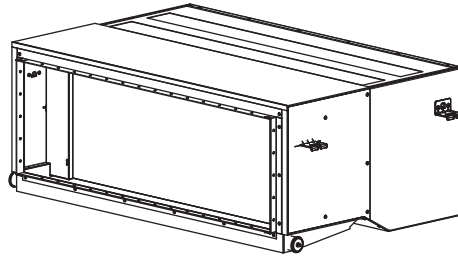


Panasonic®

Operating Instructions Air Conditioner



*Shows E1 type
(Ducted Type)

Model No.

Indoor Units
Ducted Type
S-60PE1R5
S-71PE1R5
S-100PE1R5
S-125PE1R5
S-140PE1R5

Outdoor Units
Single Split
U-60PE1R5
U-71PE1R5
U-100PE1R5
U-125PE1R5
U-140PE1R5



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PRODUCT INFORMATION

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

Model No. _____ Serial No. _____

Date of purchase _____

Dealer's address _____

Phone number _____

SAFETY PRECAUTIONS

The following symbols used in this manual, alert you to potentially dangerous conditions to users, service personnel or the appliance:



WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

INSTALLATION LOCATION

- We recommend that this air conditioner be installed properly by qualified installation technicians in accordance with the Installation Instructions provided with the unit.
- Before installation, check that the voltage of the electric supply in your home or office is the same as the voltage shown on the nameplate.



WARNING

- Do not install this air conditioner where there are fumes or flammable gases, or in an extremely humid space such as a greenhouse.
- Do not install the air conditioner where excessively high heat-generating objects are placed.

Avoid: To protect the air conditioner from heavy corrosion, avoid installing the outdoor unit where salty sea water can splash directly onto it or in sulphurous air near a spa.

ELECTRICAL REQUIREMENTS

1. All wiring must conform to the local electrical codes. Consult your dealer or a qualified electrician for details.
2. Each unit must be properly grounded with a ground (or earth) wire or through the supply wiring.
3. Wiring must be done by a qualified electrician.

The wires in this mains lead are colored in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colors of the wires in the mains lead of this appliance may not correspond with the colored markings identifying the terminals in your plugs, proceed as follows:

The wire which is colored green and yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or colored green or green-and-yellow.

The wire which is colored blue must be connected to the terminal which is marked with letter N or colored black.

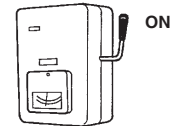
The wire which is colored brown must be connected to the terminal which is marked with the letter L or colored red.



CAUTION

To warm up the system, the power mains must be turned on at least five (5) hours before operation. Leave the power mains ON unless you will not be using this appliance for an extended period.

Power mains












NOTE

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

SAFETY INSTRUCTIONS

- Read these Operating Instructions carefully before using this air conditioner. If you still have any difficulties or problems, consult your dealer for help.
- This air conditioner is designed to give you comfortable room conditions. Use this only for its intended purpose as described in these Operating Instructions.

 WARNING
Confirm to authorized dealer or specialist on usage of specified refrigerant type. Using of refrigerant other than the specified type may cause product damage, burst and injury etc.
Never touch the unit with wet hands.
Never use or store gasoline or other flammable vapor or liquid near the air conditioner — it is very dangerous.
Do not use this appliance in a potentially explosive atmosphere.
This air conditioner has no ventilator for intaking fresh air from outdoors. You must open doors or windows frequently when you use gas or oil heating appliances in the same room, which consume a lot of oxygen from the air. Otherwise there is a risk of suffocation in an extreme case.
Provide a power outlet to be used exclusively for each unit, and a power supply disconnect, circuit breaker and earth leakage breaker for overcurrent protection should be provided in the exclusive line.
Provide a power outlet exclusively for each unit, and full disconnection means having a contact separation in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.
To prevent possible hazards from insulation failure, the unit must be grounded. 
Do not clean inside the indoor and outdoor units by users. Engage authorized dealer or specialist for cleaning.
In case of malfunction of this appliance, do not repair by yourself. Contact to the sales dealer or service dealer for a repair.
Refrigerant gas leakage may cause fire.
For safety, be sure to turn the air conditioner off and also to disconnect the power before cleaning or servicing. 
Pull off the power plug from a receptacle, or switch off the breaker, or switch off the power disconnecting mean to isolate the air conditioner from the main power supply in case of emergency.

 CAUTION
Do not turn the air conditioner on and off from the power mains switch. Use the ON/OFF operation button.
Do not stick anything into the air outlet of the outdoor unit. This is dangerous because the fan is rotating at high speed. 
Do not touch the air inlet or the sharp aluminum fins of the outdoor unit. You may get injured. 
Keep the fire alarm and the air outlet at least 1.5m away from the unit.
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that do not play with the appliance.
Do not cool or heat the room too much if babies or invalids are present.
Do not sit or step on the unit. You may fall down accidentally. 
Do not stick any object into the FAN CASE. You may be injured and the unit may be damaged.  

NOTICE

- The compressor may occasionally stop during thunderstorms. This is not a mechanical failure. The unit automatically recovers after a few minutes.
- The English text is the original instructions. Other languages are translation of the original instructions.



Stop using the product when any abnormality/failure occurs and disconnect the power plug.

(Risk of smoke/fire/electric shock)

Examples of abnormality/failure

- The product sometimes does not start when turned on.
- The power is sometimes disconnected when the cord is moved.
- Burnt odor or abnormal noise is detected during operation.
- The body is deformed or abnormally hot.

Contact immediately your local dealer for maintenance/repair.

INFORMATION

Operation Condition

Use this air conditioner under the following temperature range.

Indoor temperature range:

Cooling mode 14°C ~ 25°C (*WBT) / 18°C ~ 32°C (*DBT)

Heating mode 16°C ~ 30°C (*DBT)

Outdoor temperature range:

Cooling mode -15°C ~ 46°C (*DBT)

Heating mode -20°C ~ 18°C (*WBT) / -20°C ~ 24°C (*DBT)

*DBT: Dry bulb temperature

*WBT: Wet bulb temperature

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



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 and the Directives 2002/96/EC and 2006/66/EC.

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.

Note for the battery symbol (bottom two symbol examples):

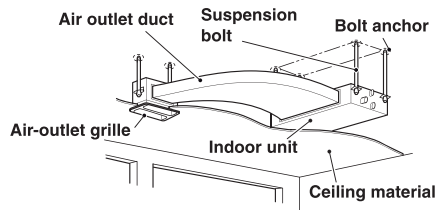
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.



OPERATION

Names of Parts INDOOR UNIT

N1 Ducted Type



Wireless Remote Controller (Optional parts)

NOTE Refer to the Operating Instructions attached to the optional Wireless Remote Controller.

(Wireless type: available for all indoor units)



Timer Remote Controller (Optional parts)

NOTE Refer to the Operating Instructions attached to the optional Timer Remote Controller.

(Wired type: available for all indoor units)



SPECIAL REMARKS

“DRY” Operation

How it works

- Once the room temperature reaches the level that was set, the unit repeats the cycle of turning on and off automatically.
- In order to prevent the humidity in the room from rising again, the indoor fan also turns off when the unit stops operating.
- The fan speed is set to “LO.” automatically, and cannot be adjusted.
- “DRY” operation is not possible if the outdoor temperature is 15 °C or less.

Heating Operation




Heating performance

- Because this appliance heats a room by utilizing the heat of the outside air (heat pump system), the heating efficiency will fall off when the outdoor temperature is very low. If sufficient heat cannot be obtained with this heat pump, use another heating appliance in conjunction with this unit.

Defrosting

- When the outdoor temperature is low, frost or ice may form on the outdoor heat exchanger coil, reducing the heating performance. When this happens, a microcomputer-controlled defrosting system operates. At the same time, the fan on the indoor unit stops (or runs at very low speed in some cases) and the “STANDBY” indicator appears on the display until defrosting is completed. Heating operation then restarts after several minutes. (This interval will vary slightly depending upon the outdoor temperature and the way in which frost forms.)

(standby) on the display

- For several minutes after the start of heating operation, the indoor fan will not start running (or it will run at very low speed in some cases) until the indoor heat exchanger coil has warmed up sufficiently. This is because a cold draft prevention system is operating. During this period, the “” (standby) indicator remains displayed.
- “” (standby) remains displayed during defrosting or when the compressor has been turned off (or when the unit is running at very low speed) by the thermostat when the system is in the heating mode.
- Upon completion of defrosting and when the compressor is turned on again, “” (standby) will turn off automatically as heating operation resumes.

NOTE

Should the power fail while the unit is running

If the power supply for this unit is temporarily cut off, the unit will automatically resume operation (once the power is restored) using the same settings before the power was cut off.

CARE AND CLEANING



WARNING

1. For safety, be sure to turn the air conditioner off and also to disconnect the power before cleaning.
2. Do not pour water on the indoor unit to clean it. This will damage the internal components and cause an electric shock hazard.

Air intake and outlet side (Indoor unit)

Clean the air intake and outlet side of the indoor unit with a vacuum cleaner brush, or wipe them with a clean, soft cloth.
If these parts are stained, use a clean cloth moistened with water. When cleaning the air outlet side, be careful not to force the vanes out of place.



CAUTION

1. Never use solvents or harsh chemicals when cleaning the indoor unit. Do not wipe plastic parts using very hot water.
2. Some metal edges and the fins are sharp and may cause injury if handled improperly; be especially careful when you clean these parts.
3. The internal coil and other components of the outdoor unit must be cleaned periodically. Consult your dealer or service center.

TROUBLESHOOTING

If your air conditioner does not work properly, first check the following points before requesting service. If it still does not work properly, contact your dealer or a service center.

INDOOR UNIT

Symptom		Cause
Noise	Sound like streaming water during operation or after operation	<ul style="list-style-type: none"> • Sound of refrigerant liquid flowing inside unit • Sound of drainage water through drain pipe
	Cracking noise during operation or when operation stops.	Cracking sound due to temperature changes of parts
Odor	Discharged air is smelled during operation.	Indoor odor components, cigarette odor and cosmetic odor accumulated in the air conditioner and its air is discharged. Unit inside is dusty. Consult your dealer.
Dewdrop	Dewdrop gets accumulated near air discharge during operation	Indoor moisture is cooled by cool wind and accumulated by dewdrop.
Fog	Fog occurs during operation in cooling mode. (Places where large amounts of oil mist exist at restaurants.)	<ul style="list-style-type: none"> • Cleaning is necessary because unit inside (heat exchanger) is dirty. Consult your dealer as technical engineering is required. • During defrost operation
Fan is rotating for a while even though operation stops.		<ul style="list-style-type: none"> • Fan rotating makes operation smoothly. • Fan may sometimes rotates because of drying heat exchanger due to settings.
Wind-direction changes while operating. Wind-direction setting cannot be made. Wind-direction cannot be changed.		<ul style="list-style-type: none"> • When air discharge temperature is low or during defrost operation, horizontal wind flow is made automatically. • Flap position is occasionally set up individually.
When wind-direction is changed, flap operates several times and stops at designated position.		When wind-direction is changed, flap operates after searching for standard position.
Dust		Dust accumulation inside indoor unit is discharged.

OUTDOOR UNIT

Symptom		Cause
No operation	When power is turned ON instantly.	Operation is not acticated for the first approx. 3 minutes because compressor protection circuit is activated.
	When operation is stopped and resumed immediately.	
Noise	Noise often occurs in heating mode.	During defrost operation
Steam	Steam often occurs in heating mode.	
When stopped by remote controller, outdoor unit fan is sometimes operating for a while even though outdoor compressor is stopped.		Fan rotating makes operation smoothly.

CHECK BEFORE REQUIRING SERVICES

Symptom	Cause	Remedy
Air conditioner does not run at all although power is turned on.	Power failure or after power failure	Press ON/OFF operation button on remote control unit again.
	Operation button is turned off.	<ul style="list-style-type: none"> • Switch on power if breaker is turned off. • If breaker has been tripped, consult your dealer without turning it on.
	Fuse blow out.	If blown out, consult your dealer.
Poor cooling or heating performance	Air intake or air discharge port of indoor and outdoor units is clogged with dust or obstacles.	Remove dust or obstruction.
	Wind speed switch is set to "Low".	Change to "High" or "Strong".
	Improper temperature settings	Refer to "TIPS FOR ENERGY SAVING".
	Room is exposed to direct sunlight in cooling mode.	
	Doors and /or windows are open.	
	Air filter is clogged.	Refer to "CARE AND CLEANING".
	Too much heat sources in room in cooling mode.	Use minimum heat sources and in a short time.
	Too many people in room in cooling mode.	Reduce temperature settings or change to "High" or "Strong".

If your air conditioner still does not work properly although you checked the points as described above, first stop the operation and turn off the power switch. Then contact your dealer and report the serial number and symptom. Never repair your air conditioner by yourself since it is very dangerous for you to do so. You also report if the inspection mark Δ and the letters E, F, H, L, P in combination with the numbers appear on the LCD of the remote control unit.

TIPS FOR ENERGY SAVING

Avoid

- **Do not block the air intake and outlet of the unit. If either is obstructed, the unit will not work well, and may be damaged.**
- Do not let direct sunlight into the room. Use sunshades, blinds or curtains. If the walls and ceiling of the room are warmed by the sun, it will take longer to cool the room.

Do

- Always try to keep the air filter clean. (Refer to "CARE AND CLEANING".) A clogged filter will impair the performance of the unit.
- To prevent conditioned air from escaping, keep windows, doors and any other openings closed.

NOTE

Should the power fail while the unit is running

If the power supply for this unit is temporarily cut off, the unit will automatically resume operation once power is restored using the same settings before the power was interrupted.