

Mr.SLIM

Air-Conditioners Indoor unit PKA-A·KA4 PCA-A·KA4 PCA-A·KA5

OPERATION MANUAL

FOR USER

POUR L'UTILISATEUR

PARA EL USUARIO

For safe and correct use, please read this operation manual thoroughly before operating the air-conditioner unit.

MANUEL D'UTILISATION

Pour une utilisation correcte sans risques, veuillez lire le manuel d'utilisation en entier avant de vous servir du climatiseur.

MANUAL DE INSTRUCCIONES

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.

English

Français

Español

Contents

2. Parts Names......2 3. Operation......4 4 5. Emergency Operation for IR Wireless Remote controller5

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.

Symbols used in the text

Warning:

7.

8.

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

6. Care and Cleaning5

9. Operation Manual for IR wireless remote controller9

A Caution:

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

Symbols used in the illustrations

 (\downarrow) : Indicates a part which must be grounded.

- **Warning**:
- For appliances 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 intakes 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.

A 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 intakes or outlets

- · This air conditioner is NOT intended for use by children or infirm persons without supervision.
- 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.
- When installing or relocating, or servicing the air conditioner, use only the specified refrigerant (R410A) 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.

Disposing of the unit

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

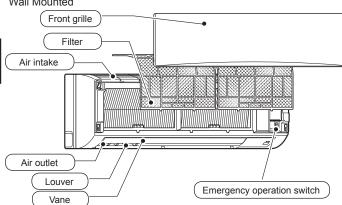
2. Parts Names

Indoor Unit

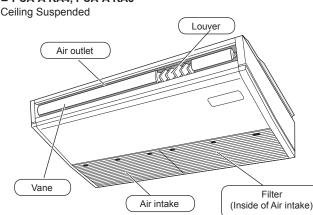
| PKA-A·KA4 | PCA-A·KA4, PCA-A·KA5 |
|----------------------|---|
| 3 speeds (with auto) | 4 speeds (with auto) |
| Auto with swing | Auto with swing |
| Manual | Manual |
| Normal | Long-life |
| 100 hr | 2,500 hr |
| | 3 speeds (with auto) Auto with swing Manual Normal |

■ PKA-A·KA4



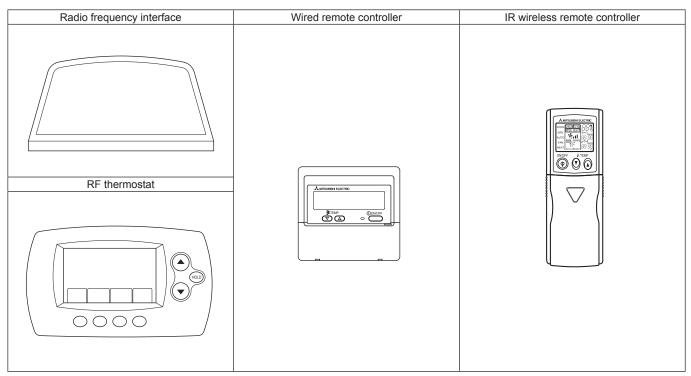


PCA-A·KA4, PCA-A·KA5



2. Parts Names

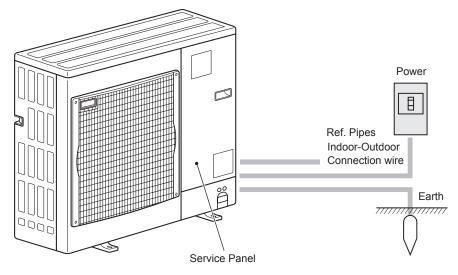
Remote controller (Optional parts)



Note: (Only for IR wireless remote controller)

- When using the IR wireless remote controller, point it towards the receiver on the indoor unit.
- If the IR wireless 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 IR wireless remote controller has been received. Signals can be received up to approximately 7 meters, 275 19/32 inch 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 IR wireless remote controller carefully! Do not drop the IR wireless remote controller or subject it to strong shocks. In addition, do not get the IR wireless remote controller wet or leave it in a location with high humidity.
- To avoid misplacing the IR wireless remote controller, install the holder included with the IR wireless remote controller on a wall and be sure to always place the IR wireless remote controller in the holder after use.

Outdoor unit



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

3.1. Turning ON/OFF

Note:

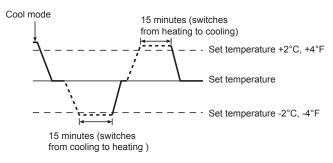
Even if you press the ON/OFF button immediately after shutting down the operation is progress, the air conditioner will not start for about three minutes. This is to prevent the internal components from being damaged.

3.2. Operation mode select

Cool/Dry/Fan/Heat/Automatic (cool/heat)/Ventilation modes are available.

Note:

- Heat and Automatic mode can not be available for cooling only units.
- Ventilation mode: only indicated on the following condition. Wired remote controller is used and LOSSNAY is connected.
- Automatic mode
- 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 °C, 4 °F 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 °C, 4 °F or more below the set temperature for 15 minutes, the air conditioner switches to heat mode.



Because the room temperature is automatically adjusted in order to maintain a fixed effective temperature, cooling operation is performed a few degrees warmer and heating operation is performed a few degrees cooler than the set room temperature once the temperature is reached (automatic energy-saving operation).

3.3. Fan speed setting

Note:

- The number of available fan speeds depends on the type of unit connected.
- In the following cases, the actual fan speed generated by the unit will differ from the speed shown the remote controller display.
- 1. When the unit is in "STAND BY" or "DEFROST" states.
- 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. When the unit is in DRY mode.

3.4. Airflow up/down direction setting

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. When the unit is in "STAND BY" or "DEFROST" states.
 - 2. Immediately after starting heater mode (while the system is waiting for the operation 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.
- Stop the unit operation, hold the lever of the louver airflow vanes, 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.

3.5. Ventilation ► For LOSSNAY combination

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

Note:

- With some model configurations, the fan on the indoor unit may come on even when you set the ventilator to run independently.
- For IR wireless remote controller and RF thermostat
- Running the ventilator independently is not available.
- No indication on the remote controller.

4. Timer

- 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 IR Wireless Remote Controller

(For PKA-A·KA4)

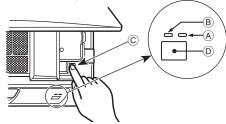


Fig. 5-1

(For PCA-A·KA4, PCA-A·KA5)

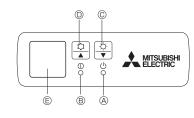


Fig. 5-2

When the IR wireless remote controller cannot be used

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

- [®] Operation lamp (Green)
- © Emergency operation switch (cooling/heating)
- Receiver
 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.)

- - [®] Operation lamp
 - © Emergency operation switch (heating)
 - Emergency operation switch (cooling)
 Receiver

Starting operation

- To operate the cooling mode, press the C button
 for more than 2 seconds.
- To operate the heating mode, press the

 button
 © for more than 2 seconds.

Stopping operation

To stop operation, press the

 button

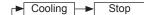
 © or the

 button
 © for more than 2 seconds.

[Heat pump type]

Cooling
 Heating
 Stop

[Cooling Only type]



Operation Monitor Display

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

O Turning off ● Lighting

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

Note that over the first 30 minutes or so, the temperature adjustment will not function and the unit will be in continuous operation with the fan on high.

| Operation Mode | COOL | HEAT |
|-------------------------------|------------|---------------|
| Set Temperature | 24°C, 75°F | 24°C, 75°F |
| Fan Speed | High | High |
| Airflow Direction Up and Down | Setting 1 | Setting 4 (5) |

6. Care and Cleaning

- Following indication shows that the filter needs cleaning.
 - Wired remote controller : "FILTER"
 - RF thermostat: "Clean Filter"
 - ASK authorized people to clean the filter.
- When resetting "FILTER" or "Clean Filter" display. Resetting the indication, refer to the operation manual of each remote controller.

Note:

- When two or more different types of indoor unit are controlled, the cleaning period differs with the type of filter. When the master unit cleaning period arrives, "FILTER" is displayed. When the filter display goes off, the cumulative time is reset. (only for wired remote controller)
- "FILTER" or "Clean Filter" indicates the cleaning period when the air conditioner was used under general indoor air conditions by criteria time. Since the degree of dirtiness depends on the environmental conditions, clean the filter accordingly.
- The filter cleaning period cumulative time differs with the model.
- This indication is not available for IR 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, 122°F), as this may warp them.
- Make sure that the air filters are always installed. Operating the unit without air filters can cause malfunction.

A 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.

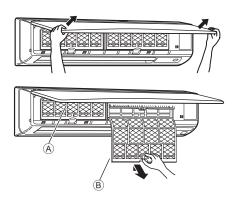
6. Care and Cleaning

Filter removal

A Caution:

- · In removing the filter, precautions must be taken to protect your eyes from dust. Also, if you have to climb up on a stool to do the job, be careful not to fall.
- When the filter is removed, do not touch the metallic parts inside the indoor unit, otherwise injury may result.

PKA-A·KA4



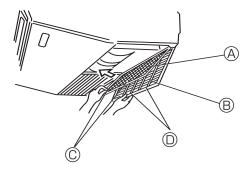
- ① Using both hands, pull both the bottom corners of the intake grille to open the grille, then lift the filter until it clicks at the stop position.
- ② Hold the knobs on the filter and pull the filter up, then pull it out downward (Located in two places, on the left and right.)

 - A Front grille
 - B Filter

7. Troubleshooting

Having trouble? Here is the solution. (Unit is operating normally.) Clean the filter. (Airflow is reduced when the filter is dirty or clogged.) Air conditioner does not heat or cool well Check the temperature adjustment and adjust the set temperature. Make sure that there is plenty of space around the outdoor unit. Is the indoor unit air intake or outlet blocked? Has a door or window been left open? ■ Warm air does not blow until the indoor unit has sufficiently warmed When heating operation starts, warm air does not blow from the indoor unit soon. up During heating mode, the air conditioner stops before the set room ■ When the outdoor temperature is low and the humidity is high, temperature is reached. 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 During cooling mode, the vanes automatically move to the horizontal direction cannot be set. (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. During heating mode, the vanes automatically move to the horizontal airflow up/down direction when the airflow temperature is low or during defrosting mode. When the airflow up/down direction is changed, the vanes always move ■ When the airflow up/down direction is changed, the vanes move to the up and down past the set position before finally stopping at the position. 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. If the indoor temperature and the humidity are high, this condition may occur when operation starts. During defrosting mode, cool airflow may blow down and appear like a mist Water or vapor is emitted from the outdoor unit. During cooling mode, water may form and drip from the cool pipes and joints. During heating mode, water may form and drip from the heat exchanger. During defrosting mode, water on the heat exchanger evaporates and water vapor may be emitted.

PCA-A·KA4, PCA-A·KA5



- ① Open the intake grille.
- ② Hold the knob on the filter then pull the filter up in the direction of an arrow. To replace the filter after cleaning, be sure to insert the filter far enough until it fits into the stopper.

| A Filter | Intake Grille | © Knob | D Stopper |
|----------|---------------|--------|-----------|
|----------|---------------|--------|-----------|

7. Troubleshooting

| | Line is the colution (Linit is execution normally.) | | |
|--|--|--|--|
| Having trouble? The operation indicator does not appear in the wired remote controller | Here is the solution. (Unit is operating normally.) | | |
| display. (*1) | Turn on the power switch. "O" will appear in the wired remote controller display. | | |
| " appears in the wired remote controller display. (*1) | During central control, " " " appears in the wired remote controller display and air conditioner operation cannot be started or stopped using the wired remote controller. | | |
| When restarting the air conditioner soon after stopping it, it does not operate even though the ON/OFF button is pressed. | Wait approximately 3 minutes. (Operation has stopped to protect the air conditioner.) | | |
| Air conditioner operates without the ON/OFF button being pressed. (*1) | Is the on timer set? Press the ON/OFF button to stop operation. Is the air conditioner connected to a central wired remote controller? Consult the concerned people who control the air conditioner. Does "\overline" appear in the wired remote controller display? Consult the concerned people who control the air conditioner. Has the auto recovery feature from power failures been set? Press the ON/OFF button to stop operation. | | |
| Air conditioner stops without the ON/OFF button being pressed. (*1) | Is the off timer set? Press the ON/OFF button to restart operation. Is the air conditioner connected to a central wired remote controller? Consult the concerned people who control the air conditioner. Does " ^(C) appear in the wired remote controller display? Consult the concerned people who control the air conditioner. | | |
| Wired remote controller timer operation cannot be set. (*1) | Are timer settings invalid? If the timer can be set, <u>WEEKLY</u> , <u>SIMPLE</u> , or <u>AUTO OFF</u> appears in the wired remote controller display. | | |
| "PLEASE WAIT" appears in the wired remote controller display. (*1) | The initial settings are being performed. Wait approximately 3 minutes. | | |
| An error code appears in the remote controller display. | The protection devices have operated to protect the air conditioner. 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. | | |
| Draining water or motor rotation sound is heard. | When cooling operation stops, the drain pump operates and then stops. Wait approximately 3 minutes. | | |
| When dry mode starts, the set temperature changes. | When Dry mode starts, the set temperature automatically changes to the optimum initial set temperature. | | |
| 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 than the noise specification, which was measured in an echo-free room. | | |
| | High sound- absorbing rooms Normal rooms 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 IR wireless remote controller display, the display is faint, or signals are not received by the indoor unit unless the IR wireless remote controller is close. (*2) | The batteries are low. Replace the batteries and press the Reset button. If nothing appears even after the batteries are replaced, make sure that the batteries are installed in the correct directions (+, -). | | |
| The operation lamp near the receiver for the IR wireless remote controller on the indoor unit is blinking. (*2) | The self diagnosis function has operated to protect the air conditioner. 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. | | |

*1: Only for wired remote controller.

*2: Only for IR wireless remote controller.

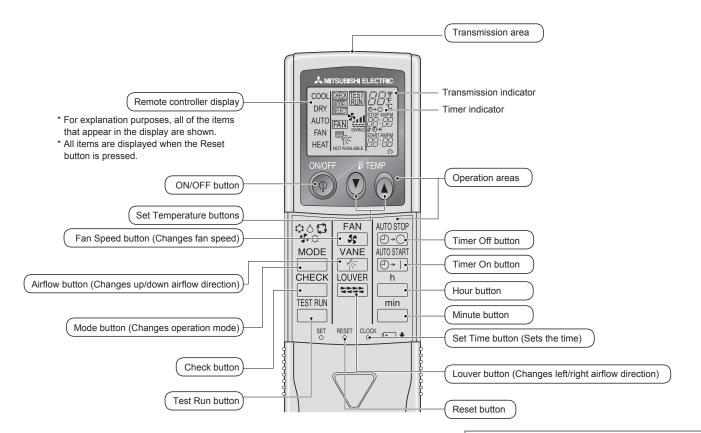
8. Specifications

| Model | | PKA-A24KA4 | PKA-A30KA4 | PKA-A36KA4 |
|--|-------------------|-------------------------|------------|-------------|
| Power source (Phase, voltage <v>, Free</v> | quency <hz>)</hz> | Single, 208/230, 60 | | |
| Rated Input (Indoor only) | <kw></kw> | 0.05 | 0.05 | 0.08 |
| Rated Current (Indoor only) | <a> | 0.36 | 0.36 | 0.57 |
| Heater | <kw></kw> | - | _ | - |
| Dimension (Height) | <inch></inch> | 14-3/8 | | |
| Dimension (Width) | <inch></inch> | 46-1/16 | | |
| Dimension (Depth) | <inch></inch> | 11-5/8 | | |
| Airflow (Low-Middle-High) | <cfm></cfm> | 635-705-775 705-810-920 | | 705-810-920 |
| Noise level (Low-Middle-High) | <db></db> | 39-42-45 41-45-49 | | 41-45-49 |
| Net weight | <lbs></lbs> | 46 | | |

| Model | | PCA-A24KA4 | PCA-A30KA4 | PCA-A36KA4 | PCA-A42KA5 |
|--|-----------------|---------------------|-----------------|-----------------|------------------|
| Power source (Phase, Voltage <v>, Frequency <hz>)</hz></v> | | Single, 208/230, 60 | | | |
| Fan motor | <fla></fla> | 0. | 54 | 0. | 97 |
| MCA | <a> | | 1 | | 2 |
| MOCP | <a> | | 1 | 5 | |
| Dimension (Height) | <inch></inch> | 9-1/16 | | | |
| Dimension (Width) | <inch></inch> | 50-3/8 63 | | 3 | |
| Dimension (Depth) | <inch></inch> | 26-3/4 | | | |
| Airflow | DRY <cfm></cfm> | 530-565-600-670 | 565-600-635-705 | 775-850-920-990 | 810-885-955-1025 |
| (Low-Middle2-Middle1-High) | WET <cfm></cfm> | 495-530-565-635 | 530-565-600-670 | 705-775-850-920 | 740-810-885-955 |
| Noise level (Low-Middle2-Middle1-High) | <db></db> | 33-35-37-40 | 35-37-39-41 | 37-39-41-43 | 39-41-43-45 |
| Net weight | <lbs></lbs> | 7 | 1 | 79 | 86 |

9. Operation Manual for IR wireless remote controller

9.1 Parts Names

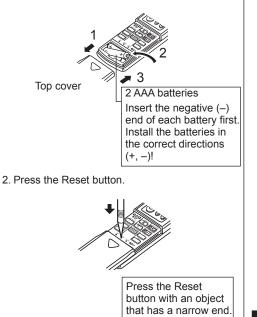


Note:

- When using the IR wireless remote controller, point it towards the receiver on the indoor unit.
- If the IR wireless remote controller is operated within approximately 2 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 IR wireless 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 blinking, the unit needs to be inspected. Consult your dealer for service.
- Handle the IR wireless remote controller carefully! Do not drop the IR wireless remote controller or subject it to strong shocks. In addition, do not get the IR wireless remote controller wet or leave it in a location with high humidity.
- To avoid misplacing the IR wireless remote controller, install the holder included with the IR wireless remote controller on a wall and be sure to always place the IR wireless remote controller in the holder after use.

Battery installation/replacement

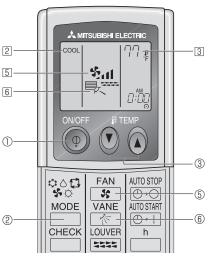
1. Remove the top cover, insert 2 AAA batteries, and then install the top cover.



9. Operation Manual for IR wireless remote controller

9.2. Operation

9.2.1. Turning ON/OFF



<To Start Operation>

- Press the ON/OFF button ①.
- The display area come on.

<To Stop Operation>

- Press the ON/OFF button ① again.
- The display area go dark.

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.

9.2.2. Operation mode select

■ Press the operation mode button ② and select the operation mode ⊇.

- (COOL) Cooling mode
- (DRY) Drying mode
- (FAN) Fan mode
- (HEAT) Heating mode
- (AUTO) Automatic (cooling/heating) mode

9.2.3. Temperature setting

► To decrease the room temperature: Press button ③ to set the desired temperature. The selected temperature is displayed ③.

To increase the room temperature:

Press 👁 button ③ to set the desired temperature. The selected temperature is displayed ③.

| • | Available temperature | ranges are as follows: |
|---|-----------------------|------------------------|
| | Cooling/Drying: | 19 - 30 °C, 67 - 87 °F |
| | Heating: | 17 - 28 °C, 63 - 83 °F |
| | Automatic: | 19 - 28 °C, 67 - 83 °F |

9.2.4. Fan speed setting

- Press the Fan Speed button (5) as many times as necessary while the system is running.
 - Each press changes the force. The currently selected speed is shown at 5.
 - The change sequence, and the available settings, are as follows.

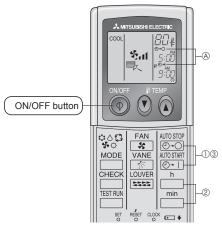
| FAN SPEED | Display | | |
|----------------------|--------------------------------------|--|--|
| 4-speed + Auto | Speed 1 Speed 2 Speed 3 Speed 4 Auto | | |
| 3-speed + Auto | Speed 1 Speed 2 Speed 3 Auto | | |

9.2.5. Airflow direction setting

- <To Change the Airflow's Up/Down Direction>
- With the unit running, press the Airflow Up/Down button (6) as necessary.
 Each press changes the direction. The current direction is shown at 6
- The change sequence, and the available settings, are as follows.



9.3 Timer



① Press the ℗・Ο or ℗・□ button (TIMER SET).

Time can be set while the following symbol is blinking.
 OFF timer: A ⊕+○ is blinking.

ON timer: $A \bigoplus_{h} \neq I$ is blinking.

- 2 Use the $\fbox{3}$ and $\fbox{3}$ buttons to set the desired time.
- ③ Cancelling the timer.
- To cancel the OFF timer, press the OFF timer.
- To cancel the ON timer, press the @-1 button.
- It is possible to combine both OFF and ON timers.
- Pressing the ON/OFF button of the remote controller during timer mode to stop the unit will cancel the timers.
- If the current time has not been set, the timer operation cannot be used.

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

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 BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN