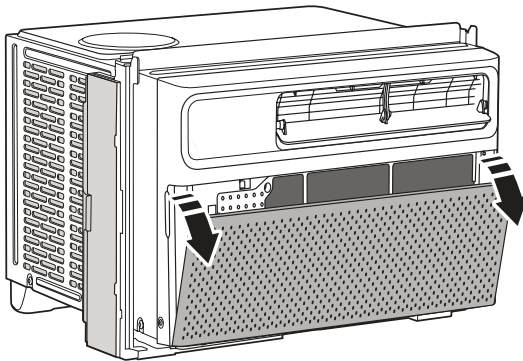


**GENERAL<sup>®</sup>**  
*Royal*  
**AIR CONDITIONER**

**WINDOW TYPE**

---

**USER MANUAL**



**A BETTER AIR CONDITIONER SUPPLIER**



# CONTENTS

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

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

# INTRODUCTION TO REFRIGERANTS R32

## INSTALLATION MANUAL---Important considerations

When compared with other refrigerants, R32 is more environmentally friendly. Please use this product as instructed. This refrigerant is flammable and may combust under certain conditions, however when this product is used as directed these risks are significantly reduced. Always consult with a trained professional when maintaining or repairing an air conditioner.

### Warning

- Please read the manual before installing, using, or conducting maintenance.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- Be aware that refrigerants may not contain an odor.
- Do not pierce or burn the appliance.
- The appliance shall be stored in a room without continuously operating sources (for example: open flames, an operating ignition gas appliance or an operating electric heater).
- Please contact the nearest after-sale service center when maintenance is necessary. At the time of maintenance, the maintenance personnel must strictly comply with the Operation
- Manual provided by the corresponding manufacturer and any non-professional is prohibited to maintain the air conditioner.
- It is necessary to comply with the provisions of gas-related federal, state, and local laws and regulations.
- It is necessary to clear away the refrigerant in the system when maintaining or recycling an air conditioner by a trained professional.



Warning: flammable & Dangerous



Read the user manual & Read the installation manual



Read the service manual

### Important Considerations

- **The air conditioner you buy must be installed by professional personnel** and the "Installation manual" is used only for the professional installation personnel!
- The installation specifications should be subject to our after-sale service regulations.
- When filling the flammable refrigerant, please use caution to avoid serious injury.
- A leak test must be done after the installation is completed.
- It is a must to perform the safety inspection before maintaining or repairing an air conditioner using flammable refrigerant in order to ensure that the fire risk is reduced to a minimum.
- Requirements for the total weight of filled refrigerant and the area of a room to be equipped with an air conditioner (are shown as in the following Tables GG.1 and GG.2)



### The maximum charge and the required minimum floor area

$m_1 = (4 \text{ m}^3) \times \text{LFL}$ ,  $m_2 = (26 \text{ m}^3) \times \text{LFL}$ ,  $m_3 = (130 \text{ m}^3) \times \text{LFL}$

Where LFL is the lower flammable limit in  $\text{kg}/\text{m}^3$ , R290 LFL is  $0.038 \text{ kg}/\text{m}^3$ , R32 LFL is  $0.038 \text{ kg}/\text{m}^3$ .

### For the appliances with a charge amount $m_1 < M = m_2$ :

The maximum charge in a room shall be in accordance with the following:  $m_{\text{max}} = 2.5 \times (\text{LFL})^{(5/4)} \times h_0 \times (A)^{1/2}$

The required minimum floor area  $A_{\text{min}}$  to install an appliance with refrigerant charge  $M$  (kg) shall be in accordance with following:  $A_{\text{min}} = (M / (2.5 \times (\text{LFL})^{(5/4)} \times h_0))^2$

Where:

$m_{\text{max}}$  is the allowable maximum charge in a room, in kg;

$M$  is the refrigerant charge amount in appliance, in kg;

$A_{\text{min}}$  is the required minimum room area, in  $\text{m}^2$ ;

$A$  is the room area, in  $\text{m}^2$ ;

LFL is the lower flammable limit, in  $\text{kg}/\text{m}^3$ ;

$h_0$  is the installation height of the appliance, in meters for calculating  $m_{\text{max}}$  or  $A_{\text{min}}$ , 1.8m for wall mounted;

# IMPORTANT SAFETY INSTRUCTIONS

**Table GG.1- Maximum charge (kg)**

Category	LFL (kg/m <sub>3</sub> )	h <sub>0</sub> (m)	Floor area (m <sub>2</sub> )				
			4	7	10	15	20-80-60
R32+0,306		0,6	0,68	0,9	1,08+0,32	1,53+1,87+2,41	
		1	1,14+1,51	1,8+2,2+2,54+3,12			4,02
		1,8+2,05		2,71	3,24+3,97+4,58+5,61+7,254		
		2,2+2,5+3,31+3,96+4,85			5,6+6,86+8,85		

**Table GG.2 - Minimum room area (m2)**

Category	LFL (kg/m <sub>3</sub> )	h <sub>0</sub> (m)	Charge amount (M) (kg)					Minimum room area (m <sup>2</sup> )	
			1,224kg+1,836kg+2,448	kg+3,672	kg+4,896	kg+6,12kg+7,956	kg		
R32+0,306		0,6		29	51	116+206	321+543		
		1		10	19	42	74	116+196	
		1,8		3	6	13	23	36+60	
		2,2		2	4	0	15	24	40

## Installation Safety Principles

### 1. Site Safety

Open Flames Prohibited



Ventilation Necessary



### 2. Operation Safety

Mind Static Electricity



Open Flames Prohibited

Must wear protective clothing and anti-static gloves



Don't use mobile phone



### 3. Installation Safety

- Refrigerant Leak Detector
- Appropriate Installation Location



The left picture is the schematic diagram of a refrigerant leak detector.


#### Please note that:


1. The installation site should be in a well-ventilated area.
2. The sites for installing and maintaining an air conditioner using Refrigerant R32 should be free from open fire or welding, smoking, drying oven or any other heat source higher than 548° which easily produces open fire.
3. When installing an air conditioner, it is necessary to take appropriate anti-static measures such as wear anti-static clothing and/or gloves.
4. Installation or maintenance location should not be surrounded by obstacles or close to any heat source, flammable, and/or explosive areas or objects.
5. If the product suers refrigerant leak during the installation, all personnel should go out till the refrigerant leaks completely for 15minutes. If the product is damaged, a professional must carry such damages product back to the maintenance station. It is prohibited to weld the refrigerant pipe or conduct other operations on the contaminated site.
6. The air conditioner unit needs to sit on a flat even surface.
7. It is necessary to avoid the places where there are other electrical products, power switch plugs and sockets, kitchen cabinet, bed, sofa and other valuables directly under the lines on two sides of the indoor unit.
8. Any ventilation openings of unit should be free from obstructions.

# IMPORTANT SAFETY INSTRUCTIONS





To prevent injury to the user or other people and property damage, the following instructions must be followed. Failure to follow these instructions may lead to incorrect operation, causing harm and 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 damage to properties only.

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

	<b>Be sure not to do.</b>
  	<b>Be sure to follow the instruction.</b>

## WARNING

### Plug in power plug properly

- Otherwise, it will cause electric shock or fire due to heat generation



### Do not operate or stop the unit by inserting or pulling out the power plug.

- It will cause electric shock or fire due to heat generation



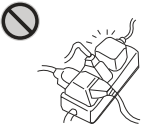
### Do not damage or use an unspecified power cord.

- It will cause electric shock or fire.
- If the power cord is damaged, it must be replaced by the manufacturer or an authorized service center or a similarly qualified person in order to avoid a hazard.



### Do not modify power cord length or share the outlet with other appliances

- It will cause electric shock or fire due to heat generation



### Do not operate with wet hand or in damp environment.

- It will cause electric shock.



### Do not direct airflow at room occupants only.

- This could damage your health.



# IMPORTANT SAFETY INSTRUCTIONS

## 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 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 breaker.

Since the fan rotates at high speed during operation, it may cause an injury.

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

This could cause injury to the pets or plants.

⊘ 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.

⊘ Do not operate switches with wet hands.

It may cause an electric shock.

⊘ Do not apply an insecticide or flammable spray.

It may cause fire or deformation of the unit's cabinet.

⊘ Do not place a heater or other combustible materials where it will be exposed to direct air flow.

It may cause imperfect combustion

## For your safety

- ⊘ Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this product or any other appliance.
- ⊘ Avoid fire hazard or electric shock. Do not use an extension cord or an adaptor plug. Do not remove any prong from the power cord.

## Electrical Information

- ⊘ Ensure that the electrical service is adequate for the model you have chosen. This information can be found on the serial plate, which is located on the side of the unit's cabinet.
- Be sure the air conditioner is properly grounded. To minimize shock and fire hazards, proper grounding is important. The power cord is equipped with a three-prong grounding plug for protection against shock hazards.
- Your air conditioner must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle.
- ⊘ Ensure that the receptacle is accessible after the unit installation.
- ⊘ Do not run air conditioner with outside protective cover in place. This could result to mechanical damage within the air conditioner.

**NOTE:** This air conditioner is designed to be operated under the following conditions:

Cooling operation	Outdoor temp:	18-43°C/64-109°F (18-52°C/64-125°F for special tropical models)
	Indoor temp:	17-32°C/62-90°F
Heating operation	Outdoor temp:	-5-24°C/23-76°F
	Indoor temp:	0-27°C/32-80°F

Note: Performance may be reduced outside of these operating temperatures.

**NOTE:** All pictures and figures shown in this manual are for illustrative purposes only, and may vary from that of your air conditioner's. However, please note that the actual shape shall prevail.

# IMPORTANT SAFETY INSTRUCTIONS

## Points to consider when using the air conditioner

**▲ WARNING** To reduce the risk of fire, electric shock, or injury to persons, read the **Safety Precautions** before operating this appliance.

**NOTE:** If the air conditioner is turned off, wait for 3 minutes before restarting the unit. This allows pressure inside the compressor to equalize. Failure to follow these instructions may be harmful to your unit.

### **Power supply voltage**

If the power supplied to the unit is not within  $\pm 10\%$  of the specified rating, the unit may not function and the fuse may blow.

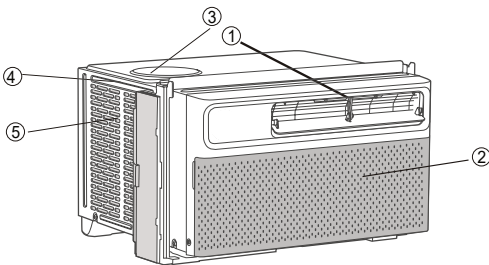
### **Noise level**

Noise from the air conditioner will be louder at night than in the daytime. This is because noise in the surroundings is comparatively low at night. If you feel that noise of the air conditioner is too loud, switch the thermostat to a lower temperature.

### **Energy Saving Ideas**

- The capacity of the room air conditioner must fit the room size for efficient and satisfactory operation.
- Install the room air conditioner on the shaded side of your room.
- Do not block air flow inside with blinds, curtains or furniture; or outside with shrubs, enclosures, or other buildings.
- Keep blinds and drapes in other windows closed during the sunniest part of the day.
- Clean the air filter as recommended in the section "Care and Cleaning" section.

### **Normal sounds**



① **Sound of Rushing Air**  
At the front of the unit, you may hear the sound of rushing air being moved by the fan

② **Gurgle/Hiss**  
"Gurgling or hissing" noise may be heard due to refrigerant passing through evaporator during normal operation.

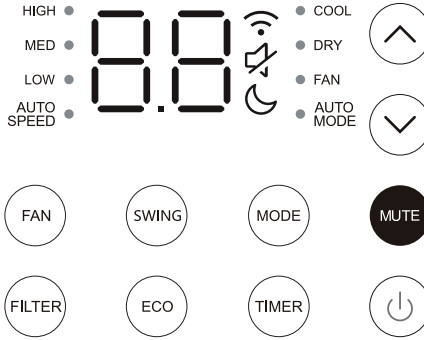
③ **High Pitched Chatter**  
High efficiency compressors may have a high pitched chatter during the cooling cycle.

④ **Vibration**  
Unit may vibrate and make noise because of poor wall or window construction or incorrect installation.

⑤ **Pinging or Switching**  
Droplets of water hitting condenser during normal operation may cause "pinging or switching" sounds.










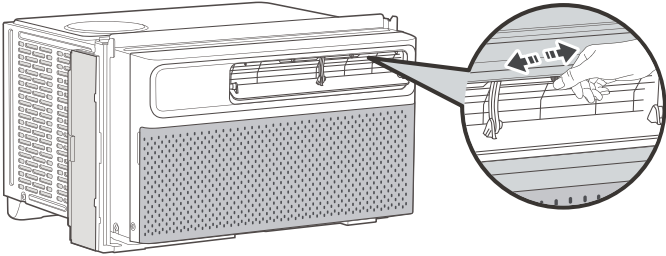



# USING YOUR AIR CONDITIONER



	Turn on the air conditioner or switch to standby.
	Adjust fan speed (Low, Med, High, Auto) NOTE: Fan speed setting is available in Auto, Cool, and Fan modes only.
	Select to adjust the airflow direction by swinging the louver vertically.
	Decrease the air conditioning temperature.
	Increase the air conditioning temperature.
	Switch between Cool/Dry/Fan/Auto mode.
	Remind to clean the dust filter.
	Turn on/off the ECO mode, under Cool/Dry mode.
	Timer on or Timer off the unit.
	Turn on/off the MUTE mode.
COOL DRY FAN AUTO MODE	Indicates Cool, Dry, Fan, and Auto mode, respectively.
	Indicates the unit is in Sleep mode.
	Indicates the unit is in MUTE mode.
	Indicates that there is a WiFi connection
HIGH MED LOW AUTO SPEED	Indicates Low, Medium, High, and Automatic fan speeds, respectively.

# USING YOUR AIR CONDITIONER






## General Operations

 Power Button	<p>Press to turn on the air conditioner or switch it to standbymode.</p>
  Increase Button	<p>Press to increase the air conditioning temperature by 1°F/°C.</p>
  Decrease Button	<p>Press to decrease the air conditioning temperature by 1°F/°C.</p>
  Swing/Oscillation Button	<p>1.Press to make the louver move up and down.              2.Press again to stopthe louver at the desired angle.  <b>NOTE:</b>Toadjust the airflow direction horizontally, manually move the levers located on top of the air outlet from side to side.   <b>NOTE:</b>Donot adjust the big vertial louver by hand, otherwise will cause damage.</p> 
  Fan Speed Button	<p><b>Adjust Fan Speed</b>              Press repeatedly to adjustfan speed: Low, Med, High, and Auto.</p>
 Filter Button	<p><b>Reset Filter Reminder</b>              To clean the filter, see page below.</p>



**NOTE:**

- In Auto speed, fan speed will adaptto the room temperature.
- In Dry Mode, fan speed cannot beadjusted.

# USING YOUR AIR CONDITIONER

 Mode Button 	<p><b>Press repeatedly to cycle through Cool, Dry, Fan and Auto modes.</b></p> <p><b>Cool Mode</b></p> <ul style="list-style-type: none"> <li>- In Cool mode, the air conditioner cools the room to the desired temperature.</li> <li>- Temperature and fan speed are adjustable.</li> </ul> <p><b>Dry Mode</b></p> <ul style="list-style-type: none"> <li>- In Dry mode, the air conditioner works as a dehumidifier to remove humidity in the room. The fan is constantly running at a low speed.</li> <li>- Temperature and fan speed cannot be adjusted.</li> </ul> <p><b>Fan Mode</b></p> <ul style="list-style-type: none"> <li>- In Fan mode, the air conditioner circulates air like a normal fan. Remember to open the vent during this function, but keep it closed during cooling for maximum cooling efficiency.</li> <li>- Fan speed can be set to Low, Med, or High.</li> <li>- Temperature cannot be adjusted.</li> </ul> <p><b>Auto Mode</b></p> <ul style="list-style-type: none"> <li>- In Auto mode, the air conditioner adjusts its working mode (Cool or Fan) automatically based on the room temperature.</li> <li>- Temperature and fan speed cannot be adjusted.</li> </ul>
 Timer Button (On Remote Control) 	<ul style="list-style-type: none"> <li>- When the air conditioner is on standby/running, press the Timer button and its icon will flash on the remote display. During the flashing process, press + or - to select a timer from 0.5 to 24 hours, then press the Timer button again to confirm the setting. After the timer ends, the air conditioner will start/stop running automatically.</li> <li>- Turning the air conditioner ON or OFF at any time or adjusting the timer setting to 0.0 hour will cancel the timer program.</li> </ul>
 Eco Mode Button (On Remote Control)	<p>In Eco mode, when the desired temperature is reached, the compressor will turn off and the fan will continue to run for 3 minutes. Then the fan cycles on for 1 minute at 5 minute intervals until the room temperature is above the set temperature, at which time the compressor turns back on and cooling restarts.</p>

# USING YOUR AIR CONDITIONER

 <p>Sleep Mode Button (On Remote Control)</p>	<p>In Sleep mode, the air conditioning temperature will adjust gradually every 30 minutes to keep you comfortable while preventing overcooling. After 10 hours, Sleep mode will exit automatically and the temperature will return to the initial temperature.</p> <p><b>NOTE:</b> In Sleep mode, all the button sounds will be muted, and all the indicators on the display will turn off after 15 seconds, except for the Sleep mode indicator.</p> <p>Long press 5 seconds to turn on or off MUTE mode.</p>
 <p>LED Display Button (On Remote Control)</p>	<p>- Turn on or off the display on the air conditioner.</p>

## Other Features

### Filter Reminder

When the running time of the fan reaches 500 hours, the filter reminder will light up to remind you to clean the filter. To clean the filter, see page below.

### Display Auto Off

- Display will dim after 30 seconds (off after 15 seconds in sleep mode).
- Wake up the display with any button.

### Memory

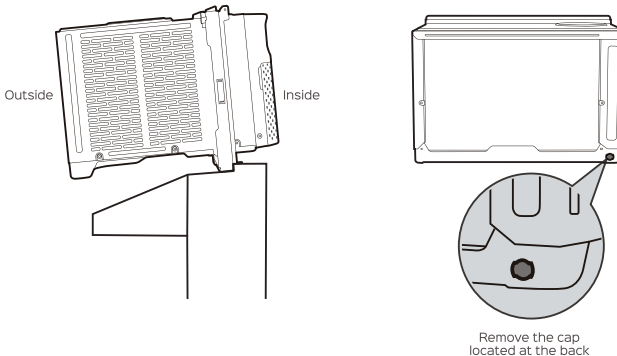
If the air conditioner is turned OFF and stays connected to the power, it will operate under the previous settings (except the timer setting) when it is turned ON again.

### Drain Water

After proper installation, condensate will not overflow during normal use.

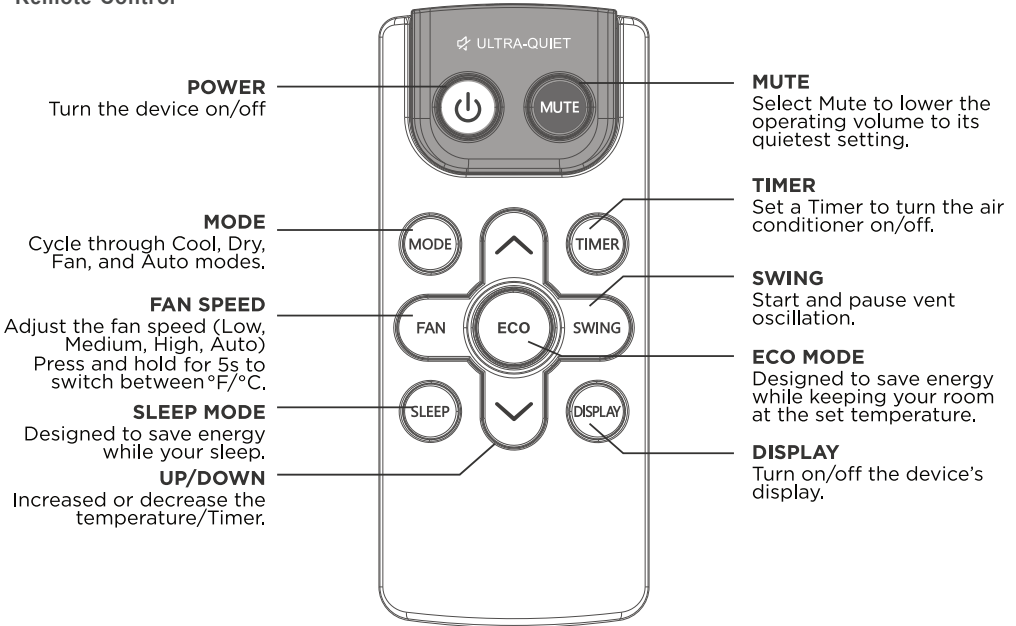
If the fan hits the built-up water and the sound annoys you, please remove the cap located at the back of the air conditioner to drain the water away.

**NOTE:** Removing the cap may affect the heat transfer efficiency.



# USING YOUR AIR CONDITIONER

## Remote Control



For more information on how to use the remote and other functions of your air conditioning unit, or to understand how each mode works, please refer to the next few pages.

## Battery Replacement

The air conditioner comes with two batteries for the included remote control. Please be sure to insert them correctly for proper use of the remote.

### Note:

- Do not mix old and new batteries, or batteries of different types
- Do not leave batteries in the remote if you do not plan on using the device for more than 2 months
- Follow your local city ordinances for information on proper disposal of old and used batteries. Do not dispose of batteries in unsorted municipal waste.

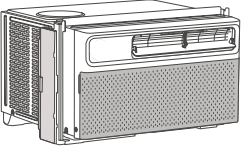



## Tips for Using the Remote

1. The remote must be used within 26ft of the unit
2. The unit will make a sound when it receives the remote's signal
3. Curtains, other materials, and even direct sunlight can interfere with the infrared signal receiver.
4. Press "MODE" and " ^ " and hold for 3s to reset the wifi setting.

# ASSEMBLING YOUR AIR CONDITIONER

## What's in the Box

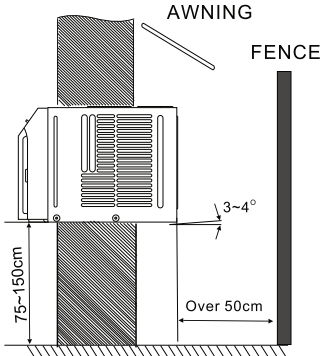
Open the carton and remove the below parts.

APPEARANCE	PART NAME66666666666666666666	
	Window Air Conditioner	1
	Remote Control	1
	Remote Control Battery	2
	Modelling Material (Plasticene)	1

**Note:** Illustrations in this manual are for explanatory purposes only. Product design and aesthetics may vary. Please search the entire package for the contents listed above as they may be packaged on top or underneath the main AC unit.

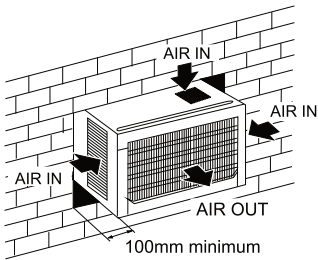
# ASSEMBLING YOUR AIR CONDITIONER

## Select the best location

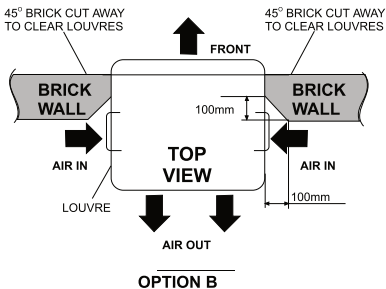


Note: Unit may be supported by a solid frame from below or by a hanger from a solid overhead support.

## Installing the unit into the wall



### OPTION A



## Installation instructions

### Suggested tools

1. Screw driver (medium size Phillips)
2. Tape measure or ruler
3. Knife or scissors
4. Level gauge

### Select the best location

1. To avoid vibration and noise, make sure that the unit is installed securely and firmly.
2. Install the unit where the sunlight does not shine directly on the unit. If the unit is exposed to direct sunlight, build an awning to shade the cabinet.
3. There should be no obstacle, such as a fence or wall, within 50cm from the back of the cabinet because it will prevent heat radiation of the condenser. Restriction of outside air will greatly reduce the cooling and heating efficiency of the air conditioner.
4. Install the unit a little obliquely outward to prevent the condensed water from leaking into the room (about 3~4° with level).
5. Install the unit with its bottom portion 75~150cm above the floor level.
6. The power cord must be connected to an independent circuit. The yellow/green wire must be grounded.

### CAUTION

All side louvers of the cabinet must remain exposed to the outside of the structure.

**NOTE:** After installing, make sure that the air conditioner is tilted 3~4° to the outside to allow water drainage and perfect cooling efficiency.

# CLEANING AND MAINTENANCE

..

## Care and Cleaning

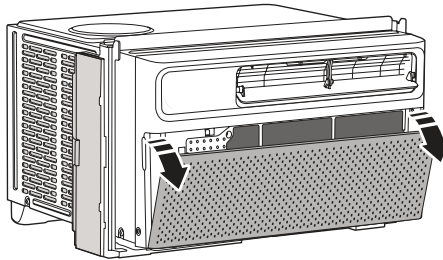
Clean your air conditioner occasionally to keep it looking new. Before cleaning, be sure to unplug the unit from any and all power sources to prevent electric shock or fire hazards.

### Air Filter

The air filter should be checked at least once every month to see if it needs cleaning. Never use hot water over 104°F (40°C) to clean the air filter. Never attempt to operate the unit without the air filter. Trapped particles and dust can build up over time, which can result in decreased airflow and can cause the coils to accumulate frost. To clean the air filter:

1. Pull the grille out from the indents on both sides at the front and remove the filter inside.
2. Wash the filter using liquid dish soap and warm water. Rinse the filter thoroughly. Gently shake the filter to remove excess water.
3. Let the filter dry completely before placing it into the air conditioner.

**Note:** If you do not wish to wash the filter, you may vacuum the filter to remove the dust and other particles.



### Cabinet Cleaning

To clean the air conditioner's cabinet:

- Using a cloth dampened in a solution of warm water and mild liquid soap, wipe down the unit and the front panel. Then, using a clean dampened cloth, make sure to wipe down the unit to remove all excess soap and continue to dry.
- Never use harsh cleaners, wax, or polish on the cabinet front.
- Be sure to wring out excess water from the cloth before wiping round the control. Excess water may damage the unit.

### Storage

If you want to store the unit when not in use, we recommend removing the drain plug at the back of the unit and slightly tilting the unit towards the rear to drain any water in the pan in a safe manner. Next, clean the unit and then store it back in the original packaging or box until next use.



# TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
<b>The air conditioner will not start</b>	The air conditioner is unplugged	Make sure the air conditioner plug is pushed completely into the outlet.
	The fuse is blown/circuit breaker is tripped	Check the house fuse/circuit breaker box and replace the fuse or reset the breaker.
	Power failure	<ul style="list-style-type: none"> <li>The unit will automatically restart when power is restored.</li> <li>There is a protective time delay (approx. 3 minutes) to prevent tripping and overloading the compressor. For this reason, the unit may not start normal cooling for 3 minutes after it is turned back on.</li> </ul>
	The current interrupter device is tripped	<ul style="list-style-type: none"> <li>Press the RESET button located on the power cord plug.</li> <li>If the RESET button will not stay engaged, discontinue use of the air conditioner and contact a qualified service technician.</li> </ul>
<b>The air conditioner does not cool as it should</b>	Air flow is restricted	Make sure there are no curtains, blinds or furniture blocking the front of the air conditioner.
	The temperature control may not be set correctly.	Lower the set thermostat temperature.
	The air filter is dirty	Clean the filter. Refer to MAINTENANCE.
	The room may be too warm	Please allow time for the room to cool down after turning on the air conditioner.
	Cold air is escaping	Check for open furnace registers and cold air returns.
	The cooling coils are frozen	Switch to high fan speed and set the thermostat to a higher temperature.
	Temperature sensor is not well situated.	Temperature sensor behind the air filter is touching the coil. Try to move it so it does not contact the cold coil.
<b>The air conditioner is freezing up</b>	Ice blocks the air flow and stops the air conditioner from cooling the room	Switch to high fan speed and set the thermostat to a higher temperature.
<b>The remote control is not working</b>	The batteries are inserted incorrectly	Check the position of the batteries.
	The batteries may be dead	Replace the batteries.
<b>Water is dripping outside</b>	Hot and humid weather	This is normal.

## ASSEMBLING YOUR AIR CONDITIONER

<b>Water is dripping INSIDE when the unit is cooling</b>	The air conditioner is not correctly tilted outside	Improper installation. Tilt air conditioner slightly to the outside to allow water drainage. Refer to installation instructions.
<b>Water is dripping INSIDE when the unit is cooling</b>	Moisture removed from the air is draining into the base pan	This is normal for a short period in areas with low humidity and normal for a longer period in areas with high humidity
<b>Noise when the unit starts</b>	A "da-da" sound may occur for 30 seconds when the unit is turned on due to the compressor starting.	This is normal.





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