MITSUBISHI ELECTRIC

CITY MULTI Control System and Mitsubishi Mr. Slim Air Conditioners Wireless Remote Controller PAR-SL101A-E Series

OPERATION MANUAL

FOR USER / FOR INSTALLER

English

Manual Download

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Operation Manual Contents

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

en

Note

Fig. 1

This symbol mark is for EU countries only.
This symbol mark is according 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 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 batteries and accumulators.
Please, dispose of batteries and accumulators correctly at your local community waste collection/recycling centre.
Please, help us to conserve the environment we live in!

1. Safety Precautions

- Be sure to read these Safety precautions thoroughly and install the remote controller correctly.
- The following two symbols are used to denote dangers that may be caused by incorrect use. They are classified according to the degree of danger.

⚠ **WARNING:**	This symbol denotes what could lead to serious injury or death if you misuse the controller.
⚠ **CAUTION:**	This symbol denotes what could lead to personal injury or damage to your property if you misuse the controller.

- After reading this manual, be sure to forward it, together with the operation manual accompanying the indoor unit, to the user.
  Together with the operation manual for the indoor unit, this manual should be kept in a place where it can be referred to at anytime by the user. When the user changes, be sure to forward the manual to the final user.

⚠ WARNING

- **Do not dispose of the controller by yourself.**
  - Consult your dealer in case of disposal.
- **Stop operation when an abnormality occurs.**
  - Continuing to operate under abnormal conditions can result in breakdown, electric shock or fire. When an abnormality occurs (burning smell etc.), stop operations, turn off the power switch and consult your dealer.
- **Never modify or repair the controller by yourself.**
  - Any deficiency caused by your modification or repair may result in an electric shock or fire. Consult your dealer about repairs.

1. Safety Precautions

⚠ WARNING

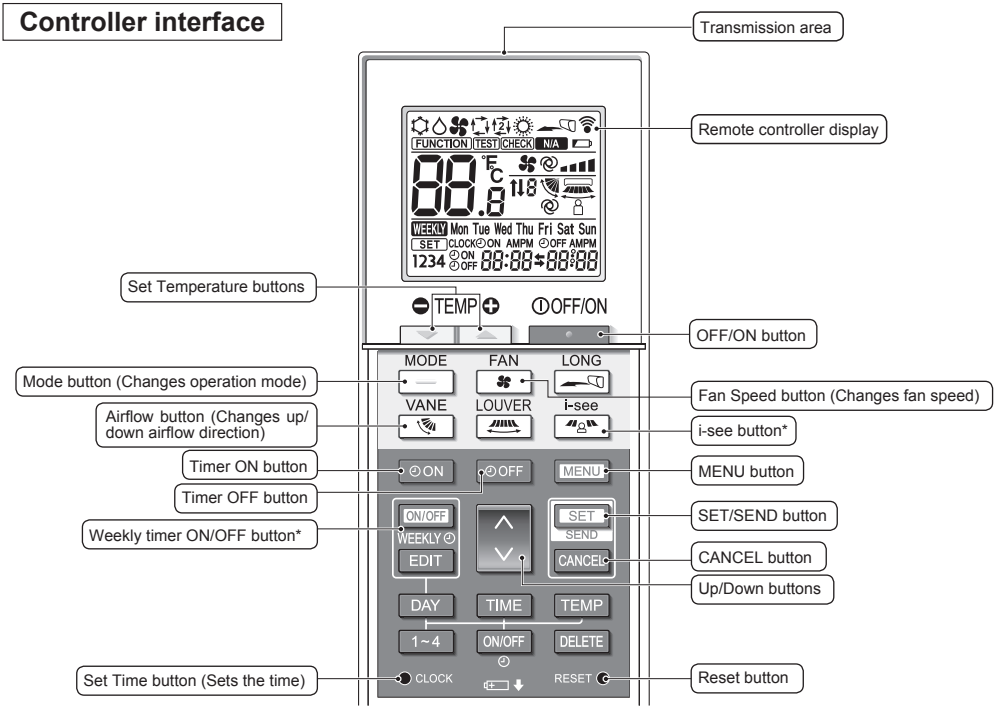
- **Stop operation if the operation lamp on the controller's receiver blinks or if an abnormality occurs.**
  - Leaving the controller in these conditions can lead to fire or breakdown. Report such conditions to your dealer.
- **Never allow the alkaline batteries to short-circuit. Never disassemble, heat or place them in fire.**
  - Doing so can cause the strong alkaline liquid to leak and possibly enter your eyes or cause the batteries to explode or heat up, resulting in personal injuries, burning or mechanical breakdowns. If strong alkaline liquid comes in contact with your skin or clothes, wash it off with clean water. If it gets in to your eyes, wash them with clean water and consult a doctor immediately.

⚠ CAUTION

- **Do not drop the controller.**
  - Doing so may cause the case to crack and may disable control.
- **Do not place any dangerous substances near the controller.**
  - Do not install in any place exposed to leakage of flammable gas. Flammable gases accumulated around the controller may cause fire or an explosion.
- **Do not wash with water.**
  - Doing so may cause an electric shock or breakdown.
- **Do not touch any control button with wet hands.**
  - Doing so may cause an electric shock or breakdown.
- **Do not disassemble the controller.**
  - Contact with internal circuitry may cause fire or breakdown.
- **Do not use in special environments.**
  - Using in places exposed to oil (including machine oil), steam or sulfur gas can reduce the performance or can cause damage to the components.
- **Do not spray insecticide or other flammable sprays.**
  - Do not place flammable sprays near the controller or spray directly at the controller. Doing so may result in fire or explosion.
- **Do not wipe the controller with benzine, thinner or chemical cloths etc.**
  - Doing so may cause discoloration or breakdowns. If the controller becomes extremely dirty, dampen a cloth with water-diluted neutral detergent and wipe the controller with it, then wipe with a dry cloth.
- **Do not press any control button with a sharp object.**
  - Doing so may cause an electric shock or breakdown.
- **Keep the temperature within the specified range.**
  - Use the controller within the specified operating temperature range. Using in temperature outside that range can cause serious breakdowns.
  - For the specified operating temperature range, refer to the specifications given on the operation manual.
- **Do not use for other special purposes.**
  - The controller has been designed for use with the CITY MULTI and Mr. Slim only. Do not use for other purposes such as controlling other air conditioners. Doing so may result in breakdown.
- **Incorrect use of batteries can cause liquid leakage, explosion or heating and may result in breakdown or personal injury. Adhere to the following.**
  (1) Do not recharge the batteries.
  (2) Insert the batteries in the correct direction.
  (3) Do not mix a new battery with an old battery or batteries of different types.
  (4) Remove the batteries immediately when they have run out.

2. Names and functions of controller components

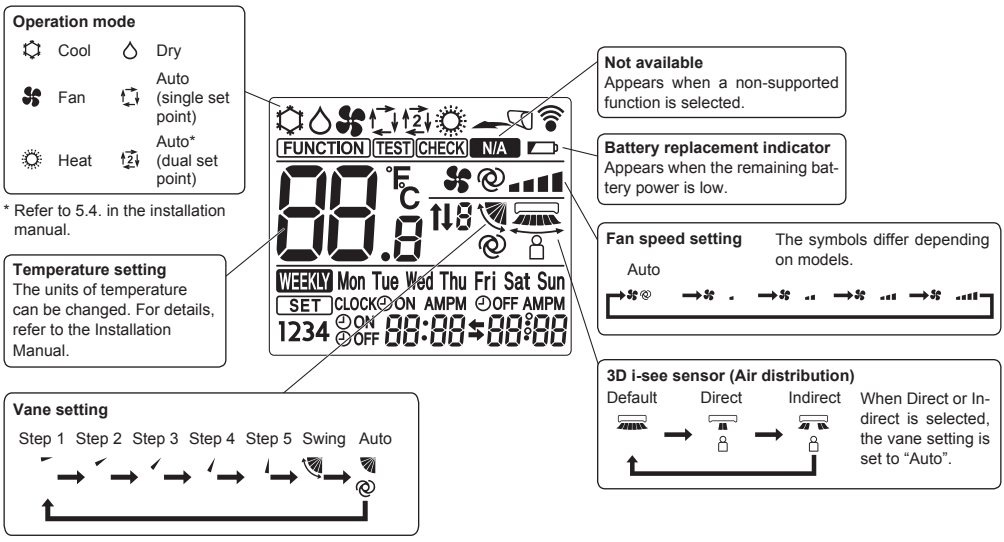
Controller interface



Note:

* **This button is enabled or disabled depending on the model of the indoor unit.**

Display



2. Names and functions of controller components

Note:

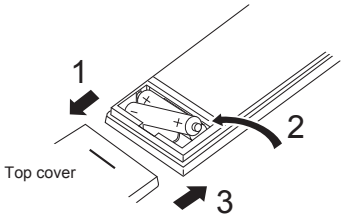
- When using the wireless remote controller, point it towards the receiver on the indoor unit.
- If the remote controller is operated within approximately 3 minutes after power is supplied to the indoor unit, the indoor unit may beep three times as the unit is performing the initial automatic check.
- 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 (Approx. 22 feet) 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 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.
- If the indoor unit beeps 4 times when you are using the wireless remote controller, switch the auto mode setting to the AUTO (single set point) mode or AUTO (dual set point) mode.
  For details, refer to the included Notice (A5 sheet) or the Installation Manual.

3. Before Operation

3.1. Replacing the batteries and how to set the current time

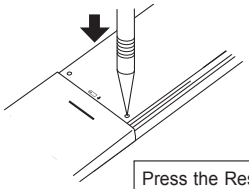
Battery installation/replacement

1. Remove the top cover, insert two LR6 AA batteries, and then install the top cover.



Two LR6 AA batteries
Insert the negative (–) end of each battery first. Install the batteries in the correct directions (+, –)!

2. Press the Reset button.



Press the Reset button with an object that has a narrow end.

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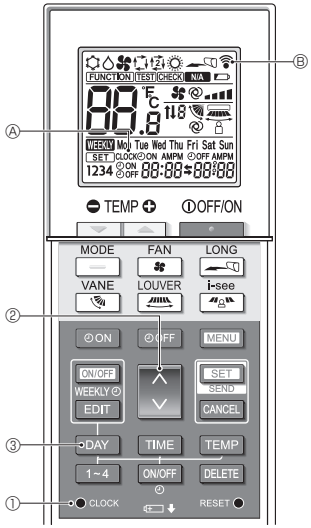
After battery installation/replacement, please set clock.
Without setting clock, you cannot use a part of function of remote controller.



How to set the current time

- The transmission mark Ⓑ appears each time a signal is transmitted.
- The indoor unit beeps to confirm that the signal transmitted from the wireless remote controller has been received by the receiver on the indoor unit. If the indoor unit does not beep, transmit the signal again.

1. Press the ● CLOCK button ①. [CLOCK] Ⓐ blinks.
2. Press the ^ v button ② to set the current time.
   - Press the ^ button to increase the current time. Press the v button to decrease the current time.
   - Hold down the button to increase or decrease the time in 10-minute increments.
3. Press the DAY button ③ to set the day.
   - Each time the button is pressed, the day changes in the following repeating order: Monday → Tuesday → … Sunday → Monday → …
4. Press the ● CLOCK button ① to confirm the current time settings.
   - [CLOCK] Ⓐ stops blinking and remains on, and the current day and time are displayed.

3.2. Initial setting

Refer to 5. Initial Setting in the installation manual.

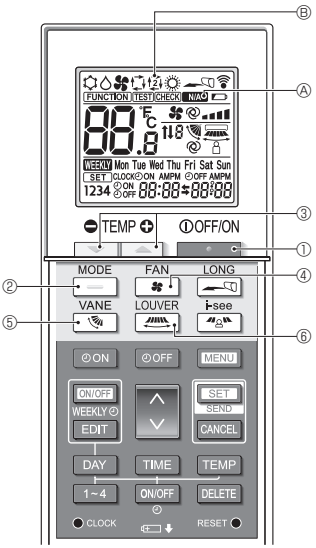


Fig. 4-1

4.1. Switching the unit on/off (Fig. 4-1)

1. Press the [ ] button ①.
   - The remote controller display turns on.
2. Press the [—] button ②.
   - Each time the button is pressed, the setting changes.

Auto → Heat → Cool → Dry → Fan

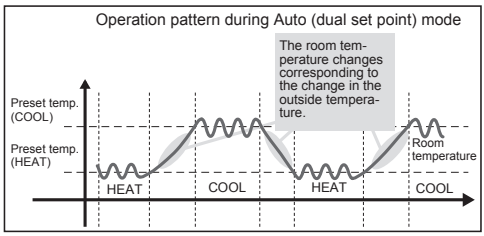
* If the automatic operation is selected, cooling operation starts if the room temperature is higher than the set temperature and heating operation starts if the room temperature is lower than the set temperature.
If the AUTO (dual set point) mode is enabled, Ⓑ is displayed.
When setting the AUTO (dual set point) mode, you can set 2 temperatures (1 temperature for cooling and 1 temperature for heating).
According to the room temperature, the indoor unit operates automatically in the cooling or heating mode to keep the room temperature within the set range.

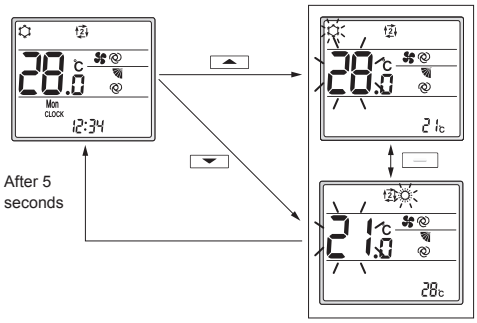
* The AUTO (dual set point) mode cannot be used depending on the model of the connected outdoor unit.

<Auto operation (dual set point) mode>

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.

The graph below shows the operation pattern of indoor unit operated in the Auto (dual set point) mode.





4.2. Selecting a temperature (Fig. 4-1)

To decrease the temperature, press the ▼ button ③.
To increase the temperature, press the ▲ button ③.

- Each time the button is pressed, the set temperature changes 0.5°C (1°F).
- The setting ranges for the temperature are as follows.

Cool/Dry	Heat	Auto	Fan
19–30°C 67–87°F	17–28°C 63–83°F	19–28°C 67–83°F	Not settable

* Refer to 6.3. 6) Set temperature range setting in the installation manual if the set temperature range has been changed.

When using the AUTO (dual set point) mode

- The set temperature for the current operation mode, cooling or heating, is displayed.
- When the ▼ or ▲ button ③ is pressed, the set temperature blinks and the setting screen is displayed.
  To change the upper limit (cooling) for the set temperature range, press the ▲ button ③.
  To change the lower limit (heating) for the set temperature range, press the ▼ button ③.
- In the setting screen, press the — button ② to switch the blinking display between the upper limit (cooling) and lower limit (heating).
- Press the ▼ or ▲ button ③ in the setting screen to change the blinking set temperature.
- If no operations are performed for 5 seconds, the display returns to the previous screen.

* The difference between the upper limit (cooling) and lower limit (heating) cannot be set to less than 2°C (4°F).

* The AUTO (dual set point) mode cannot be used depending on the models of the connected indoor and outdoor units.

4.3. Selecting a fan speed (FAN) (Fig. 4-1)

Press the ❋ button ④.

- Each time the button is pressed, the setting changes.

- The available fan speeds depend on the model of the indoor unit.

* The symbols differ depending on models.

Note:

In the following cases, the actual fan speed generated by the unit may be different from the speed shown on the remote controller display.

- The unit is performing the warming-up operation or the defrosting operation.
- Immediately after starting the heating operation (while the system is waiting for the mode change to take effect).
- In the heating mode, the room temperature is higher than the temperature setting.
- In the cooling mode, the room temperature is lower than the temperature setting.
- The unit is in the dry mode.

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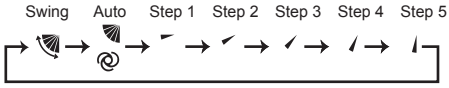
4.4. Adjusting vertical airflow direction
(Fig. 4-1)

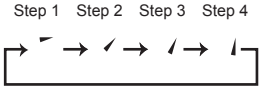
- Refer to the catalog or the operation manual of the indoor unit to find out whether or not the model has functions for vertical, horizontal, or direct/indirect airflow direction.
- The horizontal airflow direction cannot be operated when multiple refrigerant systems are controlled together as a group.

<Changing the vertical airflow direction (vane)>
Press the [ ] button ⑤.
- Each time the button is pressed, the setting changes.

For models with swing and automatic functions



For models without swing and automatic functions



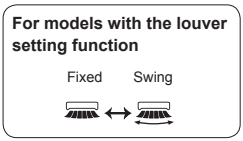
* For models that are equipped with a horizontal airflow direction function, the horizontal airflow direction setting is switched to “Auto” when the vertical airflow direction is set to “Auto”.

* For models that are not equipped with a vertical airflow direction function, N/A Ⓐ blinks twice when the vertical airflow direction is set.

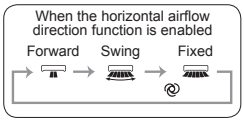
<Changing the horizontal airflow direction (louver)>
Press the button ⑥.

Louver flow model

- Each time the button is pressed, the setting switches between the swing operation and the fixed operation.



Horizontal flow model (3D Total Flow Unit)
Each time the button ⑥ is pressed, the setting changes in the following order.



* For models that are equipped with an automatic airflow direction function, the vertical airflow direction setting is switched to “Auto” when the horizontal airflow direction is set to “Auto”.
* Functions differ depending on models.
* For models that are not equipped with a horizontal airflow direction function, N/A Ⓐ blinks twice when the horizontal airflow direction is set.

Note:
In the following cases, the vertical airflow direction of the unit may be different from the direction shown on the remote controller display.

- The unit is performing the warming-up operation or the defrosting operation.
- Immediately after starting the heating operation (while the system is waiting for the mode change to take effect).
- In the heating mode, the room temperature is higher than the temperature setting.

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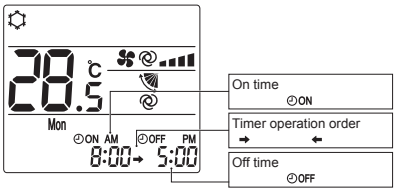


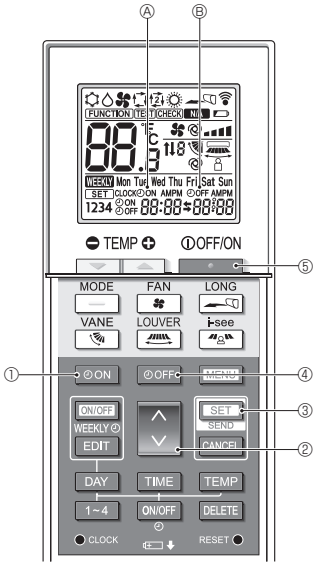


Fig. 4-2

4.5. Using the on/off timer (Fig. 4-2)

- When setting the timer operation, point the transmission area of the wireless remote controller towards the receiver on the indoor unit and confirm that the indoor unit beeps when it receives signals from the remote controller.

■ There are 3 types of timer operation.
- On timer operation: Only the timer to start the operation is set.
- Off timer operation: Only the timer to stop the operation is set.
- On/off timer operation: The timers to start and stop the operation are both set.

■ Only 1 on-timer setting and 1 off-timer setting can be set for the timer operation within a 24-hour period.

■ The time setting for the timer operation can be set in 10-minute increments.

[Set the time to start the unit as follows]

1. Press the ON button ①.
   - The current time disappears, the on time appears, and ON Ⓐ blinks.
2. Press the ▲▼ button ② to set the on time.
3. Press the SET button ③.
   - ON Ⓐ stops blinking and remains on to indicate that the setting is complete.
     * Even if no operations are performed for 10 seconds, ON Ⓐ stops blinking and remains on to indicate that the setting is complete.
   - If the on timer is set while the air conditioner is operating, the air conditioner stops.

[Set the time to stop the unit as follows]

1. Press the OFF button ④.
   - The current time disappears, the off time appears, and OFF Ⓑ blinks.
2. Press the ▲▼ button ② to set the off time.
3. Press the SET button ③.
   - OFF Ⓑ stops blinking and remains on to indicate that the setting is complete.
     * Even if no operations are performed for 10 seconds, OFF Ⓑ stops blinking and remains on to indicate that the setting is complete.

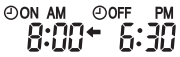
[Changing the set times]

Set both the off timer and on timer.

- In the ⇵ display, → or ← appears.
  → : Stops → Operates (on time) → Stops (off time)
  ← : Operates → Stops (off time) → Operates (on time)

Example 1) The current time is 7:00 A.M.
The air conditioner starts operating at 8:00 A.M. and stops at 6:30 P.M.

Example 2) The current time is 10:00 A.M.
The air conditioner stops operating at 6:30 P.M. and starts at 8:00 A.M. on the following day.



[Canceling the timer operation]

- Canceling the on timer operation
  Press the ON button ①.
  - The on time disappears and the on timer is canceled.
- Canceling the off timer operation
  Press the OFF button ④.
  - The off time disappears and the off timer is canceled.
- Canceling the on/off timer operation
  Press the ON button ① or the OFF button ④.
  The on time and off time disappear and the timer is canceled.
- Canceling the timer operation and stopping the air conditioner
  Press the button ⑤.
  - The air conditioner stops and the set timer operation is canceled at the same time.

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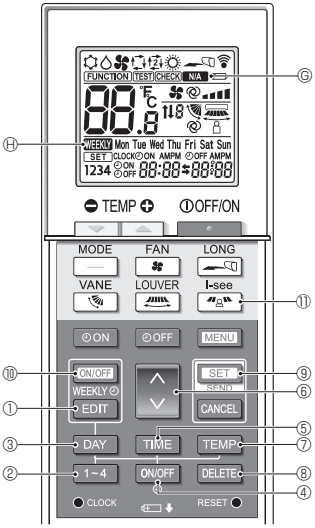


Fig. 4-3

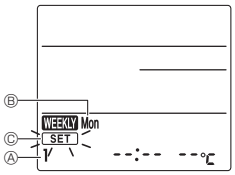


Fig. 4-4

Fig. 4-5

Fig. 4-6

Fig. 4-7

Fig. 4-8

4.6. Using the weekly timer

- This function cannot be operated depending on the model of the indoor unit.
- The weekly timer can be set to 4 operation patterns for each day of the week.
- The settings include the on and off times and the set temperature.
- The operation time can be set in 10-minute increments.

<Switching to the editing mode> (Fig. 4-3, Fig. 4-4)

Press the EDIT button ①.

- SET Ⓒ blinks.

<Selecting the setting pattern>

Press the 1~4 button ②. (Fig. 4-3, Fig. 4-4)

- Each time the 1~4 button ② is pressed, the pattern number Ⓐ changes in the following order: 1 → 2 → 3 → 4.

<Selecting the day of the week>

Press the DAY button ③. (Fig. 4-3, Fig. 4-4)

- Each time the DAY button ③ is pressed, the day of the week Ⓑ changes in the following order: Mon → Tue → Wed → Thu → Fri → Sat → Sun → All days.

<Selecting the operation settings>

1. Press the ON/OFF button ④. (Fig. 4-3, Fig. 4-5 Ⓓ)
   - ON (OFF) appears.
   - Each time the ON/OFF button ④ is pressed, the setting switches between ON and OFF.
2. Press the TIME button ⑤. (Fig. 4-3, Fig. 4-6)
   - The operation time blinks.
   - Press the ∧∨ button ⑥ to set the operation time.
3. Press the TEMP button ⑦. (Fig. 4-3, Fig. 4-7, Fig. 4-8)
   - The set temperature blinks.
   - Press the ∧∨ button ⑥ to set the temperature.
   - When the AUTO (dual set point) mode is enabled, press the TEMP button ⑦ to switch between the upper limit Ⓔ and the lower limit Ⓕ.

* When setting the off operation, the temperature cannot be set.

<Deleting the settings> (Fig. 4-3)

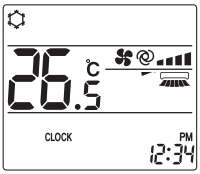
Press the DELETE button ⑧.

- The displayed day of the week and the pattern number settings are deleted.

<Transmitting the settings> (Fig. 4-3)

Point the transmission area of the wireless remote controller towards the receiver on the indoor unit and operate the controller. Confirm that the indoor unit beeps 7 times.

Press the SET button ⑨.



<Enabling the weekly timer> (Fig. 4-3)

Point the transmission area of the wireless remote controller towards the receiver on the indoor unit and operate the controller.

Press the ON/OFF button ⑩.
The weekly timer operates when WEEKLY Ⓗ is on.

- The weekly timer does not function when the on/off timer is enabled.
- The weekly timer operates when all of the on/off timer settings have been executed.

4.7. i-See sensor (Fig. 4-3)

- This function cannot be operated depending on the model of the indoor unit.

1. Each time button ⑪ is pressed during operation, the setting changes in the following order: OFF → Direct → Indirect.

Display			
Setting	OFF	Direct	Indirect

When the setting is changed from OFF to Direct or Indirect, the vane setting changes to “Auto”. This setting is applied collectively to all of the vanes.

* Refer to the operation manual of the indoor unit for airflow direction when direct / Indirect airflow is selected.
* N/A Ⓖ blinks twice when direct / Indirect airflow is not selected.

2. The vanes automatically move relative to the areas where persons are detected. When a person is detected, the vanes operate as indicated in the following table.

	Vane setting	
	Direct	Indirect
Cooling	horizontal → swing	keep horizontal
Heating	keep downward	downward → horizontal

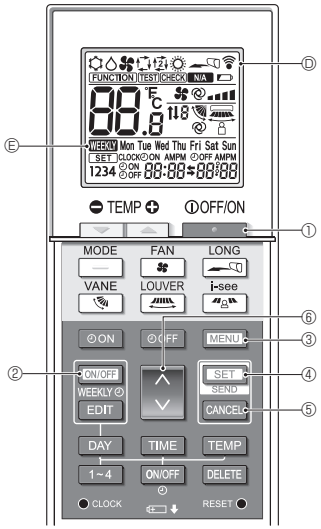


Fig. 5-1

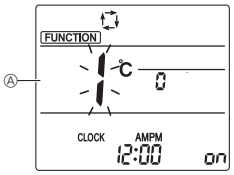


Fig. 5-2

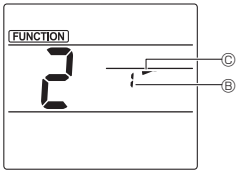


Fig. 5-3

Some functions cannot be operated depending on the air conditioner.
Confirm whether the air conditioner supports each function, and then operate the air conditioner.

<Switching to the special operation mode>
(Fig. 5-1, Fig. 5-2)

1. Press the [ ] button ① to stop the air conditioner.
   - If the weekly timer is enabled, press the [ON/OFF] button ② to disable the timer. (WEEKLY Ⓔ disappears.)
2. Press the [MENU] button ③.
   - The Function setting screen will be displayed and the function No. Ⓐ will blink.

<Transmitting the settings> (Fig. 5-1)

- When you perform each operation, Ⓓ on the remote controller display blinks to indicate that the [SET] button ④ must be pressed to transmit the settings. Point the transmission area of the wireless remote controller towards the receiver on the indoor unit and press the [SET] button ④ to transmit the settings. Confirm that the indoor unit beeps at this time.

<Exiting the special operation mode> (Fig. 5-1, Fig. 5-2)

1. While the operation screen for each function is displayed, press the [MENU] button ③ or the [CANCEL] button ⑤.
   - The Function setting screen will be displayed and the function No. Ⓐ will blink.
2. Press the [MENU] button ③.
   - The display returns to the normal screen.

5.1. Setting the fixed airflow direction (Fig. 5-1, Fig. 5-3, Fig. 5-4)

<Setting the vertical airflow direction>

1. In the Function setting screen, press the [ ] button ⑥ and select function No. “2”.
2. Press the [SET] button ④.
   - The vane number Ⓑ blinks.
3. Press the [ ] button ⑥ to select the vane number.
   - For information about the vane numbers, refer to the indoor unit operation manual.
4. Press the [SET] button ④.
   - The airflow direction setting Ⓒ blinks.
5. Press the [ ] button ⑥ to select the airflow direction at which you want to fix the vane.

Step 1	Step 2	Step 3	Step 4	Step 5
Draft reduction		No setting		
(No display)				

6. Press the [SET] button ④ to transmit the settings.

Note:
Draft reduction
The airflow direction for this setting is more horizontal than the airflow direction for the “Step 1” setting in order to reduce a drafty feeling. The draft reduction can be set for only 1 vane. The setting is enabled only for the last vane that was set.

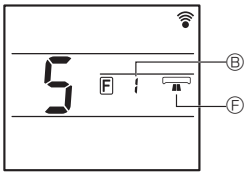


Fig. 5-4

<Setting the horizontal airflow direction>

1. Press the ∧∨ button ⑥ to select the function No. "5" on the function setting screen (see 5.1. in the installation manual).
2. Press the SET button ④.
   - The vane number Ⓑ blinks.
3. Press the ∧∨ button ⑥ to select the vane number.
   - Refer to the operation manual of the indoor unit for vane numbers.
4. Press the SET button ④.
   - The horizontal airflow direction Ⓕ blinks.
5. Press the ∧∨ button ⑥ to select the desired airflow direction.

Forward	Right forward	Right	Left forward	Left	Not selected

6. Press the SET button ④ to set the airflow direction.

en

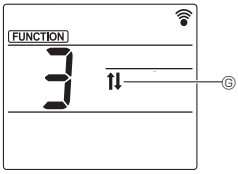


Fig. 5-5

5.2. Operating the ascending/descending panel (Fig. 5-1, Fig. 5-5)

1. In the Function setting screen, press the ∧∨ button ⑥ and select function No. “3”.
2. Press the SET button ④.
   - The ascending/descending mark Ⓖ blinks.
3. Press the ∧∨ button ⑥ or the CANCEL button ⑤.
   - ∨ : Descending operation
   - ∧ : Ascending operation
   - CANCEL : Stop operation

6. Centrally Controlled

<When remote operation by other remote controllers is prohibited>
When remote operation is prohibited by a central remote controller, the operations for stopping and starting operation and the settings for the operation mode, temperature setting, vane setting, and fan speed cannot be performed from this remote controller according to the prohibited settings.
<When a wireless remote controller is operated during central control>
The receiver of the wireless remote controller operates as follows.
Reception confirmation sound: 2 beeps
Operation lamp during operation: Turns off 3 times in 0.5-second intervals
Operation lamp when operation is stopped: Turns on 3 times in 0.5-second intervals

en

7. Troubleshooting

<When the operation lamp of the wireless remote controller receiver is blinking>
The blinking lamp indicates an air conditioner malfunction has occurred.
If this occurs, turn off the power switch immediately and consult your dealer.
Do not attempt to repair this equipment by yourself.
<When the indoor unit beeps 4 times and the operations are ineffective>
The auto mode setting (single set point or dual set point) is different for the remote controller and the system to which the indoor unit is connected. Change the current setting according to 5.4. in the installation manual.

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.

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