

Type K2

Panasonic®

Operating Instructions Air Conditioner

Model No.

Indoor Units			
Type	Indoor Unit Type	Nominal Capacity	
		18	24
K2	Wall Mounted	S-18MK2U6	S-24MK2U6

● Connectable outdoor unit lineup

This booklet is the operating instructions for indoor unit. Regarding the outdoor unit, see the operating instructions supplied with the outdoor unit.

Outdoor Units							
Type	Outdoor Unit Type	Nominal Capacity					
		36	52	72	96	120	144
ME2	2WAY VRF System			U-72ME2U9	U-96ME2U9	U-120ME2U9	U-144ME2U9
MF2	3WAY VRF System			U-72MF2U9	U-96MF2U9	U-120MF2U9	U-144MF2U9
LE1	Mini VRF System	U-36LE1U6	U-52LE1U6				

This air conditioner uses the refrigerant R410A.



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

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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 of the unit.

Model No. _____ Serial No. _____

Date of purchase _____

Dealer's address _____

Phone number _____

ALERT SYMBOLS

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



WARNING

- All wiring must conform to the local electrical codes. Consult your dealer or a qualified electrician for details.
- It is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD) to prevent electric shock or fire.
- 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.



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.

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.
- 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.
- Check for a leaking refrigerant! Refrigerant gas may produce a toxic gas if it comes in contact with fire.





WARNING

- 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 5 feet (1.5 m) away from the unit.
- Do not let children play with the air conditioner.
- 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.

OPERATION CONDITION

Use this air conditioner under the following temperature range.

3 way system

Temperature range (°F/°C)		Indoor		Outdoor	
		*DBT	*WBT	*DBT	*WBT
Heating & Cooling	Max.	86/30	-/-	75/24	64/17.8
	Min.	59/15	-/-	14/-10	14/-10
Cooling	Max.	90/32	77/25	122/50	-/-
	Min.	64/17.8	57/14	14/-10	-/-
Heating	Max.	86/30	-/-	75/24	64/17.8
	Min.	61/16	-/-	-13/-25	-13/-25

2 way system

Temperature range (°F/°C)		Indoor		Outdoor	
		*DBT	*WBT	*DBT	*WBT
Cooling	Max.	90/32	77/25	122/50	-/-
	Min.	64/17.8	57/14	14/-10	-/-
Heating	Max.	86/30	-/-	75/24	64/17.8
	Min.	61/16	-/-	-4/-20	-4/-20

Mini VRF system

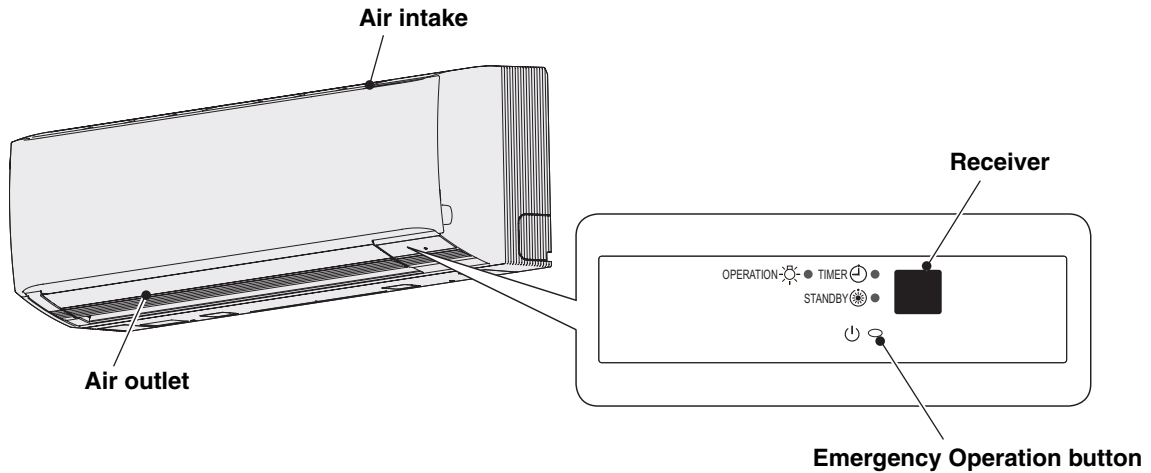
Temperature range (°F/°C)		Indoor		Outdoor	
		*DBT	*WBT	*DBT	*WBT
Cooling	Max.	90/32	77/25	115/46	-/-
	Min.	64/17.8	57/14	14/-10	-/-
Heating	Max.	86/30	-/-	75/24	64/17.8
	Min.	61/16	-/-	-4/-20	-4/-20

* DBT: Dry bulb temperature

* WBT: Wet bulb temperature

NAMES OF PARTS

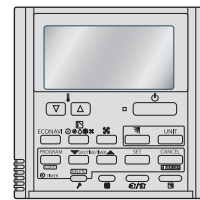
INDOOR UNIT



Timer Remote Controller (Optional parts)

NOTE

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



(CZ-RTC4)

High-spec Wired Remote Controller (Optional parts)

NOTE

Refer to the Operating Instructions attached to the optional High-spec Wired Remote Controller.



(CZ-RTC3)
(CZ-RTC5)

Wireless Remote Controller (Optional parts)

NOTE

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



(CZ-RWSK1U)

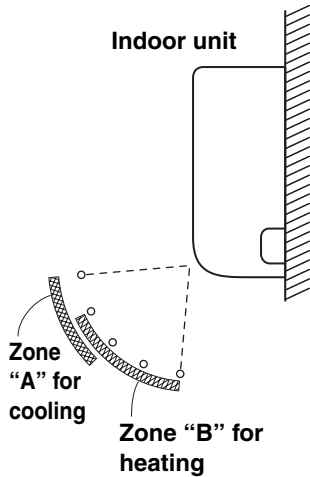
ADJUSTING AIRFLOW DIRECTION

■ Wall mounted type (K2)

Vertical directions (automatic)

Confirm that the remote controller has been turned on. Press the FLAP button to start the flap moving up and down. If you want to stop the flap movement and to direct the air in the desired direction, press the FLAP button again. In the cool mode, do not direct the flap down and move out of the cooling zone "A", otherwise, condensation may drip on to the floor. Zone "A" is the recommended flap position for cooling.

When operating continuously in the fixed airflow direction setting for about an hour, the airflow direction is automatically controlled and the flap position is changed. The airflow direction may be different from the display on the remote controller.

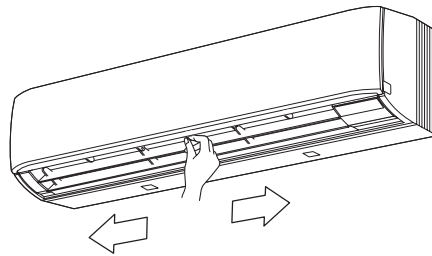


CAUTION

Do not move the flap with your hands.

Horizontal directions (manual)

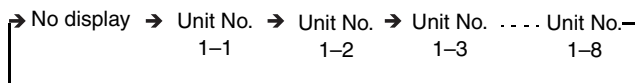
The horizontal airflow direction can be adjusted manually by moving the vertical vanes to the left or right.



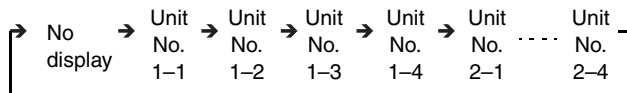
ADJUSTING AIRFLOW DIRECTION FOR MULTIPLE INDOOR UNITS USING SINGLE REMOTE CONTROLLER (WIRED)

- If multiple indoor units are connected to a remote controller, the airflow direction can be set for each indoor unit by selecting the indoor units (see the operation below).
- To set the airflow for individual units, press the UNIT button. Display shows the indoor unit number under group control. Set the airflow direction for the indoor unit that is shown on the display.
- Each time UNIT is pressed, the indicator changes in the order shown below.
- When nothing is displayed, you can make the setting for all indoor units in one operation.
- The unit number is displayed as Outdoor Unit Number–Indoor Unit Number. It varies depending on the number of units under group control.


One outdoor unit and eight indoor units



Two outdoor units and four indoor units



SPECIAL REMARKS

- Heating Performance**
- Since this air conditioner utilizes outside air for heating, its heating performance deteriorates as outside temperature decreases. (Due to heat pump system)
 - It will take some time until the room becomes warmer after heating operation started. (Due to hot air circulation system in order to heat a whole room)
- Defrosting**
- This appliance may start defrosting operation to melt frost form in the outdoor unit during long hour heating operation mode.
The indoor unit fan will stop for about 5 to 10 minutes at this time.
- Heating Standby**
- The remote controller shows “” (Heating standby) on the display in the following mode and the indoor unit fan may be controlled.
- When operation started (Indoor unit fan stops for maximum 6 minutes.)
 - When Thermostat activated
 - When defrosting (Indoor unit fan stops.)
- When Heating Operation Started (Only 3WAY VRF)**
- When changed to heating mode from stopped or cooling operation mode, the unit does not work for about 3 minutes for the sake of self-protection.
It may take about 5 to 10 minutes until the hot air is delivered after starting the heating operation.
- Oil Recovery**
- The indoor unit fan may stop or run at a slow speed in order to recover the oil in the system every 1 to 3 hours during cooling or heating operation.
The unit will automatically resume the original operation after about 5 to 10 minutes.
- Remote Control Sensor**
- The temperature sensor in the indoor unit normally senses the room temperature and can also sense the ambient temperature of the remote controller.
For the details, consult the shop you purchased.
- Should the power failure occurs while the unit is running**
- When the unit automatically resumes operation after temporary power failure, it uses the same settings before the power was cut off.

CARE AND CLEANING



Do not attempt to clean inside the unit by yourself.
Refer to the section "Care and Cleaning" in the Installation Instructions.



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 a mild liquid detergent. 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 every year. Consult your dealer or service center.**

Air filter

The air filter collects dust and other particles from the air and should be cleaned at regular intervals when the filter indication () on the display of the remote controller (wired type) shows that the filter needs cleaning. If the filter gets blocked, the efficiency of the air conditioner drops greatly.

NOTE

The frequency with which the filter should be cleaned depends on the environment in which the unit is used.

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 rotate 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.
At the initial high-speed operation, the fan may sometimes rotate faster (for 3 to 30 minutes) than the setting speed.		This is for operation check in order to confirm whether the fan motor rotation is within use range.

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 controller 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  and the letters E, F, H, L, P in combination with the numbers appear on the LCD of the remote controller.

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.

SPECIFICATIONS

■ Wall Mounted (Type K2)

Model Name		S-18MK2U6	S-24MK2U6
Power Source		208 / 230 V, 60 Hz, 1PH	
Cooling Capacity	BTU/h	18,000	25,000
	kW	5.3	7.3
Heating Capacity	BTU/h	20,000	27,000
	kW	5.9	7.9
Sound Pressure Level (High/Medium/Low)		44/40/37	47/42/38
Unit Dimensions	H : inch (mm)	11-13/16 (300)	11-13/16 (300)
	W : inch (mm)	41-15/16 (1,065)	41-15/16 (1,065)
	D : inch (mm)	9-1/16 (230)	9-1/16 (230)
Net Weight	lbs. (kg)	29.0 (13)	32.0 (14.5)

