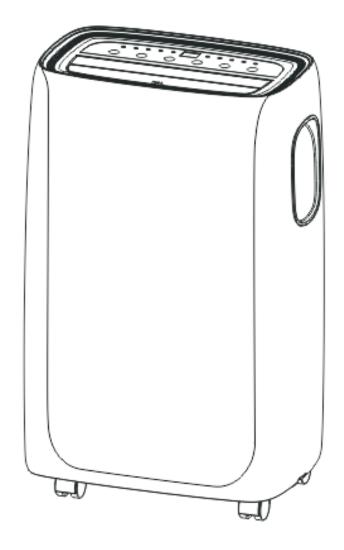
SVan

Portable Air Conditioner User Manual



SVAN212PF / SVAN212PBL

Thank you for selecting our quality appliance. Please be sure to read this user manual carefully before using. Any question, please contact the professional service for help.

This appliance is intended for domestic use only.

IMPORTANT SAFEGUARDS

- Disconnect the appliance from its power source during service and when replacing parts and cleaning.
- The appliance shall not be installed in the laundry.
- Please note: Check the nameplate for the type of refrigerant gas used in your appliance.
- Specific information regarding appliances with refrigerant gas.

The appliance is recommended not to pierce the cooling circuit of the machine. At the end of its useful life, deliver the appliance to a special waste collection centre for disposal.

GWP(Global Warming Potential): R410A: 2088, R134a: 1430, R290: 3, R32: 675.

- This hermetically sealed system contains fluoridated greenhouse gases.
- ENVIRONMENTAL INFORMATION: This unit contains fluoridated greenhouse gases covered by the Kyoto Protocol.
- Do not use this unit for functions other than those described in this instruction manual.
- Make sure the plug is plugged firmly and completely into the outlet. It can result in the risk of electric shock or fire.
- Do not plug other appliances into the same outlet, it can result in the risk of electric shock.
- Do not disassemble or modify the appliance or the power cord, it can result in the risk of electric shock or fire. All other services should be referred to a qualified technician.
- Do not place the power cord or appliance near a heater, radiator, or other heat source. It can result in the risk of electric shock or fire.
- This unit is equipped with a cord that has a earthed wire connected to an earthed pin or grounding tab.

 The plug must be plugged into a socket that is properly installed and earthed. Do not under any circumstances cut or remove the earthed pin or grounding tab from this plug.
- The unit should be used or store in such a way that it is protected from moisture e.g. condensation, splashed water, etc. Unplug unit immediately if this occurs.
- Always transport your appliance in a vertical position and place on a stable, level surface during use. If the unit is transported laying on its side it should be stood up and left unplugged for 6 hours.
- Always use the switch on the control panel or remote control to turn the unit off, and do not start or stop operation by plugging in or unplugging the power cord. It can result in the risk of electric shock.
- Do not touch the buttons on the control panel with your wet and damp fingers.
- Do not use hazardous chemicals to clean or come into contact with the unit. To prevent damage to the surface finish, use only a soft cloth to clean the appliance. Do not use wax, thinner, or a strong detergent. Do not use the unit in the presence of inflammable substance or vapour such as alcohol, insecticides, gasoline, etc.

- If the appliance is making unusual sounds or is emitting smoke or an unusual odor, unplug it immediately.
- Do not clean the unit with water. Water can enter the unit and damage the insulation, creating a shock hazard. If water enters the unit, unplug it immediately and contact Customer Service.
- Utilize two or more people to lift and install the unit.
- Always grasp the plug when plugging in or unplugging the appliance. Never unplug by pulling on the cord. It can result in the risk of electrical shock and damage.
- Install the appliance on a sturdy, level floor capable of supporting up to 110lbs(50kg). Installation on a
 weak or unlevel floor can result in the risk of property damage and personal injury.
- If the appliance have the Wi-Fi function, the transmission power: less than 20dBm, and the radio frequency range is: 2412MHz-2472MHz.
- The appliance is compliant with the RE Directive (2014/53/EU).

According the EN standard:

- 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.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.
- The appliance shall be installed in accordance with national wiring regulations.
- When the fuse is blown/circuit breaker is tripped, check the house fuse/circuit breaker box and replace fuse or reset breaker
- Details of type and rating of fuses: T; 3.15A; 250VAC.

According the IEC standard:

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

• The appliance shall be installed in accordance with national wiring regulations.

Specific information regarding appliances with R290 refrigerant gas

- Thoroughly read all of the warnings.
- When defrosting and cleaning the appliance, do not use any tools other than those recommended by the manufacturing company.
- The appliance must be placed in an area without any continuous sources of ignition (for example: open flames, gas or electrical appliances in operation).
- Do not puncture and do not burn.
- Refrigerant gases can be odourless.
- The appliance must be installed, used and stored in an area that is greater than 13 m².
- R290 is a refrigerant gas that complies with the European directives on the environment. Do not
 puncture any part of the refrigerant circuit.
- If the appliance is installed, operated or stored in a non-ventilated area, the room must be designed to prevent the accumulation of refrigerant leaks resulting in a risk of fire or explosion due to ignition of the refrigerant caused by electric heaters, stoves, or other sources of ignition.
- The appliance must be stored in such a way as to prevent mechanical failure.
- Individuals who operate or work on the refrigerant circuit must have the appropriate certification issued by an accredited organization that ensures competence in handling refrigerants according to a specific evaluation recognized by associations in the industry.
- Repairs must be performed based on the recommendations from the manufacturing company.
- Maintenance and repairs that require the assistance of other qualified personnel must be performed under the supervision of an individual specified in the use of flammable refrigerants.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) or other potential ignition sources (for example an operating electric heater, hot surfaces).
- All the work men who are engaging in the refrigeration system should bear the valid certification awarded by the authoritative organization and the qualification for dealing with the refrigeration system recognized by this industry. If it needs other technician to maintain and repair the appliance, they should be supervised by the person who bears the qualification for using the flammable refrigerant.
- It can only be repaired by the method suggested by the equipment's manufacturer.

- Do not pierce or burn.
- Be aware that the refrigerants may not contain an odour.
- Compliance with national gas regulations shall be observed.
- Keep ventilation openings clear of obstruction.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- A warning that the appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Any 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 recognized 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.
- Appliance should be installed, operated and stored in a room with a floor area larger than the one indicated in the chart .

Quantity of R290 gas in charge (see rating label on the appliance) (g)	Minimum size of the site for use and storage (m²)
m<152	4
152≦m≦185	9
186≦m≦225	11
226≦m≦270	13
271≦m≦290	14



WARNING: System contains refrigerant under very high pressure. The system must be serviced by qualified persons only.

1. Transport of equipment containing flammable refrigerants (Annex CC.1)

Compliance with the transport regulations.

2. Marking of equipment using signs (Annex CC.2)

Compliance with local regulations.

3. Disposal of equipment using flammable refrigerants (Annex CC.3)

Compliance with national regulations.

4. Storage of equipment/appliances (Annex CC.4)

The storage of equipment should be in accordance with the manufacturer's instructions.

5. Storage of packed (unsold) equipment (Annex CC.5)

Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge.

The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

6. Information on servicing (Annex DD.3)

1) Checks to the area

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 following precautions shall be complied with prior to conducting work on the system.

2) Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

3) General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

4) 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.

5) Presence of fire extinguisher

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

6) No ignition sources

No person carrying out work in relation to a refrigeration 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. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which lammable 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.

7) 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.

8) Checks to the refrigeration 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 charge size 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;
- Refrigeration 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 suitably protected against being so corroded.

9) Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. 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. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- 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.
- 7. Repairs to sealed components (Annex DD.4)
- 1) 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.

2) 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.

8. Repair to intrinsically safe components (Annex DD.5)

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. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

9. Cabling (Annex DD.6)

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.

10. Detection of flammable refrigerants (Annex DD.7)

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

11. Leak detection methods (Annex DD.8)

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants.

Electronic leak detectors shall 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 suitable for use with most refrigerants but 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. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

12. Removal and evacuation (Annex DD.9)

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 again 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 "flushed" with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing 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 ignition sources and there is ventilation available.

13. Charging procedures (Annex DD.10)

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 minimise the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration 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 overfill the refrigeration system.

Prior to recharging the system it shall be pressure tested with OFN. 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.

14. Decommissioning (Annex DD.11)

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. 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 reclaimed 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 manufacturer's instructions.
- h) Do not overfill cylinders. (No more than 80 % volume liquid charge).

- 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 refrigeration system unless it has been cleaned and checked.

15. Labelling (Annex DD.12)

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.

16. Recovery (Annex DD.13)

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 is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. 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.

Competence of service personnel

General

Special training additional to usual refrigerating equipment repair procedures is required when equipment with flammable refrigerants is affected.

In many countries, this training is carried out by national training organisations that are accredited to teach the relevant national competency standards that may be set in legislation.

The achieved competence should be documented by a certificate.

Training

The training should include the substance of the following:

Information about the explosion potential of flammable refrigerants to show that flammables may be dangerous when handled without care.

Information about potential ignition sources, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.

Information about the different safety concepts:

Unventilated – (see Clause GG.2) Safety of the appliance does not depend on ventilation of the housing. Switching off the appliance or opening of the housing has no significant effect on the safety. Nevertheless, it is possible that leaking refrigerant may accumulate inside the enclosure and flammable atmosphere will be released when the enclosure is opened.

Ventilated enclosure – (see Clause GG.4) Safety of the appliance depends on ventilation of the housing. Switching off the appliance or opening of the enclosure has a significant effect on the safety. Care should be taken to ensure a sufficient ventilation before.

Ventilated room – (see Clause GG.5) Safety of the appliance depends on the ventilation of the room. Switching off the appliance or opening of the housing has no significant effect on the safety. The ventilation of the room shall not be switched off during repair procedures. Information about the concept of sealed components and sealed enclosures according to IEC 60079-15:2010.

Information about the correct working procedures:

- a) Commissioning
- Ensure that the floor area is sufficient for the refrigerant charge or that the ventilation duct is assembled in a correct manner.

- Connect the pipes and carry out a leak test before charging with refrigerant.
- Check safety equipment before putting into service.
- b) Maintenance
- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with flammable refrigerants.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark. The standard procedure to short circuit the capacitor terminals usually creates sparks.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.
- Check safety equipment before putting into service.
- c) Repair
- Portable equipment shall be repaired outside or in a workshop specially equipped for servicing units with flammable refrigerants.
- Ensure sufficient ventilation at the repair place.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- When brazing is required, the following procedures shall be carried out in the right order:
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- · Evacuate the refrigerant circuit.
- Purge the refrigerant circuit with nitrogen for 5 min.
- Evacuate again.
- Remove parts to be replaced by cutting, not by flame.
- Purge the braze point with nitrogen during the brazing procedure.
- · Carry out a leak test before charging with refrigerant.
- Reassemble sealed enclosures accurately. If seals are worn, replace them.

- Check safety equipment before putting into service.
- d) Decommissioning
- If the safety is affected when the equipment is putted out of service, the refrigerant charge shall be removed before decommissioning.
- Ensure sufficient ventilation at the equipment location.
- Be aware that malfunction of the equipment may be caused by refrigerant loss and a refrigerant leak is possible.
- Discharge capacitors in a way that won't cause any spark.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- · Evacuate the refrigerant circuit.
- Purge the refrigerant circuit with nitrogen for 5 min.
- · Evacuate again.
- Fill with nitrogen up to atmospheric pressure.
- Put a label on the equipment that the refrigerant is removed.
- e) Disposal
- Ensure sufficient ventilation at the working place.
- Remove the refrigerant. If the recovery is not required by national regulations, drain the refrigerant to the outside. Take care that the drained refrigerant will not cause any danger. In doubt, one person should guard the outlet. Take special care that drained refrigerant will not float back into the building.
- Evacuate the refrigerant circuit.
- Purge the refrigerant circuit with nitrogen for 5 min.
- Evacuate again.
- Cut out the compressor and drain the oil.

IMPORTANT - GROUNDING METHOD

This product is factory equipped with a power supply cord that has a three-pronged grounded plug. It must be plugged into a mating grounding type receptacle in accordance with the National Electrical Code and applicable local codes and ordinances. If the circuit does not have a grounding type receptacle, it is the responsibility and obligation of the customer to exchange the existing receptacle in accordance with the National Electrical Code and applicable local codes and ordinances. The third ground prong should not, under any circumstances, be cut or removed. Never use the cord, the plug or the appliance when they show any sign of damage. Do not use your appliance with an extension cord unless it has been checked and tested by a qualified electrical supplier. Improper connection of the grounding plug can result in risk of fire, electric shock and/or injury to persons associated with the appliance. Check with a qualified service representative if in doubt that the appliance is properly grounded.

ELECTRICAL CONNECTIONS

Before plugging the appliance into the mains socket, check that:

- The mains power supply corresponds to the value indicated on the rating plate on the back of the appliance.
- The power socket and electrical circuit are adequate for the appliance.
- The mains socket matches the plug. If this is not the case, have the plug replaced.
- The mains socket is adequately earthed. Failure to follow these important safety instructions absolves the manufacturer of all liability.

Important information for correct disposal of the product in accordance with EC Directive 2012/19/EU.



At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service. Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin.

SOME NOTIONS ON HUMIDITY

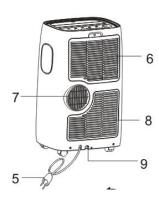
Air always contains a certain amount of water in the form of vapour. This determines the level of humidity in an atmosphere. The capacity of the air to hold water vapour increases with temperature. This is why in our homes, as soon as the temperature decreases, the vapour contained in the air condenses, as is evident on the colder surfaces in the room, such as the windows, walls etc. The purpose of a dehumidifier is to remove the excess moisture from the air, avoiding the damage caused by condensation.

Experts have established that the optimum environmental conditions for our well being and for the home are obtained between 40% and 60% relative humidity. With very low temperatures, you are recommended to heat the room even minimally. This considerably increases the dehumidifying power of the appliance. With heating, the condensation formed by the water vapour on windows and other cold surfaces evaporates into the air to be collected by the dehumidifier. Air leaving the dehumidifier is usually about 1°C-2°C warmer than room temperature.

DESCRIPTION



- 1. Deflector
- 2. Control panel
- 3. Handle (both sides)
- 4. Castors
- 5. Power cable
- 6. Intake grille
- 7. Air outlet grille
- 8. Intake grille
- 9. Condenser drain



ACCESSORIES

PARTS	PARTS NAME	QUANTITY
	Exhaust hose	
	Hose inlet	1 set
	Hose outlet	
	Window slider kit	1 set
	Remote Control	
9 S	Batteries	1 set
	(Two AAA 1.5V)	
	Drain Hose	1 set

Note: All the illustrations in this manual are for explanatory purposes only. Your appliance may be slightly different.

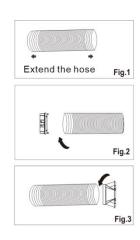
Be sure all accessories are removed from the packing before use.

INSTALLATION INSTRUCTIONS

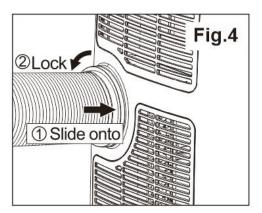
EXHAUSTING HOT AIR

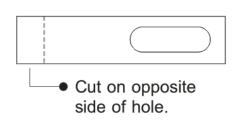
In the Cool Mode the appliance must be placed close to a window or opening so that the warm exhaust air can be ducted outside.

First position unit on a flat floor and make sure there's a minimum of 18"(45cm) clearance around the unit, and is within the vicinity of a single circuit outlet power source.



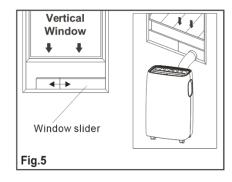
- 1 .Extend either side of the hose (Fig.1)and screw the hose inlet (Fig.2).
- 2 .Extend the other side of the hose and screw it to the hose outlet (Fig.3).
- 3 .Install the hose inlet into the unit (Fig.4).
- 4 .Affix the hose outlet into the window slider kit and seal. (Fig.5 &6).

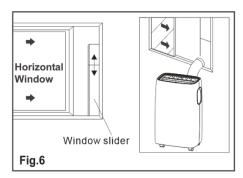




Your window slider kit has been designed to fit most standard vertical and horizontal window applications, however, it may be necessary for you to modify some aspects of the installation procedures for certain types of windows. The window slider kit can be fastened with screws.

NOTE: If the window opening is less than the minimum length of the window slider kit, cut the end without the hold in it short enough to fit in the window opening. Never cut out the hole in window slider kit.





WINDOW SLIDER KIT INSTALLATION

- 1:Parts:
- A) Panel
- B) Panel with one hole
- C) Screw to lock window kit in place
- 2: Assembly:

Slide Panel B into Panel A and size

to widow width. Windows sizes vary. When

sizing the window width, be sure that the window kit assembly is free from gaps from gaps and/or air pockets when taking measurements.

3.Lock the screw into the holes that correspond

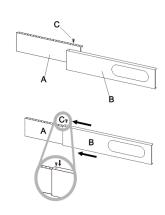
With the width that your window requires to ensure that there are no gaps or air pockets in the window kit assembly after installation.

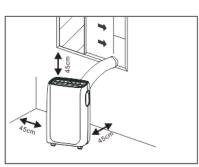
LOCATION

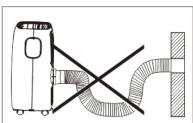
- The unit should be placed on a firm foundation to minimize noise and vibration. For safe and secure
 positioning, place the unit on a smooth, level floor strong
- The unit has casters to aid placement, but it should only be rolled on smooth, flat surfaces. Use caution
 - when rolling on carpeted surfaces. Use caution and Protect floors when rolling over wood floors. Do not
 - attempt to roll the unit over objects.

enough to support the unit.

- The unit must be placed within reach of a properly rated grounded socket.
- Never place any obstacles around the air inlet or outlet of the unit.
- Allow at least 18"(45cm) of around and above space away from the wall for efficient working.
- The hose can be extended, but it is the best to keep the length to minimum required. Also make sure that the hose does not have any sharp bends or sags.





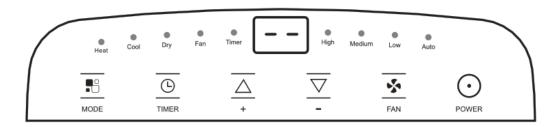


OPERATING FROM THE CONCTROL PANEL

The control panel is on the top of the appliance, enables you to manage part functions without remote controller, but to fully exploit its potential, you must use the remote controller.

TURNING THE APPLIANCE ON

Plug into the mains socket, then the appliance is standby.



Press the \odot button to make the appliance turn on. The last function active when it was turned off will appear.

 $\sqrt{}$ Never turn the appliance off by unplugging from the mains. Always press the button \bigcirc , then wait for a few minutes before unplugging. This allows the appliance to perform a cycle of checks to verify operation.

COOL mode

Ideal for hot muggy weather when you need to cooling and dehumidify the room.

To set this mode correctly:

- Press the 💾 button a number of times until the Cool symbol appears.
- Select the target temperature 18°C-32°C(64°F-90°F) by pressing the ▲ or ▼ button until the corresponding value is displayed.
- Select the required fan speed by pressing the substant.

Four speeds are available: High / Medium / Low / Auto.



The most suitable temperature for the room during the summer varies from 24°C to 27°C(75°F to 81°F). You are recommended, however, not to set a temperature much below the outdoor temperature. The fan speed difference is more noticeable when the appliance is under Fan mode but may not be noticeable under Cool mode.

HEAT mode *

" * " means only the heat pump model have this function.

To set this mode correctly:

- Press the 💾 button a number of times until the Heat symbol appears.
- Select the target temperature 13°C-27°C (55°F-81°F) by pressing the ▲ or ▼ button until the corresponding value is displayed.
- Select the required fan speed by pressing the \$\frac{1}{2}\$ button.

Four speeds are available: High / Medium / Low / Auto.



- Water is removed from the air and collected in the tank.
- When the tank has been emptied, the appliance starts up again.

NOTE: - When operating in very cold rooms, the appliance defreezes automatically, momentarily interrupting normal operation. " L appears on the display. During this operation, it is normal for the noise made by the appliance to change.

- In this mode, you may have to wait for a few minutes before the appliance starts giving out hot air.
- In this mode, the fan may operate for short periods, even though the set temperature has already been reached.

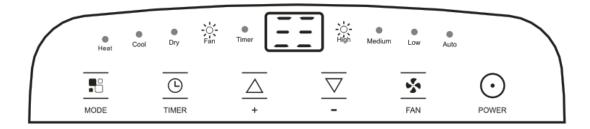
FAN mode

When using the appliance in this mode, the air hose does not need to be attached.

- Press the \blacksquare button a number of times until the Fan symbol appears.
- Select the required fan speed by pressing the specifical button.

Three speeds are available: High / Medium / Low.

The screen display " = = " as high speed, " = = " as medium speed, " = " as low speed.



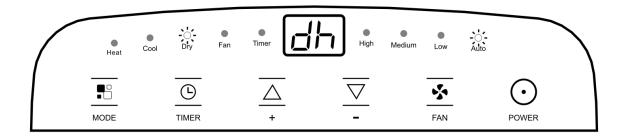
DRY mode

Ideal to reduce room humidity (spring and autumn, damp rooms rainy periods, etc).

In dry mode, the appliance should be prepared in the same way as for cool mode, with the air exhaust hose attached to enable the moisture to be discharged outside.

To set this mode correctly:

- Press the 📲 button a number of times until the Dry symbol appears. The screen display " 💋 🡆 ".
- In this mode, fan speed is selected automatically by the appliance and can not be set manually.



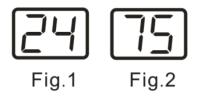
Switch the unit of temperature

When the appliance is running, hold on + and - button together 3 seconds by the same time, then you can change the unit of temperature.

For example:

Before change, in cool mode, the screen display like fig1.

After change, in cool mode, the screen display like fig2.

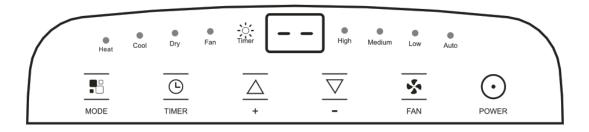


SETTING THE TIMER

-This timer can be used to delay the appliance start-up or shutdown, this avoids wasting electricity by optimizing operating periods.

Programming start up

- Turn on the appliance, choose the mode you want, for example cool, 24°C, high fan speed. Turn off the appliance.
- Press the Timer button, the symbol and number of hours flash.
- Press several times until the corresponding time is displayed. Wait about 5 seconds, the timer will be active, then "Timer" symbol is displayed on screen.
- A few second after set, the setting is memorized, the timer indicator is light and the display shows that the appliance is in standby.



• Press again the Timer button or the \odot button, the timer will be canceled, and the "Timer" symbol will disappear from screen.

Programming shut down

- When the appliance is running, press the () button, the Timer indicator and the hours flash.
- Press several times until the corresponding time is displayed. Wait about 5 seconds, the timer will be active, then "Timer" symbol is displayed on screen.
- A few second after set, the setting is memorized, the timer indicator is light and the display shows the current mode. At the end of the set time the unit automatically turns to standby mode.



• Press again the Timer button or the \odot button, the timer will be canceled, and the "Timer" symbol will disappear from screen.

SELF-DIAGNOSIS

The appliance has a self diagnosis system to identify a number of malfunctions.

Error messages are displayed on the appliance display.

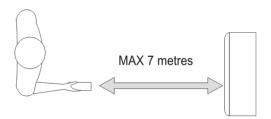
IF IS DISPLAYED	WHAT SHOULD I DO?
LOW TEMPERATURE (frost prevention)	The appliance is fitted with a frost protection device to avoid excessive formation of ice. The appliance starts up again automatically when the defrosting process is completed.
PROBE FAILURE (sensor damaged)	If this is displayed, contact your local authorized service centre.
FULL TANK (safety tank full)	Empty the internal safety tank, following the instructions in the "End of season operations" paragraph.

MANUAL OF REMOTE CONTROL



(h)	On/Off button	ゃ	Fan speed button
^	Increase button		Mode button
V	Decrease button	\Diamond	Swing button
(Timer button	mh_	Sleep button
°C/°F	Unit Switch button		

- $\sqrt{}$ Point the remote control at the receiver on the appliance.
- $\sqrt{\ }$ The remote control must be no more than 7 meters away from the appliance (without obstacles between the remote control and the receiver).
- $\sqrt{}$ The remote control must be handled with extreme care. Do not drop it or expose it to direct sunlight or sources of heat. If the remote control do not work, please try to take out the battery, and put it back.



INSERTING OR REPLACING THE BATTERIES

- Remove the cover on the rear of the remote control;
- Insert two "AAA" 1.5V batteries in the correct position (see instructions inside the battery compartment);



NOTE:

- √ If the remote control unit is replaced or disposed of, the batteries must be removed and discarded in accordance with current legislation as they are harmful to the environment.
- $\sqrt{}$ Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium) batteries.
- √ Do not dispose of batteries in fire. Batteries may explode or leak.
- $\sqrt{}$ If the remote control is not be used for a certain length of time, remove the batteries.

COOL mode

Ideal for hot muggy weather when you need to cooling and dehumidify the room

To set this mode correctly:

- Press the putton a number of times until the "Cool" symbol appears.
- Select the target temperature 18°C-32°C (64°F-90°F) by pressing

The ∧ or ∨ button until the corresponding value is displayed.

Four speeds are available: High / Medium / Low / Auto.

The most suitable temperature for the room during the summer varies from 24°C to $27^{\circ}\text{C}(75^{\circ}\text{F} \text{ to } 81^{\circ}\text{F})$. You are recommended, however, not to set a temperature much below the outdoor temperature. The fan speed difference is more noticeable when the appliance is under FAN mode but may not be noticeable under COOL mode.

HEAT mode *

" * " means only the heat pump model have this function.

To set this mode correctly:

- Press the button a number of times until the "Heat" symbol appears.
- Select the target temperature 13°C-27°C (55°F-81°F) by pressing

the Λ or V button until the corresponding value is displayed.

Select the required fan speed by pressing the

 button.

Four speeds are available: High / Medium / Low / Auto.

- Water is removed from the air and collected in the tank.
- When the tank is full, the appliance shuts down and " F \(\) "(full tank) appears on the display. The tank cap must be extracted and emptied. Run off all water left into a basin. When all the water has been drained, put the cap back in place.
- When the tank has been emptied, the appliance starts up again.
- N.B.: When operating in very cold rooms, the appliance defreezes automatically, momentarily interrupting normal operation. " L be "appears on the display. During this operation, it is normal for the noise made by the appliance to change.
 - In this mode, you may have to wait for a few minutes before the appliance starts giving out hot air.
 - In this mode, the fan may operate for short periods, even though the set temperature has already been reached.

FAN mode

When using the appliance in this mode, the air hose does not need to be attached.

- Press the 🔐 button a number of times until the "Fan" symbol appears.
- Select the required fan speed by pressing the

 button.

Three speeds are available: High / Medium / Low.

DRY mode

Ideal to reduce room humidity (spring and autumn, damp rooms rainy periods, etc).

In dry mode, the appliance should be prepared in the same way as for cool mode, with the air exhaust hose attached to enable the moisture to be discharged outside.

To set this mode correctly:

- Press the 🔐 button a number of times until the "Dry" symbol appears.
- The fan speed is auto fan speed, and can not be changed.

SMART mode

The appliance chooses automatically whether to operate in cool, fan or heat mode(some certain models have not heat mode).

To set this mode correctly:

• Press the \square button a number of times until the screen display like below:



It is SMART mode when the display will be running circulating.

Four speeds are available: High / Medium / Low / Auto.

If the appliance is cooling only model, the unit operates in Fan mode when the room temperature is below 23°C (73°F), and Cool mode when the room temperature is above 23°C(73°F).

If the appliance is cooling and heating model, the unit operates in Heat mode when the room temperature is below 20°C(68°F), and Fan mode when the room temperature is from 20°C (68°F) to 23°C(73°F), and Cool mode when the room temperature is above 23°C (73°F).

SWING function

This function is useful for select the up/down swing of air delivery.

To set this function correctly:

- Select the operating mode (Cool, Dry, Fan) as described above.

SLEEP function

This function is useful for the night as it gradually reduces operation of the appliance.

To set this function correctly:

- Select the cool or heat mode as described above.
- Press the 🚽 button.

The appliance operates in the previously selected mode.

When you choose the sleep function, the screen will reduce the brightness, and the fan speed is low.

The SLEEP function maintains the room at optimum temperature without excessive fluctuations in either temperature or humidity with silent operation. Fan speed is always at Low, while room temperature and humidity vary gradually to ensure the most comfortable.

When in COOL mode, the selected temperature will increase by 1°C(1°F) per hour in a 2 hour period. This new temperature will be maintained for the next 6 hours. Then the appliance turn it off.

When in HEAT mode, the selected temperature will decrease by 1°C(1°F) per hour in a 3 hour period. This new temperature will be maintained for the next 5 hours. Then the appliance turn it off.

The SLEEP function can be canceled at any time during operation by pressing the "Sleep", "Mode" or "fan speed" button.

In FAN or DRY mode, SLEEP function cannot be set.

Switch the unit of temperature

When the appliance is running, press the °C/°F button, then you can change the unit of temperature.

For example:

Before change, in cool mode, the screen display like fig left.

After change, in cool mode, the screen display like fig right.





SETTING THE TIMER

-This timer can be used to delay the appliance startup or shutdown, this avoids wasting electricity by optimising operating periods.

Programming start up

- Turn on the appliance, choose the mode you want, for example cool, 24°C, high fan speed. Turn off the appliance.
- Press the button, the screen will display 1-24 hours.
- Press several times until the corresponding time is displayed. Wait about 5 seconds, the timer will be active, then only the symbol is displayed on screen.
- Press again the button or the button, the timer will be canceled

Programming shut down

- When the appliance is running, press the (button, the screen will display hours.
- Press several times until the corresponding time is displayed. Wait about 5 seconds, the timer will be

active.

• Press again the 🕒 button or the () button, the timer will be canceled, .

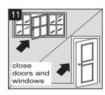
TIPS FOR CORRECT USE

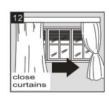
To get the best from your appliance, follow these recommendations:

- Close the windows and doors in the room to be air conditioned (fig. 11). When installing the appliance semi-permanently, you should leave a door slightly open (as little as 1 cm) to guarantee correct ventilation;
- Protect the room from direct exposure to the sun by partially closing curtains and/or blinds to make the appliance much more economical to run (fig. 12);
- Never rest objects of any kind on the appliance;
- •Do not block the air inlet or outlet of the appliance.

Reduced air flow will result in poor performance and could damage the unit (fig. 13).

- Make sure there are no heat sources in the room;
- Never use the appliance in very damp rooms (laundries for example).
- Never use the appliance outdoors.
- Make sure the appliance is standing on a level surface. If necessary, place the castor locks under the front wheels.







WATER DRAINAGE METHOD

When there is excess water condensation inside the unit, the appliance stops running and shows "FL" (FULL TANK as mentioned in SELF-DIAGNOSIS). This indicates that the water condensation needs to be drained using the following procedures:

Manual Draining (fig.24)

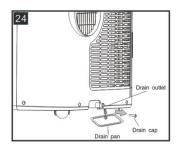
Water may need to be drained in high humidity areas

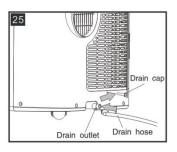
- 1 .Unplug the unit from power source.
- 2. Place a drain pan under the lower drain plug. See diagram.
- 3. Remove the lower drain plug.
- 4. Water will drain out and collect in the drain pan (maybe not supplied).
- 5. After the water is drained, replace the lower drain plug firmly.
- 6.Turn on the unit.

Continuous Draining (fig.25)

While using the unit in dehumidifier mode, continuous drainage is recommended.

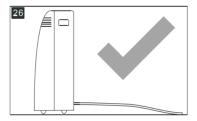
- 1. Unplug the unit from the power source.
- 2. Remove the drain plug. While doing this operation some residual water may spill so please have a pan to collect the water.
- 3. Connect the drain hose (1/2" or 12.7mm, maybe not supplied). See diagram.
- 4. The water can be continuously drained through the hose into a floor drain or bucket.
- 5. Turn on the unit.

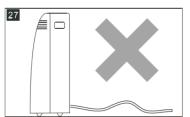




NOTE

Please be sure that the height of and section of the drain hose should not be higher than that of the drain outlet, or the water tank may not be drained. (fig.26 and fig.27)





CLEANING

Before cleaning or maintenance, turn the appliance off by pressing the button on the control panel or remote control, wait for a few minutes then unplug from the mains socket.

CLEANING THE CABINET

You should clean the appliance with a slightly damp cloth then dry with a dry cloth.

- Never wash the appliance with water. It could be dangerous.
- Never use petrol, alcohol or solvents to clean the appliance.
- Never spray insecticide liquids or similar.

CLEANING THE AIR FILTERS

To keep your appliance working efficiently, you should clean the filter every week of operation.

The evaporator filter can take out like below fig.

• To avoid possible cuts, avoid contacting the metal parts of the appliance when removing or re-installing the filter. It can result in the risk of personal injury.



Use a vacuum cleaner to remove dust accumulations from the filter. If it is very dirty, immerse in warm water and rinse a number of times. The water should never be hotter than 40°C(104°F). After washing, leave the filter to dry then attach the intake grille to the appliance.

START-END OF SEASON OPERATIONS

START OF SEASON CHECKS

Make sure the power cable and plug are undamaged and the earth system is efficient.

Follow the installation instructions precisely.

END OF SEASON OPERATIONS

To empty the internal circuit completely of water, remove the cap(fig. 32).

Run off all water left into a basin. When all the water

has been drained, put the cap back in place.

Clean the filter and dry thoroughly before putting back.

TECHNICAL SPECIFICATIONS

Mains voltage see rating label

Maximum power in cooling mode - -

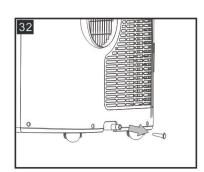
Refrigerant - -

Cooling capacity - -

Strictest operation environment:

Cooling mode: 18°C-35°C (64°F-95°F), 30%RH~90%RH

Heating mode: 10°C-25°C (50°F-77°F), 30%RH~90%RH



TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
The appliance	There is no current	• Wait
does not come on	It is not plugged into the mains	Plug into the mains
	The internal safety device has tripped	Wait 30 minutes, if the problem persists, contact your service center
The appliance	Here are bends in the air exhaust	Position the air exhaust hose
works for a short	hose	correctly, keeping it as short
time only		and free of curves as possible
		to avoid bottlenecks
	Something is preventing the	Check and remove any
	air from being discharged	obstacle
		obstructing air discharge
The appliance	Windows, doors and/or curtains open	Close doors, windows and
works, but does not	Орен	curtains, bearing in mind the
cool the room		"tips for correct use" given
		above
	There are heat sources in the	Eliminate the heat sources
	room (oven, hairdryer, etc)	
	The air exhaust hose is detached	Fit the air exhaust hose in the
from the appliance	housing at the back of the	
		appliance
	The technical specification of	
	the appliance is not adequate for the room in which it is located	
During operation,	Air filter clogged	Clean the filter as described
there is an		above
unpleasant smell in		

the room		
The appliance	The internal compressor safety	Wait. This delay is part of
does not operate for	device prevents the appliance	normal operation
about three minutes	from being restarted until three minutes have elapsed since it	
after restarting it	was last turned off	
The following	The appliance has a self	See the SELF-DIAGNOSIS
message appears on the display:	diagnosis system to identify a number of malfunctions	Chapter
LE/PF/FE		