



# Packaged Air Conditioners Indoor unit PKA-M-KA PKA-M-KAL

OPERATION MANUAL         FOR USER           For safe and correct use, please read this operation manual thoroughly before operating the air-conditioner unit.	English
BEDIENUNGSHANDBUCH         FÜR BENUTZER           Zum sicheren und einwandfreien Gebrauch der Klimaanlage dieses Bedienungshandbuch vor Inbetriebnahme gründlich durchlesen.         Gründlich durchlesen	Deutsch
MANUEL D'UTILISATION         POUR L'UTILISATEUR           Pour une utilisation correcte sans risques, veuillez lire le manuel d'utilisation en entier avant de vous servir du climatiseur.	Français
<b>BEDIENINGSHANDLEIDING</b> Voor een veilig en juist gebruik moet u deze bedieningshandleiding grondig doorlezen voordat u de airconditioner gebruikt.	Nederlands
MANUAL DE INSTRUCCIONES       PARA EL USUARIO         Lea este manual de instrucciones hasta el final antes de poner en marcha la unidad de aire acondicionado para garantizar un uso seguro y correcto.       Para este manual de instrucciones hasta el final antes de poner en marcha la unidad de aire acondicionado para garantizar un uso seguro y correcto.	Español
ISTRUZIONI DI FUNZIONAMENTO PER L'UTENTE Leggere attentamente questi istruzioni di funzionamento prima di avviare l'unità, per un uso corretto e sicuro della stessa.	Italiano
ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ ΧΡΗΣΕΩΣ Για ασφάλεια και σωστή χρήση, παρακαλείστε διαβάσετε προσεχτικά αυτό το εγχειρίδιο χρήσεως πριν θέησετε σε λειτουργία τη μονάδα κλιματισμού.	Ελληνικά
MANUAL DE OPERAÇÃO         PARA O UTILIZADOR           Para segurança e utilização correctas, leia atentamente o manual de operação antes de pôr a funcionar a unidade de ar condicionado.         Para segurança e utilização correctas, leia atentamente o manual de operação antes de pôr a funcionar a unidade de ar condicionado.	Português
DRIFTSMANUAL         TIL BRUGER           Læs venligst denne driftsmanual grundigt før airconditionanlægget betjenes af hensyn til sikker og korrekt brug.	Dansk
DRIFTSMANUAL         FÖR ANVÄNDAREN           Läs denna driftsmanual noga för säkert och korrekt bruk innan luftkonditioneringen används.	Svenska
İşletme Elkitabı         KULLANICI İÇİN           Emniyetli ve doğru biçimde nasıl kullanılacağını öğrenmek için lütfen klima cihazını işletmeden önce bu elkitabını dikkatle okuyunuz.	Türkçe
BRUKSANVISNING         FOR BRUKER           Vennligst les nøye gjennom denne bruksanvisningen, for sikkert og riktig bruk av klimaanlegget.	Norsk
INSTRUKCJA OBSŁUGI INFORMACJA DLA UŻYTKOWNIKA Aby zapewnić bezpieczne i prawidłowe korzystanie z urządzenia, należy wcześniej uważnie przeczytać niniejszą instrukcję obsługi.	Polski
<b>操作説明書</b>	繁體中文

### Contents

1. Safety Precautions	5. Emergency Operation for Wireless Remote-controller	9
2. Parts Names	6. Care and Cleaning	10
3. Operation	7. Troubleshooting	11
4. Timer	8. Specifications	12



#### This symbol mark is for EU countries only.

This symbol mark is according to the directive 2012/19/EU Article 14 Information for users and Annex IX, and/or to the directive 2006/66/EC Article 20 Information for end-users and Annex II.



Your MITSUBISHI ELECTRIC product is designed and manufactured with high quality materials and components which can be recycled and/or reused. This symbol means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste. If a chemical symbol is printed beneath the symbol (Fig. 1), this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration.

This will be indicated as follows: Hg: mercury (0.0005%), Cd: cadmium (0.002%), Pb: lead (0.004%)

In the European Union there are separate collection systems for used electrical and electronic products, batteries and accumulators. Please, dispose of this equipment, batteries and accumulators correctly at your local community waste collection/recycling centre. Please, help us to conserve the environment we live in!

Note:

The phrase "Wired remote controller" in this operation manual refers only to the PAR-32MAA. If you need any information for the other remote controller, please refer to the instruction book included in this box.

### 1. Safety Precautions

- ▶ Before installing the unit, make sure you read all the "Safety Precautions".
- ► The "Safety Precautions" provide very important points regarding safety. Make sure you follow them.
- Please report to or take consent by the supply authority before connection to the system.

#### MEANINGS OF SYMBOLS DISPLAYED ON THE UNIT

	WARNING (Risk of fire)	This mark is for R32 refrigerant only. Refrigerant type is written on nameplate of outdoor unit. In case that refrigerant type is R32 this unit uses a flammable refrigerant. If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.	
	Read the OPERATION MANUAL carefully before operation.		
	Service personnel are required to carefully read the OPERATION MANUAL and INSTALLATION MANUAL before operation.		
i	Further information is	s available in the OPERATION MANUAL, INSTALLATION MANUAL, and the like.	

### Symbols used in the text

⚠ Warning:

Describes precautions that should be observed to prevent danger of injury or death to the user.

A Caution:

Describes precautions that should be observed to prevent damage to the unit.

#### A Warning:

- There appliances are not accessible to the general public.
- The unit must not be installed by the user. Ask the dealer or an authorized company to install the unit. If the unit is installed improperly, water leakage, electric shock or fire may result.
- Do not stand on, or place any items on the unit.
- Do not splash water over the unit and do not touch the unit with wet hands. An electric shock may result.
- Do not spray combustible gas close to the unit. Fire may result.
- Do not place a gas heater or any other open-flame appliance where it will be exposed to the air discharged from the unit. Incomplete combustion may result.
- Do not remove the front panel or the fan guard from the outdoor unit when it is running.
- When you notice exceptionally abnormal noise or vibration, stop operation, turn off the power switch, and contact your dealer.
- · Never insert fingers, sticks etc. into the air inlets or outlets.
- If you detect odd smells, stop using the unit, turn off the power switch and consult your dealer. Otherwise, a breakdown, electric shock or fire may result.
- This air conditioner is NOT intended for use by children or infirm persons without supervision.
- 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.
- Young children must be supervised to ensure that they do not play with the air conditioner.
- If the refrigeration gas blows out or leaks, stop the operation of the air conditioner, thoroughly ventilate the room, and contact your dealer.
- 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

⚠ Caution:

- Do not use any sharp object to push the buttons, as this may damage the remote controller.
- Never block or cover the indoor or outdoor unit's air inlets or outlets.

### Symbols used in the illustrations

(≟) : Indicates a part which must be grounded.

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.

- 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.
- When installing or relocating, or servicing the air conditioner, use only the specified
  refrigerant written on outdoor unit to charge the refrigerant lines. Do not mix it with
  any other refrigerant and do not allow air to remain in the lines.

If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards. The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.

- Children should be supervised to ensure that they do not play with the appliances.
  This unit should be installed in rooms which exceed the floor space specified in outdoor unit installation manual.
- Refer to outdoor unit installation manual. • 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 ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- · Be aware that refrigerants may not contain an odour.

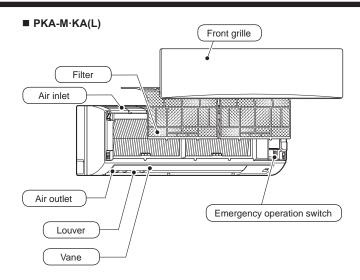
#### Disposing of the unit

When you need to dispose of the unit, consult your dealer.

### 2. Parts Names

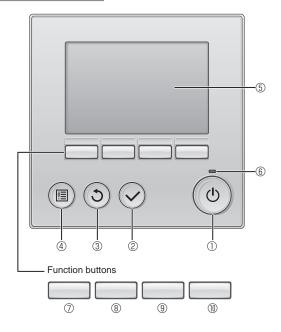
#### Indoor Unit

	PKA-M·KA(L)
Fan speed	3 speeds (with auto)
Vane	Auto swing
Louver	Manual
Filter	Normal
Filter cleaning indication	100 hr
Wireless remote controller model No. setting	002



#### ■ Wired Remote Controller

Controller interface



#### ① [ON/OFF] button

Press to turn ON/OFF the indoor unit.

#### 2 [SELECT] button

Press to save the setting.

#### ③ [RETURN] button

Press to return to the previous screen.

#### ④ [MENU] button

Press to bring up the Main menu.

#### ⑤ Backlit LCD

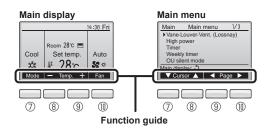
Operation settings will appear.

When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.

When the backlight is off, pressing any button turns the backlight on and does not perform its function. (except for the [ON/OFF] button) The functions of the function buttons change depending on the screen.

Refer to the button function guide that appears at the bottom of the LCD for the functions they serve on a given screen.

When the system is centrally controlled, the button function guide that corresponds to the locked button will not appear.



#### 6 ON/OFF lamp

This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

#### **⑦** Function button [F1]

Main display: Press to change the operation mode. Main menu: Press to move the cursor down.

#### 8 Function button [F2]

Main display: Press to decrease temperature. Main menu: Press to move the cursor up.

#### 9 Function button [F3]

Main display: Press to increase temperature. Main menu: Press to go to the previous page.

#### I Tunction button [F4]

Main display: Press to change the fan speed. Main menu: Press to go to the next page.

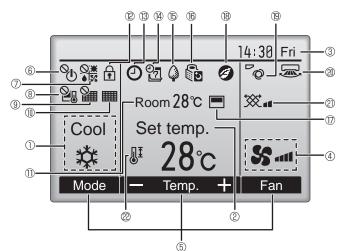
### 2. Parts Names

#### Display

The main display can be displayed in two different modes: "Full" and "Basic". The factory setting is "Full". To switch to the "Basic" mode, change the setting on the Main display setting. (Refer to operation manual included with remote controller.)

#### <Full mode>

\* All icons are displayed for explanation.



#### ① Operation mode

Indoor unit operation mode appears here.

#### 2 Preset temperature

Preset temperature appears here.

#### ③ Clock (See the Installation Manual.)

Current time appears here.

#### 4 Fan speed

Fan speed setting appears here.

#### **5** Button function guide

Functions of the corresponding buttons appear here.

### 6 <sup>0</sup>

Appears when the ON/OFF operation is centrally controlled.

#### 

Appears when the operation mode is centrally controlled.

### 8 21

Appears when the preset temperature is centrally controlled.

### 9 9

Appears when the filter reset function is centrally controlled.

### 10

Indicates when filter needs maintenance.

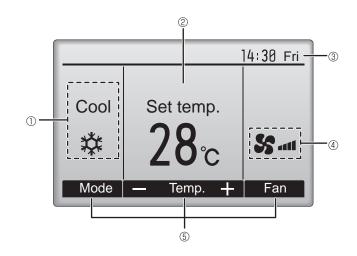
#### ① Room temperature (See the Installation Manual.)

Current room temperature appears here.

### 12 主

Appears when the buttons are locked.

<Basic mode>



### 

Appears when the On/Off timer, Night setback, or Auto-off timer function is enabled.

appears when the timer is disabled by the centralized control system.

# 

Appears when the Weekly timer is enabled.

## 15 🗘

Appears while the units are operated in the energy-save mode. (Will not appear on some models of indoor units)

### 16 5

Appears while the outdoor units are operated in the silent mode.

#### 

Appears when the built-in thermistor on the remote controller is activated to monitor the room temperature  $(\mathbb{O})$ .

<u>↓</u> appears when the thermistor on the indoor unit is activated to monitor the room temperature.

#### 1 18 🥑

Appears when the units are operated in the energy-save mode with 3D i-see Sensor.

### 19 ~0

Indicates the vane setting.

#### 2 🐷

Indicates the louver setting.

#### 1 2) 🕱

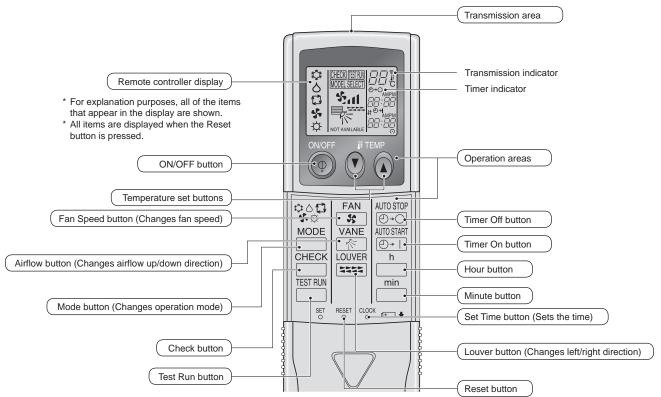
Indicates the ventilation setting.



Appears when the preset temperature range is restricted.

Most settings (except ON/OFF, mode, fan speed, temperature) can be made from the Menu screen. (Refer to operation manual included with remote controller.)

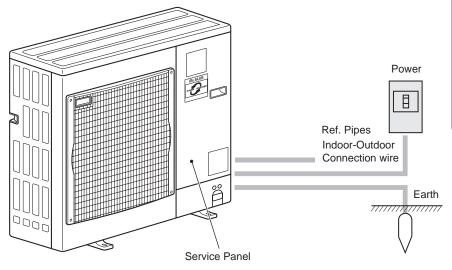
#### ■ Wireless Remote-Controller



#### Note (Only for wireless remote controller):

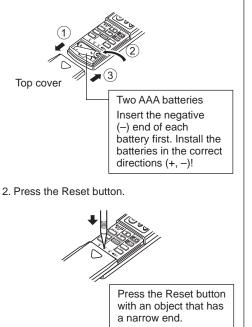
- When using the wireless remote controller, point it towards the receiver on the indoor unit.
- If the remote controller is operated within approximately two minutes after power is supplied to the indoor unit, the indoor unit may beep twice as the unit is performing the initial automatic check.
- The indoor unit beeps to confirm that the signal transmitted from the remote controller has been received. Signals can be received up to approximately 7 meters in a direct line from the indoor unit in an area 45° to the left and right of the unit. However, illumination such as fluorescent lights and strong light can affect the ability of the indoor unit to receive signals.
- If the operation lamp near the receiver on the indoor unit is flashing, the unit needs to be inspected. Consult your dealer for service.
- Handle the remote controller carefully! Do not drop the remote controller or subject it to strong shocks. In addition, do not get the remote controller wet or leave it in a location with high humidity.
- To avoid misplacing the remote controller, install the holder included with the remote controller on a wall and be sure to always place the remote controller in the holder after use.

#### Outdoor unit



#### **Battery installation/replacement**

1. Remove the top cover, insert two AAA batteries, and then install the top cover.



#### About the operation method, refer to the operation manual that comes with each remote controller.

#### 3.1. Turning ON/OFF

#### [ON]



Press the [ON/OFF] button. The ON/OFF lamp will light up in green, and the operation will start.

### [OFF]



Press the [ON/OFF] button again. The ON/OFF lamp will come off, and the operation will stop.

Note:

Even if you press the ON/OFF button immediately after shutting down the operation is progress, the air conditioner will not start for about 3 minutes. This is to prevent the internal components from being damaged.

#### Operation status memory

	Remote controller setting		
Operation mode	Operation mode before the power was turned off		
Preset temperature	Preset temperature before the power was turned off		
Fan speed	Fan speed before the power was turned off		

#### Settable preset temperature range

Operation mode	Preset temperature range
Cool/Dry	19 – 30 °C
Heat	17 – 28 °C
Auto	19 – 28 °C
Fan/Ventilation	Not settable

#### 3.2. Mode Selection



Press the [F1] button to go through the operation modes in the order of "Cool", "Dry", "Fan", "Auto", and "Heat". Select the desired operation mode.

 Cool
 Dry
 Fan

 Auto
 Heat

 Operation modes that are not available to the connected outdoor unit models will not appear on the display.

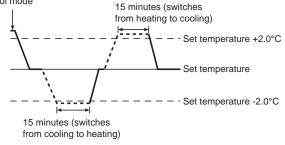
#### What the blinking mode icon means

The mode icon will blink when other indoor units in the same refrigerant system (connected to the same outdoor unit) are already operated in a different mode. In this case, the rest of the unit in the same group can only be operated in the same mode.

#### Automatic operation

- According to a set temperature, cooling operation starts if the room temperature is too hot and heating operation starts if the room temperature is too cold.
- During automatic operation, if the room temperature changes and remains 2.0 °C or more above the set temperature for 15 minutes, the air conditioner switches to cool mode. In the same way, if the room temperature remains 2.0 °C or more below the set temperature for 15 minutes, the air conditioner switches to heat mode.

Cool mode



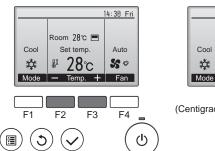
#### <Dual set point> Note:

• This function cannot be set depending on the outdoor unit to be connected.

When the operation mode is set to the Auto (dual set point) mode, two preset temperatures (one each for cooling and heating) can be set. Depending on the room temperature, indoor unit will automatically operate in either the Cool or Heat mode and keep the room temperature within the preset range.

For details on how to operate, refer to manual of remote controller.

# 3.3. Temperature setting <Cool, Dry, Heat, and Auto>





Example display (Centigrade in 0.5-degree increments)

Press the [F2] button to decrease the preset temperature, and press the [F3] button to increase.

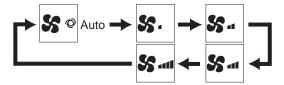
- Refer to the table on page 6 for the settable temperature range for different operation modes.
- Preset temperature range cannot be set for Fan/Ventilation operation.
- Preset temperature will be displayed either in Centigrade in 0.5- or 1-degree increments, or in Fahrenheit, depending on the indoor unit model and the display mode setting on the remote controller.

### 3. Operation

#### 3.4. Fan speed setting



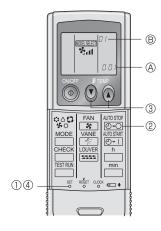
Press the [F4] button to go through the fan speeds in the following order.



· The available fan speeds depend on the models of connected indoor units.

Note:

- The number of available fan speeds depends on the type of unit
- connected. Note also that some units do not provide an "Auto" setting. • In the following cases, the actual fan speed generated by the unit will differ from the speed shown the remote controller display.
  - 1. While the display is showing "STAND BY" or "DEFROST".
  - 2. When the temperature of the heat exchanger is low in the heat mode. (e.g. immediately after heat operation starts)
  - 3. In HEAT mode, when room temperature is higher than the temperature setting.
  - 4. In COOL mode, when room temperature is lower than the temperature setting.
  - 5. When the unit is in DRY mode.
- Automatic fan speed setting (For wireless remote controller) It is necessary to set for wireless remote controller only when automatic fan speed is not set at default setting. It is not necessary to set for wired remote controller with automatic fan speed at default setting.
- ① Press the SET button with something sharp at the end. Operate when display of remote controller is off. MODEL SELECT blinks and Model No. is lighted (A).
- ② Press the AUTO STOP <sup>●</sup>→<sup>○</sup> button. Sat blinks and setting No. is lighted B. (Setting No.01: without automatic fan speed)
- ③ Press the temp. ③ ④ buttons to set the setting No.02. (Setting No.02: with automatic fan speed) again from procedure 2.
- ④ Press the SET button with something sharp at the end. MOTELSELECT and Model No. are lighted for 3 seconds, then turned off.

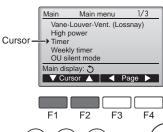


#### 3.5. Airflow direction setting 3.5.1 Navigating through the Main menu <Accessing the Main menu>

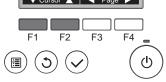


Press the [MENU] button. The Main menu will appear.

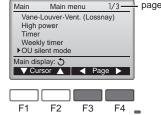




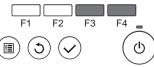
Press [F1] to move the cursor down. Press [F2] to move the cursor up.



#### <Navigating through the pages>



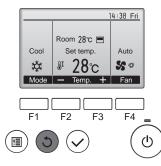
Press [F3] to go to the previous page. Press [F4] to go to the next page.



#### <Saving the settings>



#### <Exiting the Main menu screen>



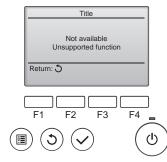
Select the desired item, and press the [SELECT] button.

The screen to set the selected item will appear.

Press the [RETURN] button to exit the Main menu and return to the Main display.

If no buttons are touched for 10 minutes, the screen will automatically return to the Main display. Any settings that have not been saved will be lost.

#### <Display of unsupported functions>



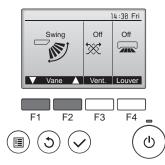
#### 3.5.2 Vane · Vent. (Lossnay) <Accessing the menu>



# C

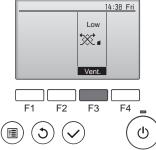
:

#### <Vane setting>



		14 30 Fri
	(	To the second se
	Room 28℃ 🔳	
Cool	Set temp.	Auto
口	<b>₽ 28</b> ℃	<b>S</b> 0
Mode	— Temp. +	Fan

#### <Vent. setting>



The message at left will appear if the user selects a function not supported by the corresponding indoor unit model.

Select "Vane-Louver-Vent. (Loss-

nay)" from the Main menu (refer to

page 7), and press the [SELECT]

Press the [F1] or [F2] button to go

through the vane setting options:

"Auto", "Step 1", "Step 2", "Step 3",

Step 1

Step 4

Step 2

Step 5

"Step 4", "Step 5" and "Swing".

Select the desired setting.

Auto 0

Step 3

Swing MP)

lected angle.

1

Sw

button.

ტ

#### <Returning to the Main menu>



Press the [RETURN] button to go back to the Main menu.

#### Note:

- During swing operation, the directional indication on the screen does not change in sync with the directional vanes on the unit.
- Available directions depend on the type of unit connected.
- . In the following cases, the actual air direction will differ from the direction indicated on the remote controller display.
- 1. While the display is in "STAND BY" or "DEFROST" states. 2. Immediately after starting heat mode (while the system is wait-
- ing for the mode change to take effect).
- 3. In heat mode, when room temperature is higher than the temperature setting.

#### <[Manual] To Change the Airflow's Left/Right Direction>

- The louver button cannot be used.
- Model PKA-M·KA(L)
- Stop the unit operation, hold the lever of the louver, and adjust to the desired direction.
- Do not set to the inside direction when the unit is in the cooling or drying mode because there is a risk of condensation and water dripping.

#### ▲ Caution:

To prevent falls, maintain a stable footing when operating the unit.

#### 3.6. Ventilation

For LOSSNAY combination

- The following 2 patterns of operation is available.
  - · Run the ventilator together with indoor unit.
  - Run the ventilator independently.

#### Note: (for wireless remote controller)

- Running the ventilator independently is not available.
- No indication on the remote controller.

Off \*\*

• (1h) under the vane setting icon This icon will appear when the vane is set to "Step 2" to "Step 5" and the fan operates at "Mid 1" to "Low" speed during cooling or dry operation (depends on the model).

Select "Swing" to move the vanes up and down automatically. When set to "Step 1" through "Step 5", the vane will be fixed at the se-

The icon will go off in an hour, and the vane setting will automatically change.

Press the [F3] button to go through the ventilation setting options in the order of "Off", "Low", and "High".

Settable only when LOSSNAY unit is connected.



The fan on some models of indoor units may be interlocked with certain models of ventilation units.

### 4. Timer

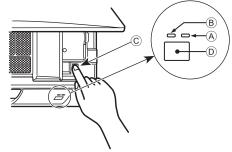
#### 4.1. For Wired Remote-controller

■ Timer functions are different by each remote controller.

For details on how to operate the remote controller, refer to the appropriate operation manual included with each remote controller.

### 5. Emergency Operation for Wireless Remote-controller

#### ■ PKA-M·KA(L)



#### When the remote controller cannot be used

When the batteries of the remote controller run out or the remote controller malfunctions, the emergency operation can be done using the emergency buttons on the grille.

- Operation lamp (Green)
- © Emergency operation switch (cooling/heating)
- Receiver
- Each press of the emergency operation switch will toggle the operation mode.
- Check "COOL/HEAT" with the operation monitor display. (The display will appear orange for 5 seconds after the switch operation.)

### [Combination Cooling and Heating Models]

Cooling Heating Stop

### [Cooling Only Models]

Cooling Stop

#### Operation Monitor Display

	GREEN	ORANGE	
STOP	0		The display will appear orange for 5
COOL	٠		seconds following the switch operation as indicated at the left, and then it will
HEAT	•		return to the regular display.

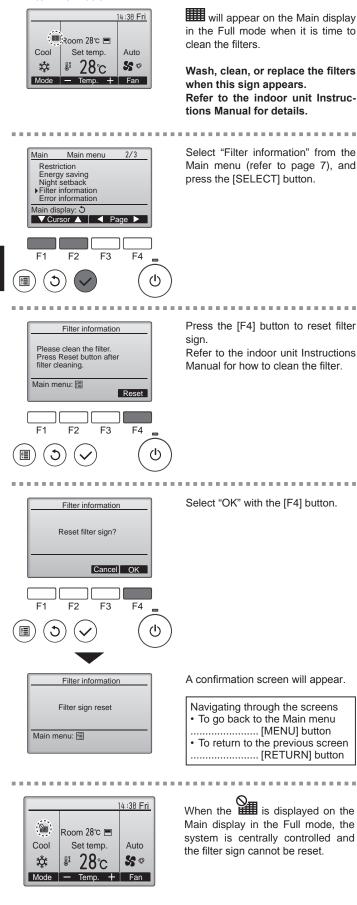
#### ○ Turning off ● Lighting

\* Operation details at the time of emergency operation are as shown below.

Operation Mode	COOL	HEAT
Set Temperature	24°C	24°C
Fan Speed	High	High
Airflow Direction Up and Down	Setting 1	Setting 4(5)

### 6. Care and Cleaning

#### Filter information



If two or more indoor units are connected, filter cleaning timing for each unit may be different, depending on the filter type.

The icon **main** will appear when the filter on the main unit is due for cleaning.

When the filter sign is reset, the cumulative operation time of all units will be reset.

The icon **iiii** is scheduled to appear after a certain duration of operation, based on the premise that the indoor units are installed in a space with ordinary air quality. Depending on the air quality, the filter may require more frequent cleaning.

The cumulative time at which filter needs cleaning depends on the model.

· This indication is not available for wireless remote controller.

#### Cleaning the filters

- Clean the filters using a vacuum cleaner. If you do not have a vacuum cleaner, tap the filters against a solid object to knock off dirt and dust.
- If the filters are especially dirty, wash them in lukewarm water. Take care to rinse off any detergent thoroughly and allow the filters to dry completely before putting them back into the unit.

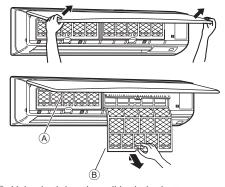
#### **⚠** Caution:

- Do not dry the filters in direct sunlight or by using a heat source, such as an electric heater: this may warp them.
- Do not wash the filters in hot water (above 50°C), as this may warp them.
- Make sure that the air filters are always installed. Operating the unit without air filters can cause malfunction.

#### **△** Caution:

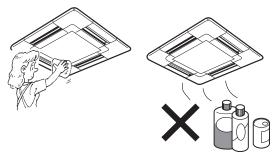
- Before you start cleaning, stop operation and turn OFF the power supply.
- Indoor units are equipped with filters to remove the dust of suckedin air. Clean the filters using the methods shown in the following sketches.

#### PKA-M·KA(L)



- ① Using both hands, pull both the bottom corners of the inlet grille to open the grille, then lift the filter until it clicks at the stop position.
- ② Hold the knobs on the filter and pull the filter up, then pull it out downward.
- (Located in two places, on the left and right.)
- A Front grille
- B Filter

#### Cleaning the indoor unit



Wipe the outside of the unit with a clean, dry, soft cloth.
Clean off any oil stains or finger marks using a neutral household detergent (such as dishwashing liquid or laundry detergent).

#### ▲ Caution:

Never use gasoline, benzene, thinner, scouring powder or any type of non-neutral detergent, as these substances may damage the unit's case.

### 7. Troubleshooting

Having trouble?	Here is the solution. (Unit is operating normally.)
Air conditioner does not heat or cool well.	<ul> <li>Clean the filter. (Airflow is reduced when the filter is dirty or clogged.)</li> <li>Check the temperature adjustment and adjust the set temperature.</li> <li>Make sure that there is plenty of space around the outdoor unit. Is the indoor unit air inlet or outlet blocked?</li> <li>Has a door or window been left open?</li> </ul>
When heating operation starts, warm air does not blow from the indoor unit soon.	Warm air does not blow until the indoor unit has sufficiently warmed up.
During heat mode, the air conditioner stops before the set room temperature is reached.	When the outdoor temperature is low and the humidity is high, frost may form on the outdoor unit. If this occurs, the outdoor unit performs a defrosting operation. Normal operation should begin after approximately 10 minutes.
Airflow up/down direction changes during operation or airflow up/down direction cannot be set.	<ul> <li>During cool mode, the vanes automatically move to the horizontal (down) position after 1 hour when the down (horizontal) airflow up/ down direction is selected. This is to prevent water from forming and dripping from the vanes.</li> <li>During heat mode, the vanes automatically move to the horizontal airflow up/down direction when the airflow temperature is low or during defrosting mode.</li> </ul>
When the airflow up/down direction is changed, the vanes always move up and down past the set position before finally stopping at the position.	When the airflow up/down direction is changed, the vanes move to the set position after detecting the base position.
A flowing water sound or occasional hissing sound is heard.	These sounds can be heard when refrigerant is flowing in the air conditioner or when the refrigerant flow is changing.
A cracking or creaking sound is heard.	These sounds can be heard when parts rub against each due to expansion and contraction from temperature changes.
The room has an unpleasant odor.	The indoor unit draws in air that contains gases produced from the walls, carpeting, and furniture as well as odors trapped in clothing, and then blows this air back into the room.
A white mist or vapor is emitted from the indoor unit.	<ul> <li>If the indoor temperature and the humidity are high, this condition may occur when operation starts.</li> <li>During defrosting mode, cool airflow may blow down and appear like a mist.</li> </ul>
Water or vapor is emitted from the outdoor unit.	<ul> <li>During cool mode, water may form and drip from the cool pipes and joints.</li> <li>During heat mode, water may form and drip from the heat exchanger.</li> <li>During defrosting mode, water on the heat exchanger evaporates and water vapor may be emitted.</li> </ul>
" ${}^{\circ}$ ${}^{\circ}$ The operation indicator does not appear in the remote controller display.	Turn on the power switch. " U " will appear in the remote controller display.
When restarting the air conditioner soon after stopping it, it does not operate even though the ON/OFF button is pressed.	<ul> <li>Wait approximately three minutes.</li> <li>(Operation has stopped to protect the air conditioner.)</li> </ul>
Air conditioner operates without the ON/OFF button being pressed.	<ul> <li>Is the on timer set? Press the ON/OFF button to stop operation.</li> <li>Is the air conditioner connected to a central remote controller? Consult the concerned people who control the air conditioner.</li> <li>Does " " " appear in the remote controller display? Consult the concerned people who control the air conditioner.</li> <li>Has the auto recovery feature from power failures been set? Press the ON/OFF button to stop operation.</li> </ul>
Air conditioner stops without the ON/OFF button being pressed.	<ul> <li>Is the off timer set? Press the ON/OFF button to restart operation.</li> <li>Is the air conditioner connected to a central remote controller? Consult the concerned people who control the air conditioner.</li> <li>Does " To appear in the remote controller display? Consult the concerned people who control the air conditioner.</li> </ul>
Remote controller timer operation cannot be set.	Are timer settings invalid? If the timer can be set, On appears in the remote controller display.
"PLEASE WAIT" appears in the remote controller display.	The initial settings are being performed. Wait approximately 3 minutes.
An error code appears in the remote controller display.	<ul> <li>The protection devices have operated to protect the air conditioner.</li> <li>Do not attempt to repair this equipment by yourself. Turn off the power switch immediately and consult your dealer. Be sure to provide the dealer with the model name and information that appeared in the remote controller display.</li> </ul>
Draining water or motor rotation sound is heard.	When cooling operation stops, the drain pump operates and then stops. Wait approximately 3 minutes.

### 7. Troubleshooting

Having trouble?	Here is the solution. (Unit is operating normally.)			rmally.)	
Noise is louder than specifications.	The indoor operation sound level is affected by the acoustics of the particular room as shown in the following table and will be higher tha the noise specification, which was measured in an echo-free room.			will be higher than	
	5				Low sound- absorbing rooms
		Location examples	Broadcasting studio, music room, etc.	Reception room, hotel lobby, etc.	Office, hotel room
		Noise levels	3 to 7 dB	6 to 10 dB	9 to 13 dB
Nothing appears in the wireless remote controller display, the display is faint, or signals are not received by the indoor unit unless the remote controller is close.	<ul> <li>The batteries are low. Replace the batteries and press the Reset button.</li> <li>If nothing appears even after the batteries are replaced, make sure that the batteries are installed in the correct directions (+, -).</li> </ul>				
The operation lamp near the receiver for the wireless remote controller on the indoor unit is flashing.	<ul> <li>The self diagnosis function has operated to protect the air conditioner.</li> <li>Do not attempt to repair this equipment by yourself. Turn off the power switch immediately and consult your dealer. Be sure to provide the dealer with the model name.</li> </ul>				

## 8. Specifications

Model		PKA-M60KA(L) PKA-M71KA(L) PKA-M100KA(I		
Power source (voltage <v>/Frequency <hz< td=""><td>&gt;)</td><td colspan="3">~N/230/50</td></hz<></v>	>)	~N/230/50		
Rated Input (Indoor only)	<kw></kw>	0.06 0.08		
Rated Current (Indoor only)	<a></a>	0.43	0.43	0.57
Heater	<kw></kw>			-
Dimension (Height)	<mm></mm>	365		
Dimension (Width)	<mm></mm>	1170		
Dimension (Depth)	<mm></mm>	295		
Fan airflow volume (Low-Middle-High)	<m³ min=""></m³>	18-20-22 20-23-26		
Noise level (Low-Middle-High)	<db></db>	39-42-45 41-45-49		
Net weight	<kg></kg>	21		

# This product is designed and intended for use in the residential, commercial and light-industrial environment.

#### Importer:

Mitsubishi Electric Europe B.V. Capronilaan 46, 1119 NS, Schiphol Rijk, The Netherlands

French Branch 25, Boulevard des Bouvets, 92741 Nanterre Cedex, France

German Branch Mitsubishi-Electric-Platz 1, 40882 Ratingen, Germany

Belgian Branch Autobaan 2, 8210 Loppem, Belgium

Irish Branch Westgate Business Park, Ballymount, Dublin 24, Ireland

Italian Branch Centro Direzionale Colleoni, Palazzo Sirio-Ingresso 1 Viale Colleoni 7, 20864 Agrate Brianza (MB), Italy

Norwegian Branch Gneisveien 2D, 1914 Ytre Enebakk, Norway

Portuguese Branch Avda. do Forte, 10, 2799-514, Carnaxide, Lisbon, Portugal

Spanish Branch Carretera de Rubi 76-80 - Apdo. 420 08173 Sant Cugat del Valles (Barcelona), Spain

Scandinavian Branch Hammarbacken 14, P.O. Box 750 SE-19127, Sollentuna, Sweden

UK Branch Travellers Lane, Hatfield, Herts., AL10 8XB, England, U.K.

Polish Branch Krakowska 50, PL-32-083 Balice, Poland

MITSUBISHI ELECTRIC TURKEY ELEKTRİK ÜRÜNLERI A.Ş. Şerifali Mah. Kale Sok. No: 41 34775 Ümraniye, İstanbul / Turkey

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

## MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN