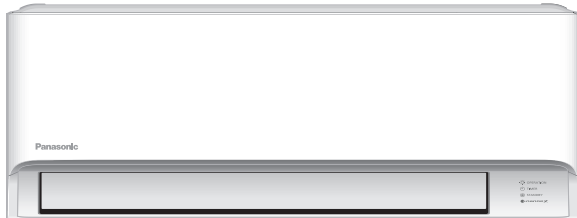




# Operating Instructions (Simplified Version)

## Air Conditioner



QR code for  
Web Manual

<https://eu.datanavi.ac.smartcloud.panasonic.com/documents/index.htm?model=S-2545PK4E>

**Model No.**  
**Indoor Unit**  
**S-2545PK4E, S-5010PK4E**

**Outdoor Unit**  
**PZ3**  
**U-25PZ3E5, U-36PZ3E5, U-50PZ3E5,**  
**U-60PZ3E5A, U-71PZ3E5A, U-100PZ3E5,**  
**U-125PZ3E5, U-140PZ3E5, U-100PZ3E8,**  
**U-125PZ3E8, U-140PZ3E8**

**PZH3**  
**U-36PZH3E5, U-50PZH3E5, U-60PZH3E5**

**PZH4**  
**U-71PZH4E5, U-100PZH4E5, U-125PZH4E5,**  
**U-140PZH4E5, U-71PZH4E8, U-100PZH4E8,**  
**U-125PZH4E8, U-140PZH4E8, U-200PZH4E8,**  
**U-250PZH4E8**

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

2-17, 98

**English (EN)**

This booklet mainly mentions the safety-related regulatory matters. Regarding the contents of the operation, please scan the matrix two-dimensional (2D) barcode and refer to the detailed manuals.

Antes de utilizar la unidad, sírvase leer atentamente estas instrucciones de funcionamiento y conservarlas para futuras consultas.

18-33, 98

**Español (ES)**

En este folleto se describen principalmente las cuestiones relacionadas con la seguridad y reglamentarias. Si desea consultar explicaciones relativas al funcionamiento, escanee el código de barras 2D de matriz y consulte los manuales detallados.

Prima di utilizzare l'unità, leggere attentamente le istruzioni e conservare questo opuscolo per potervi fare riferimento in futuro.

34-49, 98

**Italiano (IT)**

Questo opuscolo descrive principalmente argomenti inerenti la sicurezza e normativi. Per le spiegazioni riguardanti il funzionamento, scansionare il codice a barre 2D a matrice e fare riferimento ai manuali dettagliati.

Lees voor u het apparaat gebruikt deze gebruikshandleiding grondig en bewaar deze voor toekomstig gebruik.

50-65, 98

**Nederlands (NL)**

Dit boekwerkje beschrijft voornamelijk zaken die te maken hebben met de veiligheid en met regelgeving. Voor uitleg over de bediening kunt u de matrix 2D-streepjescode scannen en dan de gedetailleerde handleidingen raadplegen.

Antes de ligar a unidade, leia cuidadosamente este manual de utilização e guarde-o para future referência.

66-81, 98

**Português (PT)**

Este manual descreve principalmente as questões regulatórias e relacionadas com a segurança. Para as explicações sobre a operação, digitalize o código de barras 2D em matriz e consulte os manuais detalhados.

Преди да задействате климатика, моля, прочетете внимателно инструкциите за употреба и ги запазете за бъдещи справки.

82-97, 98

**Български (BG)**

Тази брошура описва главно въпросите, свързани със сигурността и регулаторните изисквания. За обяснения относно работата, моля, сканирайте 2D баркода на матрицата и направете справка в подробните ръководства.



ACXF55-39850

Thank you for purchasing  
Panasonic Air Conditioner.

## Table of Contents

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Before installation, the installer must:  
Read the Installation Instructions, then request  
the customer keep them for future reference.

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.
- The English text is the original instructions. Other languages are translation of the original instructions.



# 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:

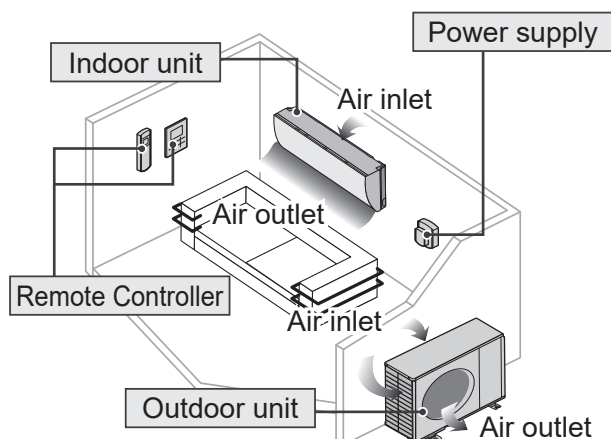
This appliances is not intended for accessibility by the general public.

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.

 <b>WARNING</b>	This sign warns of death or serious injury.
 <b>CAUTION</b>	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 can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

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 risk of fire.

### Indoor unit and outdoor unit



The appliance shall be installed, and/or operated in a room with floor area larger than  $A_{min}$  (m<sup>2</sup>) 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  $A_{min}$  (m<sup>2</sup>))

Be aware that refrigerant may 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

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## 1. Installation (Space)

- Product with flammable refrigerants, shall be installed according to the minimum room area,  $A_{min}$  (m<sup>2</sup>) 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 protected 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 CO<sub>2</sub> fire extinguisher adjacent to the charging area.

# Safety Precautions

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## 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 may 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 actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
  - The ventilation machinery and outlets are operating adequately and are not obstructed.
  - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
  - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
  - Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are 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 there 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.
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# Safety Precautions

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## 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 may not be adequate, or may need re-calibration.  
(Detection equipment shall be calibrated in a refrigerant-free area.)
  - Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
  - Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
  - Leak detection fluids are also suitable for use with most refrigerants, for example, bubble method and fluorescent method agents. The use of detergents containing chlorine shall be avoided as the chlorine may 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. Removal and 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:
  - 1) Safely remove refrigerant following local and national regulations
  - 2) Evacuate
  - 3) Purge the circuit with inert gas
  - 4) Evacuate
  - 5) Continuously flush with inert gas when using flame to open circuit
  - 6) 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.
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## 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 over fill 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 over fill cylinders. (No more than 80 % volume liquid charge).

# Safety Precautions

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- 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 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).



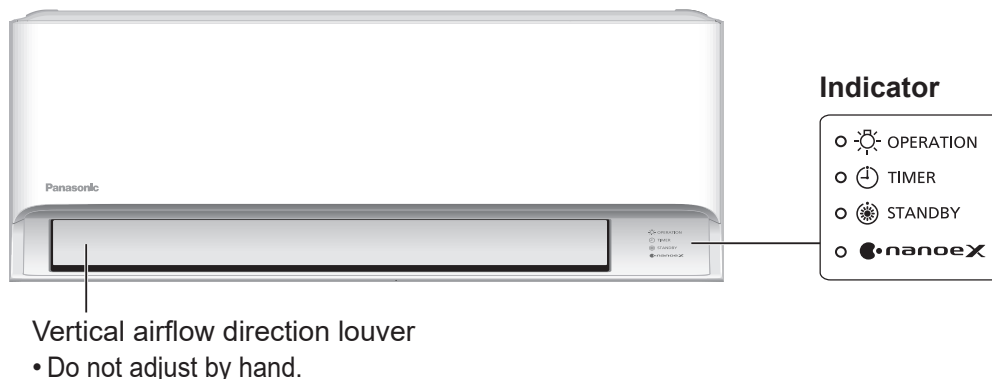
- Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
- Recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment shall be in good working order with a set of instructions concerning the equipment 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)



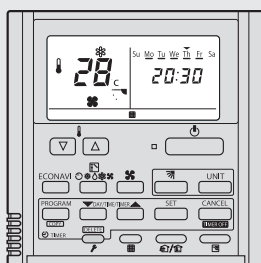
## Optional



### Wireless Remote Controller

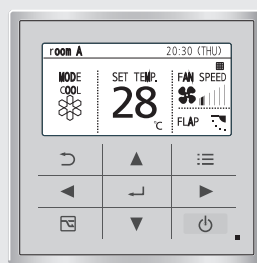
Model No. CZ-RWS3

(Infrared Remote Controller)



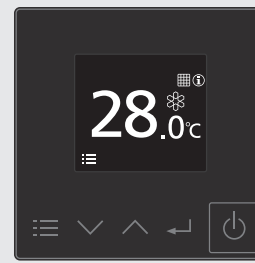
### Timer Remote Controller

Model No. CZ-RTC4,  
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.

## Operating conditions

Operation condition temperature range

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

# 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.

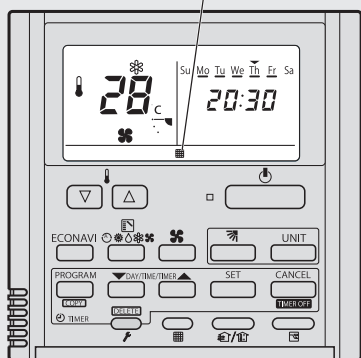
The internal coil and other components of the outdoor unit must be cleaned periodically.

- Consult your dealer or service center.

## Air Filter Maintenance

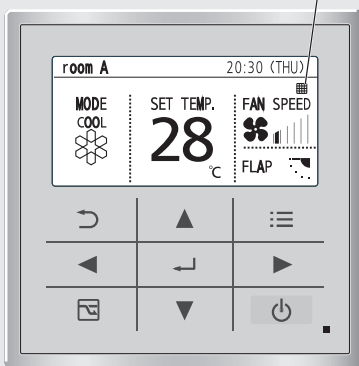
It is recommended that the air filter be cleaned when the  (Filter) appears on the display. Clean the filter frequently for best performance in the area of dusty or oil spots regardless of filter status.

Filter indicator



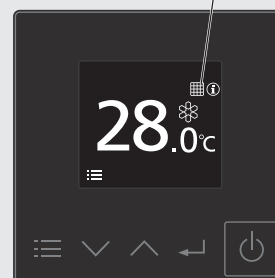
Timer Remote Controller

Filter indicator



High-spec Wired Remote Controller

Filter indicator



Wired Remote Controller

## Information for Users on Collection and Disposal of Old Equipment and Used Batteries



### Only for European Union and countries with recycling systems

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local authority.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



### For business users in the European Union and some other European countries

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.






### [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):

Pb

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 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.

Do refer to “nanoe™X Function” in detailed manuals (Matrix 2D scanning) for more information.

### Note:

### Important Information Regarding The Refrigerant Used

- Refer to the Installation Instructions attached to the outdoor unit.

# Information / Información / Informazioni / Informatie / Informação / Информация

- English** • 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.
- Español** • Información del producto  
Si tiene problemas o preguntas en relación con el acondicionador de aire, necesitará la información que se indica a continuación. El modelo y los números de serie están en la placa de características.
- Italiano** • Informazioni sul prodotto  
In caso di problemi o domande riguardanti il condizionatore d'aria, sono necessarie le seguenti informazioni. Numeri di modello e serie si trovano sulla targhetta di identificazione.
- Nederlands** • Productinformatie  
Als u problemen of vragen hebt met betrekking tot uw airconditioner, dan hebt u de volgende informatie nodig. Het model en de serienummers staan op het typeplaatje.
- Português** • Informações sobre o produto  
Se tiver problemas ou dúvidas com respeito ao seu aparelho de ar condicionado, precisará das seguintes informações. O modelo e os números de série estão localizados na placa de identificação.
- Български** • Информация за продукта  
При проблеми или въпроси относно вашия климатик ще ви е необходима следната информация. Номерът на модела и серийният номер се намират на табелката.

Model No.

Serial No.

Date of purchase

Dealer's address

Phone number

- English** Model No. / Serial No. / Date of purchase / Dealer's address / Phone number
- Español** N.º de modelo / N.º de serie / Fecha de compra / Dirección del distribuidor / Número de teléfono
- Italiano** Modello n. / N. di serie / Data di acquisto / Indirizzo del rivenditore / Numero di telefono
- Nederlands** Modelnr. / Serienr. / Datum van aankoop / Adres van de dealer / Telefoonnummer
- Português** Nº do modelo / Nº de série / Data de compra / Endereço do distribuidor / Número de telefone
- Български** Модел № / Сериен № / Дата на закупуване / Адрес на търговеца / Телефонен номер