



Operating Instructions

Air Conditioner



Model No.

Indoor Unit

CS-NZ25VKE

CS-NZ35VKE

CS-NZ50VKE

CS-QZ25VKE

Outdoor Unit

CU-NZ25VKE

CU-NZ35VKE

CU-NZ50VKE

CU-QZ25VKE

Operating Instructions Air Conditioner

2-41

Before operating the unit, please read these operating instructions thoroughly and keep them for future reference. The included Installation Instructions should be kept and read by the installer before installation. Remote control is packaged in the indoor unit and removed by the installer before installation.

Bruksanvisning Luftkonditionering

42-77

Innan du använder enheten, läs noga igenom denna bruksanvisning och spara den för framtida bruk. De medföljande installationsanvisningarna ska sparas och läsas av installatören före installationen. Fjärrkontrollen finns i inomhusenheten och tas bort av installatören före installationen.

Bruksanvisninger Klimaanlegg

78-113

Les bruksanvisningen nøye før du bruker denne enheten, og oppbevar den for fremtidig bruk. Installatøren bør oppbevare og lese de medfølgende installasjonsinstruksene før installasjon. Fjernkontrollen skal pakkes inn i innendørsenheten og fjernes av installatøren før installasjon.

English

Svenska

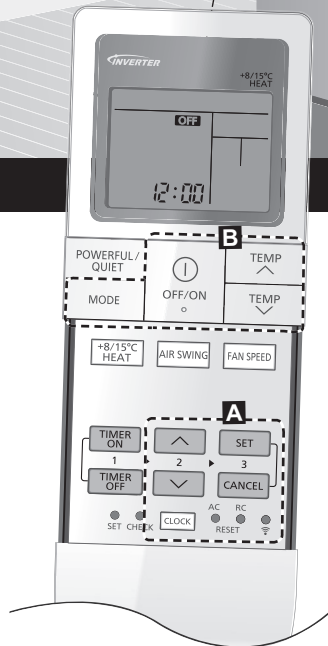
Norsk



ACXF55-24700

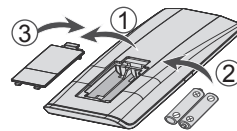
A new built-in Network Adaptor that allows you to control your heatpump from everywhere.

Use remote control within 8 m from the remote control receiver of the indoor unit.



Quick Guide

Inserting the batteries



- ① Pull out the back cover of remote control.
- ② Insert AAA or R03 batteries.
- ③ Close the cover.

A Clock setting



- ① Press **CLOCK** and set the time **↑** **↓**.
 - Press **CLOCK** and hold for approximately 5 seconds to show time in 12-hour (am/pm) or 24 hour indication.
- ② Confirm **SET**.

Thank you for purchasing Panasonic
Air Conditioner.

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Accessories

- Remote control
- AAA or R03 batteries × 2
- Remote control holder
- Screws for remote control holder × 2

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

English

Basic operation

① Press



to start/stop the operation.

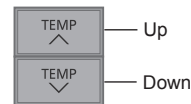


- Please note that the **OFF** indication is on display to start the unit.


② Press **MODE** to select the desired mode.



③ Select the desired temperature.



Selection range:
16.0 °C ~ 30.0 °C /
60 °F ~ 86 °F.

- Press and hold  for approximately 10 seconds to switch the temperature indication in °C or °F.

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.



WARNING

This sign warns of death or serious injury.



CAUTION

This sign warns of injury or damage to property.

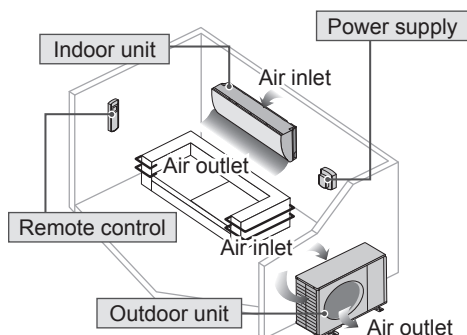
The instructions to be followed are classified by the following symbols:



This symbol denotes an action that is PROHIBITED.



These symbols denote actions COMPULSORY.



WARNING

Indoor unit and outdoor unit



This appliance 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.

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. 

Remote control




 Do not allow infants and small children to play with the remote control to prevent them from accidentally swallowing the batteries.

Network Adaptor (activated)

 Do not use the indoor unit near to any medical equipment or automatic control equipment (automatic door, wire alarms, etc.).
(Radio wave from indoor unit may interfere with the equipment and may cause incident due to malfunction)


 Keep at least 15 cm away from the indoor unit if you have a cardiac pacemaker.
(Radio wave from indoor unit may interfere with the operation of pacemaker)

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.

Safety precautions



CAUTION

Indoor unit and outdoor unit



Do not wash the indoor unit with water, benzine, 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.

Remote control



Do not use rechargeable (Ni-Cd) batteries. It may damage the remote control.



To prevent malfunction or damage of the remote control:

- Remove the batteries if the unit is not going to be used for a long period of time.
- New batteries of the same type must be inserted following the polarity stated.

Network Adaptor (activated)



Check the following requirements in advanced (At home):

- Insert the power supply thoroughly. Ensure no dust builds up on the power supply.
(This can cause fire due to ignition in the power supply's of poor contact)
- Check the status of timer activation set by other persons.
(Unexpected run-stop operation may cause harm to human body, pets, and plants)
- There should be no abnormality in the air conditioner. Even though there is a change of wind direction, no adverse effect on the persons nor the rooms.
(Ensure no objects that easy to fly or drop, etc. Object fall due to wind may cause fire, injury, etc.)



Check the following requirements before and during operation from outside:

- Do inform the inside person of the air conditioner operating setting's condition.
(This may cause harm to human body due to sudden changes of outside temperature and room temperature)
 - Temperature adjustment can be operated by remote control.
 - If inside the room with an infant, physically handicapped person, elderly person, etc. who are not able to control the temperature by themselves, please do not use this application.
- Please check the setting and operating conditions.
(Sudden change of outside-room temperature may cause harm to human body, pets, and plants)

Power supply



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



WARNING



This appliance is filled with R32 (mild 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^2) 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 Table A of Installation instructions table for A_{min} (m^2))

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.

Safety precautions

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 (>1.04 MPa, max 4.15 MPa). No leak shall be detected.



1. Installation (Space)

- Product with flammable refrigerants, shall be installed according to the minimum room area, Amin (m²) mentioned in Table A of the 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.

English

Safety precautions

Safety precautions



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.



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 unauthorized 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.



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. He/She 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.

English

Safety precautions

Safety precautions



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. Repairs to sealed components

- During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc.
- If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
- Ensure that apparatus is mounted securely.
- Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres.
- Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.



4. Repair to intrinsically safe components

- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.
- Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere.
- The test apparatus shall be at the correct rating.
- Replace components only with parts specified by the manufacturer. Unspecified parts by manufacturer may result ignition of refrigerant in the atmosphere from a leak.



5. 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.



6. 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



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

- No leaks shall be detected when using detection equipment with a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure (>1.04 MPa, max 4.15 MPa), 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 #8 must be followed to remove the refrigerant.



8. 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: remove refrigerant -> purge the circuit with inert gas -> evacuate -> purge with inert gas -> open the circuit by cutting or brazing.
- The refrigerant charge shall be recovered into the correct recovery cylinders.
- The system shall be purged with OFN to render the appliance safe.
- This process may need to be repeated several times.
- Compressed air or oxygen shall not be used for this task.
- Purging shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum.
- This process shall be repeated until no refrigerant is within the system.
- When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
- This operation is absolutely vital if brazing operations on the pipe work are to take place.
- Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and there is ventilation available.

OFN = oxygen free nitrogen, type of inert gas.



9. 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).
 - 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.



10. 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).

English

Safety precautions

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.



11. 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.



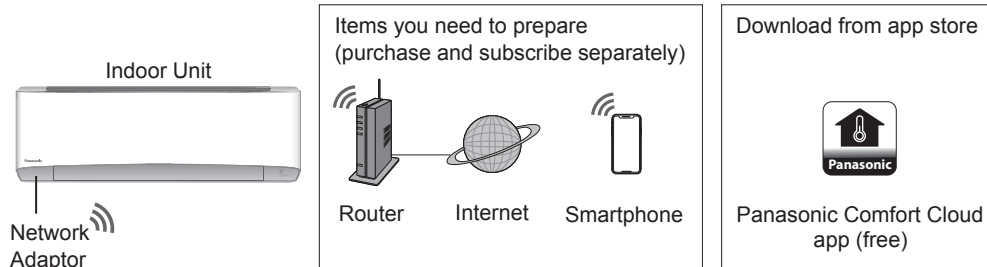
12. Recovery

- When removing refrigerant from a system, either for servicing or decommissioning, it is recommended 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.
- 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.
- Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
- The recovered refrigerant shall be returned to the refrigerant supplier 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 evacuation process shall be carried out prior to returning the compressor to the suppliers.
- Only electric heating to the compressor body shall be employed to accelerate this process.
- When oil is drained from a system, it shall be carried out safely.

System Overview



- Requires the APP to work with a smartphone with Android 4.4 and above, or iOS 9 and above. However, there is no guarantee that the APP will work well with all Android OS version.
- The Network Adaptor is designed specifically as a terminal for “Panasonic Comfort Cloud” app.
- The Wireless LAN network coverage must reach the air conditioner installation location.

Specification

Network Adaptor	Wireless LAN Module (built-in)
Model	DNSK-P11
Input Voltage	DC 5V (From Air Conditioner Indoor Unit)
Current Consumption	Tx/Rx max. 290/100 mA
Wireless LAN standard	IEEE 802.11 b/g/n
Frequency range	2.4 GHz band
Encryption	WPA2-PSK (TKIP/AES)

Precaution

- Do NOT disassemble or alter this Network Adaptor in any way.
- Do NOT remove this Network Adaptor from the appliance product during operations.
- Data transmitted and received over radio waves may be intercepted and monitored.

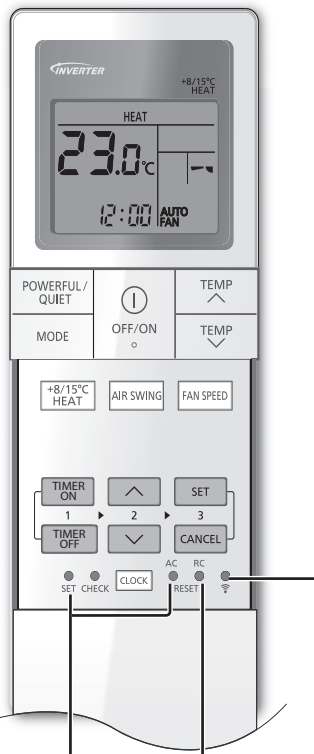
Maximum radio-frequency power transmitted in the frequency bands

Type of wireless	Frequency band	Max. EIRP (dBm)
WLAN	2412 - 2472 MHz	20 dBm

How to use



- Indicator
- POWER
 - TIMER
 - DEICE
 - +8/15°C HEAT
 -



Not used in normal operations.

Press to restore the remote control to default setting.

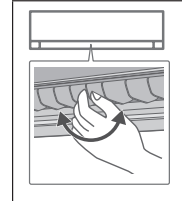
Press to ON/ OFF Wireless LAN features.

To adjust vertical airflow direction



- Do not adjust the flap by hand.

- For lateral direction, it is manually adjustable as shown.

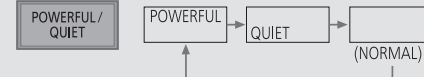


To adjust fan speed



- For AUTO, the indoor fan speed is automatically adjusted according to the operation mode.
- To have low noise priority operation, select the lowest fan speed (★).

To switch between powerful/quiet



POWERFUL:

To reach temperature quickly

- This operation continues until it is cancelled by pressing again **POWERFUL/QUIET** button or turn OFF the unit to stop this operation.

QUIET:

To enjoy quiet operation

- This operation reduces airflow noise.

To use maintenance heating



- Maintain indoor temperature at 8/15°C. Fan switches to high fan speed automatically.
- This operation overwrite the operation mode and could be cancelled by pressing **MODE**.
- Defrost operation at outdoor unit will result in sudden cold air from indoor unit. Eliminate cold air with heat mode.

To connect network



- Press to communicate with the home wireless LAN access point.
- Wireless LAN LED blinks to indicate the connection status to home access point.

Fast blink	The unit is establishing the connection.
Slow blink	The unit is not securing the connection.
No blink (stays on)	The unit has established the connection.

- It can establish the connection to the unit even if the unit is turned OFF.

Note

- If Wireless LAN LED continuously blinking and you do not want to use the APP, press to turn off.

To set the timer

2 sets of ON and OFF timers are available to turn ON or OFF the unit at different preset time.

1 Select ON or OFF timer
 • Each time pressed:
 → ① → ② → Cancel

2 Set the time

3 Confirm

Example:
 OFF at 22:00

TIMER OFF 0:00
 2 22:00
 SET OFF ① 22:00

- To cancel ON or OFF timer, press or to select respective ① or ② then press .
- If timer is cancelled manually or due to power failure, you can restore the timer again by pressing or to select respective ① or ② then press .
- The nearest timer setting will be displayed and will activate in sequence.
- Timer operation is based on the clock set in the remote control and repeats daily once set. For clock setting, please refer to Quick Guide.

Note



- Can be activated in all modes and can be cancelled by pressing the respective button again.



- Cannot be selected at the same time.


How to use

App Installation

For Android user (Android 4.4 and above)

- Open  .
- Search for “Panasonic Comfort Cloud” app.
- Download and install.

For iOS user (iOS 9 and above)

- Open  .
- Search for “Panasonic Comfort Cloud” app.
- Download and install.

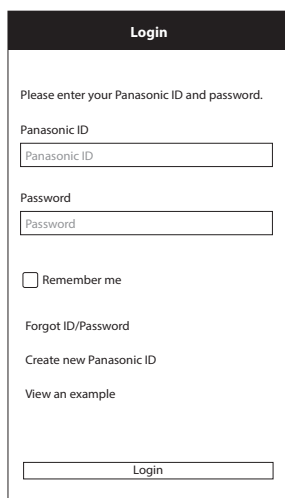
Note

- The app user interface image may change for version upgrade without notification.
- There is no charge for using this application. However, other charges may be incurred for connection and operation.

Starting “Panasonic Comfort Cloud”

Create New Panasonic ID

Use “Panasonic Comfort Cloud” app as an option to control the air conditioner.



Login

Please enter your Panasonic ID and password.

Panasonic ID

Panasonic ID

Password

Password

☐ Remember me

[Forgot ID/Password](#)

[Create new Panasonic ID](#)

[View an example](#)

Login

- For new user, select Create new Panasonic ID to register.
- For registered user, login using your Panasonic ID and password.

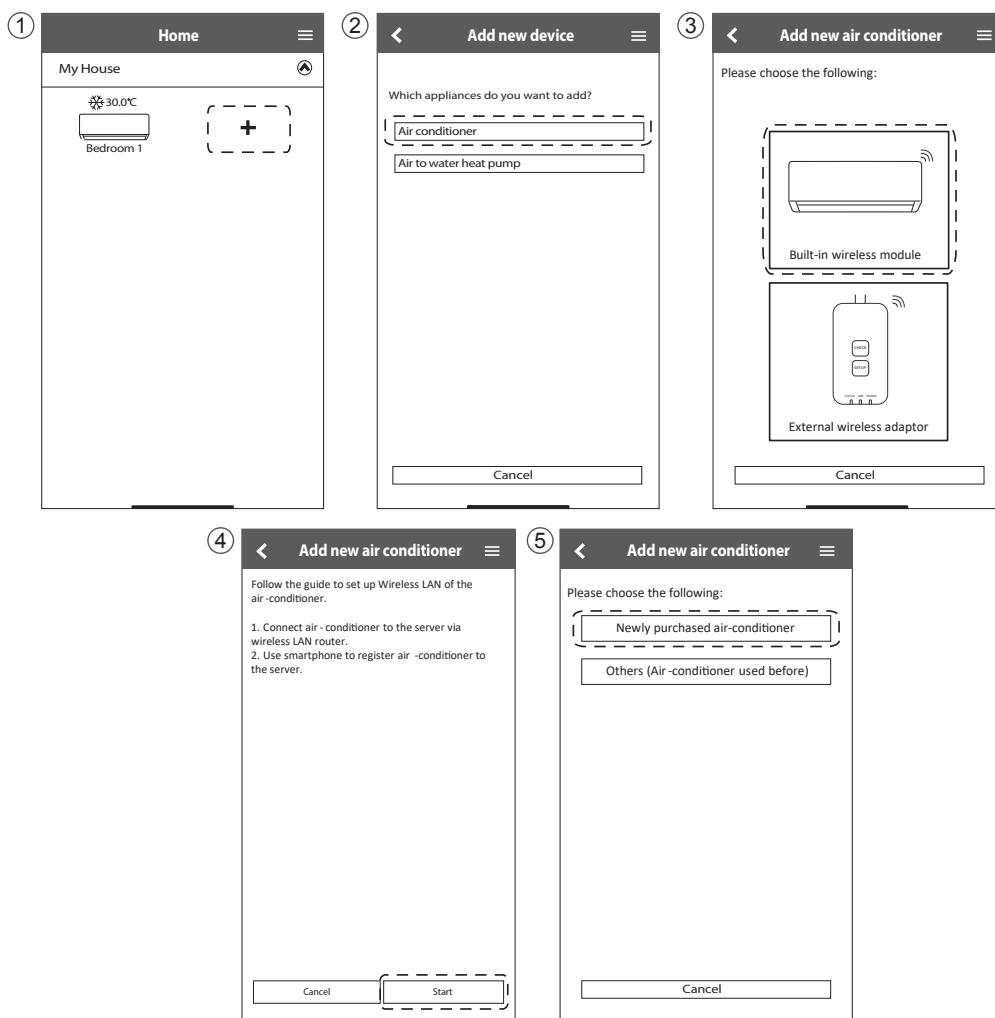
App Setting

Before setting

- Confirm the wireless router is connected to the network correctly.
- Confirm the Wireless LAN of the smartphone is activated.
- Smartphone and air conditioner should be connected to the same wireless router.

Add new air conditioner device

- Air conditioner need to be registered before using “Panasonic Comfort Cloud” app.




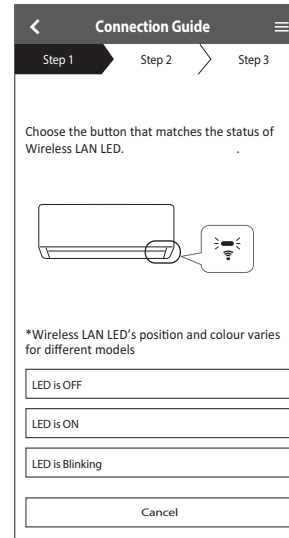
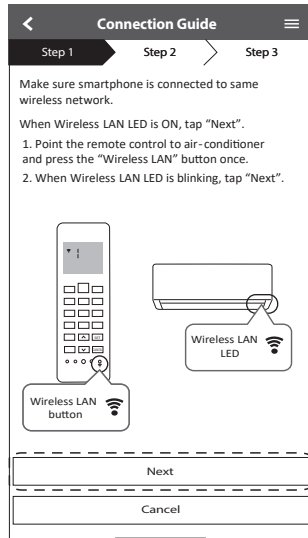
English

How to use

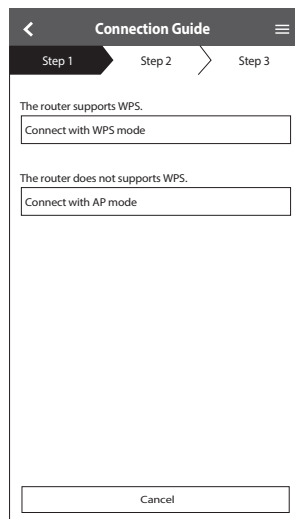
How to use

Setting connection network

- ① Ensure Wireless LAN LED is ON, point the remote control to air conditioner and press Wireless LAN  button until the Wireless LAN LED changed to blinking.
- ② When Wireless LAN LED is blinking, select the preferred connection setup mode.

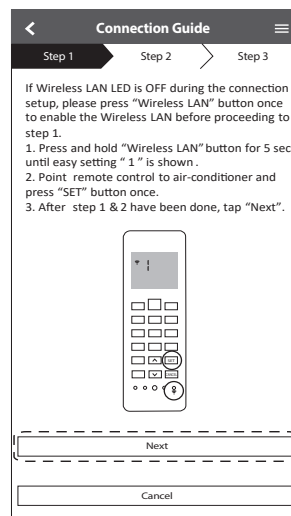
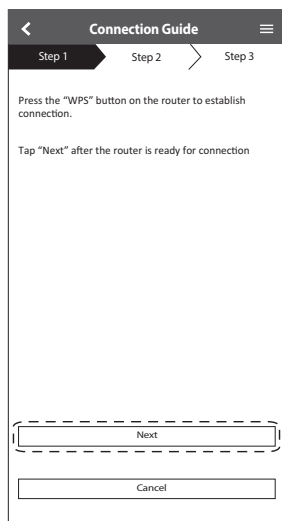


- ③ Select the preferred router support connectivity mode.

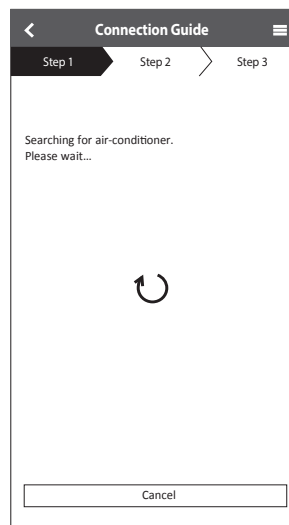
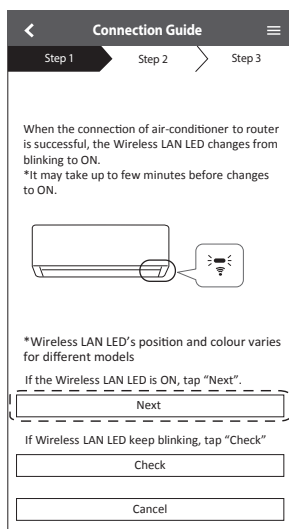


Connection network using WPS mode (method 1)

- ① Press the "WPS" button from the router that will be connected to an air conditioner.
 - Check the status of Wireless LAN LED on the remote control. If the Wireless LAN LED is OFF, press the Wireless LAN button to enable the Wireless LAN connection.
- ② Ensure Wireless LAN LED is ON. Press and hold the Wireless LAN button for 5 seconds until "1" is shown on the remote control and press **SET** pointing to the air conditioner.



- ③ When the connection of air conditioner to router is successful, the Wireless LAN LED changed from blinking to ON.
- ④ If the Wireless LAN LED keep blinking, check the wireless router connection.






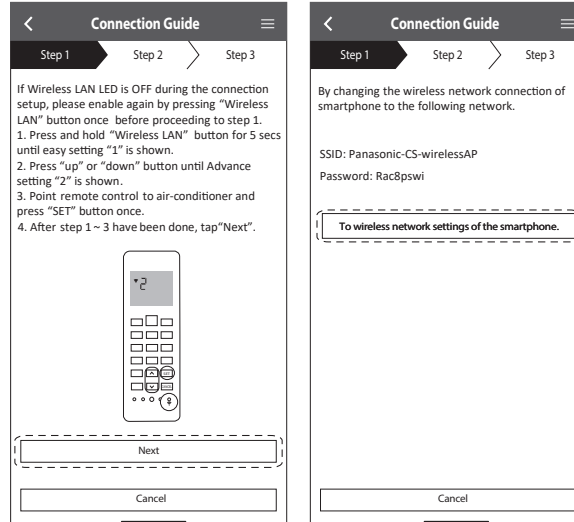
English

How to use

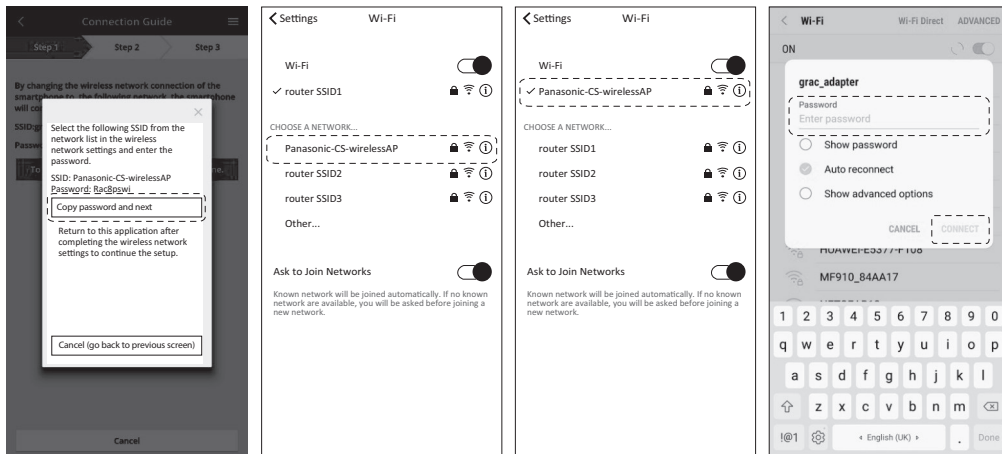
How to use

Connection network using AP mode (method 2)

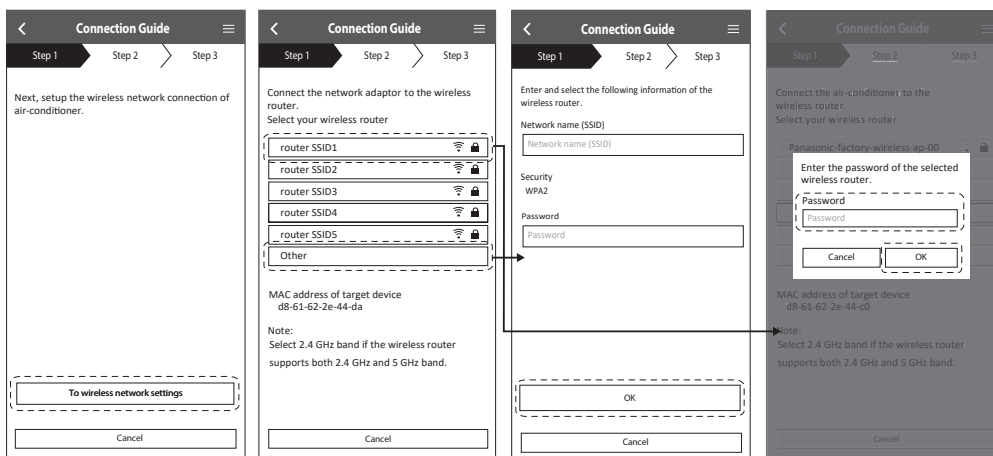
- ① Ensure Wireless LAN LED is ON. Press and hold the Wireless LAN  button for 5 seconds until "1" is shown on the remote control.
Press  until "2" is shown on the remote control and press  pointing to the air conditioner.



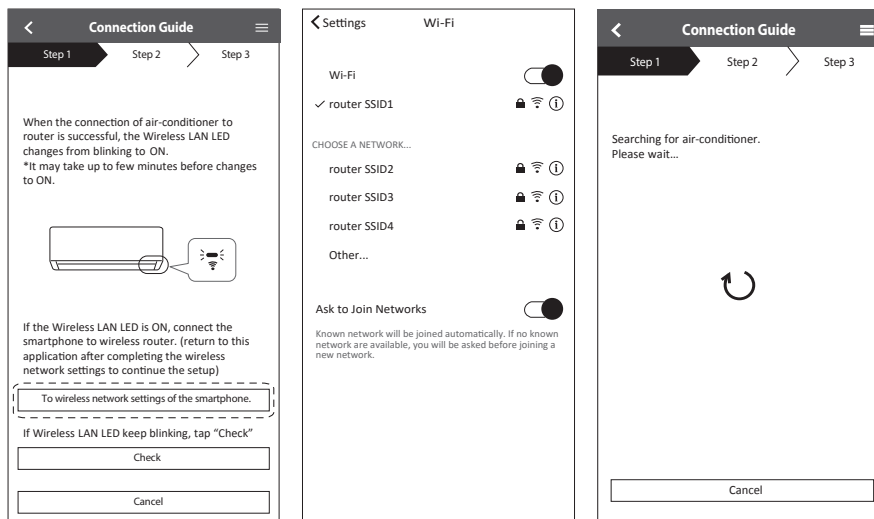
- ② Copy the password for later use. Select "Panasonic-CS-wirelessAP" from smartphones Wireless LAN setting and enter the copied password. Return to "Panasonic Comfort Cloud" app.



- ③ Select the SSID of your wireless router. Enter the password to connect the air conditioner to the wireless router.



- ④ When connection of air conditioner to router is successful, the Wireless LAN LED will be changed from blinking to ON. If the Wireless LAN LED is ON, connect the smartphone to wireless router. (return to this application after completing the wireless network settings to continue the setup)
- If the Wireless LAN LED keep blinking, check the wireless router connection.



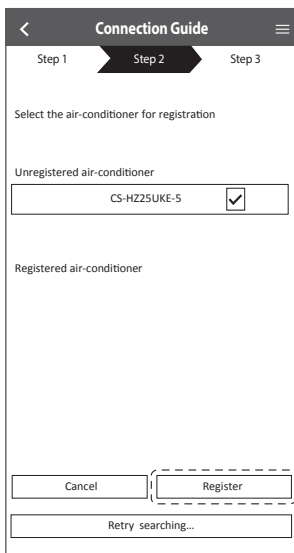
English

How to use

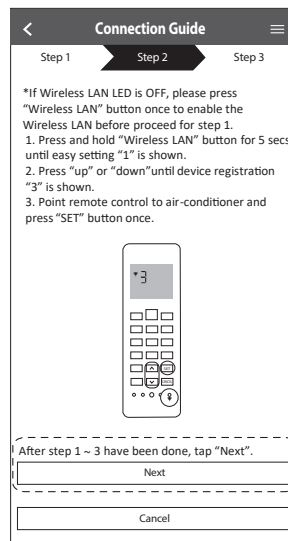
How to use

Select the air-conditioner and set the password

- ① Select the air conditioner model to register the device.



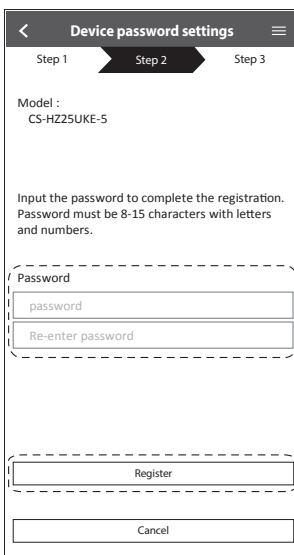
- ② Set a password for new air conditioner model to complete the registration.



- ③ Password must be 8-15 characters with letters and number.

Note

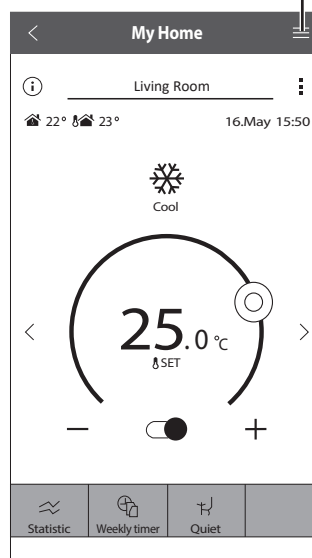
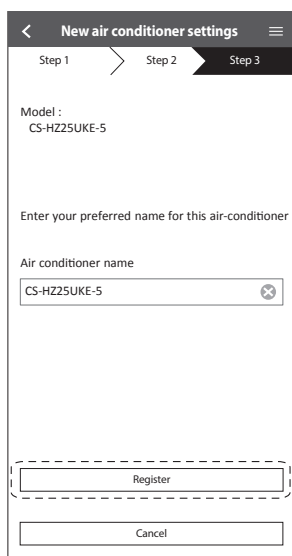
- Keep password for future used on additional user registration.



Registration completed

- ① Once connection is established between the app and the new air conditioner through the registration process, set the preferred name for this air conditioner to help identify it.
 - By registered the new name of air conditioner, the function of “Panasonic Comfort Cloud” app is ready to be used.
- ② Beside operation control, this application can monitor the estimated energy consumption and do comparison for different time frame by referring to the statistic's graph.

User's manual can be found under Menu tab.




English

How to use





How to use

Network Adaptor Q & A







Initial setting

"Panasonic Comfort Cloud" app cannot be installed in smartphone.	Check if OS of the smartphone is compatible. The APP is not guaranteed to work with all versions of Android OS.
Air conditioner and router cannot be connected.	Ensure the router's LAN signal reaches the unit, the SSID is not hidden, the MAC address setup is enabled for the unit, the router's dual band signal is enabled for 2.4GHz connection. There is a possibility that you are using a smartphone or wireless router that is not supported or connection method is different. Refer to the smartphone and router installation manual for detail.
Register additional air conditioner to "Panasonic Comfort Cloud" app.	Set the additional unit setting follow to the first unit initial setup. It is recommended to name each of the registered air conditioner units for easy to distinguish.
Register additional user to control the Network Adaptor.	Download "Panasonic Comfort Cloud" app and create new Panasonic ID. Follow initial setting. Once the air conditioner is registered, input the preset device password (set by first user). Approval from administrator (first user) is required to complete the registration. For administrator approval, select the  Menu. Choose "Owner" and select "User List" to approve additional user.

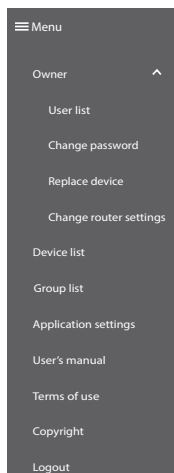
Wireless connection

Wireless signal is disconnected or interrupted.	There is a possibility of connection network is not stable. Check the signal strength by:- <ul style="list-style-type: none"> • Confirm the air conditioner operation is stopped and press the Wireless LAN  button for 5 seconds. ("1" is displayed) • Press the  button until "4" is displayed. • Press the  button and operation stops. • After 5 seconds, the signal strength is shown on the indoor unit Wireless LAN LED. Strong: Blink 3 times with an interval Moderate: Blink 2 times with an interval Weak: Blink once with an interval No signal: OFF • It will stop automatically after 10 minutes. To stop immediately, press the Wireless LAN  button.
Suspicious unauthorized access to the unit.	<ul style="list-style-type: none"> • Reset the air conditioner unit to manufacturing default condition by referring to "To transfer or dispose the air conditioner" method at next page. Complete by initial connection setup.

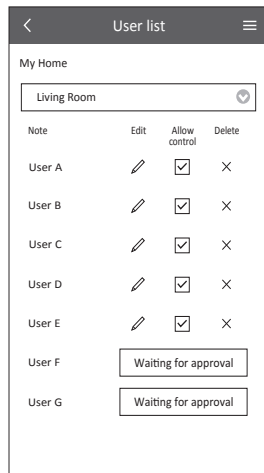
Others

Replacement of router.	From “Panasonic Comfort Cloud” app, select  . Choose “Owner” and select “Change router settings”.
Change of smartphone’s model.	Ensure the smartphone compatability. Install “Panasonic Comfort Cloud” app and login using your Panasonic login ID and password. Complete by initial connection setup.
Change of control board of the indoor unit.	Change the control board and then, use “Panasonic Comfort Cloud” app to select  . Choose “Owner” and “Replace device”. This shall be performed by authorized service dealer.
Change of Network Adaptor/Wireless LAN module of indoor unit.	Change the Network Adaptor/Wireless LAN module and then, use “Panasonic Comfort Cloud” app to select  . Choose “Owner” and “Change router settings”. This shall be performed by authorized service dealer.
To transfer or dispose the air conditioner.	<p>Reset the air conditioner unit to manufacturing default condition.</p> <ul style="list-style-type: none"> • Confirm the Wireless LAN LED of the indoor unit is ON/blinking and press the Wireless LAN  button for 5 seconds. (“1” is displayed) • Press the  button until “5” is displayed. • Press the  button for 3 seconds and operation stops. • The Wireless LAN LED will light off. (Factory reset complete) <p>To unregister the air conditioner unit from “Panasonic Comfort Cloud” app, select the Menu and choose “Device list” to delete the set unit.</p>

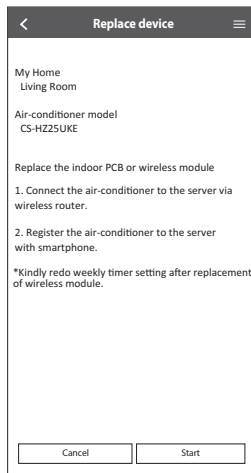
Main Menu



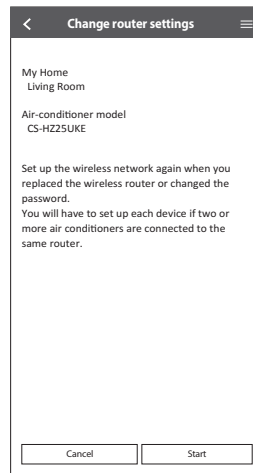
User List



Replace device



Change router setting



English

How to use

To learn more...

Operation mode

- HEAT** : The POWER indicator blinks at the initial stage of this operation. Unit takes a while to warm up.
- For system which HEAT mode has been locked, if operation mode other than HEAT is selected, the indoor unit stops and the POWER indicator blinks.
 - Unit may stop warm air supply for device. The device indicator ON during this operation.
- COOL** : Provides efficient comfort cooling to suit your needs.
- DRY** : Unit operates at low fan speed to give a gentle cooling operation.
- FAN** : To circulate air in the room.
- AUTO** : During operation, the POWER indicator will blink at initial. Unit selects operation mode every 10 minutes according to the setting and room temperatures.

Energy saving temperature setting

Operating the unit within the recommended temperature range may save energy.

HEAT : 20.0 °C ~ 24.0 °C / 68 °F ~ 75 °F.

COOL : 26.0 °C ~ 28.0 °C / 79 °F ~ 82 °F.

Air flow direction

In COOL/DRY mode:

If AUTO is set, the flap swings left/right and up/down automatically.

In HEAT mode:

If AUTO is set, the horizontal flap is fixed at the predetermined position.

Auto restart control

If power is resumed after a power failure, the operation will restart automatically after a period of time with previous operation mode and airflow direction.

- This control is not applicable when TIMER is set.

Operating conditions

Use this air conditioner in the temperature range indicated in the table.

Temperature °C (°F)		Indoor		Outdoor	
		DBT	WBT	DBT	WBT
COOL	Max.	32 (89.6)	23 (73.4)	43 (109.4)	26 (78.8)
	Min.	16 (60.8)	11 (51.8)	-15 (5.0)	11 (51.8)
HEAT	Max.	30 (86.0)	-	24 (75.2)	18 (64.4)
	Min.	16 (60.8)	-	-25 (-13.0)	-
+8/15°C HEAT	Max.	15 (59.0)	-	-	-
	Min.	8 (46.4)	-	-25 (-13.0)	-

DBT : Dry bulb temperature, WBT : Wet bulb temperature

Cleaning instructions

To ensure optimal performance of the unit, cleaning has to be carried out at regular intervals. Dirty unit may cause malfunction and you may see error code "H 99". Please consult authorised dealer.

- Switch off the power supply and unplug before cleaning.
- Do not touch the aluminium fin, sharp parts may cause injury.
- Do not use benzine, thinner or scouring powder.
- Use only soap (\sim pH 7) or neutral household detergent.
- Do not use water hotter than 40 °C / 104 °F.

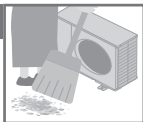
Indoor unit

Wipe the unit gently with a soft, dry cloth.
Coils and fans should be cleaned periodically by authorised dealer.

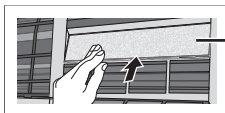


Outdoor unit

Make sure the air outlet of the outdoor unit is not blocked by fallen leaves or snow.
Clear any blockage from drain pipe.



Air Purifying Filter



Air Purifying Filter

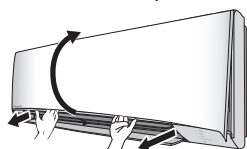
- Do not wash the air purifying filter.
- Replace the filter every 10 years or replace any damaged filter. Part no.: CZ-SA32P

Front panel

Wash gently and dry.

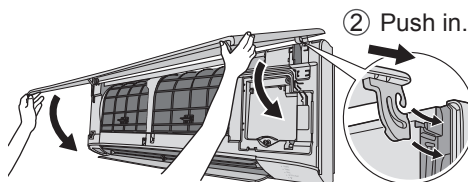
Remove the front panel

- ② Pull out and lift up.



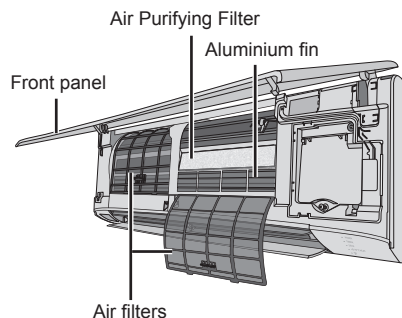
- ① Release the hooks at both ends.

Close it securely



- ③ Close down.
- ④ Press both ends and center of the front panel.

Indoor unit



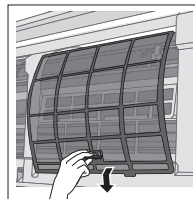
Air filters

Once every 2 weeks

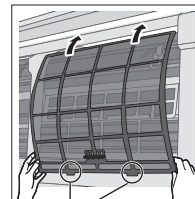


- Wash/rinse the filters gently with water to avoid damage to the filter surface.
- Dry the filters thoroughly under shade, away from fire or direct sunlight.
- Replace any damaged filters.

Remove air filter



Attach air filter




Insert into the unit

English

To learn more... / Cleaning instructions

Troubleshooting

The following symptoms do not indicate malfunction.

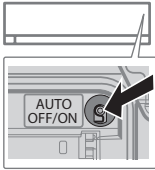
Symptom	Cause
POWER indicator blinks before the unit is switched on.	<ul style="list-style-type: none"> This is a preliminary step in preparation for the operation when the ON timer has been set. When ON Timer is set, the unit may start earlier (up to 35 minutes) before the actual set time in order to achieve the desired temperature on time.
POWER indicator blinks during HEAT mode with no warm air supply (and flap is closed).	<ul style="list-style-type: none"> The unit is in defrost mode (and AIR SWING is set to AUTO).
POWER indicator blinks and stops when operate COOL/DRY mode.	<ul style="list-style-type: none"> The system has locked to operate in HEAT mode only.
TIMER indicator is always on.	<ul style="list-style-type: none"> The timer setting repeats daily once set.
Operation is delayed a few minutes after restarting.	<ul style="list-style-type: none"> The delay is a protection to the unit's compressor.
Cooling/heating capacity reduced during the lowest fan speed setting.	<ul style="list-style-type: none"> The low fan speed is low noise priority operation, so cooling/heating capacity may be reduced (depending on the condition). Increase the Fan Speed to increase the capacity.
Indoor fan stops occasionally during heating operation.	<ul style="list-style-type: none"> To avoid unintended cooling effect.
Indoor fan stops occasionally during automatic fan speed setting.	<ul style="list-style-type: none"> This helps to remove the surrounding odour.
Airflow continues even after operation has stopped.	<ul style="list-style-type: none"> Extraction of remaining heat from the indoor unit (maximum 30 seconds).
During deice operation, flap is closed.	<ul style="list-style-type: none"> The AIR SWING is set to AUTO.
The room has a peculiar odour.	<ul style="list-style-type: none"> This may be due to damp smell emitted by the wall, carpet, furniture or clothing.
Cracking sound during operation.	<ul style="list-style-type: none"> Changes of temperature caused the expansion/contraction of the unit.
Water flowing sound during operation.	<ul style="list-style-type: none"> Refrigerant flow inside the unit.
Mist emerges from indoor unit.	<ul style="list-style-type: none"> Condensation effect due to cooling process.
Outdoor unit emits water/steam.	<ul style="list-style-type: none"> Condensation or evaporation occurs on pipes.
Discoloration of some plastic parts.	<ul style="list-style-type: none"> Discoloration is subject to material types used in plastic parts, accelerated when exposed to heat, sun light, UV light or environmental factor.
Wireless LAN LED stays ON during unit turn OFF.	<ul style="list-style-type: none"> Unit's wireless LAN connection with the router is activated.
Wireless LAN LED continuously blinks.	<ul style="list-style-type: none"> Unit's wireless LAN connection with the router is not established. Please recheck your connection. If you do not want to use the APP, press  to turn off.

Check the following before calling for servicing.

Symptom	Check
Operation in HEAT/COOL mode is not working efficiently.	<ul style="list-style-type: none"> Set the temperature correctly. Close all doors and windows. Clean or replace the filters. Clear any obstruction at the air inlet and air outlet vents.
Noisy during operation.	<ul style="list-style-type: none"> Check if the unit has been installed at an incline. Close the front panel properly.
Remote control does not work. (Display is dim or transmission signal is weak.)	<ul style="list-style-type: none"> Insert the batteries correctly. Replace weak batteries.
The unit does not work.	<ul style="list-style-type: none"> Check if the circuit breaker is tripped. Check if timers have been set.
The unit does not receive the signal from the remote control.	<ul style="list-style-type: none"> Make sure the receiver is not obstructed. Certain fluorescent lights may interfere with signal transmitter. Please consult authorised dealer.

When...

■ The remote control is missing or a malfunction has occurred



1. Raise the front panel.
2. Press the button once to use in AUTO mode.
3. Press and hold the button until you hear 1 beep, then release to use in forced COOL mode.
4. Repeat step 3. Press and hold the button until you hear 2 beeps, then release to use in normal COOL mode.
5. Repeat step 4. Press and hold the button until you hear 3 beeps, then release to use in forced HEAT mode.
6. Press the button again to turn off.

■ The indicators are too bright

- To dim or restore the unit's indicator brightness, press  and hold for 5 seconds.

■ Conducting a seasonal inspection after extended non-use

- Check the remote control batteries.
- Check that there is no obstruction around the air inlet and outlet vents.
- Use Auto OFF/ON button to select COOL/HEAT operation. After 15 minutes of operation, it is normal to have the following temperature difference between the air inlet and outlet vents:

COOL: $\geq 8^{\circ}\text{C} / 14.4^{\circ}\text{F}$ HEAT: $\geq 14^{\circ}\text{C} / 25.2^{\circ}\text{F}$

■ The units are not going to be used for a long period of time

- Activate HEAT mode for 2~3 hours to remove moisture left in the internal parts thoroughly to prevent mould growth.
- Turn off the power supply and unplug.
- Remove the remote control batteries.

NON SERVICEABLE CRITERIAS

TURN OFF THE POWER SUPPLY AND UNPLUG then please consult an authorised dealer when in following conditions:

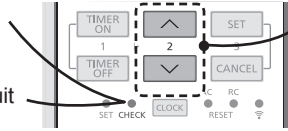
- Abnormal noise during operation.
- Water/foreign particles have entered the remote control.
- Water leaks from Indoor unit.
- Circuit breaker switches off frequently.
- Power cord becomes unnaturally warm.
- Switches or buttons are not functioning properly.

Troubleshooting

How to retrieve error codes

If the unit stops and the TIMER indicator blinks, use the remote control to retrieve the error code.

- ① Press for 5 seconds
- ② Press until you hear beep sound, then write down the error code
- ③ Press for 5 seconds to quit checking
- ④ Turn the unit off and reveal the error code to authorised dealer



• For certain errors, you may restart the unit for limited operation if there are 4 beeps when operation starts.

Diagnostic display	Abnormality/Protection control	Diagnostic display	Abnormality/Protection control
H 00	No memory of failure	H 41	Abnormal wiring or piping connection
H 11	Indoor/outdoor abnormal communication	H 50	Ventilation fan motor locked
H 12	Indoor unit capacity unmatched	H 51	Ventilation fan motor locked
H 14	Indoor intake air temperature sensor abnormality	H 52	Left-right limit switch fixing abnormality
H 15	Outdoor compressor temperature sensor abnormality	H 58	Indoor gas sensor abnormality
H 16	Outdoor current transformer (CT) abnormality	H 59	Eco sensor abnormality
H 17	Outdoor suction temperature sensor abnormality	H 64	Outdoor high pressure sensor abnormality
H 19	Indoor fan motor mechanism lock	H 67	nanoe abnormality
H 21	Indoor float switch operation abnormality	H 70	Light sensor abnormality
H 23	Indoor heat exchanger temperature sensor 1 abnormality	H 71	DC cooling fan inside control board abnormality
H 24	Indoor heat exchanger temperature sensor 2 abnormality	H 72	Abnormality tank temperature sensor
H 25	Indoor ion device abnormality	H 85	Abnormal communication between indoor & wireless LAN module
H 26	Minus ION abnormality	H 97	Outdoor fan motor mechanism lock
H 27	Outdoor air temperature sensor abnormality	H 98	Indoor high pressure protection
H 28	Outdoor heat exchanger temperature sensor 1 abnormality	H 99	Indoor operating unit freeze protection
H 30	Outdoor discharge pipe temperature sensor abnormality	F 11	4-way valve switching abnormality
H 31	Abnormal swimming pool sensor	F 16	Total running current protection
H 32	Outdoor heat exchanger temperature sensor 2 abnormality	F 17	Indoor standby units freezing abnormality
H 33	Indoor/outdoor misconnection abnormality	F 18	Dry circuit blocked abnormality
H 34	Outdoor heat sink temperature sensor abnormality	F 87	Control box overheat protection
H 35	Indoor/outdoor water adverse current abnormality	F 90	Power factor correction (PFC) circuit protection
H 36	Outdoor gas pipe temperature sensor abnormality	F 91	Refrigeration cycle abnormality
H 37	Outdoor liquid pipe temperature sensor abnormality	F 93	Outdoor compressor abnormal revolution
H 38	Indoor/outdoor mismatch (brand code)	F 94	Compressor discharge pressure overshoot protection
H 39	Abnormal indoor operating unit or standby units	F 95	Outdoor cooling high pressure protection
		F 96	Power transistor module overheating protection
		F 97	Compressor overheating protection
		F 98	Total running current protection
		F 99	Outdoor direct current (DC) peak detection

34 * Some error code may not be applicable to your model. Consult authorised dealer for clarification.

Information

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



Your product is marked with this symbol. This symbol means that electrical and electronic products shall not be mixed with unsorted household waste. Do not try to dismantle the system yourself: the dismantling of the product and of other parts must be done by a qualified installer in accordance with relevant local and national legislation.

Product and waste must be treated at a specialized treatment facility for re-use, recycling and recovery.

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should 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 these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

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



For business users in the European Union

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 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.



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.



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 that there is information included in the Operation Instructions and/or Installation Instructions.

English

Troubleshooting / Information

Information

Firmware Update Function

This product has functionality for connecting to the Panasonic firmware update server over the Internet to automatically update the device firmware to the latest version.

To update the firmware, the device will do check, once per day, whether its firmware is the latest version after power up. And if an update is required, the update is applied and the device restarts automatically. Operations are not possible while the device is being restarted (which takes about 1-5 minutes).

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mbedTLS

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