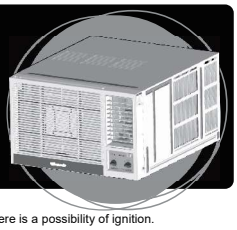
Rasonic

ENGLISH

OPERATING INSTRUCTIONS

ROOM AIR CONDITIONER
RC-N1221V

ACXF55-32500



WARNING	This symbol shows that this equipment uses a flammable refrigerant. If the refrigerant is leaked, together with an external ignition source,there is a possibility of ignition.
CAUTION	This symbol shows that the Operating Instructions should be read carefully.
CAUTION	This symbol shows that service personnel should be handling this equipment with reference to the Technical Manual.
CAUTION	This symbol shows that there is information included in the Operating Instructions and/or Installation Instructions.

Before operating the unit, read these operating instructions thoroughly and keep them for future reference.

1 SAFETY PRECAUTIONS

Please observe these following safety precautions when using your air conditioner.
Failure or negligence in observing these safety precautions could cause fire, electrical shock or personal injury.

WARNING	This sign warns of risk of death or serious injury.	⊘	This symbol (with a white background) denotes an action that is PROHIBITED.
CAUTION	This sign warns of risk of injury or damage to property.	❗	These symbols (with a green background) denote actions that are COMPULSORY.

INSTALLATION PRECAUTION

WARNING

- ⊘ Do not install, remove and reinstall the unit yourself. Improper installation may cause Leakage, electric shock or fire. Please engage an authorized dealer or specialist for the installation work.
- ⊘ Do not add or replace refrigerant other than the specified type. It may cause product damage, burst and injury. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid hazard.
- ❗ The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater)
- ❗ In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.
- ❗ Ventilate any enclosed areas when installing or testing the refrigeration system. Escaped refrigerant gas, on contact with fire or heat, can produce dangerously toxic gas.
- ❗ Confirm after installation that no refrigerant gas is leaking. If the gas comes in contact with a burning stove, gas water heater, electric room heater or other heat source, it can cause the generation of toxic gas.

CAUTION

The room air conditioner must be earthed.
- ❗ Improper grounding could cause electric shock.

Do not install the unit in a place where there are explosive gas leaks.
- ⊘ Gas leaks near the unit could cause fire.

Ensure that the drainage piping is connected properly.
- ❗ Otherwise water will leak out.

Risk of fire / Flammable materials
R32

OPERATION PRECAUTION

WARNING This sign warns of risk of death or serious injury.

⊘
- Do not modify the length of power cord or use an extension cord.
- Do not touch or operate with wet hands.
- Do not modify or damage the cord.
- Do not turn on the unit by inserting the power plug.
- Do not switch off the unit by pulling out the power plug.
- Avoid an extended period of direct airflow.
- Do not Insert your fingers or other objects into the unit, rotating parts may cause injury.
- Do not try to repair the unit yourself.

❗
- Plug in properly before operating and use a specified power cord.
- If abnormal conditions (burnt smell, etc.) occur, switch off and remove the power plug.
- Confirm to authorized dealer or specialist on usage of specified refrigerant type. Using of refrigerant other than the specified may cause product damage, burst and injury etc.
- 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. Children should be supervised to ensure that they do not play with the appliance.

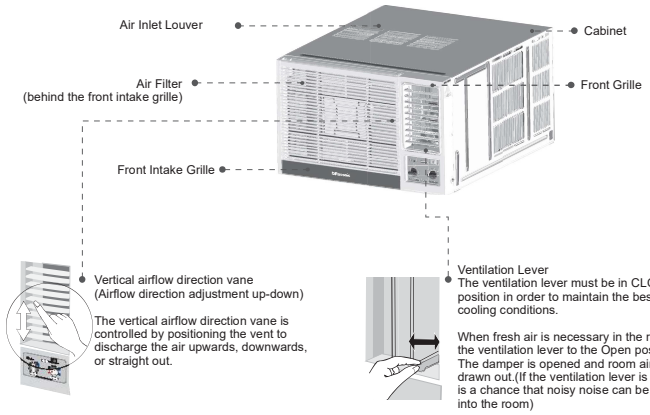
CAUTION This sign warns of risk of injury or damage to property.

⊘
- Do not use the unit for other purposes, than its intended use.
- Do not remove the power plug by pulling the cord.
- Do not block the air intake and outlet vanes.
- Do not splash or direct water at the unit.
- Do not expose the unit to direct sunlight during operation.
- Do not operate the unit without the air filter installed or when the front intake grille has been removed.
- Do not place any objects on the unit.
- Do not operate any combustion equipment near the unit's air flow area.
- Do not sit or step on the unit, you may fall down accidentally.
- Do not touch the sharp aluminium fin, sharp parts may cause injury.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by manufacturer.

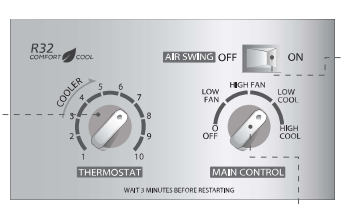
❗
- Switch off the breaker and unplug the unit from the socket if the unit will not be operated for a long period.
- Pay attention to any damages on the unit caused by extensive usage.
- Ventilate the room occasionally where the unit is installed.
- Unplug the power cord when cleaning the unit.

2 PARTS IDENTIFICATION

MAIN UNIT



Main Control Panel

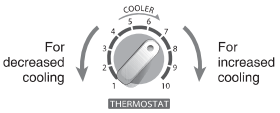


AIR SWING OFF ON

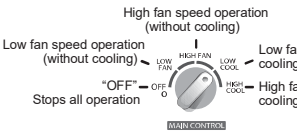
Air Swing Switch

OFF Stops the operation of Air Swing.
ON Air Swing is in operation.
(Only for LOW COOL and HIGH COOL operation.)

Main Control Knob
Turn the thermostat control knob as shown:



Main Control Knob



3 AIR CONDITIONER OPERATION

OPERATION CONDITIONS
Use the air conditioner under the following conditions:
- Operating temperature range.

Continuous operation at over 90% high humidity may create condensation and result in waterdrops on the intake and outlet vanes.

(unit in °C)

	Indoor side		Outdoor side	
	D.B.T.	W.B.T.	D.B.T.	W.B.T.
Max. Temperature	32	23	43	26
Min. Temperature	21	15	21	15

NOTE: Humidity may exceed 90%
D.B.T.: Dry Bulb Temperature
W.B.T.: Wet Bulb Temperature

- Avoid installation in the following locations.
- Mechanical processing plants and other places with a lot of mechanical oil.
- High humidity areas such as laundry room and bathroom.
- Air conditioner normal operating temperature.
- In side maximum temperature 30℃
- Out side maximum temperature 43℃

NOTICE:
When the air conditioner is used at room temperature of 21 degrees or less, the temperature may be too low, and the air conditioner may be easily frosted. After frosting, it may be difficult to drain and may flow into the room.

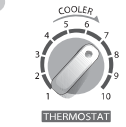
1

Main Control Knob

Set to LOW COOL or HIGH COOL as desired.
(FAN setting operates the fan only.)

Caution: If the main control knob is turned off or changed to a fan setting from a cooling operation setting, WAIT at least 3 minutes before resetting to cooling operation.

2



Thermostat Control Knob

Set the thermostat control knob to your desired setting. (Usually 6 - 7 is recommended). If the room temperature is not as desired after a reasonable period of time, turn the thermostat control knob clockwise to cool the room more or counter clockwise to cool the room less.

- When the thermostat control knob is set to 10, moisture may freeze on the evaporator fins and prevent effective cooling. If this happens, turn the Main Control Knob to HIGH FAN and the Thermostat Control Knob counter-clockwise. This will quickly defrost the evaporator fins to resume normal cooling operation.

3

Air Swing Switch

(Airflow direction adjustment Side-to-Side)

To obtain a fix airflow direction, set the air swing switch to "ON" for the vanes to swing from side to side until the desired flow direction is reached, then switch it to "OFF".

For continuous side-to-side air cirulation set the air swing switch to "ON".

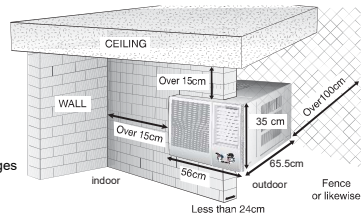
4 AIR CONDITIONER INSTALLATION

CHOOSING THE INSTALLATION LOCATION

- When installing, use the nearest power outlet. Make sure the power outlet is easy to reach so you can quickly disconnect your air conditioner in case of emergency.
- Ensure that the air conditioner is well supported, securely fastened, easily reachable and not obstructed.
- Aviod location with: salty or sulphurous air, draughts, dampness and flammable gas.
- If you install the drainage system, be sure to channel the concensed water to a suitable location.
- Covers, obstructions and unsteady support may cause excessive operating noise and vibration.
- The rear end of the air conditioner is splash proof. You don't need to shield or cover it.
- R32 refrigerant air conditioner installation and maintenance should be done by competent person.

PREPARATIONS BEFORE INSTALLATION

Dimension
- There should not be any obstacles surrounding the unit.
- Prepare and installation hole slightly bigger than the cabinet size.
- Left and right side of the unit should be at least 15 cm away from the wall.
- The minimum installation height is 75cm.
(Based on IEC 60335-2-40, there is no restriction for the minimum installation floor area since the refrigerant charges is less than 1.224kg.

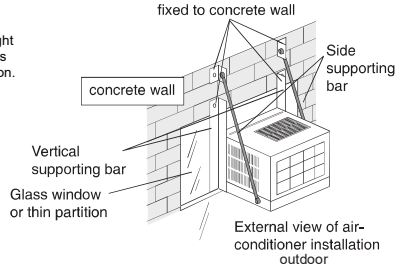


CAUTION POINT DURING INSTALLATION

When installing air conditioner at glass window or thin partition, fix the vertical and side supporting bar to the concrete wall in order to support the weight of the air-conditioner and reduce the vibration that is being transferred to the glass window or thin partition.

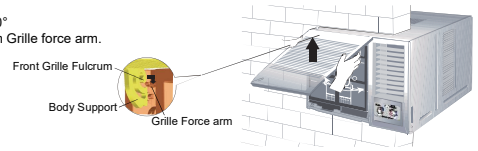
This can minimize the noise problem caused by improper installation.

- Proposed to use 1/8" x 1-1/4" angle-aluminium for installation frame and side supporting bar.

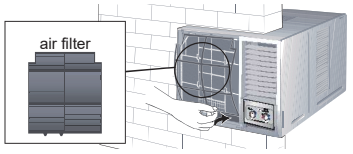


REMOVAL OF FRONT GRILLE

1 Open the Intake Griille until over 90° front grille fulcrum can remove from Grille force arm.

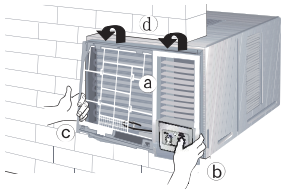


2 Remove the air filter.
Tilt up and pull out the air filter by the holder.



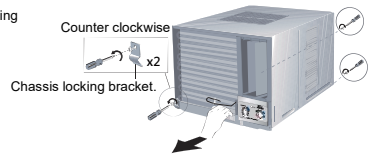
3 Remove the front grille.

(a) Remove the screw on the front grille.
(b) At the bottom right side of the front grille, press inward on the cabinet near the power cord, and pull the grille outward to the right until right tab releases.
(c) At the bottom left side, push inward on the cabinet and pull the grille outward to the left to release the left tab. Do not pull the bottom edge towards to you for more than 3 inches to prevent the two top tabs from damage.
(d) Slide the front grille upwards to loosen the two top tabs from slots at the top of the cabinet.

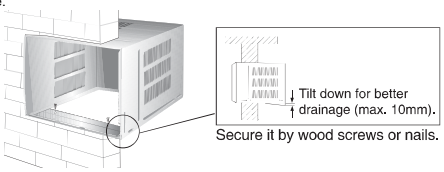


INSTALLATION PROCEDURES

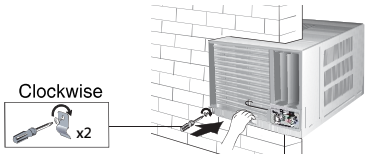
1. Remove the rear cabinet screws and two chassis locking brackets from the cabinet. Save for later use.
2. Slide the chassis out from the cabinet.



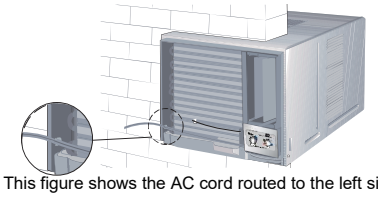
3. Place the cabinet into the installation hole.



4. Slide the chassis into the cabinet.
5. Lock the chassis to the cabinet reusing the chassis locking brackets.

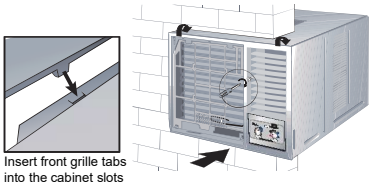


6. Depending upon the location of AC outlet, route the AC cord to either left or right side before instaling the front grille.

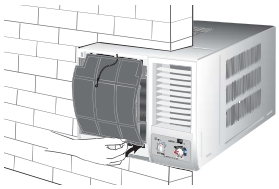


This figure shows the AC cord routed to the left side.

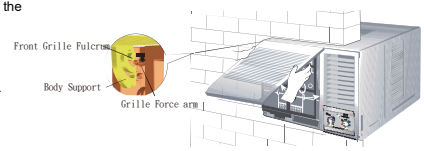
7. Attach the front grille to the cabinet and fasten it with a screw.



8. Attach air filter to the front grille. (see Anti-bacterial filter installation instructions included in this package)



9. Position the intake grille horizontally and hook the front grille fulcrum to the grille force arm.
10. Press down control panel and close the cover.

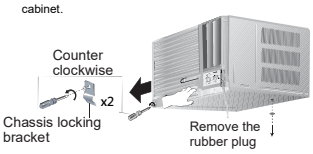


CONDENSED WATER DRAINAGE

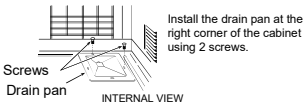
This air conditioner employs a "Slinger-Up System" which is designed to splash the condensed water on the condenser coil for maximum cooling efficiency, thus producing a splashing sound. If the splashing sound annoys you, you can provide an outside drainage by using the following the procedure which may, cause a small loss of performance.

NOTE: If the unit is installed at a coastal area, drainage of condensed water is recommended to prevent easy condenser corrosion.

1. Remove the rubber plug and chassis locking bracket*2 from the cabinet. Then slides the chassis out from the cabinet.



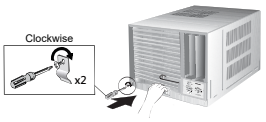
2. Install the drain pan



3. Connect a drain hose. Fit the drain hose to the drain pan.

NOTE: Drain hose or tubing can be purchased locally to satisfy your particular needs.

4. Slide the chassis back into the cabinet. Lock the chassis to the cabinet reusing the chassis locking bracket*2. Reinstall the cabinet and chassis.

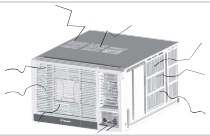


ELECTRIC WORK

- Always use at the rated voltage and with a specific air conditioning circuit.
- This equipment must be earthed and strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electric shock or fire in case of malfunction.
- Time delay fuse or circuit breaker rating is 16 Ampere for RC-N1221V.
- Nominal cross sectional area of power supply wire must be 3 core x 1.5 mm² or above.
- The power supply must be from an independent circuit.
- All electrical installations must be made in accordance with local wiring and safety regulation wherever applicable.
- There must be a double pole switch with a minimum of 3.5 mm contact gap in the fixed installation circuit.
- Please engage and authorized dealer or specialist for the installation work.

NOISE CONSIDERATION

- Select an installation location that can support the weight of the air conditioner and one that will not cause increased operating noise and vibration.
- Ensure that when installed, airflow and noise from the rear side of the unit (outdoor) do not disturb neighbouring elements.
- Obstacles placed in front of the air outlet on the rear side of the unit (outdoor), or covers placed over it will cause excessive noise and deterioration in performance.



TRANSFERRING

- Repositioning or transfer of the air conditioner due to renovation or moving requires an additional service charge. Please consult your dealer before moving.

5 ENERGY SAVING HINTS

- Do not overcool the room. This may affect your well-being as well as increase power consumption.
- The cooling capacity of the room air conditioner must match the room size for efficient and satisfactory operation.
- Keep all doors and windows closed. Prevent hot air from entering and cool air from escaping.
- Ensure that curtains and drapes are always closed to keep out direct sunlight during cooling operation.
- Avoid heat.
- Clean the air filter every 2 weeks. Dirty filters may reduce cooling efficiency.

6 CARE AND MAINTENANCE

- Clean the cabinet, front grille with mild soap or detergent and lukewarm water.
- The front intake grille can be easily removed for cleaning purposes (refer to Remove the front intake grille procedures). Gently wash it with water and a sponge.
- The filter can be easily cleaned using a vacuum cleaner. Vacuum the front of the filter and then wash the rear with water. If it is badly spoiled, wash with a mild household detergent.
- Do not clean with benzene, thinner, scouring powder or cloth soaked in caustic chemicals.
- If the unit is extremely dirty, heat transfer is less effecient and the unit may not cool effectively. Contact Shun Hing Electric Service Center Ltd. for an annual check. (Annual check is not covered by the warranty.)
- If the air filter becomes clogged with dust, the cooling capacity will drop, and 6% of the electricity used to operate the air conditioner will be wasted.

NOTE: Do not dry the front panel or the air filter in direct sunlight.
(Exposure to direct sunlight may discolour or deform the panel.)

PRE-SEASON INSPECTION

Is the discharged air cold?
After 15 minutes of operation, it is normal for the temperature difference between intake and outlet air to be more than 8°C for cooling.
Are the air intake and outlet vanes of the indoor and outdoor side obstructed?
Are the remote control batteries weak?

RECOMMENDED INSPECTION

Usage over several seasons will reduce performance as the unit becomes dirty. A dirty unit may produce foul odours and dust may clog the dehumidifying drainage. Seasonal inspection is recommended in addition to regular cleaning. Consult Shun Hing Electric Service Centre Ltd.,

7 BEFORE CALLING FOR SERVICE

BEFORE

Check the following points before calling for repairs or service.
If the malfunction persists, please contact Shun Hing Electric Service Centre Ltd.,

Condition 1 If the unit is too noisy during operation.

The following sounds are normal during operation:
- A low humming sound indicating that the unit is operating.
- A soft clicking sound when the compressor turns on and off.
- A flowing sound due to circulation of the refrigerant when the compressor is turned on.
- A splashing sound indicating condensation in the condenser coil.If you hear other noises, please consult Shun Hing Electric Service Centre Ltd.,

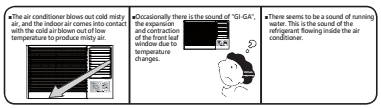
Condition 2 If the unit does not operate.
- The main power cord is not plugged in.
- The main circuit breaker has tripped.

Condition 3 If the unit does not cool properly.
- The room is too big for the unit' s capacity.
- The ventilation lever is set to OPEN
- The air circulation is impeded by curtains or furniture.
- After 15 minutes of operation, it is normal for the temperature difference between intake and outlet air to be more than 8°C for cooling.

Condition 4 If water drips off the rear of the unit.
- Humidity is high.
- Condensed water is overflowing.
- To rectify the problem, mount an optional drain pan to the unit.

Condition 5 If water drips inside the room.
- The unit is tilted inward. To rectify this, tilt the unit slightly outward.
- Mount the optional drain pan if you prefer.
- The drain pan may be blocked.

Condition 6
- Squeaking noise during operation,
- Squeaking noise after shutting down
  (This is due to the expansion or contraction of the model due to temperature changes)



Information for Users on Collection and Disposal of Old Equipment and used Batteries

[Information on Disposal in other Countries outside the European Union]
These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Pb

Note for the battery symbol (bottom two symbol examples):
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

To call Shun Hing Electric Service Centre Ltd. IMMEDIATELY
Turn off the power and contact Shun Hing Electric Service Centre Ltd.
as soon as any of the following events occur.

- The circuit breaker frequently trips or the fuse blows regularly.
- If water or foreign objects have accidentally entered the air conditioner.
- If there is abnormal sound during operation.

NOTE:
1. The enclosure opposing the room side is splash proof (IPX4).
2. Do not install this appliance in a laundry room or other locations where water may drip from the ceiling, etc.
3. If the supply cord is damaged or need to be replaced, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

IMPORTANT
* The wires in this mains lead are coloured in accordance with the following code: Green Yellow: Earth Blue: Neutral Brown: Live
"As the coulours of the wires in the mains lead of this appliance my not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wires which is coloured green and yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green and yellow. The wire which is coloured blue must be connected to the terminal which is marked with letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with letter L or colour red."
(NOTE: Replacement of installation of power plug shall be performed only by authorized/qualified personnel.)

ACXF55-32500 Rasonic Printed in Philippines OFTH0810-00