



Operating Instructions

Air Conditioner

**Model No.****Indoor Unit****S-25PK4R****S-50PK4R****S-71PK4R****S-100PK4R****Outdoor Unit****CU-RZ25AKR****CU-RZ50AKR****CU-RZ71AKR****CU-RZ95AKR****U-100PZ4R8****ENGLISH**

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

Before installation, the installer must:

Read the Installation Instructions, then request the customer keep them for future reference.

**WEB-ACXF55-42250-EN**

Thank you for purchasing Panasonic Air Conditioner.

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The illustrations in this manual are for explanation purposes only and may differ from the actual unit. They are subject to change without notice.

Note:

- The appliance shall be stored so as to prevent mechanical damage from occurring.
- The compressor may occasionally stop during thunderstorms. This is not a mechanical failure. The unit automatically recovers after a few minutes.

Safety Precautions

To prevent personal injury, injury to others or property damage, please comply with the following:

Incorrect operation due to failure to follow instructions below may cause harm or damage, the seriousness of which is classified as below:

This appliance is not intended for accessibility by the general public.

This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.



WARNING

This sign warns of death or serious injury.



CAUTION

This sign warns of injury or damage to property.

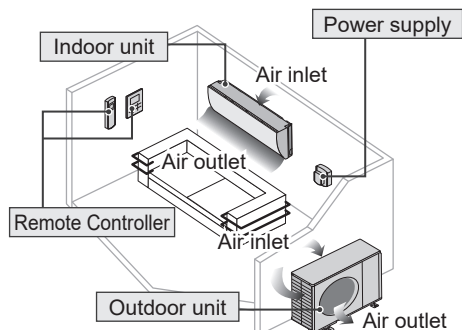
The instructions to be followed are classified by the following symbols:



This symbol denotes an action that is **PROHIBITED**.



These symbols denote actions **COMPULSORY**.



WARNING

Indoor unit and outdoor 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. Children should be supervised to ensure that they do not play with the appliance.

Please consult authorised dealer or specialist to clean the internal parts, repair, install, remove, disassemble and reinstall the unit. Improper installation and handling will cause leakage, electric shock or fire.

Confirm with authorised dealer or specialist on usage of any specified refrigerant type. Using refrigerant type other than the specified may cause product damage, burst and injury etc.



Do not use means to accelerate the defrosting process or to clean, other than those recommended by manufacturer.

Any unfit method or using incompatible material may cause product damage, burst and serious injury.

Do not install the unit in a potentially explosive or flammable atmosphere. Failure to do so could result in fire.

Safety Precautions



Do not insert your fingers or other objects into the air conditioner indoor or outdoor unit, rotating parts may cause injury.



Do not touch the outdoor unit during lightning, it may cause electric shock.

Do not expose yourself directly to cold air for a long period to avoid excess cooling.

Do not sit or step on the unit, you may fall down accidentally.



Power supply



Do not use a modified cord, joint cord, extension cord or unspecified cord to prevent overheating and fire.



To prevent overheating, fire or electric shock:

- Do not share the same power outlet with other equipment.
- Do not operate with wet hands.
- Do not over bend the power supply cord.
- Do not operate or stop the unit by inserting or pulling out the power plug.



If the supply cord is damaged, it must be replaced by the manufacturer, service agent or similarly qualified persons in order to avoid a hazard.

It is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD) to prevent electric shock or fire.



To prevent overheating, fire or electric shock:

- Insert the power plug properly.
- Dust on the power plug should be periodically wiped with a dry cloth.

Stop using the product if any abnormality/failure occurs and disconnect the power plug or turn off the power switch and breaker.

(Risk of smoke/fire/electric shock)

Examples of abnormality/failure

- The ELCB trips frequently.
 - Burning smell is observed.
 - Abnormal noise or vibration of the unit is observed.
 - Water leaks from the indoor unit.
 - Power cord or plug becomes abnormally hot.
 - Fan speed cannot be controlled.
 - The unit stops running immediately even if it is switched on for operation.
 - The fan does not stop even if the operation is stopped.
- Contact your local dealer immediately for maintenance/repair.



This equipment must be earthed to prevent electrical shock or fire.



Prevent electric shock by switching off the power supply and unplug:



- Before cleaning or servicing,
- When extended non-use, or
- During abnormally strong lightning activity.



CAUTION

Indoor unit and outdoor unit



Do not wash the indoor unit with water, benzene, thinner or scouring powder to avoid damage or corrosion at the unit.

Do not use for preservation of precise equipment, food, animals, plants, artwork or other objects. This may cause quality deterioration, etc.

Do not use any combustible equipment in front of the airflow outlet to avoid fire propagation.

Do not expose plants or pet directly to airflow to avoid injury, etc.

Do not touch the sharp aluminium fin, sharp parts may cause injury.



Do not switch ON the indoor unit when waxing the floor. After waxing, aerate the room properly before operating the unit.

Do not install the unit in oily and smoky areas to prevent damage to the unit.

Do not dismantle the unit for cleaning purpose to avoid injury.

Do not step onto an unstable bench when cleaning the unit to avoid injury.

Do not place a vase or water container on the unit. Water may enter the unit and degrade the insulation. This may cause an electric shock.

Do not open window or door for long time during operation, it may lead to inefficient power usage and uncomfortable temperature changes.



Prevent water leakage by ensuring drainage pipe is:

- Connected properly,
- Kept clear of gutters and containers, or
- Not immersed in water

After a long period of use or use with any combustible equipment, aerate the room regularly.

After a long period of use, make sure the installation rack does not deteriorate to prevent the unit from falling down.

Power supply



Do not disconnect the plug by pulling the cord to prevent electric shock.

Safety Precautions



WARNING



A2L

This appliance is filled with R32 (mildly flammable refrigerant). If the refrigerant is leaked and exposed to an external ignition source, there is a possibility of ignition.

Indoor unit and outdoor unit



The appliance shall be installed, and/or operated in a room with floor area larger than A_{min} (m²) and keep away from ignition sources, such as heat/sparks/open flame or hazardous areas such as gas appliances, gas cooking, reticulated gas supply systems or electric cooking appliances, etc. (Refer to Installation instructions table for A_{min} (m²))

Be aware that refrigerant might not contain an odour, highly recommended to ensure suitable flammable refrigerant gas detectors are present, operating and able to warn of a leak.

Keep any required ventilation openings clear of obstruction.



Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else it may explode and cause injury or death.

Precaution for using R32 refrigerant

The basic installation work procedures are the same as conventional refrigerant (R410A, R22) models.



Since the working pressure is higher than that of refrigerant R22 models, some of the piping and installation and service tools are special. Especially, when replacing a refrigerant R22 model with a new refrigerant R32 model, always replace the conventional piping and flare nuts with the R32 and R410A piping and flare nuts on the outdoor unit side.

For R32 and R410A, the same flare nut on the outdoor unit side and pipe can be used.

The mixing of different refrigerants within a system is prohibited. Models that use refrigerant R32 and R410A have a different charging port thread diameter to prevent erroneous charging with refrigerant R22 and for safety.

Therefore, check beforehand. [The charging port thread diameter for R32 and R410A is 1/2 inch.]

Must always ensure that foreign matter (oil, water, etc.) does not enter the piping. Also, when storing the piping, securely seal the opening by pinching, taping, etc. (Handling of R32 is similar to R410A.)

- Operation, maintenance, repairing and refrigerant recovery should be carried out by trained and certified personnel in the use of flammable refrigerants and as recommended by the manufacturer. Any personnel conducting an operation, servicing or maintenance on a system or associated parts of the equipment should be trained and certified.



- Any part of refrigerating circuit (evaporators, air coolers, AHU, condensers or liquid receivers) or piping should not be located in the proximity of heat sources, open flames, operating gas appliance or an operating electric heater.
- The user/owner or their authorised representative shall regularly check the alarms, mechanical ventilation and detectors, at least once a year, where as required by national regulations, to ensure their correct functioning.
- A logbook shall be maintained. The results of these checks shall be recorded in the logbook.
- In case of ventilations in occupied spaces shall be checked to confirm no obstruction.
- Before a new refrigerating system is put into service, the person responsible for placing the system in operation should ensure that trained and certified operating personnel are instructed on the basis of the instruction manual about the construction, supervision, operation and maintenance of the refrigerating system, as well as the safety measures to be observed, and the properties and handling of the refrigerant used.
- The general requirement of trained and certified personnel are indicated as below:
 - a) Knowledge of legislation, regulations and standards relating to flammable refrigerants; and,
 - b) Detailed knowledge of and skills in handling flammable refrigerants, personal protective equipment, refrigerant leakage prevention, handling of cylinders, charging, leak detection, recovery and disposal; and,



- c) Able to understand and to apply in practice the requirements in the national legislation, regulations and Standards; and,
- d) Continuously undergo regular and further training to maintain this expertise.
- e) Air-conditioner piping in the occupied space shall be installed in such a way to protect against accidental damage in operation and service.
- f) Precautions shall be taken to avoid excessive vibration or pulsation to refrigerating piping.
- g) Ensure protection devices, refrigerating piping and fittings are well protected against adverse environmental effects (such as the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris).
- h) Expansion and contraction of long runs piping in refrigerating systems shall be designed and installed securely (mounted and guarded) to minimize the likelihood hydraulic shock damaging the system.
- i) Protect the refrigerating system from accidental rupture due to moving furniture or reconstruction activities.
- j) To ensure no leaking, field-made refrigerant joints indoors shall be tightness tested. The test method shall have a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure. No leak shall be detected.

Safety Precautions



1. Installation (Space)

- Product with flammable refrigerants, shall be installed according to the minimum room area, A_{min} (m²) mentioned in Installation Instructions.
 - In case of field charge, the effect on refrigerant charge caused by the different pipe length has to be quantified, measured and labelled.
 - Must ensure the installation of pipe-work shall be kept to a minimum. Avoid use dented pipe and do not allow acute bending.
 - Must ensure that pipe-work shall be securely mounted and guarded from physical damage
 - Must comply with national gas regulations, state municipal rules and legislation. Notify relevant authorities in accordance with all applicable regulations.
 - Must ensure mechanical connections be accessible for maintenance purposes.
 - In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.
 - When disposal of the product, do follow to the precautions in #12 and comply with national regulations. Always contact to local municipal offices for proper handling.
-



2. Servicing

2-1. Service personnel

- The system is inspected, regularly supervised and maintained by a trained and certified service personnel who is employed by the person user or party responsible.
 - Ensure the actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
 - Ensure refrigerant charge not to leak.
 - Any qualified person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
 - Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
 - Servicing shall be performed only as recommended by the manufacturer.
-



2-2. Work

- Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the precautions in #2-2 to #2-8 must be followed before conducting work on the system.
 - Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapour being present while the work is being performed.
 - All maintenance staff and others working in the local area shall be instructed and supervised on the nature of work being carried out.
 - Avoid working in confined spaces. Always ensure away from source, at least 2 meter of safety distance, or zoning of free space area of at least 2 meter in radius.
 - Wear appropriate protective equipment, including respiratory protection, as conditions warrant.
 - Keep all sources of ignition and hot metal surfaces away.
 - Explosion-proof electronic components shall only be replaced with parts specified by the appliance manufacturer. Replacement with other parts may result in the ignition of refrigerant in the event of a leak.
-



2-3. Checking for presence of refrigerant

- The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres.
 - Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non sparking, adequately sealed or intrinsically safe.
 - In case of leakage/spillage happened, immediately ventilate area and stay upwind and away from spill/release.
 - In case of leakage/spillage happened, do notify persons down wind of the leaking/spill, isolate immediate hazard area and keep unauthorised personnel out.
-



2-4. Presence of fire extinguisher

- If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available at hand.
 - Have a dry powder or CO₂ fire extinguisher adjacent to the charging area.
-

Safety Precautions



2-5. No ignition sources

- No person carrying out work in relation to a refrigerating system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it can lead to the risk of fire or explosion. They must not be smoking when carrying out such work.
- All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space.
- Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks.
- "No Smoking" signs shall be displayed.



2-6. Ventilated area

- Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work.
- A degree of ventilation shall continue during the period that the work is carried out.
- The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.



2-7. Checks to the refrigerating equipment

- Where electrical components are being changed, they shall be fit for the purpose and to the correct specification.
- At all times the manufacturer's maintenance and service guidelines shall be followed.
- If in doubt consult the manufacturer's technical department for assistance.
- The following checks shall be applied to installations using flammable refrigerants.
 - The refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
 - The ventilation machinery and outlets are operating adequately and are not obstructed.
 - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
 - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
 - Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which can corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are properly protected against being so corroded.



2-8. Checks to electrical devices

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures.
 - Initial safety checks shall include but not limit to:-
 - That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
 - That no live electrical components and wiring are exposed while charging, recovering or purging the system.
 - That there is continuity of earth bonding.
 - At all times the manufacturer's maintenance and service guidelines shall be followed.
 - If in doubt consult the manufacturer's technical department for assistance.
 - If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with.
 - If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used.
 - The owner of the equipment must be informed or reported so all parties are advised thereafter.
-



3. Sealed electrical components

- Sealed electrical components shall not be repaired.
-



4. Cabling

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects.
 - The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
-



5. Detection of flammable refrigerants

- Under no circumstances shall potential sources of ignition be used in the searching or detection of refrigerant leaks.
 - A halide torch (or any other detector using a naked flame) shall not be used.
-

Safety Precautions



6. The following leak detection methods are deemed acceptable for all refrigerant systems

- No leaks shall be detected using detection equipment with sensitivity to detect leakage of 5g/year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure for example, a universal sniffer.
- Electronic leak detectors may be used to detect flammable refrigerants, but the sensitivity can be inadequate, or can need re-calibration.
(Detection equipment shall be calibrated in a refrigerant-free area.)
- Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
- Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
- Leak detection fluids are also suitable for use with most refrigerants, for example, bubble method and fluorescent agent method. The use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipe-work.
- If a leak is suspected, all naked flames shall be removed/ extinguished.
- If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. The precautions in #7 must be followed to remove the refrigerant.



7. Refrigerant removal and circuit evacuation

- When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to: Safely remove refrigerant following local and national regulations -> evacuate -> purge the circuit with inert gas -> evacuate -> continuously flush with inert gas when using flame to open circuit -> open the circuit.
- The refrigerant charge shall be recovered into the correct recovery cylinders.
- Compressed air or oxygen shall not be used for purging refrigerant systems, only use OFN (oxygen free nitrogen) for this task.
- Purging of the refrigerant circuit shall be achieved by breaking the vacuum in the system with inert gas and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to vacuum.
- This process shall be repeated until no refrigerant is within the system.
- The system shall be vented down to atmospheric pressure to enable work to take place.
- Ensure that the outlet of the vacuum pump is not close to any potential ignition sources and there is ventilation available.

OFN = oxygen free nitrogen, type of inert gas.



8. Charging procedures

- In addition to conventional charging procedures, the following requirements shall be followed.
 - Ensure that contamination of different refrigerants does not occur when using charging equipment.
 - Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
 - Cylinders shall be kept in an appropriate position according to the instructions.
 - Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
 - Label the system when charging is complete (if not already labelled).
 - Extreme care shall be taken not to overfill the refrigerating system.
 - Prior to recharging the system it shall be pressure tested with OFN (refer to #7).
 - The system shall be leak tested on completion of charging but prior to commissioning.
 - A follow up leak test shall be carried out prior to leaving the site.
 - Electrostatic charge may accumulate and create a hazardous condition when charging and discharging the refrigerant. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/ discharging.
-



9. Decommissioning

- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its details.
- It is recommended good practice that all refrigerants are recovered safely.
- Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.
- It is essential that electrical power is available before the task is commenced.
 - a) Become familiar with the equipment and its operation.
 - b) Isolate system electrically.
 - c) Before attempting the procedure ensure that:
 - mechanical handling equipment is available, if required, for handling refrigerant cylinders;
 - all personal protective equipment is available and being used correctly;
 - the recovery process is supervised at all times by a competent person;
 - recovery equipment and cylinders conform to the appropriate standards.
 - d) Pump down refrigerant system, if possible.
 - e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
 - f) Make sure that cylinder is situated on the scales before recovery takes place.
 - g) Start the recovery machine and operate in accordance with instructions.
 - h) Do not overfill cylinders. (No more than 80 % volume liquid charge).

Safety Precautions



- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.
- Electrostatic charge may accumulate and create a hazardous condition when charging or discharging the refrigerant. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/discharging.



10. Labelling

- Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant.
- The label shall be dated and signed.
- Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.



11. Recovery

- When removing refrigerant from a system, either for servicing or decommissioning, it is required to follow good practice so that all refrigerants are removed safely.
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge are available.
- All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).

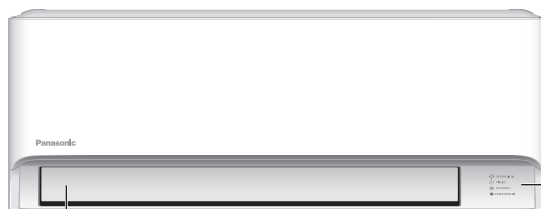


- Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
- Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. Consult manufacturer if in doubt.
- In addition, a set of calibrated weighing scales shall be available and in good working order.
- Hoses shall be complete with leak-free disconnect couplings and in good condition.
- The recovered refrigerant shall be processed according to the local legislation in the correct recovery cylinder, and the relevant Waste Transfer Note arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
- The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. Draining of oil from a system shall be carried out safely.

Names of Parts

Indoor Unit

(Structure of the unit may vary depending on the model)



Vertical airflow direction louver

- Do not adjust by hand.

Indicator

- OPERATION
- TIMER
- STANDBY
- **nanoeX**

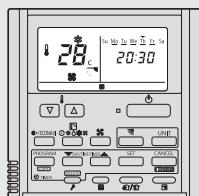
Optional



Wireless Remote Controller

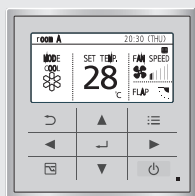
Model No. CZ-RWS3

(Infrared Remote Controller)



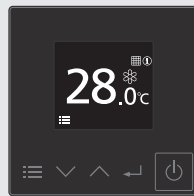
Timer Remote Controller

Model No. CZ-RTC4A
(For all indoor units)



High-spec Wired Remote Controller

Model No. CZ-RTC5B
(For all indoor units)



Wired Remote Controller

Model No. CZ-RTC6 series
(For all indoor units)

Read the Operating Instructions included with the Remote Controller.

Operation Preparation

■ Turn the power mains on 5 hours before the start of operation.

(For warm-up)

- Leave the power mains ON for continuous use.

■ Operation & Adjusting Airflow Direction

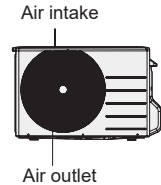
- Refer to the Operating Instructions attached to the Remote Controller.

Note: The flap display on the remote controller differs from the actual flap angle.

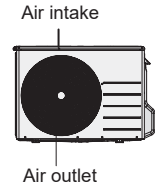
Names of Parts

Outdoor Unit

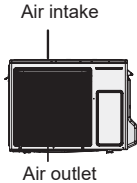
(Type 25)



(Type 50)



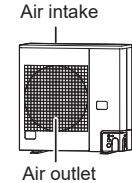
(Type 71)



(Type 95)



(Type 100)



Connectable outdoor unit lineup

Oceania

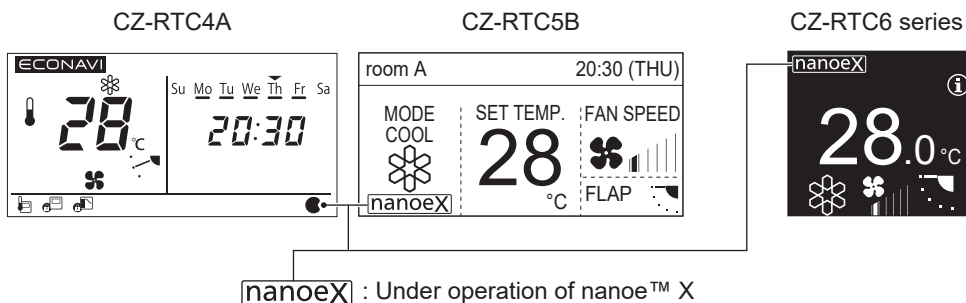
■ Refrigerant type : R32

Outdoor unit type	25	50	71	95	100
1-phase	CU-RZ25AKR	CU-RZ50AKR	CU-RZ71AKR	CU-RZ95AKR	—
3-phase	—	—	—	—	U-100PZ4R8

nanoe™X Function

Display during operation of nanoe™X

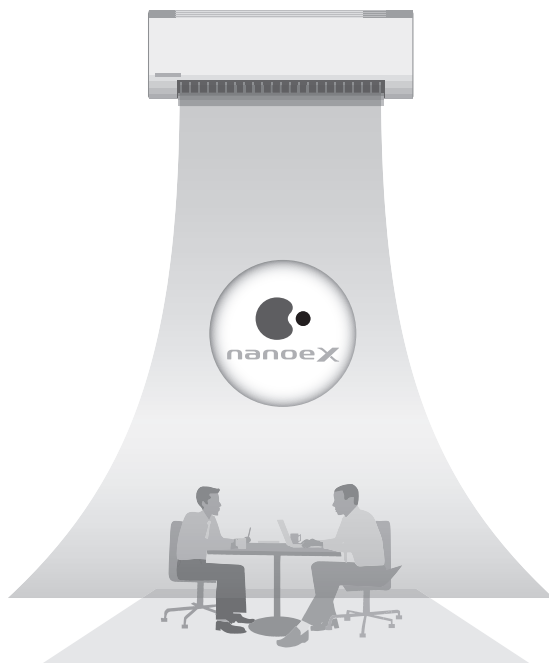
Example: Initial screen of remote controller



nanoe™ X For a freshness and cleaner environment
nanoe™ X generates negative ions using the air in the room to give a healthy air.
It also reduces the smell in the room, and constrains propagations of mold and bacteria.
When purchased, the nanoe™ X function is designed to automatically operate.

- If you wish to set to OFF, refer to the operating instructions for the remote controller adaptable to nanoe™ X function.





The effect of nanoe™X may decrease slightly depending on the installation conditions of the unit.



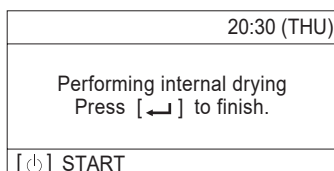
Internal Drying Function

■ Internal Drying Operation

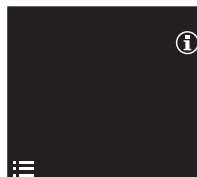
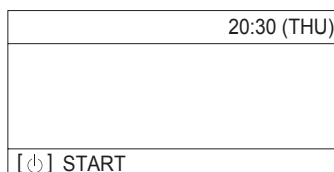
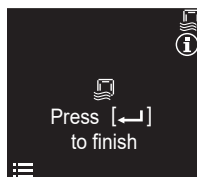
When cooling or drying operation stopped, the internally controlled drying process is activated in order to suppress the mold proliferation inside the unit (airflow passage, fan, heat exchanger). According to the installation environment or operating hours, mold proliferation or inhibition of mold growth will be changed.

- Operating conditions and operating hours
Operates in cooling or dry mode for more than 5 minutes.
When finished, the internal drying operation is started.
Drives for about Max 90 minutes.
- The figure at right shows the display during the internal drying operation.
 - If you wish to resume operating during internal drying, press  / .
 - To stop the internal drying operation, Press  / .When the internal drying operation finished and stopped, the remote controller display shows at right.

CZ-RTC5B



CZ-RTC6 series



Note:

- The internal drying operation is not activated when connecting other than the wired remote controller (CZ-RTC5B / CZ-RTC6 series).
- The internal drying function is not designed to automatically operate even if the wired remote controller (CZ-RTC5B / CZ-RTC6 series) is connected when purchased. If you wish to set to ON, refer to the operating instructions for the wired remote controller (CZ-RTC5B / CZ-RTC6 series).
- In case that the cooling or drying operation is less than 5 minutes, the internal drying operation cannot be performed.
- Humidity inside the room may sometimes increase during internal drying operation.
- When cooling or drying operation stopped, the flap automatically opens and the drying operation is started.

To Learn More...

Operation Mechanism

■ Heating performance

- This air conditioner utilizes outside air for heating; its heating performance reduces as outside temperature decreases.
- In the event that heating is not sufficient, please use an additional heating appliance.

■ Defrosting

- This appliance may start defrosting operation to melt frost formed in the outdoor unit.

1. **Defrosting starts:** The indoor unit fan stops (or the speed becomes extremely slow).

- “” (STANDBY) appears.

2. **Heating operation resumes after several minutes:** The indoor unit fan remains stopped (or it will run at a very slow speed) until the indoor heat exchanger coil warms up sufficiently.

- “” (STANDBY) appears.

3. **Defrosting is complete:** The indoor unit fan starts operation.

- “” (STANDBY) disappears.

■ “DRY” operation

- Once the room temperature reaches the level that was set, the outdoor unit repeats the cycle of turning on and off automatically.
- When the room temperature is more likely to reach the level that was set, the fan speed is set to “breeze” (light wind) automatically.

■ Should power failure occur while the unit is running

- The unit will resume operation automatically. Operation settings prior to power failure will be used.

Operating conditions

Operation condition temperature range

- Indoor unit

- Cooling mode : 18 °C ~ 32 °C DB • Heating mode : 16 °C ~ 30 °C DB

- Outdoor unit

- Cooling mode : -10 °C ~ 46 °C DB • Heating mode : -15 °C ~ 24 °C DB

Note: In the case of nanoe™X “OFF”

High :  (CZ-RTC4A),  (CZ-RTC5B, CZ-RTC6 series)

Medium :  (CZ-RTC4A),  (CZ-RTC5B, CZ-RTC6 series)

Low :  (CZ-RTC4A),  (CZ-RTC5B, CZ-RTC6 series)

Maintenance



WARNING

- For safety, be sure to turn the air conditioner off and disconnect the power before cleaning. (Otherwise, electric shock or injury may result because the fan is rotating at high speed.)
- Do not pour water on the indoor unit. (This may damage the internal components and cause an electric shock hazard.)




CAUTION

- Never use solvents or harsh chemicals. Also, do not wipe plastic parts using very hot water. (This may cause deformation or change in colour.)
- Some metal edges and fins are sharp. Be careful when you clean those parts. (Injury may result.)
- Use a firm stool or ladder when cleaning an indoor unit installed in high locations.

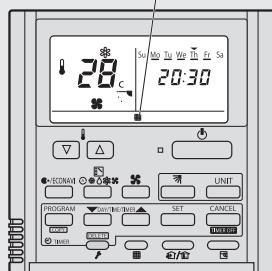
The internal coil and other components of the outdoor unit must be cleaned periodically.

- Consult your dealer or service center.

Air Filter Maintenance

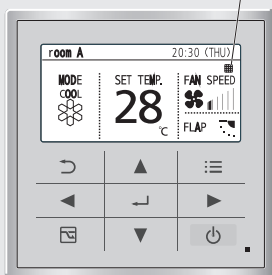
It is recommended that the air filter be cleaned when the  (Filter) appears on the display. Clean the filter frequently for best performance in the area of dusty or oil spots regardless of filter status.

Filter indicator



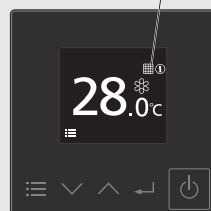
Timer Remote Controller

Filter indicator



High-spec Wired Remote Controller

Filter indicator



Wired Remote Controller

Tips for Energy Saving

■ Avoid

- **Do not block the air intake and outlet of the unit.**
(If either is obstructed, the unit will not function well, causing malfunction.)
- During cooling operation, use sunshades, blinds or curtains to prevent direct sunlight from entering the room.

■ Do

- Always keep the air filter clean.
(A clogged filter will impair the performance of the unit.)
→ "Maintenance"
- To prevent conditioned air from escaping, keep windows, doors and any other openings closed.

Cleaning

- Do not use benzene, thinner or scouring powder.
- Use soap (\approx pH 7) or neutral household detergent only.
- Do not use water hotter than 40 °C / 104 °F.

Indoor unit

Do handle the unit surface with care to avoid scratches by sharp or rough items (e.g. fingernails, tools, rings, etc). Wipe the unit gently with a soft damp cloth.

The coils and fans should be cleaned periodically by an authorised dealer.

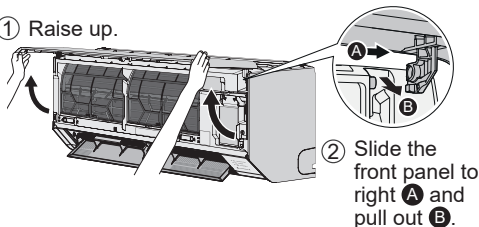


Front panel

Wash gently and dry.

How to remove front panel

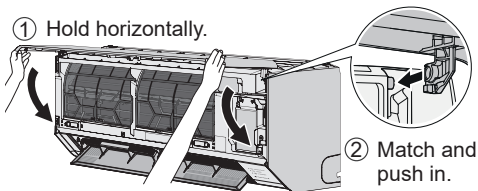
① Raise up.



② Slide the front panel to right **A** and pull out **B**.

Close it securely

① Hold horizontally.



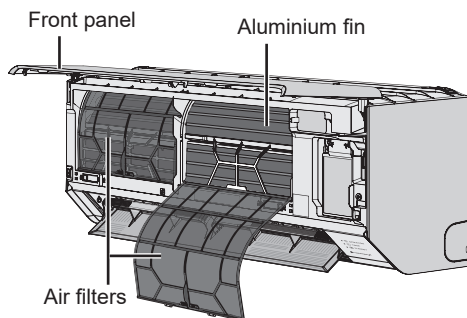
② Match and push in.

③ Close down.

④ Press both ends and center of the front panel.

Indoor unit

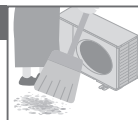
(Structure of the unit may vary depending on the model)



Outdoor unit

Clean the debris that surround the unit.

Clear any blockage from the drain pipe.



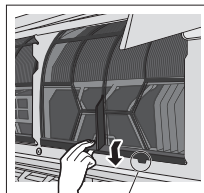
Air filters

Once every 2 weeks

- Wash/rinse the filters gently with water to avoid damaging the surface.
- Dry the filters thoroughly under a shade, away from fire or direct sunlight.
- Replace any damaged filters.

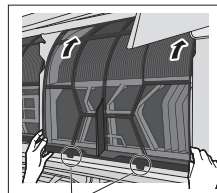


Remove air filter



Remove from the unit

Attach air filter




Insert into the unit

Note:

- Clean the filter regularly for best performance and to reduce power consumption.
- Please consult your nearest dealer for seasonal inspection.

Maintenance

After Cleaning

1. After the air filter is cleaned, reinstall it in its original position.
Be sure to reinstall in reverse order.
2. [In the case of Timer Remote Controller]
Press the Filter reset button.
The  (Filter) indicator on the display goes out.
[In the case of High-spec Wired Remote Controller]
Refer to the Operating Instructions attached to the optional High-spec Wired Remote Controller.

Troubleshooting

Check before consulting or requesting services.

Symptom		Cause / Action
Indoor unit	Noise	Sound like streaming water is heard during operation or after operation.
		• Sound of refrigerant liquid flowing inside unit. • Sound of drainage water through drain pipe.
		Cracking noise is heard during operation or when operation stops.
		• Sound due to temperature changes of parts.
	Discharged air smells during operation.	
	• Indoor odor components, cigarette odor and cosmetic odor accumulated in the air conditioner and its air is discharged. • The unit inside is dirty. (Contact your dealer.)	
	Dewdrops accumulate near the air outlet during cooling operation.	
	• Internal moisture is cooled by cool wind and accumulates as dewdrops.	
	Fog occurs during cooling operation.	
	• If the air conditioner has been installed at places such as restaurants where large amounts of oil mist exist, cleaning is necessary because the unit inside (heat exchanger) is dirty. (Contact your dealer.)	
	Fog occurs during heating operation.	
	• Defrost operation is in process.	
	The fan is rotating for a while even though operation stops.	
	• Fan rotation makes operation smooth. • The fan may rotate to dry the heat exchanger depending on the setting.	
	Airflow direction	Airflow direction changes while operating. Airflow direction cannot be set. Airflow direction cannot be changed.
		• When air discharge temperature is low during heating operation, or during defrost operation, horizontal wind flow is made automatically.
		The flap moves several times after the direction is changed.
		• The flap moves to the standard position once, and then turns to the set airflow direction.
	Dust is discharged.	
	• Dust accumulated inside the indoor unit is discharged.	
	Humming noise comes out.	
	• This is the sound of nanoe™ X being discharged.	
	[nanoeX] is not displayed on the remote controller.	
	• Has nanoe™ X been set to OFF? → Set to ON.	
	[△nanoeX] is displayed on the remote controller.	
	• nanoe™ X is considered abnormal. (Contact your dealer.)	


Troubleshooting

	Symptom	Cause / Action
Outdoor unit	No operation (When the power is turned on immediately / When operation is stopped and resumed immediately)	• Operation is not activated for the first approx. 3 minutes because the compressor protection circuit is activated.
	Noise occurs during heating operation.	• Defrost operation is in process.
	Steam comes out during heating operation.	
	The fan continues to rotate even after the operation is stopped using the remote controller.	• This is for smooth operation.

Before Requesting Services

Symptom	Cause	Action
The air conditioner does not operate although the power is turned on.	Power failure or after power failure.	Press the power ON/OFF button on the remote controller.
	The operation (power) button is turned off.	• If the breaker is turned off, turn the power on. • If the breaker has been tripped, consult your dealer without turning it on.
	Fuse blow out.	Contact your dealer.
Poor cooling or heating performance	The air intake or air outlet of indoor and outdoor units is clogged with dust.	Remove the dust.
	The fan speed switch is set to "Low".	Change to "Medium" or "High".
	Improper temperature settings.	See "Tips for Energy Saving".
	The room is exposed to direct sunlight in cooling mode.	
	Doors or windows are open.	
	The air filter is clogged.	See "Maintenance".
	Too many heat sources in the room in cooling mode.	Use minimum heat sources and in a short time.
	Too many people in the room in cooling mode.	Lower the temperature setting or change to "Medium" or "High".

If your air conditioner is not functioning properly despite checking all items:

- Stop the operation immediately, turn off the power, and contact your dealer. Additionally, report if the inspection marks  and the letters E, F, H, L, or P in combination with numbers that appear on the remote controller's LCD.
- Do not attempt to repair the air conditioner yourself, as it can be very dangerous.

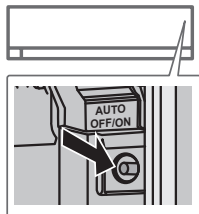
Note:

Pull off the power plug from a receptacle, or switch off the breaker, or switch off the power disconnecting mean to isolate the air conditioner from the main power supply when not in use for a long time.

Emergency Operation

■ If any of the following events should occur, operate the unit temporarily by pressing the Emergency button of the Indicator.

- The remote controller is broken.
- The batteries are dead (in the case of using optional wireless remote controller).
- The remote controller is lost (in the case of using optional wireless remote controller).



(Structure of the unit may vary depending on the model)

Pressing the Emergency button will operate under the following conditions.

- Operation mode : AUTO (A)
- Set temperature : 24 °C
- Fan speed : High (88, full bars)


At this time, the OPERATION lamp of the indoor unit's Indicator lights up.

When stopping the emergency operation, press the Emergency button.

Note:

- Do not keep pressing the Emergency button.
- If accidentally kept pressing the button, the unit will go into service mode.
- When the Emergency button is pressed once again, the unit returns to stop mode.
- If not returned to stop mode, consult the sales dealer or service center.

Information








Pb

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 authority or dealer and ask for the correct method of disposal.

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.

	This symbol shows that this equipment uses a mildly flammable refrigerant. If the refrigerant is leaked, together with an external ignition source, there is a possibility of ignition.		This symbol shows that the Operation Instructions should be read carefully.
	This symbol shows that a service personnel should be handling this equipment with reference to the Installation Instructions.		This symbol shows type of flammable refrigerant contained in the system.



This air conditioner incorporates a device that generates a biocidal product. Free radicals generated by a device incorporated in the air conditioner have the capacity to inhibit pollutants, such as certain types of bacteria, viruses, mould.
Active substances : Free radicals generated in situ from ambient air or water.
Usage : This device function can be operated ON / OFF by “nanoe X” icon button.

Note:
Important Information Regarding The Refrigerant Used
• Refer to the Installation Instructions attached to the unit.

Product Information

If you have problems or questions concerning your Air Conditioner, you will need the following information. Model and serial numbers are on the nameplate.

Model No.
Serial No.
Date of purchase
Dealer's address
Phone number

Panasonic Corporation
1006, Oaza Kadoma, Kadoma City,
Osaka 571-8501, Japan
Website: <http://www.panasonic.com>