is not pressed longer than 10 seconds after the "ON (OFF)" start flashing, the timer setting will be exited.
- * If a timer setting is confirmed, pressing this button again will cancel it.

Note: When a ON timer is set, all function buttons (except SLEEP, DISPLAY and iFEEL can't be set) are valid and when the ON time set is up, the unit will operate as preset.

7.  This button has no function.

8. ▲ or ▼

- * Each time the "▲" is pressed, the temperature setting will increase by 1°C and each time the "▼" is pressed, it will decrease by 1°C.
- * The temperature setting ranges from 16°C (60°F)~32°C(90°F).

Note: The temperature cannot be set in AUTO or FAN mode, thus these two buttons are not functional.

9. TURBO

- * Press this button only in COOL or HEAT mode to set TURBO on or off to speed up the cooling or heating.
- * When TURBO is on, the air speed is HIGH.
- * When TURBO is off, the air speed will restore to previous status.

10. MODE

- * Press this button, you can select the running mode as follows:

□ AUTO — COOL — DRY — HEAT — FAN □

Note: HEAT mode is not available for cool only units.

11. SLEEP

- * Press this button to enter SLEEP mode, which the unit will exit after 10 hours of continuous operation and restore to the previous status.

Note: The SLEEP function cannot be activated in FAN mode.

12. SWING ↑↓

- * Press this button to activate up/down swing and press it again to fix the swing position.

13. SWING ↔ This button has no function.

14 .Anti-F

- * The Anti-F functions when the unit is turned off with the remote controller in COOL, DRY or AUTO mode. It will operate in HEAT mode (FAN mode for cool only units), with the internal fan running with weak flow for 3 minute before stop, to remove the moisture within the evaporator so as to prevent it from giving off bad smell from mold.
- * This function is not set in the factory. You may set it or cancel it any time you want as follows: With both the unit and the remote controller OFF, point the remote controller at the unit and press “Anti-F” button once, the buzzer will sound 5 times after 5 times, indicating this function is set. Once set, this function will remain valid except when the unit is power off or until it is canceled.
- * To cancel Anti-F:
 1. Power off the unit.
 2. With both the unit and the remote controller OFF, point the remote controller at the unit and press this button once, the buzzer will sound 3 times after 5 times, indicating this function is canceled.

Note:

- * **With Anti-F activated, it is advised not to turn ON the unit again before it is fully OFF.**
- * **Anti-F function will be invalid when OFF timer is set.**

15.  This button has no function.

Usage

★ Fix batteries



1. Slide open the cover according the direction indicated by arrowhead.
2. Put into two brand new batteries (7#), position the batteries to right electric poles (+& -).
3. Put back the cover.

★ Automatic operation mode

1. Press the MODE button, select the automatic operation mode.
2. Press the SPEED button, you can select fan speed.
You can select fan speed from LOW, MID, HIGH, AUTO.
3. Press the ON/OFF button, the operation indicator is on, the air-conditioner starts to operate the automatic mode.
Press the button again, the air-conditioner stops.

★ Cooling/Heating operation mode (cold wind type has no heating function)

1. Press the MODE button, select the Cooling or Heating operation mode.
2. Press the “ Δ ” or “ ∇ ” button, set the temperature, temperature can be set at 1°C difference range from 16-32°C.
3. Press the SPEED button, you can select fan speed.
You can select fan speed from LOW, MID, HIGH, AUTO.
4. Press the ON/OFF button, the operation indicator is on, the air-conditioner starts to operate the automatic mode.
Press the button again, the air-conditioner stops.

★ Fan operation mode

1. Press the MODE button, select the Cooling or Heating operation mode.
2. Press the SPEED button, you can select fan speed.
You can select fan speed from LOW, MID, HIGH.
3. Press the ON/OFF button, the operation indicator is on, the air-conditioner starts to operate the automatic mode.
Press the button again, the air-conditioner stops.

Remark: In the circulation operation mode, to set the temperature is noneffective.

★ Drying operation mode

1. Press the MODE button, select the Dry operation mode.
2. Press the “△” or “▽” button, set the temperature, temperature can be set at 1°C difference range from 16-32°C.
3. Press the SPEED button, you can select fan speed.
You can select fan speed from LOW, MID, HIGH, AUTO.
4. Press the ON/OFF button, the operation indicator is on, the air-conditioner starts to operate the automatic mode.
Press the button again, the air-conditioner stops.

★ Night Luminous Function of Remote Controller(Only the remote controller with this function can be used)

For your convenient use of the remote controller in the darkness without any lighting, this remote controller has blue background light and luminous pushbuttons. Function at you press on any of the pushbutton, the background light will immediately release soft light so that you are easy to operate the remote controller. If you do not operate the controller within 10 seconds, the background light will automatically disappear.

Note:

All the figures above are the displays after being initially electrified or re-electrified after power off. In actual operations, the remote controller screen displays related items only.

Attention

1. Aim the remote controller towards the receiver on the air-conditioner.
2. The remote controller should be within 8 meters away from the receiver.
3. No obstacles between the remote controller and receiver.
4. Do not drop or throw the remote controller.
5. Do not put the remote controller under the forceful sunrays or heating facilities and other heating sources.
6. Use two 7# batteries, do not use the electric batteries.
7. Take the batteries out of remote controller before stop its using for long.
8. When the noise of transmitting signal can't be heard indoor unit or the transmission symbol on the display screen doesn't flare, batteries need be replaced.
9. If reset phenomenon occurs on pressing the button of the remote controller, the electric quantity is deficient and new batteries need to be substituted.
10. The waste battery should be disposed properly.

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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