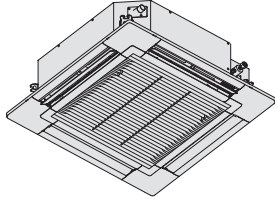


Operating Instructions Air Conditioner



4-Way Cassette (Type U2)

Model No.

INDOOR UNIT

4-Way Cassette (Type U2)

S-22MU2E5BN	S-73MU2E5BN
S-28MU2E5BN	S-90MU2E5BN
S-36MU2E5BN	S-106MU2E5BN
S-45MU2E5BN	S-112MU2E5BN
S-56MU2E5BN	S-140MU2E5BN
S-60MU2E5BN	S-160MU2E5BN

- Connectable outdoor unit lineup

OUTDOOR UNIT

Refrigerant type : R410A
mini VRF (Type LE1, LE2)
2WAY VRF (Type ME2)
3WAY VRF (Type MF3)

Refrigerant type : R32
mini VRF (Type LZ2)



ENGLISH

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





Thank you for purchasing this Panasonic product.
 This product is a commercial air conditioner indoor unit.
 Installation Instructions attached.

Contents

- Safety Precautions 2
- Precautions for Use 6
- Names of Parts 7

- Maintenance 8
- Operation Mechanism 8
- nanoe™ X Function 9
- Troubleshooting 11
 - Before Requesting Services 12

- Connectable Outdoor Unit 13
- Specifications 15
 - Indoor unit 15
 - Outdoor unit 17

	WARNING	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.
	CAUTION	This symbol shows type of flammable refrigerant contained in the system.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the Technical Manual.
	CAUTION	This symbol shows that there is information included in the Operating Instructions and/or Installation Instructions.

Product Information

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

Model No. _____

Serial No. _____

Date of purchase _____

Dealer's address _____

Phone number _____





Important Information Regarding The Refrigerant Used

NOTE

Refer to the Installation Instructions attached to the outdoor unit.


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.
	Prohibited matters	
	Matters to be observed	


- 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.


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.



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.

Never touch the unit with wet hands.

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

WARNING



If the refrigerant comes in contact with a flame, it produces toxic gases.

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.



Dispose of according to national and/or local legislation.



This product must not be modified or disassembled under any circumstances.

Modified or disassembled unit may cause fire, electric shock or injury.

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 the sales dealer or service dealer for a repair and disposal.



Provide a power outlet to be used exclusively for each unit, and a power supply disconnect, Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD) 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 use modified cord, joint cord, extension cord or unspecified cord to prevent overheating and fire.



The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).

Be aware that refrigerants may not contain an odour.

An unventilated area where the appliance using flammable refrigerants is installed shall be so constructed that should any refrigerant leak, it will not stagnate so as to create a fire or explosion hazard.

The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.

After the unit is installed, never fail to ask the installer for the floor space of the room where the unit is installed and the refrigerant charge amount.

In case the unit or the room divider is changed, never fail to consult the sales dealer or service dealer.



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

Do not pierce or burn.

In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.

WARNING



The appliance shall be stored in a room without continuously operating open flames (for example: an operating gas appliance) and ignition sources (for example: an operating electric heater).



Stop using the product when 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.
- 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.
- 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.

Contact immediately your local dealer for maintenance/repair.



When the optional “R32 refrigerant leakage detection sensor” detects refrigerant leakage, P08 alarm and inspection mark will be displayed on the remote controller, the indoor unit fan will be running to prevent refrigerant stagnation, and it will not stop even if you press the ON/OFF operation button on remote controller. In such a case, do not turn off the ELCB, ventilate the room, and contact the service dealer immediately. Also, do not use combustion equipment such as stoves.



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



If refrigerant R32 is used and R32 refrigerant leakage detection sensor is connected to the indoor unit, do not turn off the ELCB of the indoor unit except when there is a symptom of abnormality or failure, or when performing short-term maintenance. (When the ELCB is turned off, R32 refrigerant leakage detection sensor cannot detect the refrigerant leakage when the refrigerant leaks, and it may lead to cause the generation of toxic gases and fires.)

Do not use the following items near the indoor unit and R32 refrigerant leakage detection sensor as they may cause fire or false detection of refrigerant leakage.

- Gas equipment that uses flammable gas (propane, methane, etc.)
- Combustible gas such as pesticides and hair spray (LPG, etc.)
- Sprays, drugs, chemicals, paints, etc. that use siloxane.

WARNING



If the alarm display J01 appears, there is something wrong R32 refrigerant leakage detection sensor or its wiring connection to the indoor unit.

Contact the service dealer immediately.

(It may not be detected when the refrigerant leaks.)

When the alarm display J02 appears, it is the end of the life of the sensor board of R32 refrigerant leakage detection sensor.

Contact the service dealer as soon as possible to replace the sensor board.

(If the sensor board is used as it is without being replaced, the sensor may be deteriorated and the refrigerant leakage may not be detected properly.)

CAUTION



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

Keep the fire alarm and the air outlet at least 1.5 m away from the unit.

Do not make the room too hot or too cold if babies or invalids are present.

NOTICE

- The appliance shall be stored so as to prevent mechanical damage from occurring.
- The compressor may occasionally stop during thunderstorms. This is not a mechanical failure. The unit automatically recovers after a few minutes.
- The English text is the original instructions. Other languages are translation of the original instructions.

CAUTION



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.

<for European market only>

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.



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.



Do not stick any object into the FAN CASE. You may be injured and the unit may be damaged.



Do not touch the fan because it automatically rotates when it detects a refrigerant leak. You may be injured.

Precautions for Use

Installation

- This air conditioner must 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

Avoid the following locations for installation.

- Locations where smoke or combustible gas exists. Also locations of extremely high temperature such as a greenhouse.
- Locations where excessively high heat-generating objects are placed.

Attention:

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

Wiring

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

Operation Preparation

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

(For warm-up)

- Leave the power mains ON for continuous use.

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.

Tips for Energy Saving

■ Avoid

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

■ Do

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

Disposal of Old Equipment

Only for European Union and countries with recycling systems



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

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

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local municipality.

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

This air conditioner incorporates a biocidal product.



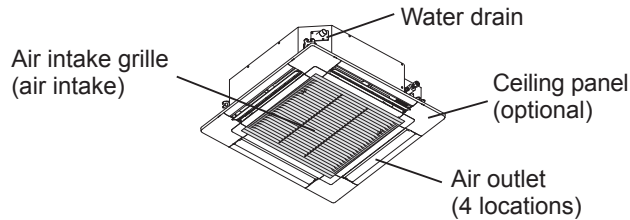
Free radicals generated by a device incorporated in the air conditioner have the capacity to inhibit pollutants, such as certain types of bacteria, viruses, mould.

Active substances : Free radicals generated in situ from ambient air or water.

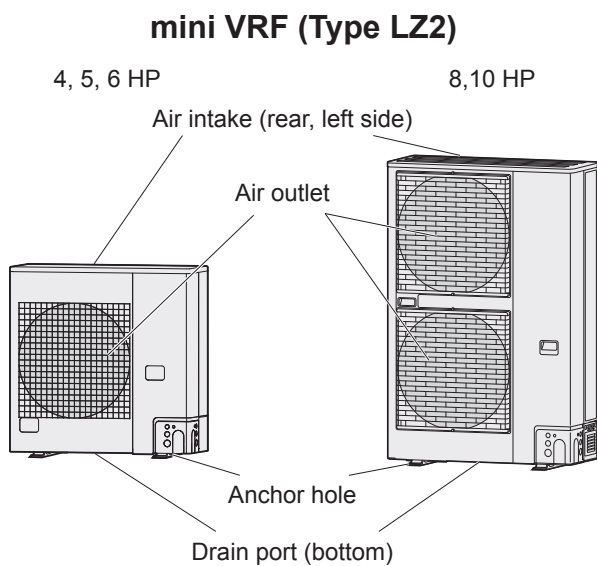
Usage : This device function can be turned ON / OFF by the "nanoe X" icon button or remote controller settings if there is no "nanoe X" icon button. Please refer to "How to Use" for more details.

Names of Parts

INDOOR UNIT



OUTDOOR UNIT



mini VRF (Type LE1, LE2)
2WAY VRF (Type ME2)
3WAY VRF (Type MF3)

NOTE

Refer to the Operating Instructions attached to the outdoor unit.

Optional

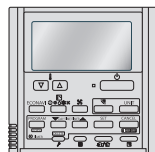
Wireless Remote Controller



Model No. CZ-RWS3
The receiver : Model No. CZ-RWRU3* (Type U2)
CZ-RWRC3
(For all indoor units)

(Infrared Remote Controller)

Timer Remote Controller



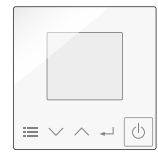
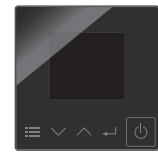
Model No. CZ-RTC4
For all indoor units

High-spec Wired Remote Controller



Model No. CZ-RTC5B
For all indoor units

Wired Remote Controller



Black

White

Model No. CZ-RTC6 series
For all indoor units

Read the Operating Instructions included with the Remote Controller.

■ Operation & Adjusting Airflow Direction

Refer to the Operating Instructions attached to the Remote Controller.

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

Maintenance

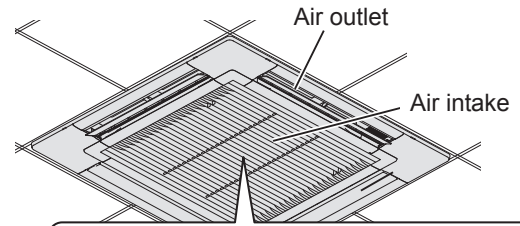
⚠ WARNING

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

⚠ CAUTION

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

■ Indoor unit (e.g., Type U2)




Wipe with a soft cloth.
(If it is very dirty, use a cloth moistened with lukewarm water.)

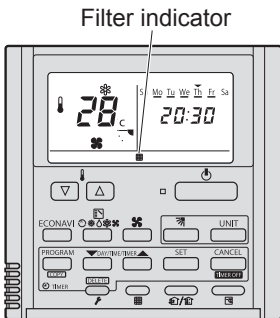
■ Outdoor unit

- The internal coil and other components of the outdoor unit must be cleaned periodically.
- Consult your dealer or service center.

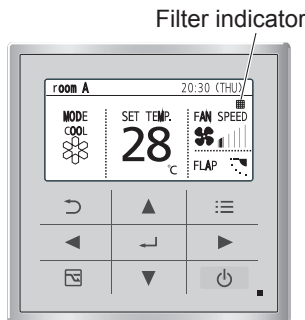
■ Air Filter Maintenance

Consult your dealer or service center when the  (Filter) appears on the display of the wired remote controller.

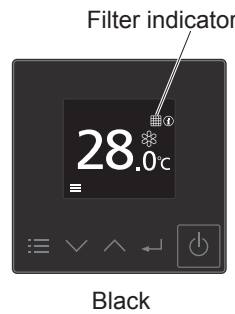
Timer Remote Controller



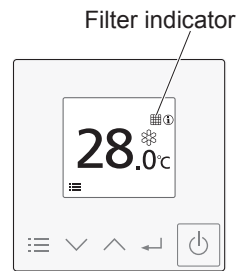
High-spec Wired Remote Controller



Wired Remote Controller



Black






White

Operation Mechanism

■ Heating performance

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

■ Defrosting

- This appliance may start defrosting operation to melt frost formed in the outdoor unit.
 - ① **Defrosting starts:** The indoor unit fan stops (or the speed becomes extremely slow).
→  (STANDBY) appears.
 - ② **Heating operation resumes after several minutes:** The indoor unit fan remains stopped (or it will run at a very slow speed) until the indoor heat exchanger coil warms up sufficiently.
→  (STANDBY) appears.
 - ③ **Defrosting is complete:** The indoor unit fan starts operation.
→  (STANDBY) disappears.

■ “DRY” operation

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

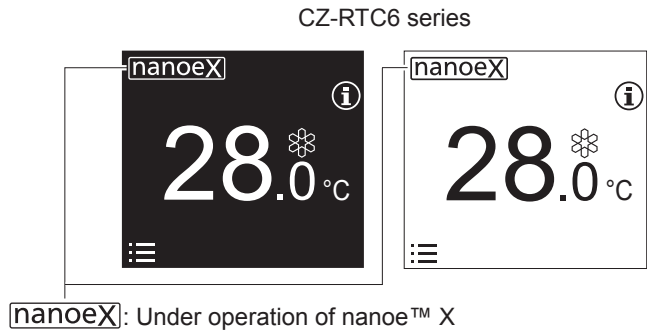
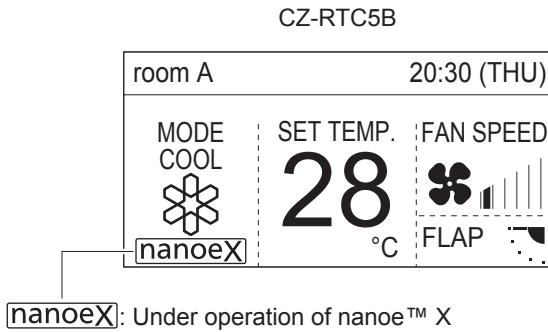
■ Should power failure occur while the unit is running

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

nanoe™ X Function

Display during operation of nanoe™ X

Example: Initial screen of remote controller



Definition of nanoe™ X

nanoe™ X particles are nano-sized electrostatic atomized water particles that contain hydroxyl radicals, which have beneficial effects.

nanoe™ X particles contain more hydroxy radicals than nanoe™ particles.

- nanoe™ X For a freshness and cleaner environment
nanoe™ X generates negative ions using the air in the room to give a clean air.
It also reduces the smell in the room, and inhibits the proliferation of mold and bacteria.
When purchased, the nanoe™ X function is designed to operate automatically.
- If you wish to set to OFF, refer to the operating instructions for the remote controller adaptable to nanoe™ X function.

Inhibiting indoor air pollutants and making fresh air

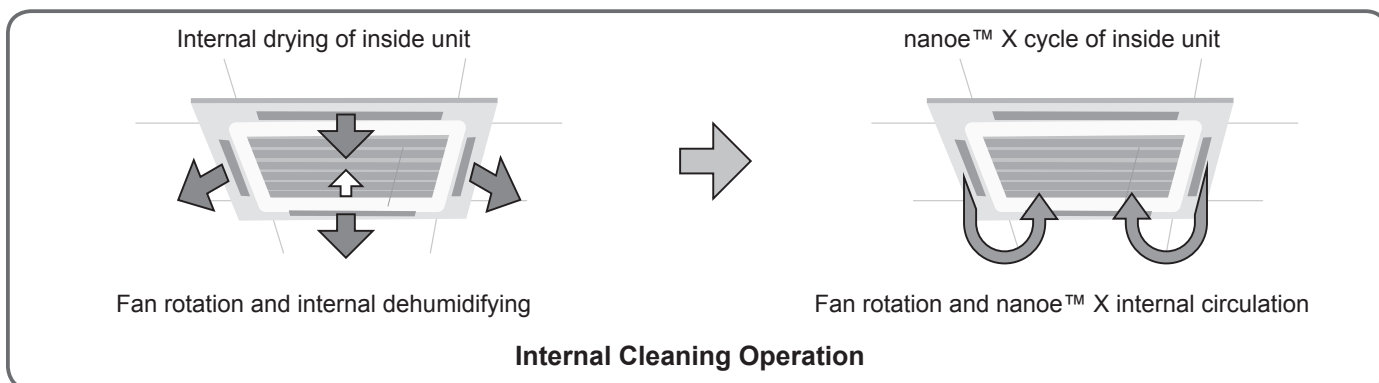


nanoe™ X Function

Internal Cleaning Function

Internal Cleaning Operation

When cooling or dry operation stopped, internal drying and nanoe™ X circulation airflow is activated in order to inhibit the mold proliferation inside the unit (airflow passage, fan, heat exchanger). Mold proliferation or inhibition of mold growth can be different due to the installation circumstances or operating hours.



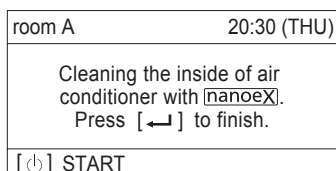
Operating conditions and operating hours

Operates in cooling or dry mode for more than 5 minutes. When finished, the internal cleaning operation is started. Drives for about 75 minutes maximum.

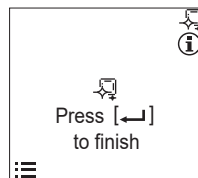
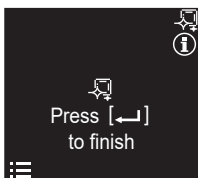
The figure at right shows the display during the internal cleaning operation.

■ If you wish to resume operating during internal cleaning, press / .

CZ-RTC5B



CZ-RTC6 series

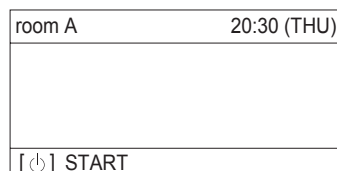


To stop the internal cleaning operation

Press / .

When the internal cleaning operation finished and stopped, the remote control display shows at right.

CZ-RTC5B



CZ-RTC6 series



NOTES:

- Internal cleaning function is not possible to use any remote controller other than that of nanoe™ X function.
- When connected to the remote controller which is adaptable to the nanoe™ X function, the internal cleaning function is set to work automatically. If you wish to set to OFF, refer to the operating instructions for the remote controller which is adaptable to the nanoe™ X function. If you wish to set the internal cleaning function to OFF with CZ-RTC6 series remote controller, use Panasonic H & C Control App. This app is compatible with the following remote controllers.
Check the model number shown in the label on the bottom of the remote controllers.
Models : CZ-RTC6BL / CZ-RTC6BLW (CZ-RTC6 incompatible)
CZ-RTC6WBL / CZ-RTC6WBLW (CZ-RTC6W incompatible)
- In case that the operation time of the air conditioner is less than 5 minutes, the internal cleaning operation cannot be performed.
- While the internal cleaning operation is running, the indoor temperature may occasionally increase.

Troubleshooting

Check before consulting or requesting services.

Symptom		Cause / Action	
Indoor unit	Noise	Sound like streaming water is heard 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 is heard during operation or when operation stops.	<ul style="list-style-type: none"> • Sound due to temperature changes of parts
	Discharged air smells during operation.		<ul style="list-style-type: none"> • Indoor odor components, cigarette odor and cosmetic odor accumulated in the air conditioner and its air is discharged. • The unit inside is dirty. (Contact your dealer.)
	Dewdrops accumulate near the air outlet during cooling operation.		<ul style="list-style-type: none"> • Internal moisture is cooled by cool wind and accumulates as dewdrops.
	Fog occurs during cooling operation.		<ul style="list-style-type: none"> • If the air conditioner has been installed at places such as restaurants where large amounts of oil mist exist, cleaning is necessary because the unit inside (heat exchanger) is dirty. (Contact your dealer.)
	Fog occurs during heating operation.		<ul style="list-style-type: none"> • Defrost operation is in process.
	The fan is rotating for a while even though operation stops.		<ul style="list-style-type: none"> • Fan rotation makes operation smooth. • The fan may rotate to dry the heat exchanger depending on the setting.
	The indoor unit fan is running and does not stop when ON/OFF operation button on remote controller is pressed.		<ul style="list-style-type: none"> • The R32 refrigerant may be leaking. If R32 refrigerant leakage detection sensor is connected and the refrigerant leaks, P08 alarm and inspection mark will be displayed on the remote controller and the fan will automatically operate. Please ventilate the room without turning off the earth leakage circuit breaker and contact the service dealer for assistance. • In case of the unit with R32 refrigerant leakage detection sensor installed, are you using gas equipment (propane, butane, methane, etc.) and sprays near R32 refrigerant leakage detection sensor? R32 refrigerant leakage detection sensor could lead to false detection and the fan may start rotating. Please contact the service dealer for assistance.
	Airflow direction	Airflow direction changes while operating.	<ul style="list-style-type: none"> • When air discharge temperature is low during heating operation, or during defrost operation, horizontal wind flow is made automatically. • The flap position may be set individually. (Type U2)
		Airflow direction cannot be set. Airflow direction cannot be changed.	
	Dust is discharged.		<ul style="list-style-type: none"> • Dust accumulated inside the indoor unit is discharged.
	At the initial high-speed operation, the fan sometimes rotates faster than the setting speed. (3 to 30 minutes)		<ul style="list-style-type: none"> • This is for operation check in order to confirm whether the fan motor rotation is within the range of use.
	Humming noise comes out.		<ul style="list-style-type: none"> • This is the sound of nanoe™ X being discharged.
	nanoeX is not displayed on the remote controller.		<ul style="list-style-type: none"> • Has nanoe™ X been set to OFF? → Set to ON.
	⚠nanoeX is displayed on the remote controller.		<ul style="list-style-type: none"> • nanoe™ X is considered abnormal. (Contact your dealer.)

Troubleshooting

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


Before Requesting Services

Symptom	Cause	Action
The air conditioner does not operate although the power is turned on.	Power failure or after power failure	Press the power ON/OFF button on the remote controller.
	The operation (power) button is turned off.	• If the breaker is turned off, turn the power on. • If the breaker has been tripped, consult your dealer without turning it on.
	Fuse blow out.	Contact your dealer.
Poor cooling or heating performance	The air intake or air outlet of indoor and outdoor units is clogged with dust.	Remove the dust.
	The fan speed switch is set to "Low".*	Change to "Medium" or "High".*
	Improper temperature settings	See "Tips for Energy Saving". (P.6)
	The room is exposed to direct sunlight in cooling mode.	
	Doors or windows are open.	
	The air filter is clogged.	Contact your dealer.
	Too many heat sources in the room in cooling mode.	Use minimum heat sources and in a short time.
Too many people in the room in cooling mode.	Lower the temperature setting or change to "Medium" or "High".*	

* Regarding the fan speed control display on the remote controller, see page 16.

- If the P08 alarm and inspection mark are displayed on the remote controller and the fan automatically operates and does not stop even when you press ON/OFF operation button on remote controller, R32 refrigerant leakage detection sensor connected to the indoor unit has detected refrigerant leakage. In such a case, do not turn off the earth leakage circuit breaker, ventilate the room, and contact the service dealer immediately.

If your air conditioner does not work properly even after checking each item of "Before Requesting Services" and "Troubleshooting"

- Stop the operation immediately and turn the power off. Then contact your dealer and report the serial number and symptom. You also report if the inspection mark  and the letters E, F, H, J, L, P in combination with numbers appear on the LCD of the remote controller.
- Never repair the air conditioner by yourself since it is very dangerous for you to do so.

Connectable Outdoor Unit

Europe

■ Refrigerant type : R410A

Outdoor unit type		4 HP	5 HP	6 HP	8 HP	10 HP
LE2	1-phase	U-4LE2E5	U-5LE2E5	U-6LE2E5	–	–
	3-phase	U-4LE2E8	U-5LE2E8	U-6LE2E8	–	–
LE1	3-phase	–	–	–	U-8LE1E8	U-10LE1E8
ME2	3-phase	–	–	–	U-8ME2E8	U-10ME2E8
MF3	3-phase	–	–	–	U-8MF3E8	U-10MF3E8

Outdoor unit type		12 HP	14 HP	16 HP	18 HP	20 HP
ME2	3-phase	U-12ME2E8	U-14ME2E8	U-16ME2E8	U-18ME2E8	U-20ME2E8
MF3	3-phase	U-12MF3E8	U-14MF3E8	U-16MF3E8	–	–

■ Refrigerant type : R32

Outdoor unit type		4 HP	5 HP	6 HP	8 HP	10 HP
LZ2	1-phase	U-4LZ2E5	U-5LZ2E5	U-6LZ2E5	–	–
	3-phase	U-4LZ2E8	U-5LZ2E8	U-6LZ2E8	U-8LZ2E8	U-10LZ2E8

Oceania

■ Refrigerant type : R410A

Outdoor unit type		4 HP	5 HP	6 HP	8 HP	10 HP
LE2	1-phase	U-4LE2R5	U-5LE2R5	U-6LE2R5	–	–
		U-4LE2R5E*	U-5LE2R5E*	U-6LE2R5E*	–	–
	3-phase	U-4LE2R8	U-5LE2R8	U-6LE2R8	–	–
		U-4LE2R8E*	U-5LE2R8E*	U-6LE2R8E*	–	–
LE1	3-phase	–	–	–	U-8LE1R8	U-10LE1R8
		–	–	–	U-8LE1R8E*	U-10LE1R8E*
ME2	3-phase	–	–	–	U-8ME2R8	U-10ME2R8
		–	–	–	U-8ME2R8E*	U-10ME2R8E*
MF3	3-phase	–	–	–	U-8MF3R7	U-10MF3R7

Outdoor unit type		12 HP	14 HP	16 HP	18 HP	20 HP
ME2	3-phase	U-12ME2R8	U-14ME2R8	U-16ME2R8	U-18ME2R8	U-20ME2R8
		U-12ME2R8E*	U-14ME2R8E*	U-16ME2R8E*	U-18ME2R8E*	U-20ME2R8E*
MF3	3-phase	U-12MF3R7	U-14MF3R7	U-16MF3R7	–	–

* Salt-Air Damage Resistant Specifications

■ Refrigerant type : R32

Outdoor unit type		4 HP	5 HP	6 HP	8 HP	10 HP
LZ2	1-phase	U-4LZ2E5	U-5LZ2E5	U-6LZ2E5	–	–
	3-phase	U-4LZ2E8	U-5LZ2E8	U-6LZ2E8	U-8LZ2E8	U-10LZ2E8

Connectable Outdoor Unit

Asia

■ Refrigerant type : R410A

Outdoor unit type		4 HP	5 HP	6 HP	8 HP	10 HP
LE2	1-phase	U-4LE2H4	U-5LE2H4	U-6LE2H4	–	–
		U-4LE2H4E*	U-5LE2H4E*	U-6LE2H4E*	–	–
	3-phase	U-4LE2H7	U-5LE2H7	U-6LE2H7	–	–
		U-4LE2H7E*	U-5LE2H7E*	U-6LE2H7E*	–	–
LE1	3-phase	–	–	–	U-8LE1H7	U-10LE1H7
		–	–	–	U-8LE1H7E*	U-10LE1H7E*
ME2	3-phase	–	–	–	U-8ME2H7	U-10ME2H7
		–	–	–	U-8ME2H7E*	U-10ME2H7E*

Outdoor unit type		12 HP	14 HP	16 HP	18 HP	20 HP
ME2	3-phase	U-12ME2H7	U-14ME2H7	U-16ME2H7	U-18ME2H7	U-20ME2H7
		U-12ME2H7E*	U-14ME2H7E*	U-16ME2H7E*	U-18ME2H7E*	U-20ME2H7E*

* Salt-Air Damage Resistant Specifications

Specifications

Indoor unit

4-Way Cassette

Model Name		S-22MU2E5BN	S-28MU2E5BN	S-36MU2E5BN	S-45MU2E5BN	S-56MU2E5BN	S-60MU2E5BN	
Power source		220 - 230 - 240 V~ 50 - 60 Hz						
Cooling capacity	kW	2.2	2.8	3.6	4.5	5.6	6.0	
	BTU/h	7,500	9,600	12,300	15,400	19,100	20,500	
	Sensible kW	2.0	2.5	3.2	3.6	4.2	4.9	
	Latent kW	0.2	0.3	0.4	0.9	1.4	1.1	
Heating capacity	kW	2.5	3.2	4.2	5.0	6.3	7.1	
	BTU/h	8,500	10,900	14,300	17,100	21,500	24,200	
Cooling electric power input*	kW	0.020	0.020	0.020	0.020	0.025	0.035	
Heating electric power input*	kW	0.020	0.020	0.020	0.020	0.025	0.035	
Sound pressure level ***	High	dB(A)	30	30	30	31	32	36
	Medium	dB(A)	29	29	29	29	30	32
	Low	dB(A)	28	28	28	28	28	29
Sound power level ***	High	dB(A)	45	45	45	46	47	51
	Medium	dB(A)	44	44	44	44	45	47
	Low	dB(A)	43	43	43	43	43	44
Unit dimensions (H×W×D) **	mm	289.5×950×950	289.5×950×950	289.5×950×950	289.5×950×950	289.5×950×950	289.5×950×950	
Net weight **	kg	19	19	19	19	19	20	

Model Name		S-73MU2E5BN	S-90MU2E5BN	S-106MU2E5BN	S-112MU2E5BN	S-140MU2E5BN	S-160MU2E5BN	
Power source		220 - 230 - 240 V~ 50 - 60 Hz						
Cooling capacity	kW	7.3	9.0	10.6	11.2	14.0	16.0	
	BTU/h	24,900	30,700	36,200	38,200	47,800	54,600	
	Sensible kW	5.6	6.4	8.3	8.8	10.0	11.0	
	Latent kW	1.7	2.6	2.3	2.4	4.0	5.0	
Heating capacity	kW	8.0	10.0	11.4	14.0	16.0	18.0	
	BTU/h	27,300	34,100	38,900	47,800	54,600	61,400	
Cooling electric power input*	kW	0.040	0.040	0.090	0.095	0.095	0.105	
Heating electric power input*	kW	0.040	0.040	0.085	0.090	0.090	0.100	
Sound pressure level ***	High	dB(A)	37	38	44	45	45	46
	Medium	dB(A)	32	35	38	39	39	40
	Low	dB(A)	29	32	34	35	35	38
Sound power level ***	High	dB(A)	52	53	59	60	60	61
	Medium	dB(A)	47	50	53	54	54	55
	Low	dB(A)	44	47	49	50	50	53
Unit dimensions (H×W×D) **	mm	289.5×950×950	289.5×950×950	352.5×950×950	352.5×950×950	352.5×950×950	352.5×950×950	
Net weight **	kg	20	20	25	25	25	25	

Specifications

Indoor unit

4-Way Cassette (Continued)


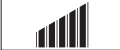

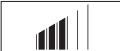

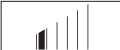
Operation condition temperature range

- Cooling mode : 14°C~25°C WB
- Heating mode : 16°C~30°C DB

* In the case of nanoe™ X “OFF”

** Values include the dimensions and weight of an optional ceiling panel.

*** Fan speed display on the remote controller

High	:		(CZ-RTC4),		(CZ-RTC5B, CZ-RTC6 series)
Medium	:		(CZ-RTC4),		(CZ-RTC5B, CZ-RTC6 series)
Low	:		(CZ-RTC4),		(CZ-RTC5B, CZ-RTC6 series)

Specifications

Outdoor unit

mini VRF (Type LZ2)

Model Name		U-4LZ2E5	U-5LZ2E5	U-6LZ2E5
Power source		220 - 230 - 240 V~ 50 Hz		
Cooling capacity	kW	12.1	14.0	15.5
Heating capacity	kW	12.5	16.0	16.5
Sound pressure level (Cooling / Heating)	dB(A)	52 / 54	53 / 56	54 / 56
Sound power level (Cooling / Heating)	dB(A)	69 / 72	70 / 74	72 / 75
Unit dimensions (H×W×D)	mm	996×980×370		
Net weight	kg	94	94	94

Model Name		U-4LZ2E8	U-5LZ2E8	U-6LZ2E8
Power source		380 - 400 - 415 V 3N~ 50 Hz		
Cooling capacity	kW	12.1	14.0	15.5
Heating capacity	kW	12.5	16.0	16.5
Sound pressure level (Cooling / Heating)	dB(A)	52 / 54	53 / 56	54 / 56
Sound power level (Cooling / Heating)	dB(A)	69 / 72	70 / 74	72 / 75
Unit dimensions (H×W×D)	mm	996×980×370		
Net weight	kg	94	94	94

Operation condition temperature range

- Cooling mode : -10°C~52°C DB
- Heating mode : -20°C~18°C WB

Rated conditions

Cooling : Indoor intake air temp. 27°C DB / 19°C WB. Outdoor intake air temp. 35°C DB.
 Heating : Indoor intake air temp. 20°C DB. Outdoor intake air temp. 7°C DB / 6°C WB.

Specifications

Outdoor unit

mini VRF (Type LZ2)

Model Name		U-8LZ2E8	U-10LZ2E8
Power source		380 - 400 - 415 V 3N~ 50 Hz	
Cooling capacity	kW	22.4	28.0
	BTU/h	76,500	95,600
Heating capacity	kW	25.0	28.0
	BTU/h	85,300	95,600
Sound pressure level	dB(A)	60	63
Sound power level	dB(A)	81	84
Unit dimensions (H×W×D)	mm	1,500×980×370	1,500×980×370
Net weight	kg	132	133

Operation condition temperature range

- Cooling mode : -10°C~52°C DB
- Heating mode : -20°C~18°C WB

Rated conditions

Cooling : Indoor intake air temp. 27°C DB / 19°C WB. Outdoor intake air temp. 35°C DB.

Heating : Indoor intake air temp. 20°C DB. Outdoor intake air temp. 7°C DB / 6°C WB.

mini VRF (Type LE1, LE2)

2WAY VRF (Type ME2)

3WAY VRF (Type MF3)

NOTE

Refer to the Operating Instructions attached to the outdoor unit.

India Only

Information on hazardous constituents as specified in sub-rule 1 of rule 16 (1) in electrical and electronic equipment.
Declaration of Conformity with the requirements of the E-Waste (Management) Amendment Rules 2018 with the rule 16 (1) limits with respect to Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls, Polybrominated diphenyl ethers.
The content of hazardous substance with the exemption of the applications listed in SCHEDULE II of the E-Waste (Management) Amendment Rules 2018 :

1. Lead (Pb) – not over 0.1% by weight;
2. Cadmium (Cd) – not over 0.01% by weight;
3. Mercury (Hg) – not over 0.1% by weight;
4. Hexavalent chromium (Cr⁶⁺) – not over 0.1% by weight;
5. Polybrominated biphenyls (PBBs) – not over 0.1% by weight;
6. Polybrominated diphenyl ethers (PBDEs) – not over 0.1% by weight.



For the purpose of recycling to facilitate effective utilization of resources, please return this product to a nearby authorized collection center, registered dismantler or recycler, or Panasonic service center when disposing of this product.

Customer care number (Toll free) : 1800 103 1333 , 1800 108 1333

Please see the Panasonic website for further information on collection centers, etc. or call the customer care toll-free number <http://www.panasonic.com/in/corporate/sustainability/panasonic-india-i-recycle-program.html>

Do's & Don'ts: E-waste (Management) Amendment Rules 2018

S.No.	Do's	Don'ts
1.	All electrical and electronic products are required to be handed over only to the Authorized recycler.	The product should not be opened by the user himself / herself, but only by authorized service personnel.
2.	The product should be handed over only to authorized recycler for disposal.	The product is not meant for re-sale to any unauthorized agencies / scrap dealers / kabariwalas.
3.	Keep the product in an isolated area, after it becomes non-functional / unrepairable so as to prevent its accidental breakage.	The product is not meant for mixing into household waste stream.
4.	Refer to Operating Instructions for handling of end of life products.	Do not keep any replaced spare part(s) from the product in an exposed area.
5.	Always dispose products that have reached end of life at Panasonic India Authorized Service Centre.	Do not donate old electronic items to anybody. Do not dispose your product in garbage bins along with municipal waste that ultimately reaches landfill.
6.	Wherever possible or as instructed, separate the packaging material according to responsible waste disposal options and sorting for recycling.	Do not give e-waste to informal and unorganized sectors like Local Scrap Dealers / Rag Pickers.

Contact in the UK
Panasonic UK,
a branch of Panasonic Marketing Europe GmbH,
Maxis 2, Western Road, Bracknell, Berkshire, RG12 1RT

Panasonic Corporation
<http://www.panasonic.com>

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