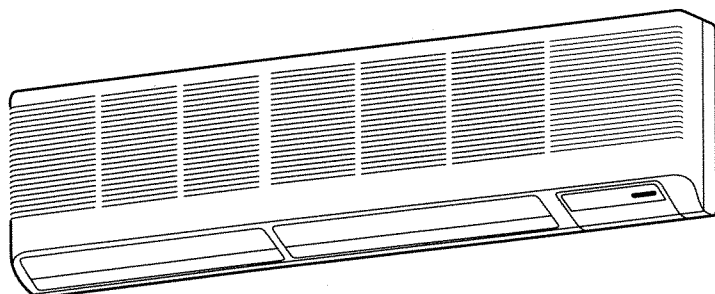


MITSUBISHI ELECTRIC Air-Conditioners

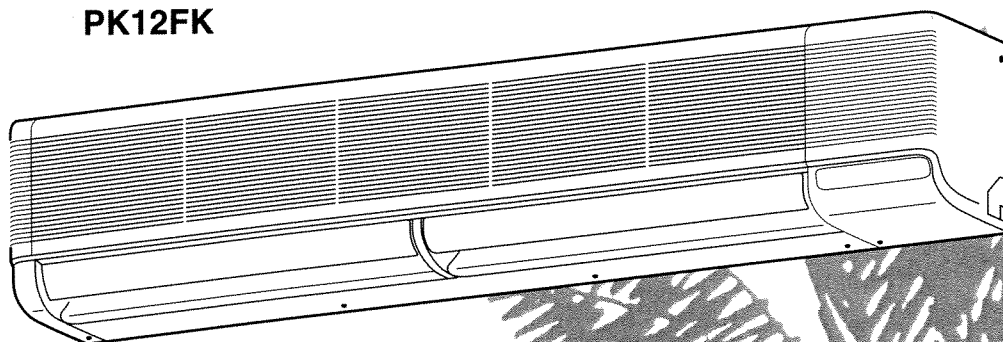
Mr. SLIM

PK12, 18, 24, 30, 36FK PKH18, 24, 30, 36FK

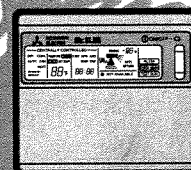
FOR USER



PK12FK



PK18, 24, 30, 36FK
PKH18, 24, 30, 36FK



OPERATION MANUAL

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

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1. Safety Precautions

- ▶ Since this unit contains rotating parts and parts which could cause an electric shock, be sure to read all of the "Safety Precautions" before operating the unit.
- ▶ "Safety Precautions" lists important points about safety. Please be sure to follow them.

Symbols used in the text

⚠ Warning:

Describes precautions that should be observed to avoid the risk of injury or death to the user.

⚠ Caution:

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

Symbols used in the illustrations

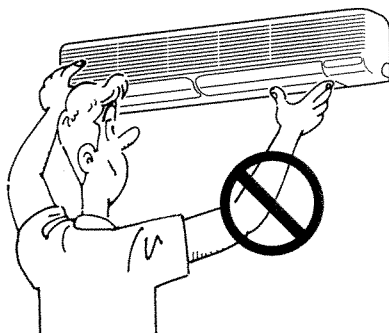
⊘ : Indicates an action that must be avoided.

❗ : Indicates that important instructions must be followed.

⚡ : Indicates a part which must be grounded.

⚠ Warning:

Carefully read the labels affixed to the main unit.



1.1. Installation

⚠ Warning:

- The unit should 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.
- Use only accessories authorized by Mitsubishi Electric and ask your dealer or an authorized company to install them. If accessories are installed improperly, water leakage, electric shock or fire may result.
- The Installation Manual details the suggested installation method. Any structural alteration necessary for installation must comply with local building code requirements.
- Never repair the unit or transfer it to another site by yourself. If repair is performed improperly, water leakage, electric shock or fire may result. If you need to have the unit repaired or moved, consult your dealer.

1. Safety Precautions

1.1. Installation

1) Outdoor unit

⚠ Warning:

- The outdoor unit must be installed on a stable, level surface, in a place where there is no accumulation of snow, leaves or rubbish.
- Do not stand on, or place any items on the unit. You may fall down or the item may fall, causing injury.

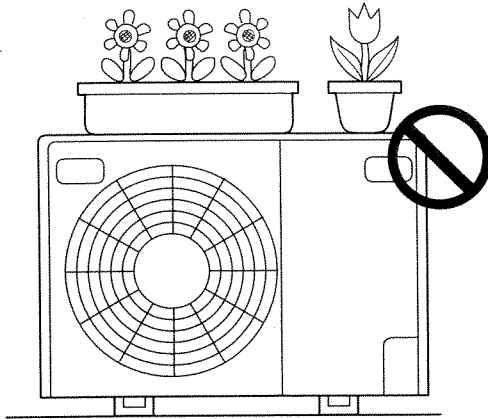
⚠ Caution:

The outdoor unit should be installed in a location where air and noise emitted by the unit will not disturb the neighbours.

2) Indoor unit

⚠ Warning:

The indoor unit should be securely installed. If the unit is loosely mounted, it may fall, causing injury.



1.1. Installation

3) Remote controller

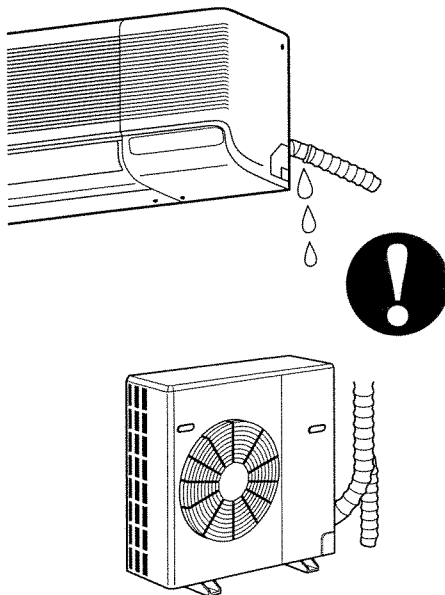
⚠ Caution:

The remote controller should be installed in such a way that children cannot play with it.

4) Drain hose

⚠ Caution:

Make sure that the drain hose is installed so that drainage can go ahead smoothly. Incorrect installation may result in water leakage, causing damage to furniture.



1. Safety Precautions

1.1. Installation

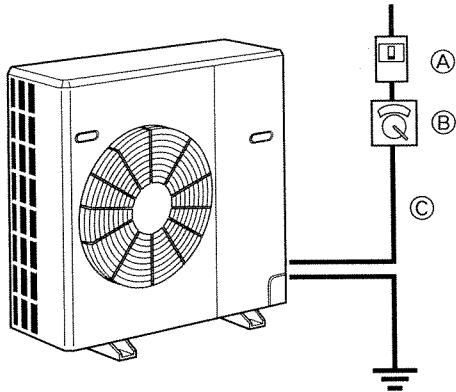
5) Power line, fuse or circuit breaker

⚠ Warning:

- Make sure that the unit is powered by a dedicated line. Other appliances connected to the same line could cause an overload.
- Make sure that there is a main power switch.
- Be sure to adhere to the unit's voltage and fuse or circuit breaker ratings. Never use a piece of wire or a fuse with a higher rating than the one specified.

Ⓐ Fuse or circuit breaker

Ⓑ Main power switch

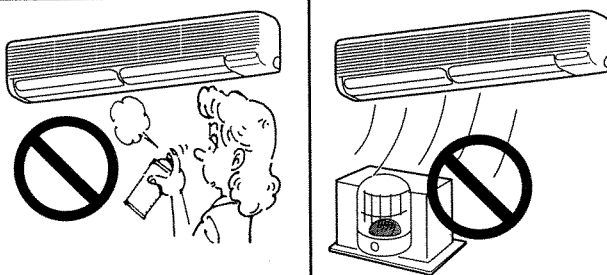
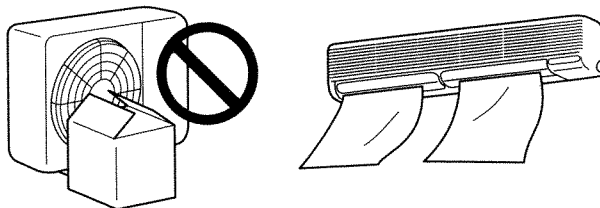
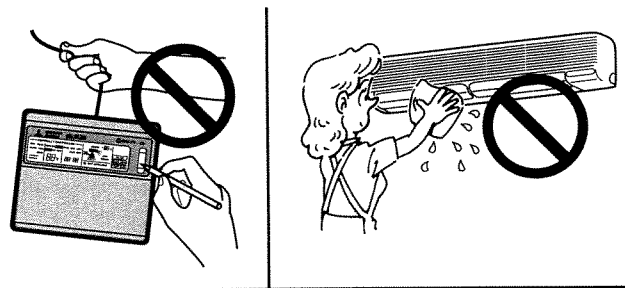


6) Grounding

⚠ Caution:

- The unit must be properly grounded. Never connect the grounding wire to a gas pipe, water pipe, lightning conductor or telephone grounding wire. If the unit is not grounded properly, electric shock may result.
- Check frequently that the ground wire from the outdoor unit is properly connected to both the unit's ground terminal and the grounding electrode.

Ⓒ Grounding electrode



1.2. During operation

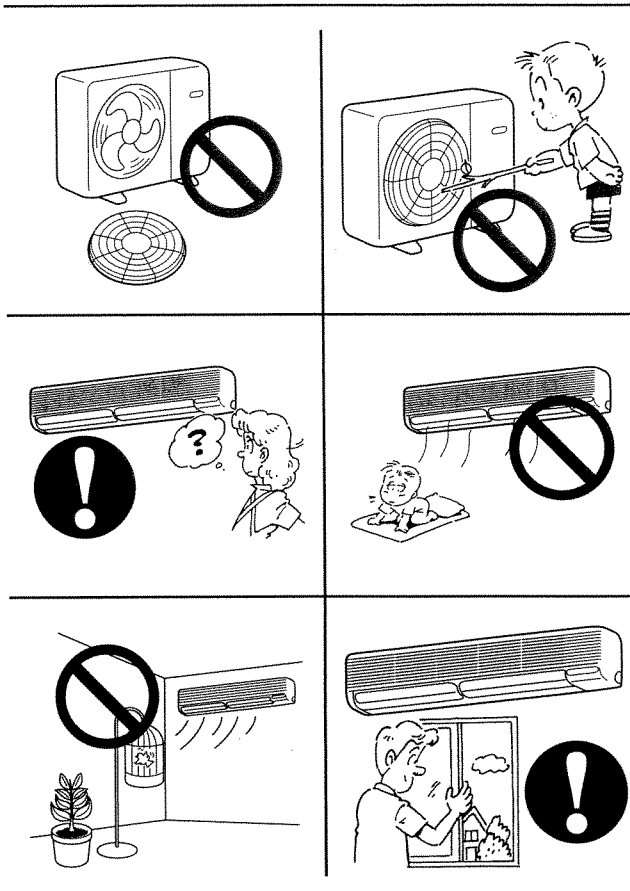
⚠ Caution:

- Do not use any sharp object to push the buttons, as this may damage the remote controller.
- Do not twist or tug on the remote controller cord as this may damage the remote controller and cause malfunction.
- Never block or cover the indoor or outdoor unit's intakes or outlets. Tall items of furniture underneath the indoor unit, or bulky items such as large boxes placed close to the outdoor unit will reduce the unit's efficiency.

⚠ Warning:

- 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.

1. Safety Precautions



1.2. During operation

⚠ Warning:

- Do not remove the front panel or the fan guard from the outdoor unit when it is running. You could be injured if you touch rotating, hot or high-voltage parts.
- Never insert fingers, sticks etc. into the intakes or outlets, otherwise injury may result, since the fan inside the unit rotates at high speed. Exercise particular care when children are present.
- 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.
- Do not over-cool. The most suitable inside temperature is one that is within 9°F of the outside temperature.
- Do not leave handicapped people or infants sitting or standing in the path of the airflow from the air-conditioner. This could cause health problems.

⚠ Caution:

- Do not direct the airflow at plants or caged pets.
- Ventilate the room frequently. If the unit is operated continuously in a closed room for a long period of time, the air will become stale.

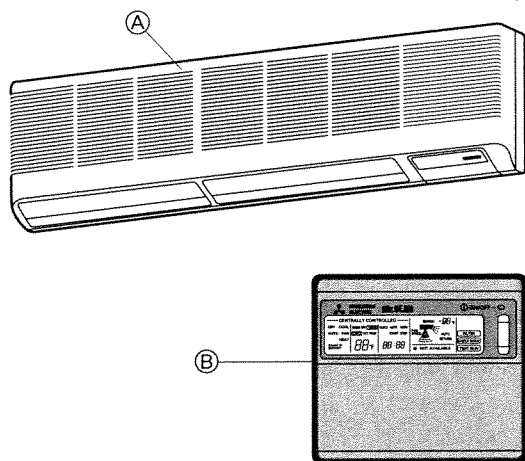
1.3. Disposing of the unit

⚠ Warning:

When you need to dispose of the unit, consult your dealer. If pipes are removed incorrectly, refrigerant (fluorocarbon gas) may blow out and come into contact with your skin, causing injury. Releasing refrigerant into the atmosphere also damages the environment.



2. Introduction



This air-conditioner unit is designed for maximum efficiency and ease of use. You can use it to cool, heat or dehumidify a room by making the appropriate settings on the wall-mounted remote controller. Once you have made your settings, operating the unit is usually a matter of simply pressing the POWER ON/OFF button.

In addition, an automatic cooling/heating mode allows you to set an ideal room temperature: the air-conditioner will then automatically adjust the room temperature accordingly.

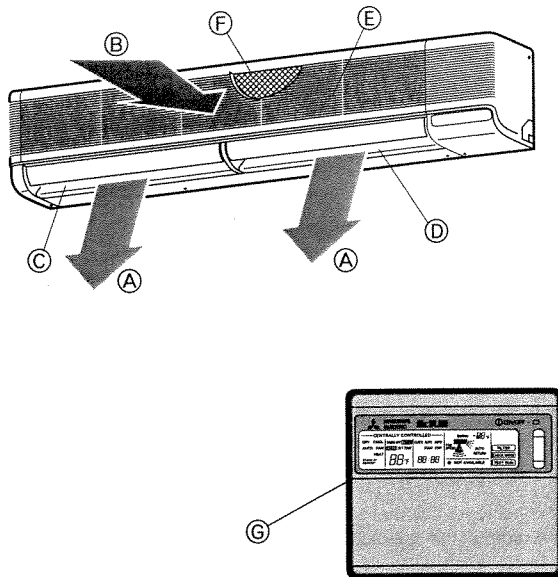
► **After you have read this manual, keep it and the Installation Manual in a safe place for easy reference whenever a question arises. If the unit is going to be operated by another person, make sure that this manual is given to him or her.**

- Ⓐ Indoor unit
- Ⓑ Remote controller

3. Components

3.1. Indoor unit and remote controller

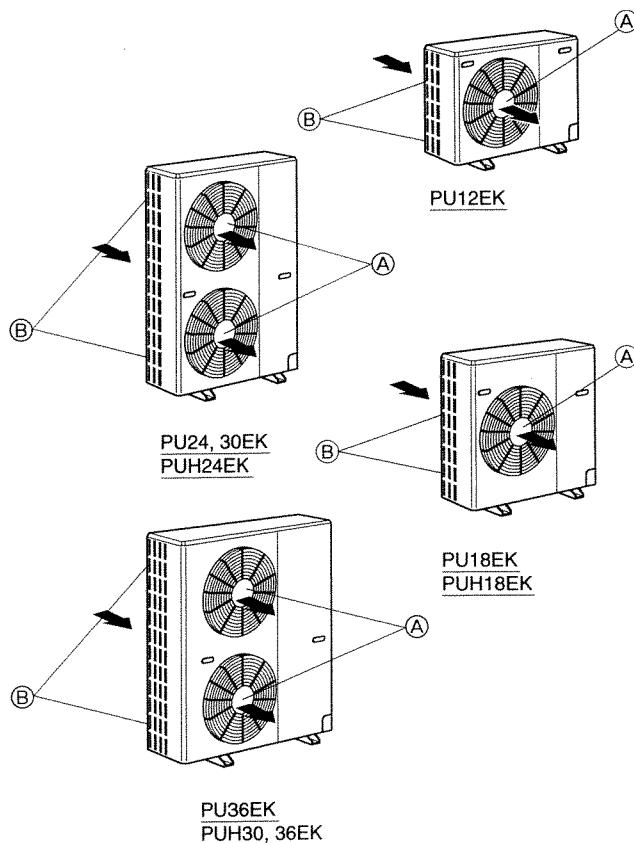
The indoor unit is mounted on the wall of your room and puts out air (cool, warm or dry) according to the settings you make using the remote controller mounted on the wall.



- Ⓐ **Air outlet**
- Ⓑ **Air intake:** sucks in air from the room.
- Ⓒ **Guide vane:** directs the airflow rightward or leftward.
- Ⓓ **Swing louvers:** direct the airflow horizontally or downward.
- Ⓔ **Intake grille**
- Ⓕ **Air filter:** removes dust and foreign matter from air coming in through the grille.
- Ⓖ **Remote controller:** mounted on the wall. The use of each button and the meaning of the display is explained in the "Operation" section.

3.2. Outdoor unit

The outdoor unit takes in air from outside and expels hot air (when cooling or drying the room) or cool air (when heating the room).



- Ⓐ **Air outlet**
- Ⓑ **Air intake**

4. Operation

4.1. Operation modes

Cooling

The air conditioner works to cool the room to the selected temperature. The fan blows air continuously at the selected speed.

Drying (dehumidifying) : Disabled in the heating mode

The drying mode efficiently reduces the humidity in the room so that the room temperature is not lowered excessively. When the selected room temperature is reached in the Low setting, the airflow will stop for ten minutes and then will resume for three minutes to keep the humidity low.

Heating [PKH18, 24, 30, 36FK only]

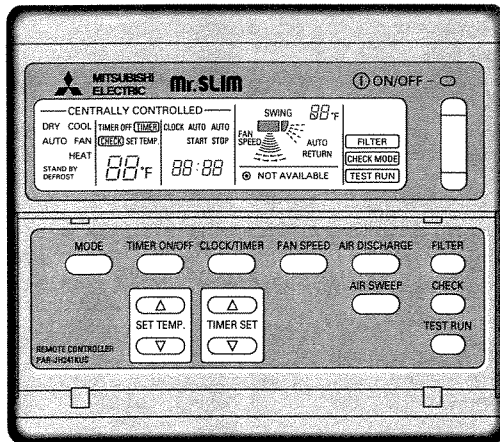
- The air conditioner works to heat the room to the selected temperature.
- When selecting the heating mode, a desired room temperature must be set to avoid any cool air. The fan will gradually increase the airflow delivery up to a selected rate.
- When the room temperature reaches the selected temperature and the compressor stops, the fan will deliver a gentle airflow.

Automatic (cooling / heating) [PKH18, 24, 30, 36FK only]

The air conditioner automatically goes into the cooling or heating mode to keep the room at the selected temperature.

Fan (circulation) [PK12, 18, 24, 30, 36FK only]

This mode allows circulation of air in the room.



4.2. Switching the unit on/off

► Before pressing the ON/OFF button:

- Check to see if the power supply is on.
- The power supply should not be turned off while the air conditioner is in use. This can cause the unit to break down.

① Press the ON/OFF button.

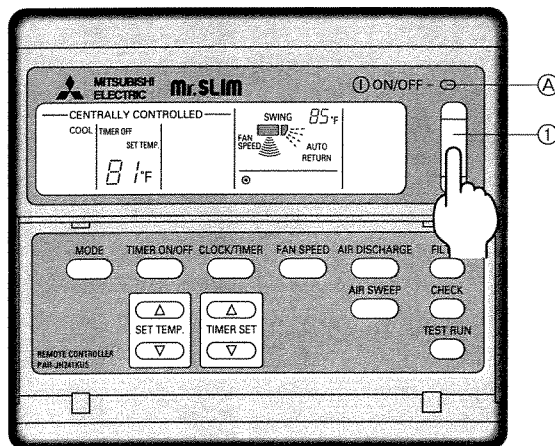
- Ⓐ The ON indicator should light up.

Note:

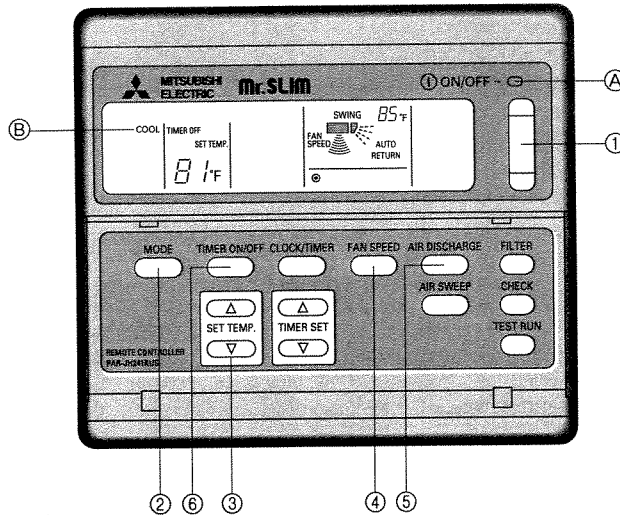
- Even if you press the ON/OFF button immediately after shutting down the operation in progress, the air conditioner will not start for about three minutes. This is to prevent the internal components from being damaged.
- If the operation stops due to a power failure, the unit will not automatically restart until the power has been restored. Press the ON/OFF button to restart.

⚠ Caution:

Never use the main power switch (see page 4) to turn off the air-conditioner while it is operating, as this may damage the unit.

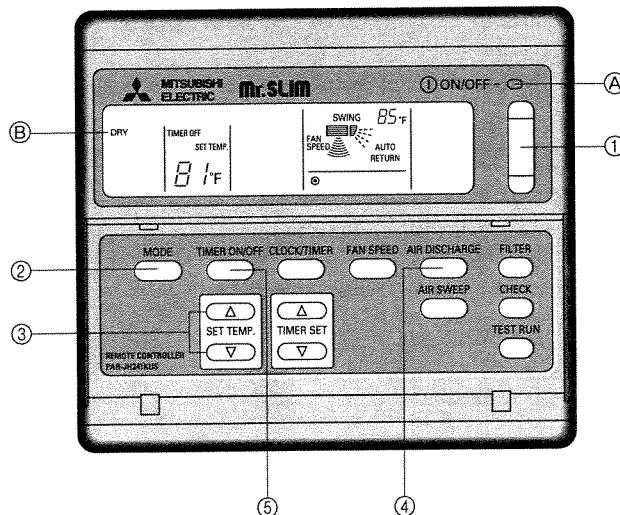


4. Operation



4.3. Cooling

- ① If the unit is off, press the ON/OFF button to turn it on.
 (A) The ON indicator should light up.
- ② Press the operation mode button and select the cooling mode.
 (B) "COOL" should be displayed.
- ③ If necessary, press set temperature button to set the desired temperature.
See page 11 for details.
- ④ If necessary, press fan speed button to select a desired rate.
See page 12 for details.
- ⑤ If necessary, press air discharge button to specify the vertical angle at which the air is blowing.
See page 12 for details.
- ⑥ If necessary, press timer on/off button to set the timer.
See page 13 for details.



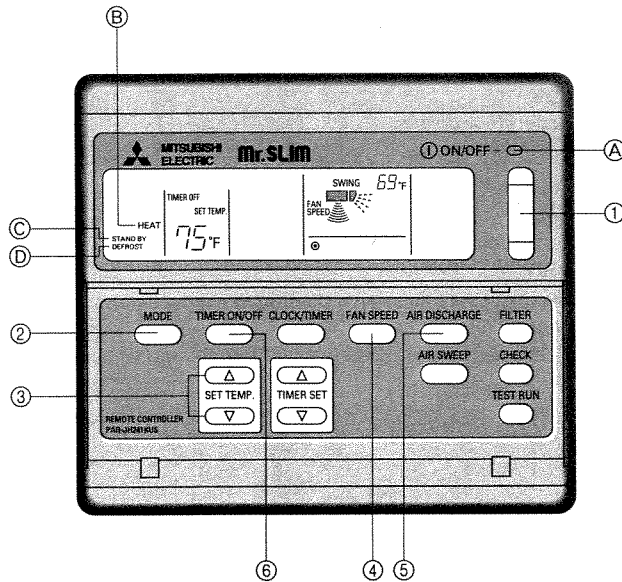
4.4. Drying (dehumidifying)

- ① If the unit is off, press the ON/OFF button to turn it on.
 (A) The ON indicator should light up.
- ② Press the operation mode button and select the drying mode.
 (B) "DRY" should be displayed.
- ③ If necessary, press set temperature button to set the desired temperature.
See page 11 for details.
- ④ If necessary, press air discharge button to specify the vertical angle at which the air is blowing.
See page 12 for details.
- ⑤ If necessary, press timer on/off button to set the timer setting.
See page 13 for details.

Note:

- When the room temperature is lower than 63°F, the drying mode cannot be set.
- This reduces the operation level of the indoor fan.
See page 12 for details.
- There may be times when the airflow volume does not match the display on the remote control unit.

4. Operation



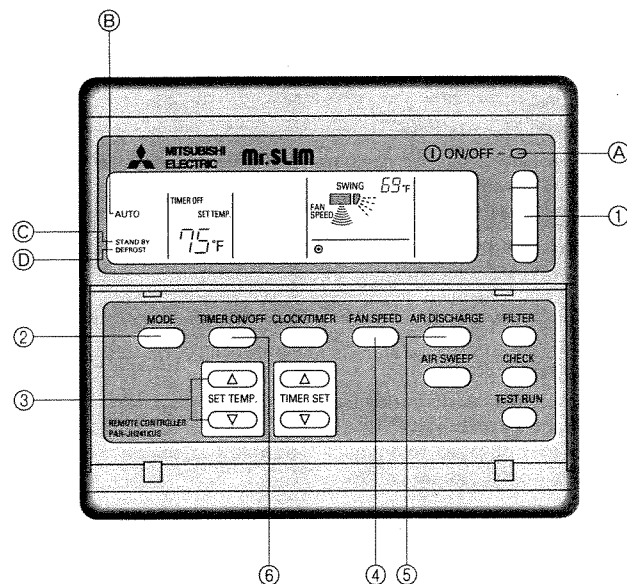
4.5. Heating [PKH18, 24, 30, 36FK only]

- ① If the unit is off, press the ON/OFF button to turn it on.
 - Ⓐ The ON indicator should light up.
- ② Press the operation mode button and select the heating mode.
 - Ⓑ "HEAT" should be displayed.
- ③ If necessary, press set temperature button to set the desired temperature.
 - See page 11 for details.
- ④ If necessary, press fan speed button to select a desired rate.
 - See page 12 for details.
- ⑤ If necessary, press air discharge button to specify the vertical angle at which the air is blowing.
 - See page 12 for details.
- ⑥ If necessary, press timer on/off button to set the timer.
 - See page 13 for details.

The fan speed may differ from the set speed at the start of the heating mode, during the defrosting mode, or after shutdown of the heating mode.

- Ⓒ "STAND BY" is displayed from the moment heating begins until warm air is blown out.
- Ⓓ "DEFROST" is displayed during defrosting.

The fan may continue blowing out air for a while after you have turned the unit off. This is to discharge residual heat.



4.6. Automatic (cooling / heating) [PKH18, 24, 30, 36FK only]

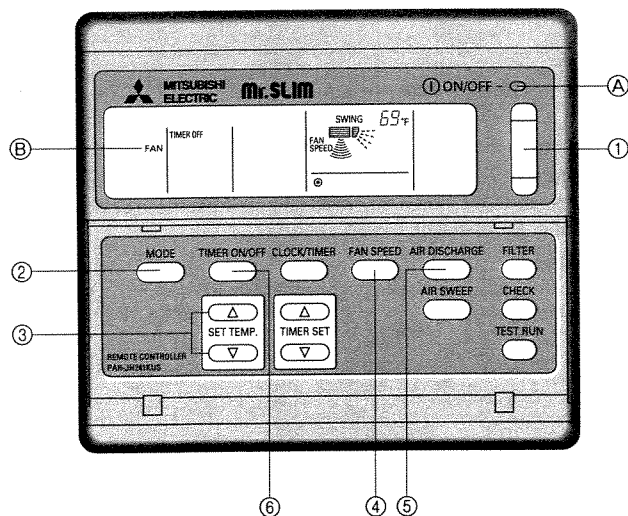
The AUTO mode starts with cooling or heating depending on the current room temperature, higher or lower, than a selected temperature value accordingly.

- ① If the unit is off, press the ON/OFF button to turn it on.
 - Ⓐ The ON indicator should light up.
- ② Press the operation mode button to select the automatic mode.
 - Ⓑ "AUTO" should be displayed.
- ③ If necessary, press set temperature button to set the desired temperature.
 - See page 11 for details.
- ④ If necessary, press fan speed button to select a desired rate.
 - See page 12 for details.
- ⑤ If necessary, press air discharge button to specify the vertical angle at which the air is blowing.
 - See page 12 for details.
- ⑥ If necessary, press timer on/off button to set the timer.
 - See page 13 for details.

- Ⓒ STANDBY is displayed from the moment heating is started until warm air is blown out.
- Ⓓ DEFROST is displayed during defrosting.

4. Operation

4.7. Fan (circulation) [PK12, 18, 24, 30, 36FK only]



- ① If the unit is off, press the ON/OFF button to turn it on.
Ⓐ The ON indicator should light up.
- ② Press the operation mode button and select the fan mode.
Ⓑ "FAN" should be displayed.
- ③ If necessary, press set temperature button to set the desired temperature.
See page 11 for details.
- ④ If necessary, press fan speed button to select a desired rate.
See page 12 for details.
- ⑤ If necessary, press air discharge button to specify the vertical angle at which the air is blowing.
See page 12 for details.
- ⑥ If necessary, press timer on/off button to set the timer.
See page 13 for details.

4.8. Selecting a temperature

► To decrease the room temperature:

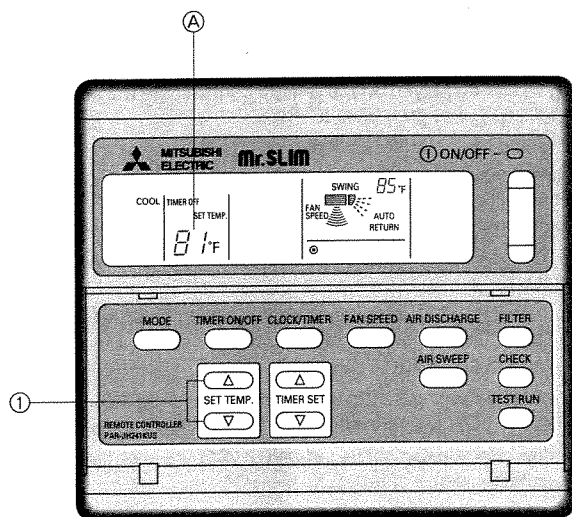
- ① Press set temperature button to set the desired temperature.
Ⓐ The selected temperature is displayed.
- Each time you press the button, the temperature value decreases by 2°F.

► To increase the room temperature:

- ① Press set temperature button to set the desired temperature.
Ⓐ The selected temperature is displayed.
- Each time you press the button, the temperature value increases by 2°F.

• Available temperature ranges are as follows:

Cooling & Drying:	65 - 87°F
Heating:	61 - 83°F
Automatic:	65 - 83°F
Circulation:	— (Not available)



4. Operation

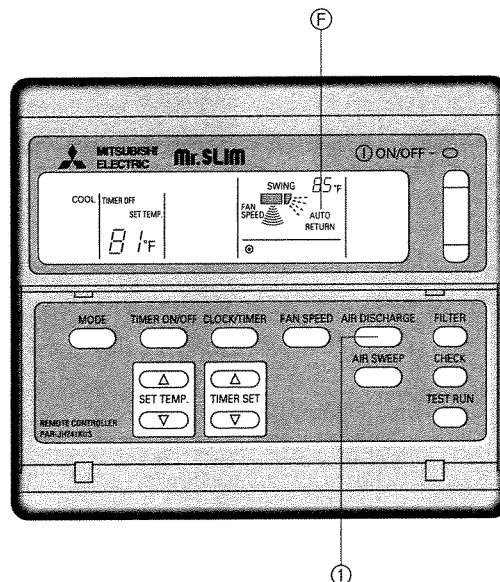
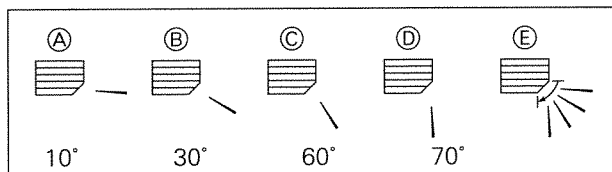
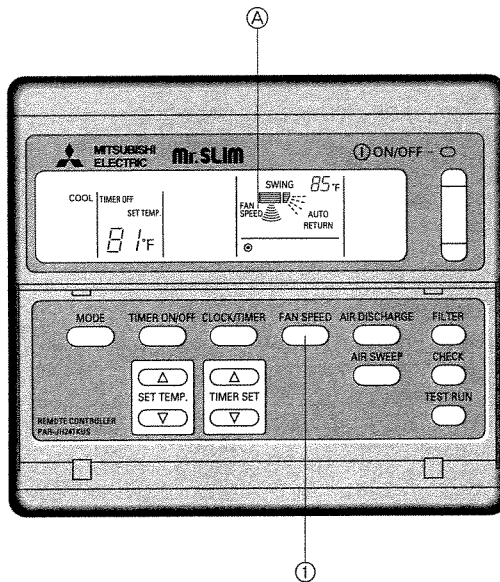
4.9. Selecting a fan speed

① Press fan speed button to select a desired fan speed.

- Each time you press the button, available options change with the display ① on the remote controller, as shown below.

Display	FAN SPEED  - FAN SPEED 
Available Option (Fan Speed Switch)	Low - High

- In the drying mode, the selection of the fan speed is disabled.
- In the heating mode, the indoor fan continues running for approximately one minute to discharge any residual heat from the electric heater; even after the operation has shut down.



4.10. Adjusting the vertical airflow direction

When you switch to the cooling/drying mode, the airflow will be directed horizontally (10°); when you switch to the heating mode, the airflow will be directed downward (70°).

① To change these default settings, press air discharge button. Your setting will be displayed on the remote controller in the sequence ①, ②, ③, ④, ⑤ and then back to ①.

① 10° ② 30° ③ 60° ④ 70° ⑤ Swing

- In cooling/drying mode with the fan speed set to LOW, every press on the button will change the direction in the order of ①, ③, ④, ①. (② can not be set)

- If ③ or ④ is set, the angle will automatically revert to ① after one hour of operation.

(Do not use ③ and ④ too often in cooling/drying mode with the fan speed set to LOW, or condensation or dripping can occur.)

⑥ "AUTO RETURN" should be displayed.

- When the angle setting is ② in cooling mode, switching the fan speed from HIGH to LOW will cause the angle to revert to ① automatically.
- The airflow direction can not be set with UP/DOWN while the SWING setting is being used.

* The SWING setting is not available on the PK12FK model.

4. Operation

4.11. Adjusting the horizontal airflow direction

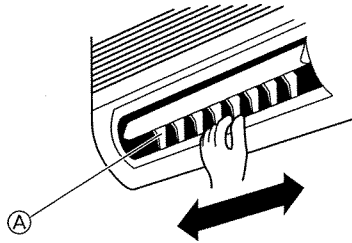
The airflow horizontal direction can be manually adjusted to the right or the left.

- ▶ To adjust, move the guide vanes to the desired direction.

Ⓐ Guide vane

⚠ **Warning:**

- Right/left adjustment should be made before starting operation.
- Never insert your fingers deep inside the air outlet as you could be hurt by the rotating fan.



4.12. Using the timer

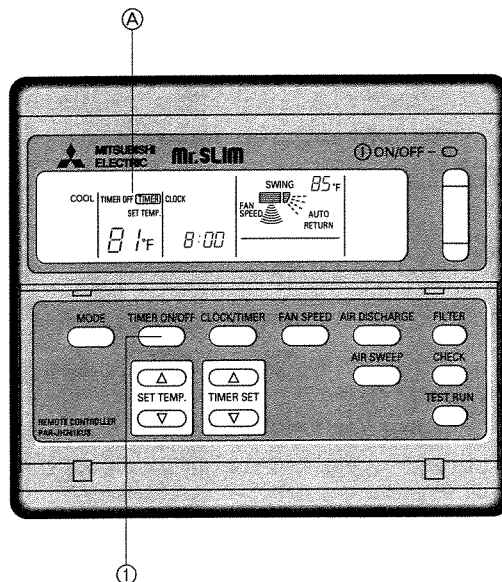
▶ **Available Timer-Interlocked Operation Modes**

1. AUTO START/STOP: Allows both start and shutdown to be interlocked with the timer.
2. AUTO START: Allows automatic start in response to the timer setting and shutdown to be proceeded by manually pressing the ON/OFF button.
3. AUTO STOP: Allows the start of the operation to be manually invoked by pressing the ON/OFF button and automatic shutdown based on the timer setting.

- ▶ **Timer-interlocked operation is available only once for both start and shutdown in 24 hours.**

- ▶ While Ⓐ **TIMER** is displayed, setting and changing of time for timer-interlocked operation is disabled.

- ① In this case, press timer on/off button once to turn off the Ⓐ **TIMER OFF** display on the remote controller. This is referred to as **TIMER OFF** operation.



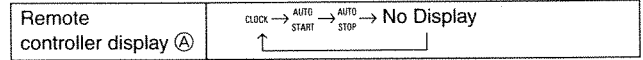
4. Operation

4.12. Using the timer

1) Set the current time

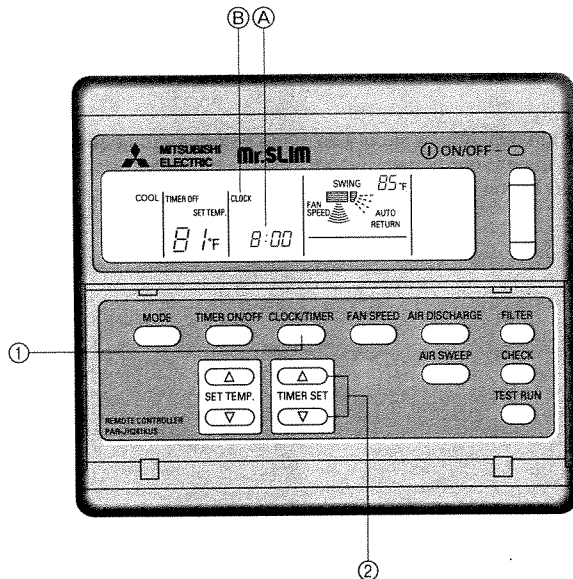
① Press clock/timer button to display the "CLOCK" ⑥.

- Each time you press clock/timer button, the display on the remote controller cyclically changes as follows.



② Each time you press  button, the time increases in increments of one minute. Each time you press  button, the time decreases in increments of one minute.

- Press and hold the button to rapidly change the time.
- The time changes in increments of one minute → ten minutes → in units of hour; in this order.
- Approximately ten seconds after pressing the button, the display on the remote controller will turn off.



4.12. Using the timer

2) Set the time to start the unit as follows

① Press clock/timer button to display ⑥ .

② Press  button to set the time that you want the unit to start. The start time is displayed at ⑥.

3) Set the time to stop the unit as follows

① Press clock/timer button to display ⑥ .

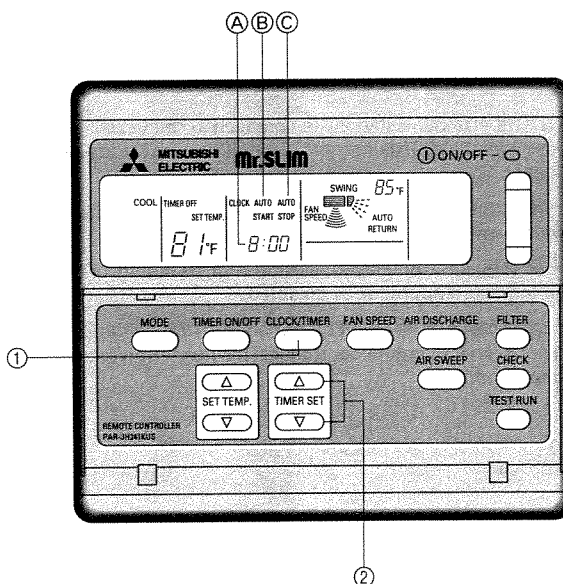
② Press  button to set the time that you want the unit to stop. The stop time is displayed at ⑥.

4) Changing the set times

① Press clock/timer button to display the time (CURRENT, START, STOP) you want to change.

② Press  button to set the desired time.

- When change is made to either one of a pair, e.g., AUTO START or AUTO STOP, set the time you need not to change to . This display is available following 23:50.



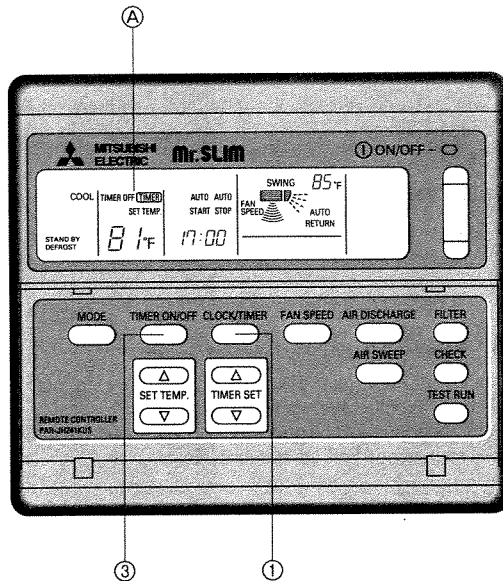
4. Operation

4.12. Using the timer

5) AUTO START and AUTO STOP operation

- ① Press clock/timer button to make the following checks.
Check that the current time is correct.
Check that the automatic start time is correct.
Check that the automatic shutdown time is correct.
- For selection or changing of time, see the previous page (page 14).
- The next operation time is displayed after approximately 10 seconds.
- ③ Press timer on/off button to display ① (TIMER) on the remote controller.
- Each time you press timer on/off button, available options change as follows with relative displays on the remote controller.

Remote controller display ①	TIMER OFF ↔ (TIMER)
Available setting	Available ↔ Not-available (Timer-interlocked operation)



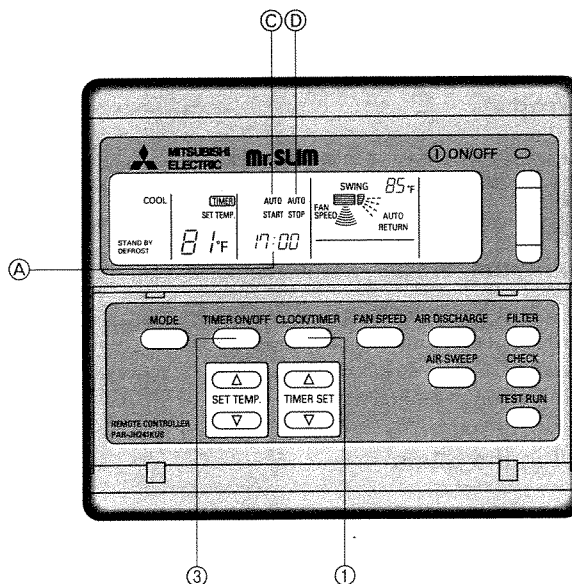
4.12. Using the timer

6) AUTO START Operation

- ① Press clock/timer button to make the following checks.
Check that the current time is correct.
Check that the automatic start time is correct.
Check that the automatic shutdown time is identical to the display ① (---).
- For the selection of the time, see the previous page (page 14).
- ③ Press timer on/off button once to display ② (AUTO START) on the remote controller.

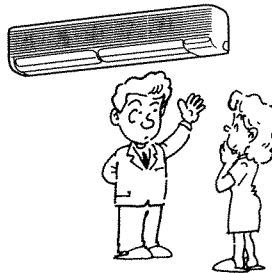
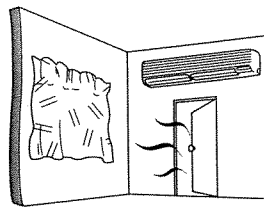
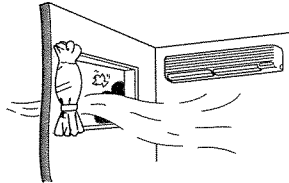
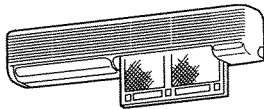
7) AUTO STOP Operation

- ① Press clock/timer button to make the following checks.
Check that the current time is correct.
Check that the automatic shutdown time is correct.
Check that the automatic start time is identical to the display ① (---).
- For the selection of the time, see the previous page (page 14).
- ③ Press timer on/off button to display ③ (AUTO STOP) on the remote controller.



5. Tips for best results

6. Care and cleaning



Keep the filters clean

Dirty or clogged filters reduce the flow of air, making the unit less efficient. Very dirty filters may even cause damage to the unit. Remove and clean the filters at least once a week (more often, in very dusty locations). Using a vacuum cleaner is an ideal way to clean the filters.

Let fresh air into the room from time to time

Open the windows and ventilate the room now and then, otherwise the room will become musty.

Eliminate heat sources

When cooling the room, draw the curtains to keep out direct sunlight. Keep doors and windows fully closed, and avoid opening doors more often than necessary.

Do not over-cool

The air-conditioner works most efficiently when cooling the room to a temperature within 9°F of the outdoor temperature. In COOL mode, for every 2°F you increase the desired temperature setting, you will save about 10% on electricity costs.

⚠ Warning:

- Always turn off the power, first on the remote controller and then the main switch, before cleaning or servicing the unit.
- When installing or removing the filter or front panel, do not stand on an unsteady surface. You may fall and injure yourself. Be also careful not to let dust fall into your eyes.

6.1. Cleaning the filters and the indoor unit

Dirty or clogged filters block the airflow and reduce efficiency. Very dirty filters can damage the air-conditioner itself. Clean the filters at least once a week.

Removing the filters - PK12FK only

Remove the two filters as follows:

- ① Manually rotate the auto-vane to a deeper position.

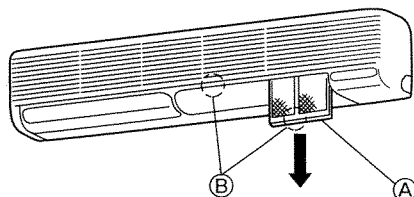
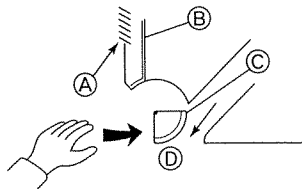
- | | |
|----------------|--------------|
| Ⓐ Intake grill | Ⓑ Filter |
| Ⓒ Auto-vane | Ⓓ Air outlet |

Removing the filters

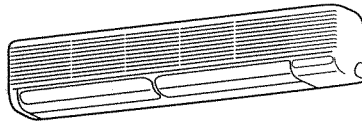
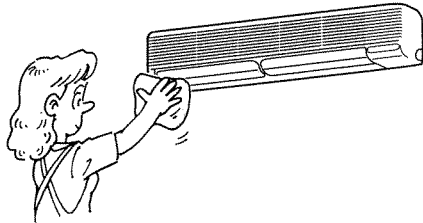
- ① Hold the filter lug (located at the bottom of the intake grill) and pull it out downward.

- | |
|----------|
| Ⓐ Filter |
| Ⓑ Lug |

- To reinstall the filters, push the filter lug upward.



6. Care and cleaning



6.1. Cleaning the filters and the indoor unit

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 120°F), as this may warp them.
- Make sure that the air filters are always installed. Operating the unit without air filters can cause malfunction.

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.

6.2. Care and cleaning

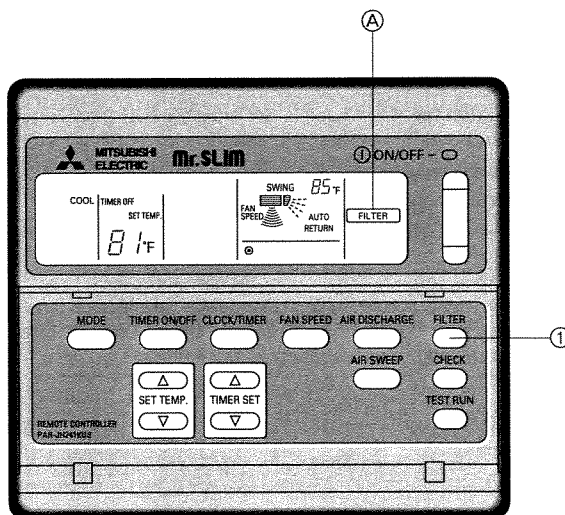
Clean the filter

When the Ⓐ "FILTER" indicator blinks on the remote controller to alert you to the necessity of cleaning of the filter.

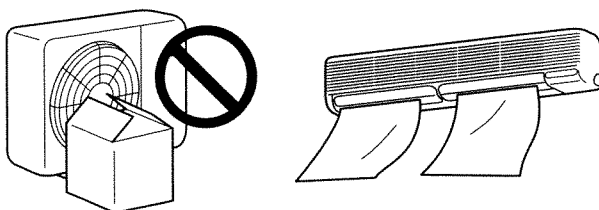
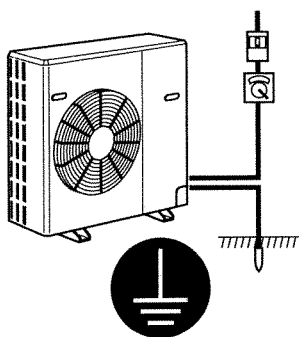
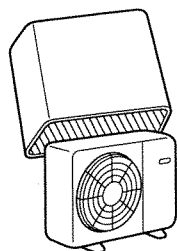
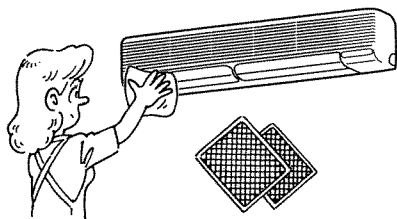
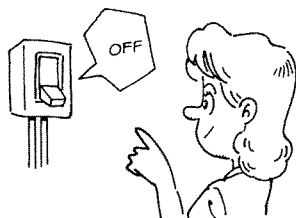
- * As a guideline for typical office environment, the filter must be cleaned every 100 operating hours.

Reset the FILTER indicator

- ① Press the FILTER button twice after cleaning.
- ▶ When you press the FILTER button twice, the 'FILTER' indicator Ⓐ will be turned off and reset.
 - ▶ The FILTER indicator provides you with a guideline for the necessity of filter cleaning based on total operating hours in typical indoor air conditions. Depending on different operating environments, more or less frequent cleaning may be necessary.



6. Care and cleaning



6.3. End-of-season

- ▶ Press POWER ON/OFF to turn the unit off.
- ▶ Turn off the main power switch.
- ▶ Clean the filters and the indoor unit thoroughly.
- ▶ Clean the outdoor unit and place a protective cover over it to keep out dirt and rubbish.

6.4. Pre-season checks

- ▶ Remove the protective cover from the outdoor unit.
- ▶ Check that the outdoor unit is properly installed.
- ▶ Check that the outdoor unit's ground wire is properly attached.
- ▶ Check that the intakes and outlets on both the indoor and outdoor units are free of any obstruction.
- ▶ Check that the drain hose is not blocked, that there are no kinks in it, and that it is correctly installed.
- ▶ Check that the filters are installed in the indoor unit. Operating the air-conditioner without filters can damage it.

⚠ Caution:

The first time you use the air-conditioner after a long break (e.g. the first hot day of summer), turn on the main power at least twelve hours before you turn on the unit using the POWER ON/OFF button. This will assist trouble-free operation.

7. Troubleshooting

Before you call out a repair man, check the following table to see whether there is a simple solution to your problem.

Problem	Display reading	Cause	Solution
Unit will not start.	Pilot lamp does not turn on even when the POWER ON/OFF button is pressed.	Main power switch is turned off.	Turn main power on. Then press the POWER ON/OFF button to turn the unit on.
		Main power fuse has blown.	Replace the fuse.
		Outdoor unit's ground fault breaker is open.	Reset the ground fault breaker.
		A power cut has occurred (see NOTE below).	Wait until power is restored, then press the POWER ON/OFF button to turn the unit on.
Unit discharges air well, but fails to cool or heat the room well.	Remote controller shows that the unit is operating.	Improper temperature setting - e.g. you have selected COOL mode, but the desired temperature setting is higher than the current room temperature.	Check the set temperature on the remote controller and the actual intake air temperature. Use the COOLER and WARMER buttons to set the temperature as described in "Setting the temperature" on page 11.
		Filters are clogged.	Clean the filter and resume operation. See "Cleaning the filters and the indoor unit" on page 16.
		Outdoor unit's intake or outlet is obstructed.	Remove the obstruction.
		A door or window has been left open.	Shut door or window.
Unit does not start immediately.	Remote controller shows that the unit is operating.	Unit is waiting three minutes before restarting.	Wait until the unit restarts automatically. The compressor may hesitate resuming because a three-minute resume prevention circuit is incorporated in the outdoor unit for protection of the compressor.
Unit stops soon after starting.	Remote controller check display reads "CHECK P6" or "CHECK P8".	Indoor or outdoor unit's intake or outlet is obstructed.	Remove obstruction and restart the unit.
		Filters are clogged.	Remove the obstruction. Clean the filter and resume operation. See "Cleaning the filters and the indoor unit" on page 16.

NOTE: After a power cut, the unit will not restart automatically. You will have to restart it by pressing the POWER - ON/OFF button on the remote controller.

If none of the above apply, turn the main switch off and contact the dealer from whom you bought the air-conditioner, telling him the model name and the nature of the problem. Do not try to fix the unit yourself.

In any of the following cases, turn off the main power switch and contact your local dealer for service:

- "CHECK" followed by "P1", "P2", "P3", "P4", "P5", "P7" or "-CENTRALLY CONTROLLED-" is displayed on the control panel.
- The switches do not work properly.
- The circuit breaker trips frequently (or the fuse blows frequently).
- Water has accidentally been splashed into the unit.
- Water leaks from the unit.
- Something is accidentally dropped into the air-conditioner.
- An unusual noise is heard during operation.

The following do not indicate any malfunction:

Odours: smells such as tobacco or cosmetic odours may persist after they have been sucked into the unit.

Sound of liquid flowing inside indoor unit: this can occur during or after operation and is simply the sound of refrigerant being circulated inside the unit.

Ticking sound coming from indoor unit: this can occur when cooling or heating has just begun or has just stopped. It is caused by the indoor unit shrinking or expanding slightly due to the change in temperature.

The message "-CENTRALLY CONTROLLED-" appearing on the LCD panel: from time to time, this message may come up on the LCD panel. This does not indicate any malfunction.

8. Specifications

Item		Models	PKH18FK	PKH24FK	PKH30FK	PKH36FK
Capacity	Cooling	*1 BTU/h	18,000	24,000	30,000	34,200
	Heating	*1,*3 BTU/h	18,600 [24,100/25,100]	25,000 [30,500/31,500]	33,000 [39,100/40,500]	38,000 [44,100/45,500]
	Heating	*2,*3 BTU/h	10,700 [16,200/17,200]	14,700 [20,200/21,200]	19,000 [25,100/26,500]	19,600 [25,700/27,100]
Power consumption	Cooling	*1 kW	1.79	2.36	3.12	3.44
	Heating	*1,*3 kW	1.56 [3.16/3.46]	2.37 [3.97/4.27]	3.02 [4.82/5.22]	3.54 [5.34/5.74]
	Heating	*2,*3 kW	1.34 [2.94/3.24]	1.92 [3.52/3.82]	2.48 [4.28/4.68]	2.65 [4.45/4.85]
SEER			11.1	10.2	10.6	10.5
HSPF			7.2	6.8	7.1	6.9
INDOOR UNIT MODELS			PKH18FK	PKH24FK	PKH30FK	PKH36FK
External finish			Munsell 3.4Y 7.7/0.8			
Power supply			208/230, 1, 60			
Max. fuse size (time delay)			A			
Min. ampacity			15			
Fan motor			F. L. A.			
Auxiliary heater			A (kW)			
Airflow	Dry	CFM	710-530		990-780	
Lo-Hi	Wet	CFM	640-480		890-700	
Dimensions	W	in	55-1/8		66-5/32	
	D	in	9-1/4		9-1/4	
	H	in	13-3/8		13-3/8	
Weight			lbs		57	
OUTDOOR UNIT MODELS			PUH18EK	PUH24EK	PUH30EK	PUH36EK
External finish			Munsell 5Y 7/1			
Power supply			208/230, 1, 60			
Max. fuse size (time delay)			A		30	
Min. ampacity			16		20	
Fan motor			F. L. A.		0.75	
Compressor	Models		RH247NAB		NH33NBD	
	R. L. A.		12.0		11.5	
	L. R. A.		37		54	
Crankcase heater			A (W)		0.11/0.12 (23/28)	
Refrigerant control			Capillary tube			
Defrost method			Reverse cycle			
Dimensions	W	in	34-1/4		38-3/16	
	D	in	11-5/8		13-9/16	
	H	in	33-1/2		41-9/16	
Weight			lbs		131	
REMOTE CONTROLLER			With indoor unit			
Control voltage (by built-in transformer)			Indoor unit-remote controller DC12V, Indoor unit- outdoor unit DC12V			

NOTES: *1 Rating conditions (cooling) – indoor: 80°F DB. 67°F WB outdoor: 95°F DB. 75°F WB
 (heating) – indoor: 70°F DB. 60°F WB outdoor: 47°F DB. 43°F WB
 *2 Rating conditions (heating) – indoor: 70°F DB. 60°F WB outdoor: 17°F DB. 15°F WB
 *3 Heating capacity and power consumption in [] include auxiliary electric heater operation at 208/230V.
 *4 With wind baffle installed. Without wind baffle, the minimum temperature will be 23°F DB.

Operating range

		Indoor air intake temperature	Outdoor air intake temperature
Cooling	Maximum	95°F DB. 71°F WB	115°F DB
	Minimum	67°F DB. 57°F WB	0°F DB *4
Heating	Maximum	80°F DB. 67°F WB	75°F DB. 65°F WB
	Minimum	70°F DB. 60°F WB	17°F DB. 15°F WB

Units should be installed by licensed electric contractor accordingly to local code requirement.

* Specifications subject to change without notice.

8. Specifications

Item		Models	PK12FK	PK18FK	PK24FK	PK30FK	PK36FK
Cooling capacity		*1 BTU/h	12,500	18,500	24,000	30,000	34,200
Power consumption		*1 kW	1.21	1.75	2.34	3.06	3.47
SEER			11.5	11.3	10.6	10.7	10.2
INDOOR UNIT MODELS			PK12FK	PK18FK	PK24FK	PK30FK	PK36FK
External finish			Munsell 3.4Y 7.7/0.8	Munsell 3.4Y 7.7/0.8	Munsell 3.4Y 7.7/0.8	Munsell 3.4Y 7.7/0.8	Munsell 3.4Y 7.7/0.8
Power supply			115, 1, 60	115, 1, 60	115, 1, 60	115, 1, 60	115, 1, 60
Max. fuse size (time delay)		A	15	15	15	15	15
Min. ampacity		A	1	1	1	2	2
Fan motor		F. L. A.	0.7	0.7	0.7	1.0	1.0
Airflow	Dry	CFM	490-350	710-530	710-530	990-780	990-780
	Wet	CFM	440-320	640-480	640-480	890-700	890-700
Dimensions	W	in	49-7/32	55-1/8	55-1/8	66-5/32	66-5/32
	D	in	7-7/8	9-1/4	9-1/4	9-1/4	9-1/4
	H	in	11-13/16	13-3/8	13-3/8	13-3/8	13-3/8
Weight		lbs	37	53	53	62	62
OUTDOOR UNIT MODELS			PU12EK	PU18EK	PU24EK	PU30EK	PU36EK
External finish			Munsell 5Y 7/1	Munsell 5Y 7/1	Munsell 5Y 7/1	Munsell 5Y 7/1	Munsell 5Y 7/1
Power supply			208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60	208/230, 1, 60
Max. fuse size (time delay)		A	15	20	20	30	30
Min. ampacity		A	11	16	16	20	22
Fan motor		F. L. A.	0.65	0.75	0.65+0.65	0.65+0.65	0.75+0.75
Compressor	Model		RH167NAB	RH247NAB	NH33NBD	NH41NAD	NH47NAD
	R. L. A.		8.9	12.0	11.5	14.0	17.5
	L. R. A.		29	37	54	73	87
Crankcase heater		A (W)	0.11/0.12 (23/28)	0.11/0.12 (23/28)	0.16/0.17 (33/39)	0.16/0.17 (33/39)	0.16/0.17 (33/39)
Refrigerant control			Capillary tube	Capillary tube	Capillary tube	Capillary tube	Capillary tube
Dimensions	W	in	34-1/4	34-1/4	34-1/4	34-1/4	38-3/16
	D	in	11-5/8	11-5/8	11-5/8	11-5/8	13-9/16
	H	in	25-9/16	33-1/2	49-9/16	49-9/16	49-9/16
Weight		lbs	105	154	207	208	220
REMOTE CONTROLLER			With indoor unit				
Control voltage (by built-in transformer)			Indoor unit-remote controller DC12V, Indoor unit- outdoor unit DC12V				

NOTES: *1 Rating conditions (cooling) – indoor: 80°F DB. 67°F WB outdoor: 95°F DB. 75°F WB
*2 With wind baffle installed. Without wind baffle, the minimum temperature will be 23°F DB.

Operating range

		Indoor air intake temperature	Outdoor air intake temperature
Cooling	Maximum	95°F DB. 71°F WB	115°F DB
	Minimum	67°F DB. 57°F WB	0°F DB *2

Units should be installed by licensed electric contractor accordingly to local code requirement.
* Specifications subject to change without notice.

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