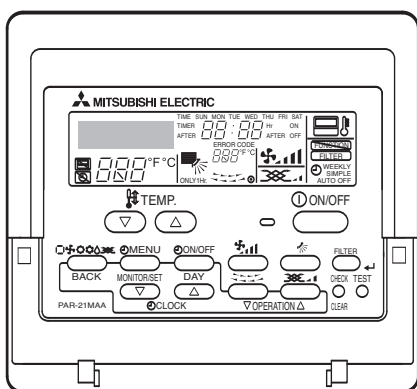## 2-2. MA remote controller
PAR-21MAA

- Dot matrix liquid crystal screen displays complete operating status.
- Digital display lets you set temperature in 1ºC/ºF increments.
- Weekly Timer: up to 8 ON/OFF/Temperature Settings can be made per day. The time can be set in 1-minute increments. The setting is kept in nonvolatile memory. No need to worry about re-setting at power failure.
- Equipped with a thermostat sensor in the remote controller that makes possible more comfortable room temperature con-trol.
- Ability to limit the set temperature (upper and lower tempera-ture can be set.)
- Ability to restrict setting changes (either all changes or all ex-cept ON/OFF)
- Constantly monitors for malfunctions in the system, and is equipped with a "self-diagnosis function" that lets you know by error code immediately when a malfunction occurs.
- Dimensions: 120(W) x100(H) x 19(D) mm

■ System example

R/C : Remote Controller
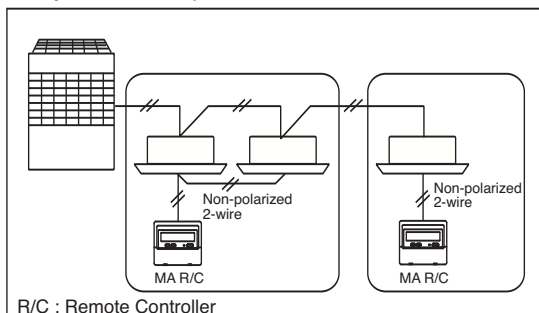
■ External dimension
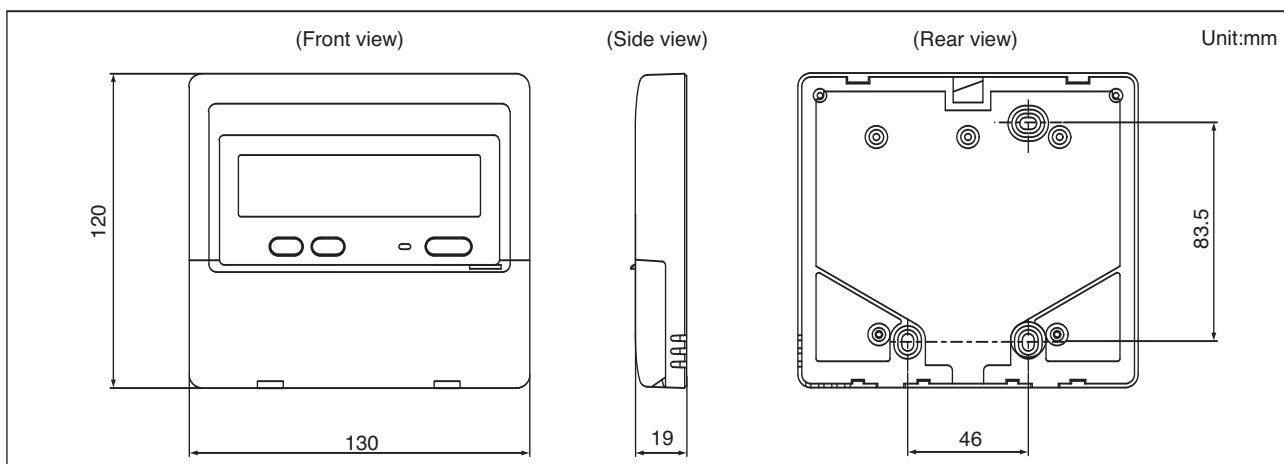
■ Functions

□ :Each unit ○ :Each group ● :Each block
△ :Each floor ◎ :Collective ✕ :Not available

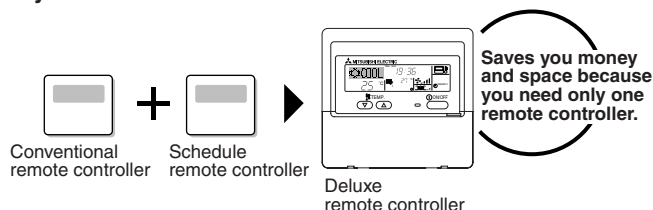| Item	Description	Operations	Display
ON/OFF	Run and stop operation for a single group	○	○
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○	○
TEMP. Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C (14°C - 30°C) Heat : 17°C - 28°C (17°C - 28°C) Auto : 19°C - 28°C (17°C - 28°C) ( ) in case of using middle-temperature on PEFY-VMS/VMH-E by setting DipSW7-1 to ON.	○	○
Fan speed setting	Models with 5 air flow speed settings: Hi/Mid-2/Mid-1/Low, Auto Models with 4 air flow speed settings: Hi/Mid/Low, Auto Models with 2 air flow speed settings: Hi/Low Fan speed setting varies depending on the model.	○	○
Air flow direction setting	Air flow direction angles (4-angle, or 5-angle Swing) Auto Louver ON/OFF Air flow direction settings vary depending on the model.	○	○
Weekly scheduler	ON/OFF/Temperature setting can be done up to 8 times one day in the week. The time can be set by the minute.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter). ※1 : When the local remote controller inactivation command is received from the master system controller, " " is displayed.	✕	※1 ○
Prohibition/permission of specified mode (Cooling prohibited /heating prohibited /cooling-heating prohibited)	By the setting from System Controller, the operation for the following modes is prohibited. At cooling prohibited : Cool, Dry, Auto, At heating prohibited : Heat, Auto, At cooling-heating prohibited : Cool, Heat, Dry, Auto	✕	○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit when the indoor unit is operating.	✕	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	✕	□
Test run	This operates air conditioner units in test run mode.	○	○
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one LOSSNAY. LOSSNAY items that can be set are "Hi" "Low" "Stop". Ventilation mode switching is not available.	○	○
Function to limit the setting range of room temperature (Set temperature range limit)	Set temperature range limit to cooling, heating, or auto mode.	○	○
Easy-to-operate simplified locking function (Auto lock function)	Setting/releasing of simplified locking for remote control switch can be performed. · Locking of all switches · Locking of all switches except Start/Stop switch	○	○

(Front view) (Side view) (Rear view) Unit:mm

120

130

19

83.5

46

CONTENTS

Ⅰ. Advantage of New MA Remote Controller

1. Weekly Timer

The built-in weekly timer enables you not only to make on/off settings but also temperature settings. Up to eight patterns can be set for each day of the week.

Conventional remote controller + Schedule remote controller ▶ Deluxe remote controller

Saves you money and space because you need only one remote controller.

Setting example (Restaurant in summer)

Economical operation according to air conditioner use

*Joint research with Japan Facility Solutions, Inc.
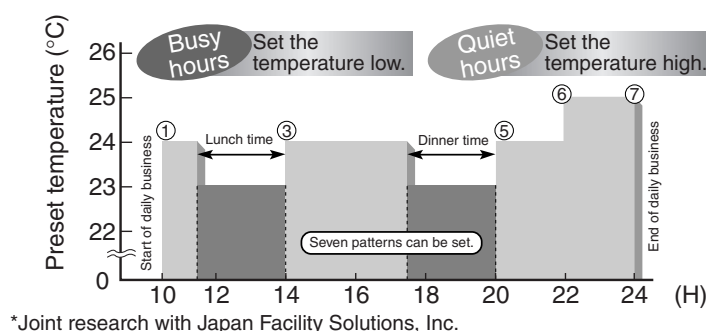
2. Easy Maintenance Function (Only for Power Inverter Mr. SLIM)

Enables you to check necessary data on site, drastically reducing the time required for maintenance work.

◆ Information useful for maintenance can be displayed on the remote controller.

Outdoor unit information can be checked even from inside a building.
Furthermore, use of maintenance stable-operation control that fixes the operating frequency, allows smooth inspection, even for inverter models.

<Display information> Outputs data for nine items.

Compressor information	Outdoor unit information	Indoor unit information
• Accumulated operating time	• Heat exchanger temperature	• Heat exchanger temperature
• Number of ON/OFF times	• Discharge temperature	• Intake air temperature
• Operating current	• Outside air temperature	• Filter operating time

◆ The contact telephone number to be called when an error occurs is displayed automatically.

This helps smooth contact with appropriate personnel in when an error occurs.
The contact telephone number of the maintenance company to be called when an error occurs can be registered in advance. When an error occurs, the contact telephone number will automatically appear, allowing you to call without difficulty.

Displays the contact number in case of abnormality.

CHECK

Displayed alternately

CALL·XXX XXXXXXX

Telephone number registered in advance

3.New Display

Various information is displayed and conveyed clearly, enabling more accurate operation of the air conditioner.

3.1 Dot Liquid Crystal Display (LCD)

The dot liquid crystal display enables quick understanding of the operation state.

● Display example [Operation mode]

Dot liquid crystal display
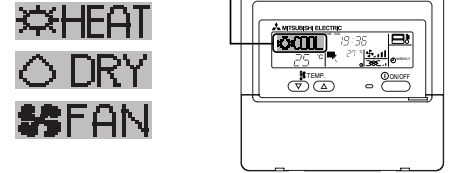
3.2 Multi-language Display

In addition to English, contents can be displayed in seven other languages.
This function makes the remote controller very useful in facilities where foreigners are present.

● Display example [Cool mode]

| [English] | [German] | [Spanish] | [Russian] |
| [Itarian] | [Chinese] | [French] | [Japanese] |

4.The Other Functions

4.1 Temperature Range Limit Setting

Enables operation of air conditioner at comfortable temperatures at all times.
Upper and lower limits can be established for the temperature setting. This prevents overcooling or overheating, thereby contributing to energy saving.

4.2 Auto Off Timer

Shuts off wasteful air conditioner operations.
Operation is stopped automatically when the preset time elapses following the start of operation, thereby preventing wasteful operations.
The time can be set from 30 minutes to 4 hours in 30-minute increments.

4.3 Simple Operation Lock

Prevents others from changing settings without permission.
This lets you disable all the buttons or all the buttons except for the [ON/OFF] button, preventing mischief and incorrect operations.

Ⅱ. New Functions

Function	Description	Available when connect Power INV R410A	Available when connect Non INV R407C	Go to page

Easy maintenance function	Displays information necessary for maintenance. Below information for easy maintenance of air-conditioner can be displayed.
	• Compressor • Accumulated operating time
	                    • Number of ON/OFF times
	                    • Operating current (A)
	• Outdoor unit • Heat exchanger temperature (°C)
	                    • Discharge temperature (°C)
	                    • Outside air temperature (°C)
	• Indoor unit • Intake air temperature (°C)
	                    • Heat exchanger temperature (°C)
	                    • Filter operating time (hours)
		◯	✕	6

Operation data monitor function	Information necessary for maintenance can be displayed on the remote controller.			50
Operation Hz fixing	The operation state of inverter models can be monitored using the maintenance stable-operation control (fixed frequency).			
Error code monitor function	Error code is displayed in the service inspection monitor.	◯	◯	46
Contact number display	Displays the contact telephone number to be called when an error occurs.	◯	◯	36
Multi language display	In addition to English, contents can be displayed in seven other languages. • English, German, Spanish, Russian, Italian, Chinese, French, Japanese	◯	◯	14
Temperature display (°C/°F) setting	Enables you to set the unit (°C/°F) in which temperatures are to be displayed.	◯	◯	38
Intake air temperature display setting	Enables you to set whether to show or hide the indoor (intake air) temperature.	◯	◯	39
Auto heat/cool display setting	Enables you to set whether to display or hide "COOL"/ "HEAT" in auto mode.	◯	◯	40
Weekly schedule timer	Provides a built-in weekly timer that allows you to make on/off and temperature settings. Up to eight patterns can be set for each day of the week.	◯	◯	25
Operation limit function setting (Operation lock)	Lets you disable all the buttons or all the buttons except for the [ON/OFF] button, preventing mischief and incorrect operations.	◯	◯	16
Temperature range limit function	Enables you to establish upper and lower limits for the temperature setting. This prevents overcooling or overheating, thereby contributing to energy saving.	◯	◯	20
Clock function setting	Enables you to set whether to use the clock function.	◯	◯	23
Auto off timer	Stops operation when the preset time elapses following the start of operation. The time can be set from 30 minutes to 4 hours in 30-minute increments. By default, the simple timer is selected. To switch to the auto off timer, select it using the remote controller's function selection.	◯	◯	28
Simple timer	Enables you to set on/off settings in 1-hour increments within 72 hours.	◯	◯	31
Remote controller main/sub setting	Enables you to set the remote controller as the main or sub.	◯	◯	22

◯ : Available   ✕ : Not available

Ⅲ. Appearance

1. Display Section

For purposes of this explanation, all parts of the display are shown as lit. During actual operation, only the relevant items will be lit.

"Sensor" indication
Displayed when the remote controller sensor is used.

Day-of-Week
Shows the current day of the week.

Time/Timer Display
Shows the current time, unless the simple or Auto Off timer is set.
If the simple or Auto Off timer is set, shows the time remaining.

"Locked" indicator
Indicates that remote controller buttons have been locked.

Identifies the current operation
Shows the operating mode, etc.
* Multilanguage display is supported.

"Clean The Filter" indicator
Comes on when it is time to clean the filter.

"Centrally Controlled" indicator
Indicates that operation of the remote controller has been prohibited by a master controller.

Timer indicators
The indicator comes on if the corresponding timer is set.

Fan Speed indicator
Shows the selected fan speed.

"Timer is Off" indicator
Indicates that the timer is off.

Ventilation indicator
Appears when the unit is running in Ventilation mode.

Up/Down Air Direction indicator
The indicator ＼ shows the direction of the outcoming airflow.

Room Temperature display
Shows the room temperature.

"One Hour Only" indicator
Displayed if the airflow is set to weak and downward during COOL or DRY mode. (Operation varies according to model.)
The indicator goes off after one hour, at which time the airflow direction also changes.

Louver display
Indicates the action of the swing louver. Does not appear if the louver is stationary.

Temperature setting
Shows the target temperature.

⦿ (Power On indicator)
Indicates that the power is on.

2. Operation Section

Set Temperature buttons
▽ Down
△ Up

ON/OFF button

Fan Speed button

Timer Menu button (Monitor/Set button)

Filter ↵ button (<Enter> button)

Mode button (Return button)

Test Run button

Check button (Clear button)

Set Time buttons
▽ Back
△ Ahead

Airflow Up/Down button

Louver button (▽ Operation button)
▽ To preceding operation number.

Timer On/Off button (Set Day button)

Ventilation button (△ Operation button)
△ To next operation number.

Opening the door.

Note:
● If you press a button for a feature that is not installed at the indoor unit, the remote controller will display the "Not Available" message.
If you are using the remote controller to drive multiple indoor units, this message will appear only if the feature is not present at the parent unit.

5

Ⅳ. Easy Maintenance Function (Only for Power Inverter Mr. SLIM)

● Reduces maintenance work drastically.
● Enables you to check operation data of the indoor and outdoor units by remote controller.
  Furthermore, use of maintenance stable-operation control that fixes the operating frequency, allows smooth inspection, even for inverter models.

● Smooth Mainte-
  nance Function

Discharge temperature 64 °C

● Conventional inspection work

● Indoor unit ●   ● Outdoor unit ●

Remove the service panel.

Measure the intake air temperature.

Measure the discharge temperature.

Measure the outside air temperature

● Easy maintenance information (unit)

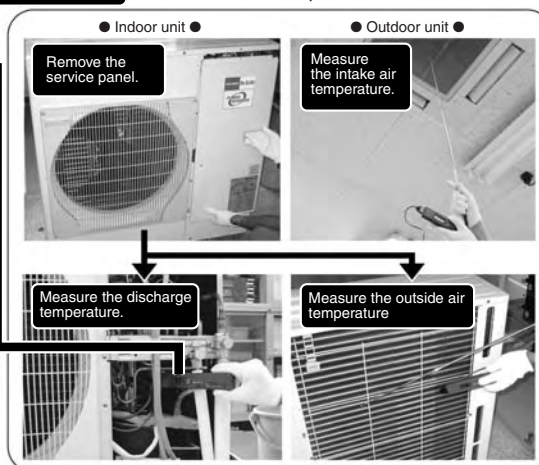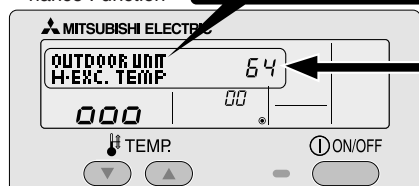|	Compressor		Outdoor unit		Indoor unit
①	Accumulated operating time (×10 hours)	④	Heat exchanger temperature (°C)	⑦	Intake air temperature (°C)
②	Number of ON/OFF times (×10 times)	⑤	Discharge temperature (°C)	⑧	Heat exchanger temperature (°C)
③	Operating current (A)	⑥	Outside air temperature (°C)	⑨	Filter operating time* (Hours)

* The filter operating time is the time that has elapsed since the filter was reset.
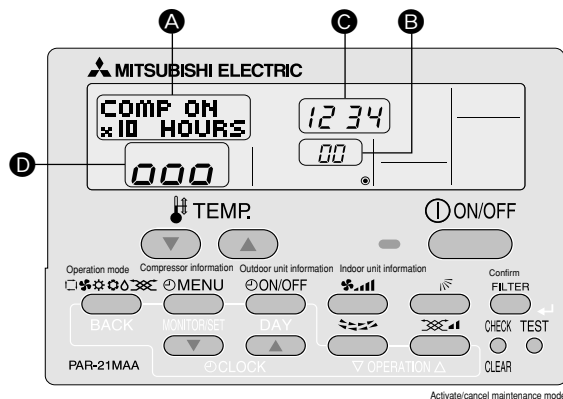
1. Maintenance Mode Operating Method

* If you are going to use the "Inspection Item Standards" given on page 10, set the airflow to "High" before activating maintenance mode.

● **Switching to maintenance mode**
  Maintenance mode can be activated either when the air conditioner is operated or stopped.
  It cannot be activated during test run.
  ✻ Maintenance information can be viewed even if the air conditioner is stopped.

■ Remote controller button information

(1) Press the (TEST) button for three seconds to switch to maintenance mode.
   [Display Ⓐ] MAINTENANCE
   If stable operation is unnecessary or if you want to check the data with the air conditioner stopped, skip to step (4).

● **Fixed Hz operation**
  The operating frequency can be fixed to stabilize operation of inverter model.
  If the air conditioner is currently stopped, start it by this operation.

(2) Press the (MODE) button to select the desired operation mode.

[Display Ⓐ]

Stable cooling operation → Stable heating operation → Stable operation cancellation

COOL STABLE MODE   HEAT STABLE MODE   STABLE MODE CANCEL

(3) Press the (FILTER) (↵) button to confirm the setting.

[Display Ⓓ] Waiting for stabilization   ⟶ o ⟶ oo ⟶ ooo   ⟹ Stabilized ooo

After 10 to 20 minutes
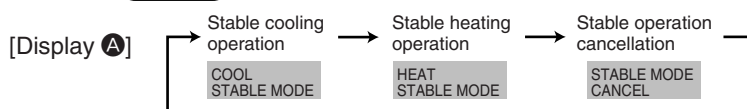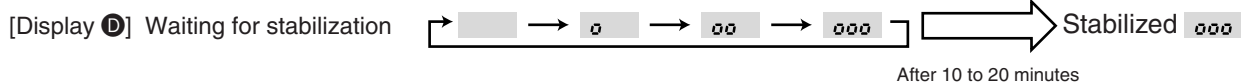
● **Data measurement**
When the operation is stabilized, measure operation data as explained below.

(4) Press the [TEMP] buttons (∇ and $\triangle$) to select the desired refrigerant address.

[Screen ❸] $00 \longleftrightarrow 01 \longleftrightarrow \cdots \longleftrightarrow 15$
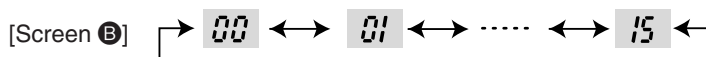
(5) Select the type of data to be displayed.
After selecting, go to step (6).

Compressor information

$\oplus$ MENU button

[Display ❹] ❶ Cumulative operation time → ❷ ON/OFF Number → ❸ Operating current

| COMP ON x10 HOURS | COMP ON x100 TIMES | COMP ON CURRENT (A) |
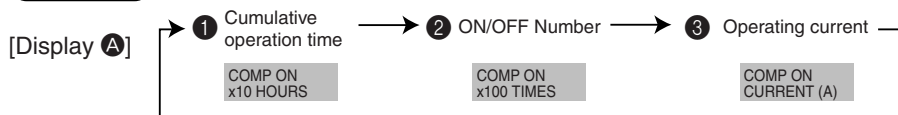
Outdoor unit information

$\oplus$ ON/OFF button

[Display ❹] ❹ Heat exchanger temperature → ❺ Comp discharge temperature → ❻ Outdoor ambient temperature

| OUTDOOR UNIT H·EXC. TEMP | OUTDOOR UNIT OUTLET TEMP | OUTDOOR UNIT OUTDOOR TEMP |
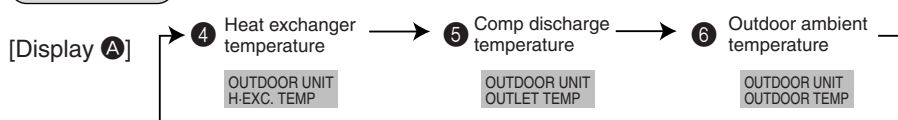
Indoor unit information

$\clubsuit$.⫸ button

[Display ❹] ❼ Indoor room temperature → ❽ Heat exchanger temperature → ❾ Filter operating time

| INDOOR UNIT INLET TEMP | INDOOR UNIT H·EXC. TEMP | INDOOR UNIT FILTER USE H |
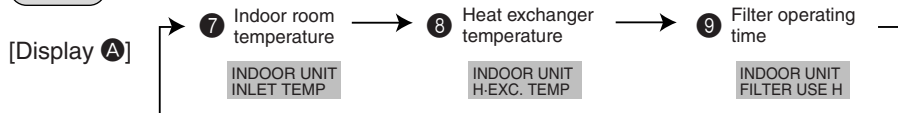
(6) Press the FILTER (↵) button to confirm the setting.

[Display example for accumulated operating time]

Display ❸ ☼ Flashing → 1234
Waiting for response   After approx. 10 seconds   12,340 hours
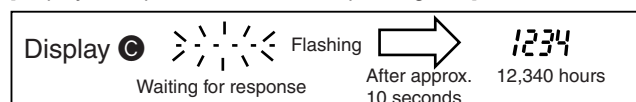
(7) Data is displayed on the display (at ❸).
To check the data for each item, repeat steps (5) to (7).

(8) To cancel maintenance mode, press the TEST button for three seconds or press the ① ON/OFF button.

■ Refrigerant address
Single refrigerant system
In the case of single refrigerant system, the refrigerant address is "00" and no operation is required.
Simultaneous twin, triple and quad units belong to this category (single refrigerant system).

[1:1]
Refrigerant address=00

| Outdoor unit |
| Indoor unit 01 |
| Remote controller |

[Twin]
Refrigerant address=00

| Outdoor unit |
| Indoor unit 01 | Indoor unit 02 |
| Remote controller |
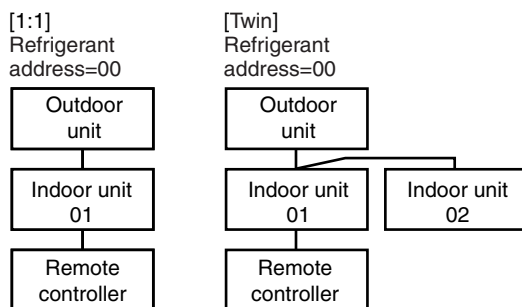
Multi refrigerant system (group control)
Up to 16 refrigerant systems (16 outdoor units) can be connected as a group by one remote controller. To check or set the refrigerant addresses, refer to page 66.

Refrigerant address 00 | Refrigerant address 01 | Refrigerant address 02 | Refrigerant address 15

| Outdoor unit | Outdoor unit | Outdoor unit | Outdoor unit |
| Indoor unit 01 | Indoor unit 01 | Indoor unit 01 | Indoor unit 01 |
| Remote controller |

7
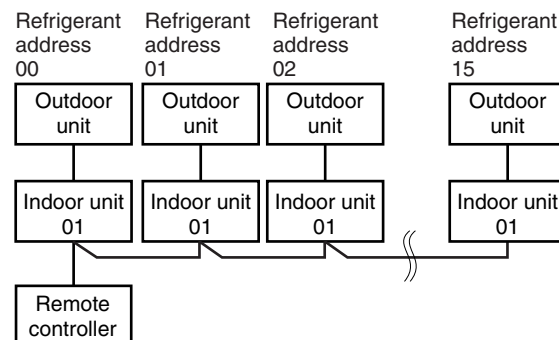
2. Guide for Operation Condition

Inspection item			Result	
Power supply	Loose connection	Terminal block — Breaker	Good	Retightened
		Terminal block — Outdoor Unit	Good	Retightened
		Terminal block — Indoor Unit	Good	Retightened
	(Insulation resistance)			MΩ
	(Voltage)			V
Compressor	①Accumulated operating time			Time
	②Number of ON/OFF times			Times
	③Current			A
Outdoor Unit	Temperature	④Refrigerant/heat exchanger temperature	COOL °C	HEAT °C
		⑤Refrigerant/discharge temperature	COOL °C	HEAT °C
		⑥Air/outside air temperature	COOL °C	HEAT °C
		(Air/discharge temperature)	COOL °C	HEAT °C
	Cleanliness	Appearance	Good	Cleaning required
		Heat exchanger	Good	Cleaning required
		Sound/vibration	None	Present
Indoor Unit	Temperature	⑦Air/intake air temperature	COOL °C	HEAT °C
		(Air/discharge temperature)	COOL °C	HEAT °C
		⑧Refrigerant/heat exchanger temperature	COOL °C	HEAT °C
		⑨Filter operating time*		Time
	Cleanliness	Decorative panel	Good	Cleaning required
		Filter	Good	Cleaning required
		Fan	Good	Cleaning required
		Heat exchanger	Good	Cleaning required
		Sound/vibration	None	Present

* The filter operating time is the time that has elapsed since the filter was reset.

Check Points

Enter the temperature differences between ⑤, ④, ⑦ and ⑧ into the graph given below.
Operation state is determined according to the plotted areas on the graph.
For data measurements, set the fan speed to "Hi" before activating maintenance mode.

Classification		Item	Result	
Cool	Inspection	Is "D000" displayed stably on the remote controller?	Stable	Unstable
	Temperature difference	(⑤ Discharge temperature) – (④ Outdoor heat exchanger temperature)	°C	
		(⑦ Indoor intake air temperature) – (⑧ Indoor heat exchanger temperature)	°C	
Heat	Inspection	Is "D000" displayed stably on the remote controller?	Stable	Unstable
	Temperature difference	(⑤ Discharge temperature) – (⑧ Indoor heat exchanger temperature)	°C	
		(⑧ Indoor heat exchanger temperature) – (⑦ Indoor intake air temperature)	°C	

* Fixed Hz operation may not be possible under the following temperature ranges.
  A) In cool mode, outdoor intake air temperature is 40 °C or higher or indoor intake air temperature is 23 °C or lower
  B) In heat mode, outdoor intake air temperature is 20 °C or higher or indoor intake air temperature is 25 °C or lower
* If the air conditioner is operated at a temperature range other than the ones above but operation is not stabilized after 30 minutes or more have elapsed, carry out inspection.
* In heat mode, the operation state may vary due to frost forming on the outdoor heat exchanger.

Cool mode

Heat mode

[⑤ Discharge temperature] – [④ Outdoor heat exchanger temperature)

[⑤ Discharge temperature] – [⑧ Indoor heat exchanger temperature)
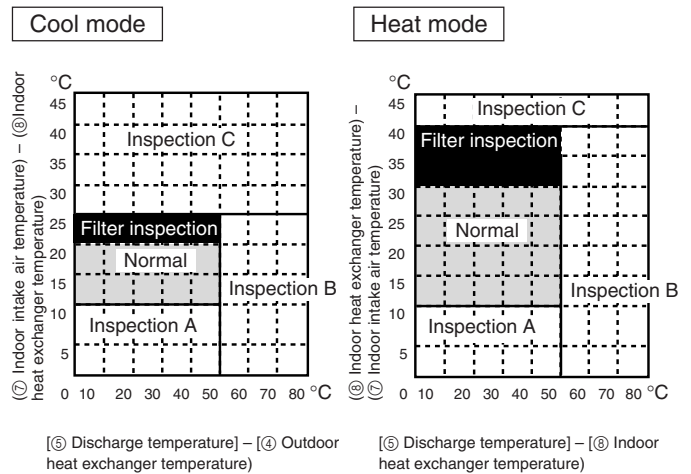
Result

Area	Check item	Judgment	
		Cool	Heat
Normal	Normal operation state		
Filter inspection	Filter may be clogged. *1		
Inspection A	Performance has dropped. Detailed inspection is necessary.		
Inspection B	Refrigerant amount is dropping.		
Inspection C	Filter or indoor heat exchanger may be clogged.		

* The above judgement is just guide based on Japanese standard conditions.
  It may be changed depending on the indoor and outdoor temperature.

Ⅴ. How to Select Functions of remote controller

1. Function Items

The setting of the following functions can be changed using the function selection mode.

Item		Setting content
1. Change Language ("CHANGE LANGUAGE")	Language setting to display	• Display in multiple languages is possible
2. Function limit ("FUNCTION SELECTION")	(1) LOCKING FUNCTION	• Setting the range of operation limit (operation lock)
	(2) SELECT AUTO MODE	• Setting the use or non-use of "automatic" operation mode
	(3) LIMIT TEMP FUNCTION	• Setting the temperature adjustable range (maximum, minimum)
3. Mode selection ("MODE SELECTION")	(1) CONTROLLER MAIN/SUB	• Selecting main or sub remote controller * When two remote controllers are connected to one group, one controller must be set to sub.
	(2) CLOCK	• Setting the use or non-use of clock function
	(3) WEEKLY TIMER	• Setting the timer type
	(4) CALL-	• Contact number display in case of error • Setting the telephone number
4. Display change ("DISP MODE SETTING")	(1) TEMP MODE °C/°F	• Setting the temperature unit (°C or °F) to display
	(2) ROOM TEMP DISP SELECT	• Setting the use or non-use of the display of indoor (suction) air temperature
	(3) AUTO MODE DISP C/H	• Setting the use or non-use of the display of "Cooling" or "Heating" display during operation with automatic mode

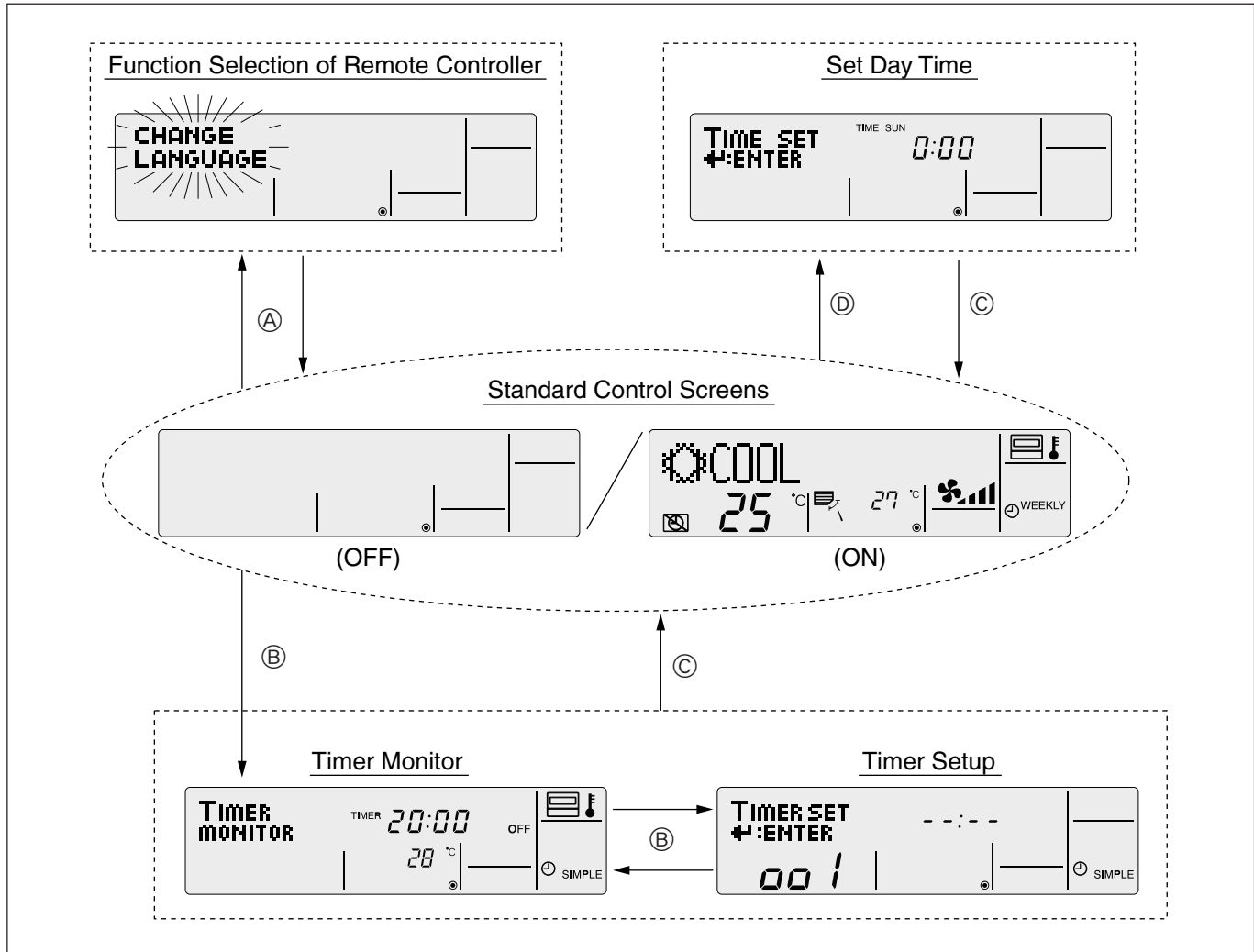# 2. Flowchart of Function Setting

Setting language (English)

Normal display
(Display when the air condition is not running)

Hold down the Ⓔ button and press the Ⓓ button for 2 seconds.

Hold down the Ⓔ button and press the Ⓓ button for 2 seconds.

Ⓔ Press the operation mode button.
Ⓖ Press the TIMER MENU button.
Ⓓ Press the TIMER ON/OFF button.

Dot display

Remote controller function selection mode

Item1   Item2

Change Language

Ⓖ LANGUAGE ENGLISH(GB) EN
Ⓖ LANGUAGE Deutsch (D) GE
   LANGUAGE ESPAÑOL(E) ES
   LANGUAGE PYCCK (RU) RU
Ⓖ LANGUAGE ITALIANO(I) IT
   LANGUAGE 中文 (CH) ZH
   LANGUAGE FRENCH (F) FR
   LANGUAGE ニホンゴ (JP) JA

CHANGE LANGUAGE

Ⓔ

Item3

Function selection

FUNCTION SELECTION

Ⓖ LOCKING FUNCTION Ⓓ OFF — Operation lock setting is not used. (Initial setting value)
   Ⓓ on1 Ⓓ — Operation lock setting is except On/Off buttons.
   Ⓓ on2 — Operation lock setting is All buttons.

Ⓖ SELECT AUTO MODE Ⓓ ON — The automatic mode is displayed when the operation mode is selected. (Initial setting value)
   Ⓓ OFF Ⓓ — The automatic mode is not displayed when the operation mode is selected.

Ⓖ LIMIT TEMP FUNCTION Ⓓ OFF — The temperature range limit is not active. (Initial setting value)
   Ⓓ LIMIT TEMP COOL MODE — The temperature range can be changed on cooling/dry mode.
   LIMIT TEMP HEAT MODE — The temperature range can be changed on heating mode.
   LIMIT TEMP AUTO MODE — The temperature range can be changed on automatic mode.

Mode selection

MODE SELECTION

Ⓖ CONTROLLER MAIN Ⓓ CONTROLLER MAIN — The remote controller will be the main controller. (Initial setting value)
   Ⓓ CONTROLLER SUB — The remote controller will be the sub controller.

Ⓖ CLOCK Ⓓ ON — The clock function can be used. (Initial setting value)
   Ⓓ OFF — The clock function can not be used.

Ⓖ TIMER SET ←:ENTER Ⓓ WEEKLY TIMER — Weekly timer can be used. (Initial setting value)
   AUTO OFF TIMER — Auto off timer can be used.
   SIMPLE TIMER — Simple timer can be used.
   TIMER MODE OFF — Timer mode can not be used.

Ⓖ CALL· Ⓓ OFF — The set contact numbers are not displayed in case of error. (Initial setting value)
   Ⓓ CALL- — The set contact numbers are displayed in case of error.

Display mode setting

DISP MODE SETTING

Ⓖ TEMP MODE °C/°F Ⓓ °C — The temperature unit °C is used. (Initial setting value)
   Ⓓ °F — The temperature unit °F is used.

Ⓖ ROOM TEMP DISP SELECT Ⓓ ON — Room air temperature is displayed. (Initial setting value)
   Ⓓ OFF — Room air temperature is not displayed.

Ⓖ AUTO MODE DISP C/H Ⓓ ON — One of "Automatic cooling" and "Automatic heating" is displayed under the automatic mode is running. (Initial setting value)
   Ⓓ OFF — Only "Automatic" is displayed under the automatic mode.
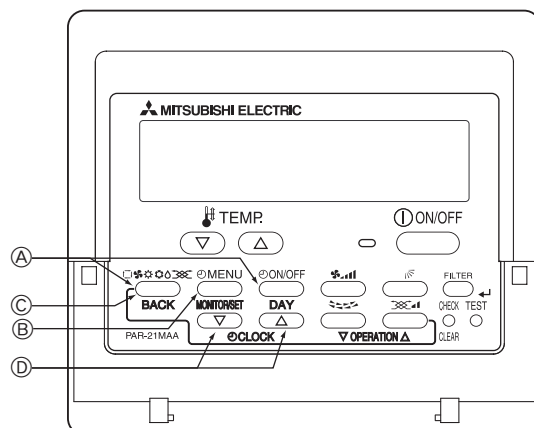
3. Screen Structure for Function Setting

Description of each screen

- Remote controller function selection screen : Used to set the timer function and operation limit function, etc.
- Day of the week/time setting screen : Used to set the current day of the week and time.
- Normal screen : Used to set the air conditioner's operating state.
- Timer monitor screen : Used to display the current settings of the timers (weekly, simple, auto off).
- Timer setting screen : Used to set the timers (weekly, simple, auto off).

Function Selection of Remote Controller

CHANGE
LANGUAGE

Set Day Time

TIME SET
+:ENTER   TIME SUN   0:00

Ⓐ   Ⓓ   Ⓒ

Standard Control Screens

(OFF)

COOL
25 ℃   27 ℃   ⏱WEEKLY
(ON)

Ⓑ   Ⓒ

Timer Monitor

TIMER
MONITOR   TIMER 20:00   OFF
28 ℃   ⏱ SIMPLE

Ⓑ

Timer Setup

TIMER SET
+:ENTER   - - : - -
001   ⏱ SIMPLE

How to change the screen display

Ⓐ : Press the [ON/OFF] button twice while holding down the [MODE] button.
Ⓑ : Press the [MENU] button.
Ⓒ : Press the [MODE] (BACK) button.
Ⓓ : Press the [CLOCK] buttons (▽ and △).

MITSUBISHI ELECTRIC

🌡 TEMP.   ⏻ ON/OFF
▽   △

Ⓐ
Ⓒ
Ⓑ   MENU   ON/OFF   FILTER
BACK   MONITOR/SET   DAY   CHECK TEST
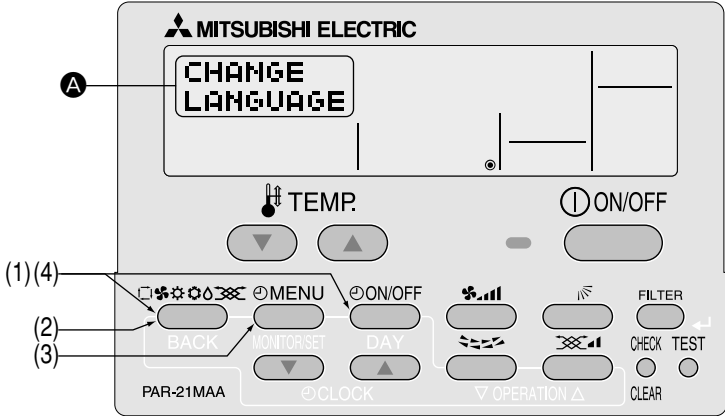PAR-21MAA   ⏱CLOCK   ▽ OPERATION △   CLEAR
Ⓓ

4. Function Setting Mode

4.1 Change Language

The language that appears on the dot display can be selected.
The following languages can be selected.

① English (GB) ② German (D) ③ Spanish (E) ④ Russian (RU)
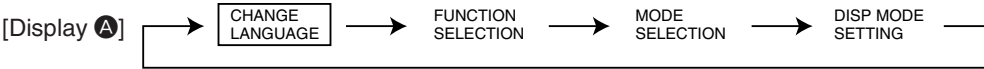⑤ Italian (I) ⑥ Chinese (CH) ⑦ French (F) ⑧ Japanese (JP)
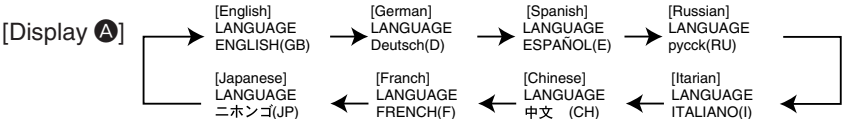
Changing the Display Language

■ Display example

(1) While pressing the (MODE) button, press the (🕐 ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until CHANGE LANGUAGE appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING

(3) Press the (🕐 MENU) button to select the desired display language.

[Display Ⓐ]

[English] LANGUAGE ENGLISH(GB) → [German] LANGUAGE Deutsch(D) → [Spanish] LANGUAGE ESPAÑOL(E) → [Russian] LANGUAGE pycck(RU)

[Japanese] LANGUAGE ニホンゴ(JP) ← [Franch] LANGUAGE FRENCH(F) ← [Chinese] LANGUAGE 中文 (CH) ← [Itarian] LANGUAGE ITALIANO(I)

(4) While pressing the (MODE) button, press the (🕐 ON/OFF) button for two seconds to return to normal mode. Setting is now complete.

Display example (Cool mode)	English	❄COOL	German	❄Kühlen	Spanish	❄FRÍO	Russian	❄Холод
	Itarian	❄COOL	Chinese	❄制冷	French	❄FROID	Japanese	❄冷房

[Dot display table]

Selecting language		English	Germany	Spanish	Russian	Italy	Chinese	French	Japanese
Waiting for start-up		PLEASE WAIT	←	←	←	←	←	←	←
Operation mode	Cool	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Dry	DRY	Trocknen	DESHUMI-ODIFICACION	Сушка	DRY	除湿	DESHU	ドライ
	Heat	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Auto	AUTO	AUTO	AUTO-MÁTICO	Авто	AUTO	自动	AUTO	自動
	Auto(Cool)	COOL	Kühlen	FRÍO	Холод	COOL	制冷	FROID	冷房
	Auto(Heat)	HEAT	Heizen	CALOR	Тепло	HEAT	制热	CHAUD	暖房
	Fan	FAN	Lüfter	VENTI-LACIÓN	Вент	VENTILAZIONE	送风	VENTILATION	送風
	Ventilation	VENTILATION	Gebläse betrieb	VENTI-LACIÓN	Венти-ляция	ARIA ESTERNA	换气	VENTILATION	換気
	Stand by (Hot adjust)	STAND BY	STAND BY	CALENTANDO	ОБОГРЕВ: ПАУЗА	STAND BY	准备中	PRE CHAUFFAGE	準備中
	Defrost	DEFROST	Abtauen	DESCONGE-LACIÓN	ОТТАИВАНИЕ	SBRINAMENTO	除霜中	DEGIVRAGE	霜取中
Set temperature		SET TEMP	TEMP einstellen	TEMP. CONSIGNA	ЦЕЛЕВАЯ ТЕМПЕРАТУРА	IMPOSTAZIONE TEMPERTURA	设定温度	REGLAGE TEMPERATURE	設定温度
Fan speed		FAN SPEED	Lüftergesch windigkeit	VELOCIDAD VENTILADOR	СКОРОСТЬ ВЕНТИЛЯТОРА	VELOCITA' VENTILATORE	风速	VITESSE DE VENTILATION	風速
Not use button		NOT AVAILABLE	nicht Verfügbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBLE	無効ボタン
Check (Error)		CHECK	Prüfen	COMPROBAR	ПРОВЕРКА	CHECK	检查	CONTROLE	点検
Test run		TEST RUN	Testbetrieb	TEST FUNCIO NAMIENTO	ТЕСТОВЫЙ ЗАПУСК	TEST RUN	试运转	TEST	試ウンテン
Self check		SELF CHECK	Selbst-diagnose	AUTO REVISIÓN	Самодиаг-ностика	SELF CHECK	自我诊断	AUTO CONTROLE	自己シンダン
Unit function selection		FUNCTION SELECTION	Funktion auswahl	SELECCIÓN DE FUNCIÓN	ВЫБОР ФУНКЦИИ	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	キノウ選択
Setting of ventilation		SETTING OF VENTILATION	Lüfterstufen wählen	CONFIG. VENTILACIÓN	Настройка ВЕНТУСТАН.	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定

Selecting language	English	Germany	Spanish	Russian	Italy	Chinese	French	Japanese
CHANGE LANGUAGE	CHANGE LANGUAGE	←	←	←	←	←	←	←
Function selection	FUNCTION SELECTION	Funktion auswahlen	SELECCIÓN DE FUNCIONES	ВЫБОР ФУНКЦИИ	SELEZIONE FUNZIONI	功能限制	SELECTION FONCTIONS	キノウ制限
Operation function limit setting	LOCKING FUNCTION	Sperr-Funktion	FUNCIÓN BLOQUEADA	ФУНКЦИЯ БЛОКИРОВКИ	BLOCCO FUNZIONI	操作限制	BLOCAGE FONCTIONS	操作セイゲン
Use of automatic mode setting	SELECT AUTO MODE	Auswahl Auto Betrieb	SELECCIÓN MODO AUTO	ВЫБОР РЕЖИМА АВТО	SELEZIONE MODO AUTO	自动模式	SELECTION DU MODE AUTO	自動モード
Temperature range limit setting	LIMIT TEMP FUNCTION	Limit Temp Funktion	LÍMIT TEMP CONSIGNA	Ограничение уст.темпер	LIMITAZIONE TEMPERATURA	温度限制	LIMITATION TEMPERATURE	温度制限
Limit temperature cooling/day mode	LIMIT TEMP COOL MODE	Limit Kühl Temp	LÍMIT TEMP MODO FRÍO	Ограничено охлаждение	LIMITAZIONE MODO COOL	制冷范围	LIMITE TEMP MODE FROID	セイゲン冷房
Limit temperature heating mode	LIMIT TEMP HEAT MODE	Limit Heiz Temp	LÍMIT TEMP MODO CALOR	Ограничен обогрев	LIMITAZIONE MODO HEAT	制热范围	LIMITE TEMP MODE CHAUD	セイゲン暖房
Limit temperature auto mode	LIMIT TEMP AUTO MODE	Limit Auto Temp	LÍMIT TEMP MODO AUTO	Ограничен РЕЖИМ АВТО	LIMITAZIONE MODO AUTO	自动范围	LIMITE TEMP MODE AUTO	セイゲン自動
Mode selection	MODE SELECTION	Betriebsart Wählen	SELECCIÓN DE MODO	ВЫБОР РЕЖИМА	SELEZIONE MODO	基本模式	SELECTION DU MODE	基本キノウ
Remote controller setting MAIN	CONTROLLER MAIN	Haupt Controller	CONTROL PRINCIPAL	Основной пульт	CONTROLLO MAIN	遥控 主	TELECOMMANDE MAITRE	リモコン主従
Remote controller setting SUB	CONTROLLER SUB	Neben Controller	CONTROL SECUNDARIO	Дополните-льный пульт	CONTROLLO SUB	遥控 辅	TELECOMMANDE ESCLAVE	リモコン主従
Use of clock setting	CLOCK	Uhr	RELOJ	Часы	OROLOGIO	时钟	AFFICHAGE HORLOGE	時計ショウ
Setting the day of the week and time	TIME SET ↵:ENTER	Uhr stellen ↵:einstellen	CONFIG RELOJ ↵:CONFIG	Часы:УСТ. ↵:ВВОД	OROLOGIO ↵:ENTER	时间 ENTER	HORLOGE ↵:ENTRER	トケイセッテイ ↵:カクテイ
Timer set	TIMER SET ↵:ENTER	Zeitschaltuhr ↵:einstellen	TEMPORIZA-DOR ↵:CONFIG	ТАЙМЕР:УСТ. ↵:ВВОД	TIMER ↵:ENTER	定器 ENTER	PROG HORAIRE ↵:ENTRER	タイマー-セッテイ ↵:カクテイ
Timer monitor	TIMER MONITOR	Uhrzeit Anzeige	VISUALIZAR TEMPORIZAD.	ПРОСМОТР ТАЙМЕРА	VISUALIZ TIMER	定器状态	AFFICHAGE PROG HORAIRE	タイマー-モニター
Weekly timer	WEEKLY TIMER	Wochenzeit Schalt uhr	TEMPORIZA-DOR SEMANAL	НЕДЕЛЬНЫЙ ТАЙМЕР	TIMER SETTIMANALE	每周定器	PROG HEBDO MADAIRE	タイマー-週間
Timer mode off	TIMER MODE OFF	Zeitschaltuhr AUS	TEMPORIZA-DOR APAGADO	ТАЙМЕР ВЫКЛ.	TIMER OFF	定器无效	PROG HORAIRE INACTIF	タイマー-無効
Auto off timer	AUTO OFF TIMER	Auto Off funktion aus	APAGADO AUTOMÁTICO	Автоотключ. по таймеру	AUTO OFF TIMER	解除定时	PROG HORAIRE ARRET AUTO	タイマー-ケシワスレ ボウシ
Simple timer	SIMPLE TIMER	Einfache Zeitfunktion	TEMPORIZA-DOR SIMPLE	ПРОСТОЙ ТАЙМЕР	TIMER SEMPLIFICATO	简易定器	PROG HORAIRE SIMPLIFIE	タイマー-カンイ
Contact number setting of error situation	CALL	←	←	←	←	←	←	←
Display change	DISP MODE SETTING	Anzeige Betriebsart	MOSTRAR MODO	НАСТРОЙКА ИНД.РЕЖИМА	IMPOSTAZIONE modo DISPLAY	转换表示	AFFICHAGE SOUS MENU	表示切替
Temperature display °C/°F setting	TEMP MODE °C/°F	Wechsel °C/°F	TEMPGRADOS °C/°F	ЕДИН.ТЕМПЕР. °C/°F	TEMPERATURA °C/°F	温度 °C/°F	TEMPERATURE °C/°F	温度 °C/°F
Room air temperature display setting	ROOM TEMP DISP SELECT	Raum Temp sewahlt	MOSTRAR TEMP.	Показывать темп.в комн.	TEMPERATURA AMBIENTE	吸入温度	TEMPERATURE AMBIANTE	スイコミオンド ヒョウジ
Automatic cooling/heating display setting	AUTO MODE DISP C/H	Auto Betrieb C/H	MOSTRAR F/C EN AUTO	ИНД.Т/Х В РЕЖИМЕ АВТО	AUTO C/H	自动表示	AFFICHAGE AUTO F/C	自動ヒョウジ

4.2 Function Setting

### 4.2.1 Operaton Lock (Operation Function Limit Setting)

The following settings can be made.
① no1   : All buttons except for the [ON/OFF] button are locked.
② no2   : All buttons are locked.
③ OFF (default): No buttons are locked.

* To activate this operation lock function on the normal screen, hold down the (⏻ ON/OFF) button for two seconds while holding down the (FILTER) (↵) button.
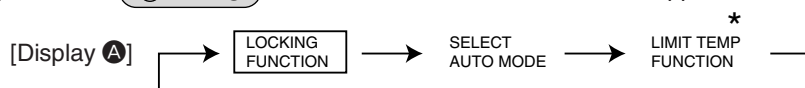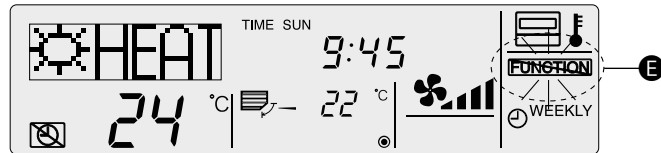
How to Lock the Buttons

■ Display example
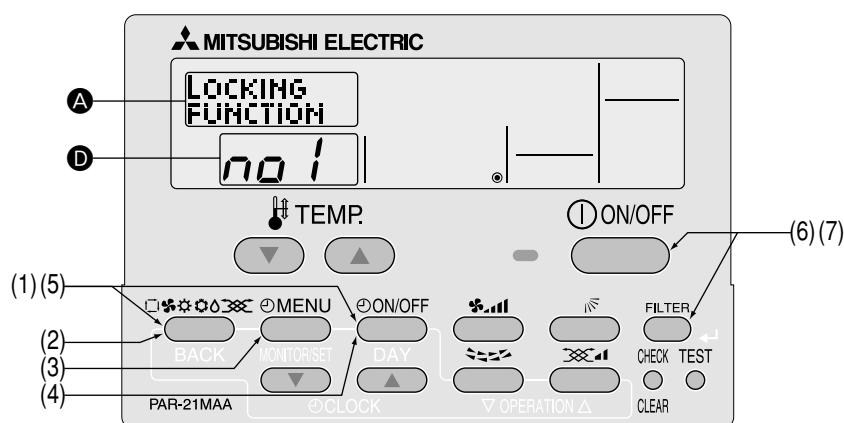
(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button to select $^{FUNCTION}_{SELECTION}$ on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING →

(3) Press the (⏱ MENU) button until "LOCKING FUNCTION" appears on the screen (at Ⓐ).

[Display Ⓐ] → LOCKING FUNCTION → SELECT AUTO MODE → LIMIT TEMP FUNCTION * →

* Displays the mode that is set in "Temperature Range Limit Setting".

(4) Press the (⏱ ON/OFF) button until the desired lock mode appears on the screen (at Ⓓ).
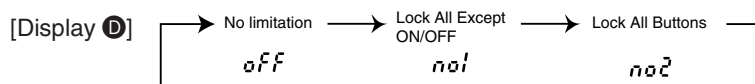
[Display Ⓓ] → No limitation → Lock All Except ON/OFF → Lock All Buttons →
off   no1   no2

(5) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to return to normal mode. Setting is now complete.

Completing steps (1) to (5) allows use of the operation lock function.
To enable the lock function, carry out the following steps.

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(6) While pressing the (FILTER) (↵) button, press the (① ON/OFF) button for two seconds to enable the operation lock function.
FUNCTION appears on the screen (at **E**).

* If a locked button is pressed while the operation lock function is in use, FUNCTION will flash on the screen (at **E**).
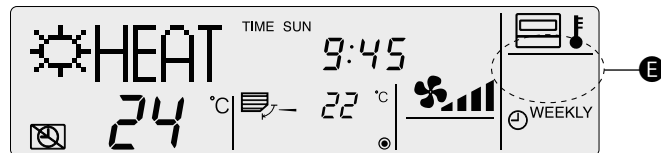
■ Display example when operation lock function is in use

How to Unlock the Buttons

(7) While pressing the (FILTER) (↵) button, press the (① ON/OFF) button for two seconds.
FUNCTION disappears from the screen (at **E**).

■ Display example when the operation lock function is not in use

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4.2.2 Auto Mode Setting

The following settings can be made.
① ON (default) : Auto mode is displayed when selecting an operation mode only if the unit to be connected is supported by the auto mode.
However, this does not apply if the unit to be connected is not supported by the auto mode.
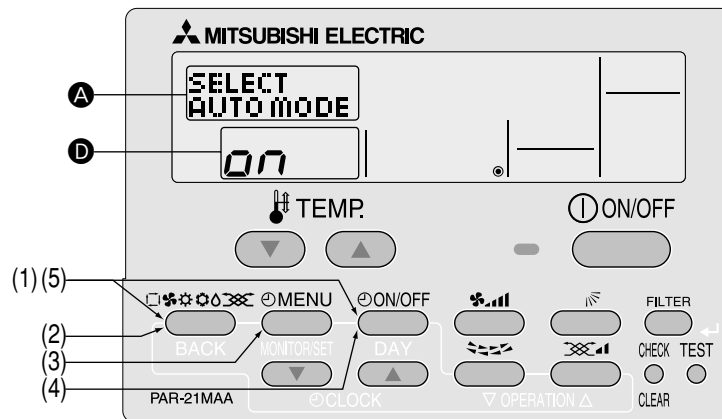Operation mode can be switched from one to another:

$$\longrightarrow COOL \longrightarrow DRY \longrightarrow FAN \longrightarrow HEAT \longrightarrow AUTO \longrightarrow$$

② OFF : Even if the unit is supported by the auto mode, auto mode is not displayed when selecting an operation mode.
Operation mode can be switched from one to another:

$$\longrightarrow COOL \longrightarrow DRY \longrightarrow FAN \longrightarrow HEAT \longrightarrow$$
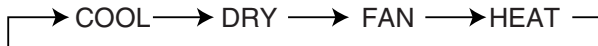
How to Set Auto Mode

■ Display example

(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function selection mode.
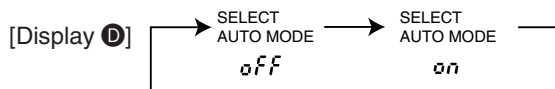
(2) Press the (MODE) button to select FUNCTION SELECTION on the screen (at Ⓐ).

[Display Ⓐ] $\longrightarrow$ CHANGE LANGUAGE $\longrightarrow$ FUNCTION SELECTION $\longrightarrow$ MODE SELECTION $\longrightarrow$ DISP MODE SETTING $\longrightarrow$

(3) Press the (⏱ MENU) button so that SELECT AUTO MODE appears on the screen (at Ⓐ).
* The current setting is displayed.

(4) Press the (⏱ ON/OFF) button to select whether auto mode is to be used (on) or not (off).

[Display Ⓓ] $\longrightarrow$ SELECT AUTO MODE off $\longrightarrow$ SELECT AUTO MODE on $\longrightarrow$

(5) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to return to normal mode. Setting is now complete.

* If you press the (⏱ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

● **Screen display when auto mode is set to ON**

(1) Press the (① ON/OFF) button.

The ON lamp lights up and operating contents are displayed on the LCD.

(2) Press the (MODE) button.

Each time the (MODE) button is pressed, the operation mode switches from one to another. "AUTO" is also displayed.

```
 ┌──→ COOL ──→ DRY ──→ FAN ──→ HEAT ──→ AUTO ─┐
 │                                 *        *1  │
 └──────────────────────────────────────────────┘
```

*1: If your air conditioner is designed for cool operation only, "AUTO" and "HEAT" will not be displayed, nor will it be possible to select them.

■ Display example when auto mode is set to ON

If AUTO MODE DISP C/H is ON (see 4.4.3), it takes about 10 seconds before the display is switched from one mode to another.

● **Screen display when auto mode is set to OFF**

(1) Press the (⊕ ON/OFF) button.

The ON lamp lights up and operating contents are displayed on the LCD.

(2) Press the (MODE) button.

Each time the (MODE) button is pressed, the operation mode switches from one to another, but "AUTO" is not displayed.

```
 ┌──→ COOL ──→ DRY ──→ FAN ──→ HEAT ─┐
 │                              *1    │
 └────────────────────────────────────┘
```
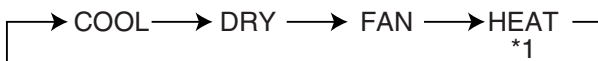
*1: If your air conditioner is designed for cool operation only, "HEAT" will not be displayed.

4.2.3 Temperature Range Limit Setting

The temperature setting range can be limited.
It can be limited for each mode.
① Cool mode   : The temperature setting range for cool/dry mode can be changed.
② Heat mode   : The temperature setting range for heat mode can be changed.
③ Auto mode   : The temperature setting range for auto mode can be changed.
④ OFF (default) : The temperature setting range is not limited.

* When a mode other than OFF mode is set, temperature setting range limit setting for cool, heat and auto modes will be made simultaneously.
  However, limit setting will not be made unless the range has been changed.

		Setting range	Standard setting
COOL·DRY Mode	Lower limit	19 °C – 30 °C	19 °C – 30 °C
	Upper limit	30 °C – 19 °C	
HEAT Mode	Lower limit	17 °C – 28 °C	17 °C – 28 °C
	Upper limit	28 °C – 17 °C	
AUTO Mode	Lower limit	19 °C – 28 °C	19 °C – 28 °C
	Upper limit	28 °C – 19 °C	

  * Temperatures can be set within the range of "upper limit ≧" "lower limit".
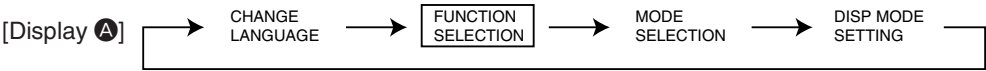
Limiting the Temperature Range

■ Display example
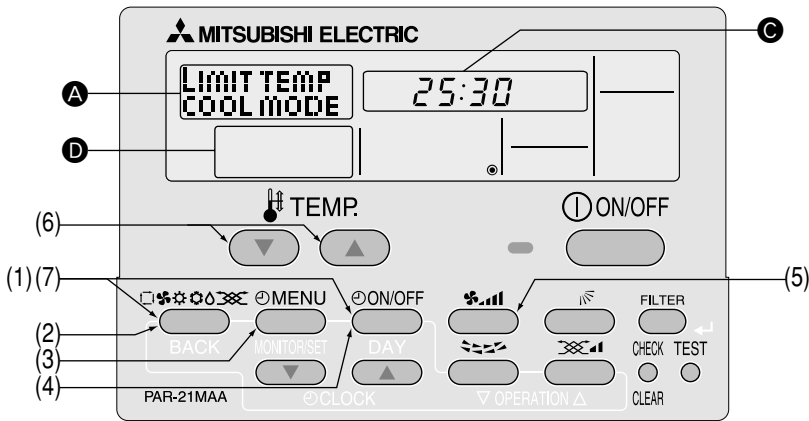
(1) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to activate the remote controller's function selection mode.
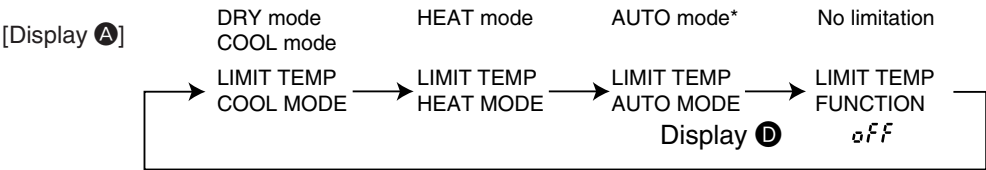
(2) Press the (MODE) button to select FUNCTION SELECTION on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING →

(3) Press the (⏲ MENU) button to select LIMIT TEMP FUNCTION on the screen (at Ⓐ).
  * If a setting change was made previously, the mode that was set (one of the modes shown in step (4)) will be displayed.

(4) Press the (⏲ ON/OFF) button to select the mode for which temperature range limit setting is to be made.

[Display Ⓐ] DRY mode COOL mode   HEAT mode   AUTO mode*   No limitation

  → LIMIT TEMP COOL MODE → LIMIT TEMP HEAT MODE → LIMIT TEMP AUTO MODE → LIMIT TEMP FUNCTION →
                                                    Display Ⓓ   oFF

  * No operation modes will be displayed if auto mode has been set to OFF.

(5) Press the (🌀.ıll) button to select lower limit or upper limit.

Lower limit flashes.   Upper limit flashes.

[Display **C**] → _19:30_ °C → _19:30_ °C

(6) Press the [TEMP] buttons (▽) and (△)) to set the desired temperature setting range.

[Setting example for lower limit]
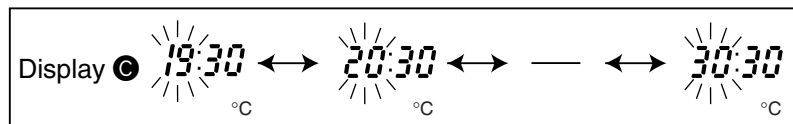
Display **C** _19:30_ °C ↔ _20:30_ °C ↔ — ↔ _30:30_ °C

(7) While pressing the (MODE) button, press the (🕐 ON/OFF) button for two seconds to return to normal mode. Setting is now complete.

* If you press the (🕐 ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

* If an attempt is made to set a temperature outside the range when the temperature range limit function is in use, "LIMIT TEMP FUNCTION" will flash.

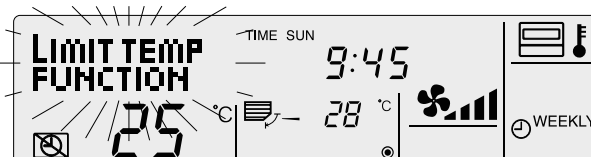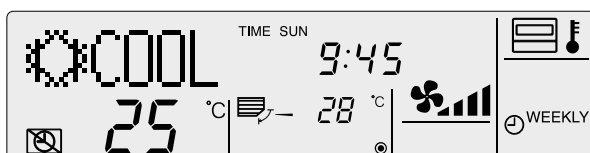■ Display example when the temperature range limit function is in use
If employees tend to lower the temperature excessively in the office without permission, set the temperature setting range for cool/dry mode to 25 °C-30 °C.

Setting

```
LIMIT TEMP
COOL MODE      25:30        ——
```

↓
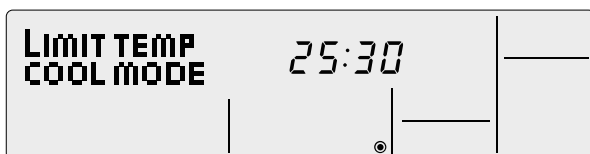
Even if someone who feels hot tries to press remote the controller's buttons to lower the temperature below 24 °C, or lower…

LIMIT TEMP FUNCTION flashes and the command is not accepted.

```
❄COOL   TIME SUN              ▭◗
  25  ℃ 🖹— 28 ℃  🌀.ıll
 🔲                      🕐WEEKLY
```

→

```
LIMIT TEMP   TIME SUN        ▭◗
FUNCTION —
  25  ℃ 🖹— 28 ℃  🌀.ıll
 🔲                      🕐WEEKLY
```

4.3 Basic Functions Setting

4.3.1 Remote Controller Main/Sub Setting
When using two remote controllers, they must be designated as the main and sub remote controllers.
The following settings can be made.
① MAIN (default) : The remote controller is set as the main controller.
② SUB : The remote controller is set as the sub controller.

To Change the Main/Sub Setting

■ Display example
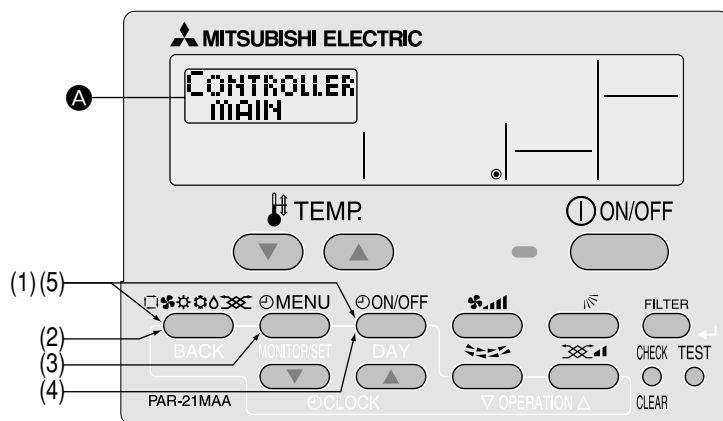
(1) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until $^{MODE}_{SELECTION}$ appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING

(3) Press the (⏲ MENU) button to select "CONTROLLER" on the screen (at Ⓐ).

(4) Press the (⏲ ON/OFF) button to select "CONTROLLER MAIN" or "CONTROLLER SUB" on the screen (at Ⓐ).

[Display Ⓐ] → CONTROLLER MAIN → CONTROLLER SUB

(5) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to return to normal mode.

4.3.2 Timer function setting (Weekly timer/Auto off timer/Simple timer)

The following settings can be made.
   ① Weekly Timer (default): The weekly timer can be used.
   ② Auto Off Timer   : The auto off timer can be used.
   ③ Simple Timer   : The simple timer can be used.
   ④ Timer Mode Off   : Timer mode cannot be used.
   * If the clock function is disabled (OFF), "Weekly Timer" cannot be selected.

■ Clock function setting

The following settings can be made.
   ① ON (default) : The clock function can be used.
   ② OFF   : The clock function cannot be used.
   * If "OFF" is selected to disable the clock function, the weekly timer cannot be used to make day of the week/time settings.
    To use the weekly timer to set the day of the week and time, the clock function must be set to "ON" (default).

To Use the Clock

■ Display example
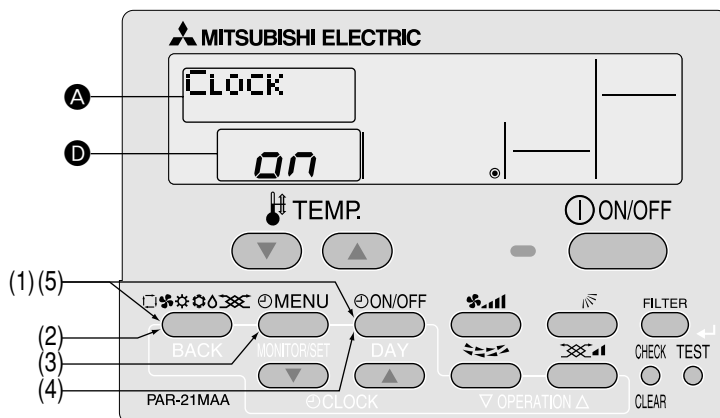
(1) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until $\substack{\text{MODE} \\ \text{SELECTION}}$ appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → | MODE SELECTION | → DISP MODE SETTING ──

(3) Press the (⏲ MENU) button to select "CLOCK" on the screen (at Ⓐ).

(4) Press the (⏲ ON/OFF) button so that "ON" appears on the screen (at Ⓓ).

[Display Ⓓ] → | on | → off ──

(5) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to return to normal mode.

   * If you press the (⏲ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

■ Day of the week and time setting
● The day of the week and time can be set and changed.
   [The time can be set in 1-minute increments.]

Notes • This setting is not possible if the clock function is disabled by the function setting. • The day of the week and time are not displayed if the clock function is disabled by function selection. • This setting is not possible if the simple timer or auto off timer has been selected.

Setting the Day of the Week and Time

■ Display example
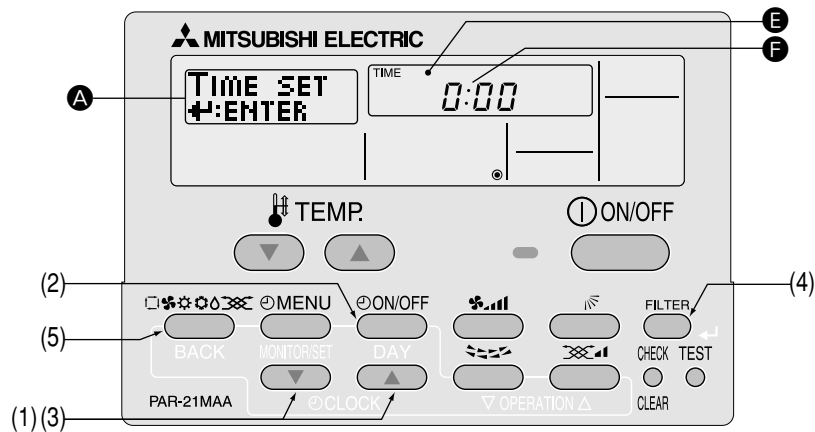
(1) Press the [CLOCK] buttons ((∇) and ($\triangle$)) to display $^{\text{TIME SET}}_{\text{↵:ENTER}}$ on the screen (at Ⓐ).

(2) Press the (⊙ ON/OFF) button until the desired day of the week appears.

[Display Ⓔ] ⟶ Sun ⟶ Mon ⟶ Tue ⟶ Wed ⟶ Thu ⟶ Fri ⟶ Sat

(3) Press the [CLOCK] buttons ((∇) and ($\triangle$)) to set the desired time.

Press the [CLOCK] buttons ((∇) and ($\triangle$)) longer will switch the time in 10-minute and 1-hour increments.

[Display Ⓕ] ⟶ One-minute ⟶ Ten-minute ⟶ One hour

(4) Press the (FILTER) (↵) button to confirm the time.

> **Note**
> The time you have set can be cancelled by pressing the (MODE) (BACK) button without confirming it.

(5) Press the (MODE) (BACK) button to return to the normal screen and complete the day of the week/time setting.

   * The day of the week and time you have set are displayed on the normal screen.

① **Weekly Timer**

■ The weekly timer allows you to set up to eight operations per day of the week.
  • For each operation, you can set the ON (start) or OFF (stop) timer and temperature. The start timer, stop timer and temperature can also be set individually.
  • The air conditioner is operated at the times you have set and according to the settings you have made.

■ The time for the weekly timer can be set in 1-minute increments.
* If "OFF" is selected to disable the clock function, the weekly timer cannot be used to make day of the week/time settings.
  To use the weekly timer to set the day of the week and time, the clock function must be set to "ON" (default).
  (Refer to page 23.)

> Note
> With the weekly timer, it is not possible to designate an operation mode.
> The air conditioner will be operated in the currently selected operation mode. (Cool, Dry, Heat or Auto)

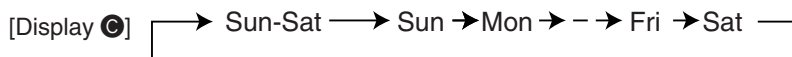How to set the Weekly Timer

■ Display example (for no1)
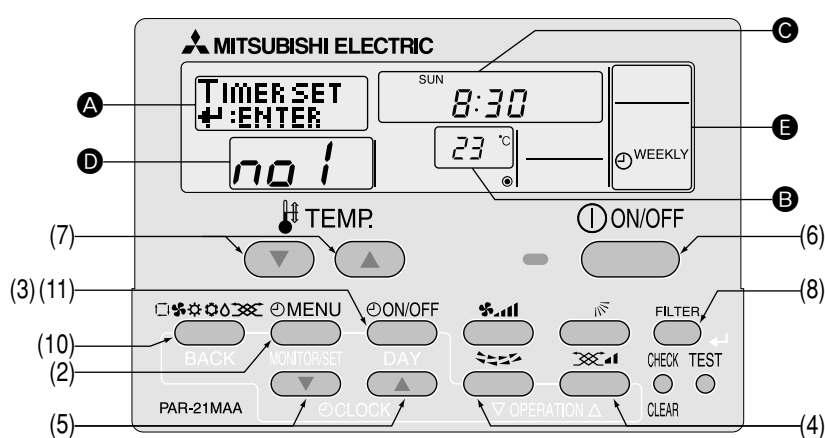
(1) Make sure that "WEEKLY" is displayed on the screen (at Ⓔ).

(2) Press the (⏱ MENU) button to select TIMER SET ↵:ENTER on the screen (at Ⓐ).

[Display Ⓐ]   TIMER MONITOR ⟶ TIMER SET ↵:ENTER

▶(3) Press the (⏱ ON/OFF) button until the desired day of the week appears.

[Display Ⓒ]   Sun-Sat ⟶ Sun ➜ Mon ➜ – ➜ Fri ➜ Sat

(4) Press the (▨⌄) and (⌄⌄) buttons to set the desired operation No. (Up to 8 patterns can be set.)

[Display Ⓓ]   no1 ⟷ no2 ⟷ — ⟷ no7 ⟷ no8

* A cell from the following setup matrix is selected according to the settings you have made in steps (2) and (3).

Set up Matrix

Op No.	Sunday	Monday	…	Saturday
no1	• 8:30 • ON • 23 °C			
no2	• 10:00 • OFF	• 10:00 • OFF	• 10:00 • OFF	• 10:00 • OFF
…			▲	
no8				

- Setting contents -
Starts the air conditioner at 8:30 with the temperature set to 23 °C.

- Setting contents -
Stops the air conditioner at 10:00.

> Note
> If "Sun – Sat" is set in step (3), the same pattern can be set for each day of the week.
> The same pattern is set in the shaded areas in the above setup matrix.
> (Example: Selecting "Sun – Sat" and setting operation No. "no2")

(5) Press the [CLOCK] buttons ($\triangledown$ and $\triangle$) to set the desired time. (0:00 to 23:59)

[Display **C**]   →*9:00* ←→ *9:01* ←→ *23:59* ←→ *0:00* ←→ *0:01* ←→ — ←→ *8:58* ←→ *8:59* ←

(6) Press the (① ON/OFF) button to select whether to start or stop the air conditioner at the time you have set in step (5).

[Display **C**]   → (Space) → ON → OFF ⌐

(7) Press the [TEMP] buttons ($\triangledown$ and $\triangle$) to set the desired room temperature. (12 °C to 30 °C)

[Display **B**]   →Space ←→ *24* ←→ *25* ←→ — ←→ *30* ←→ *12* ←→ — ←→ *22* ←→ *23* ←

Temperature setting range : The temperature can be set within a range of 12 °C to 30 °C. However, the setting range varies with the type of the air conditioner. (Refer to page 20.)

(8) After completing the settings in steps (4) to (7), press the (FILTER) (↵) button to confirm them.

To cancel the settings you have made, press the (CHECK) (CLEAR) button once.
*   The time setting will change to "- -:- -", and the ON/OFF and temperature settings will all disappear.
    (To clear all the weekly timer settings you have made, hold down the (CHECK) (CLEAR) button for two seconds or more until the settings flash. All of the settings will be cleared.)

Note

The settings you have made can be cancelled by pressing the (MODE) (BACK) button befor pressing (FILTER) (↵) button.
If you have set two or more different operations for the same time, only the operation with the highest operation No. will be effective.

---

(9) Repeat steps (3) to (8) to fill as many cells in the setup matrix as you wish.

(10) Press the (MODE) (BACK) button to return to the normal screen and complete weekly timer setting.

(11) If you press the (⊕ ON/OFF) button, the weekly timer will start and "Timer Off" will disappear from the screen.
    Make sure that "Timer Off" disappears.

How to Review the Weekly Timer Settings

(1) Make sure that "WEEKLY" is displayed on the screen (at **E**).
(2) Press the (⊕ MENU) button to display $^{TIMER}_{MONITOR}$ on the screen (at **A**).
(3) Press the (⊕ ON/OFF) button to select the day of the week you want to check.
(4) Press the (⚡) and (⌇) buttons to switch the settings from one to another, one at a time.
    * The settings are displayed in order of time setting.
(5) To close the $^{TIMER}_{MONITOR}$ and return to the normal screen, press the (MODE) button.
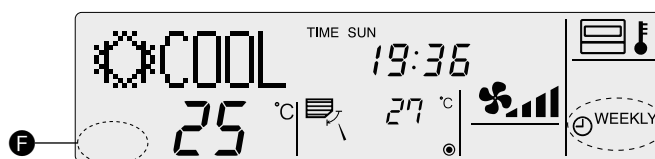

A TIMER MONITOR   SUN TIMER *8:30* ON ———— **C**
                      23 ℃   ⊕WEEKLY **E**
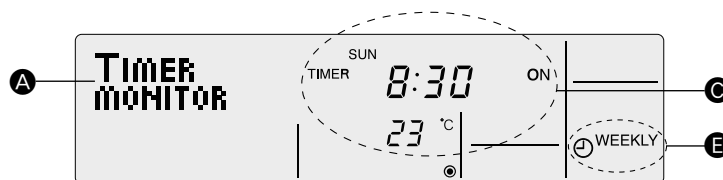
To Turn Off the Weekly Timer

(1) Press the (⊕ ON/OFF) button to display ◌ on the screen (at **F**).

COOL   TIME SUN *19:36*
25 ℃   *27* ℃   ⊕WEEKLY
F ◌

(1) Press the (⏲ ON/OFF) button so that 🔍 disappears from the screen (at **F**).

● **Weekly timer setting procedure**

To facilitate weekly timer setting, it is recommended that the settings (day of the week, time, operation (on/off)) you are going to make be entered in the setup table shown below.

Weekly timer setup table (up to 8 patterns can be set for each day of the week, 56 patterns in total for a week)

	Operation No.		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
①	no 1	Time setting							
		On/off setting							
		Temperature							
②	no 2	Time setting							
		On/off setting							
		Temperature							
③	no 3	Time setting							
		On/off setting							
		Temperature							
④	no 4	Time setting							
		On/off setting							
		Temperature							
⑤	no 5	Time setting							
		On/off setting							
		Temperature							
⑥	no 6	Time setting							
		On/off setting							
		Temperature							
⑦	no 7	Time setting							
		On/off setting							
		Temperature							
⑧	no 8	Time setting							
		On/off setting							
		Temperature							

Operation No. : Use the (🔅) and (〰) buttons to select the desired operation No.

Day of the week: Use the (⏲ ON/OFF) button to select the desired day. ("Sun to Sat", "Sun", "Mon", "Tue", "Wed", "Thu", "Fri" or "Sat" can be selected.)

Time : Use the [⏲CLOCK] buttons ((▽) and (△)) to set the desired time. (The time can be set from 0:00 to 23:59 in 1-minute increments.)

Operation (ON/OFF) : Use the (① ON/OFF) button to select the desired operation (ON/OFF⏎).

Temperature : Press the [🌡 TEMP] buttons ((▽) and (△)) to set the desired temperature.

② **Auto Off Timer**

● The auto off timer begins counting down when the air conditioner starts, and shuts off the air conditioner when the set time passed.
● The time on the auto off timer can be set in a range of 30 minutes to 4 hours, in 30-minute increments.
  * By default, the weekly timer is selected as the remoter controller's timer function.
    To use the auto off timer, switch the timer function to the auto off timer using the remote controller's function selection.
  Note 1 : If the auto off timer is selected, it is not possible to use the weekly and simple timers.
 Note 2 : Timer operation is not possible when:
    A timer is operating, an error has occurred, the air conditioner is operating, the remote controller is diagnosing a problem,
    function selection is in progress, timer setting is in progress, or the system is centrally controlled.
    (ON/OFF operation is prohibited under the above conditions.)

Selecting the Auto Off Timer

■ Display example
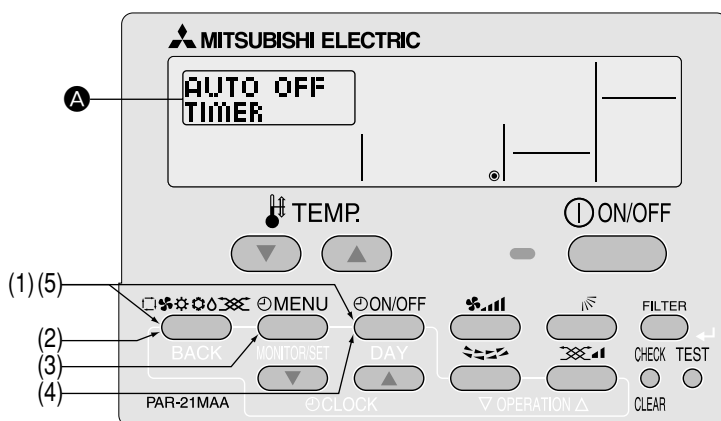
Steps (1) to (5) are necessary when switching the timer function from simple timer, weekly timer and no timer.

(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function
    selection mode.

(2) Press the (MODE) button until ${}^{MODE}_{SELECTION}$ appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → | MODE SELECTION | → DISP MODE SETTING →

(3) Press the (⏱ MENU) button so that "Timer" appears on the screen (at Ⓐ).

(4) Press the (⏱ ON/OFF) button until ${}^{AUTO\ OFF}_{TIMER}$ appears on the screen (at Ⓐ).

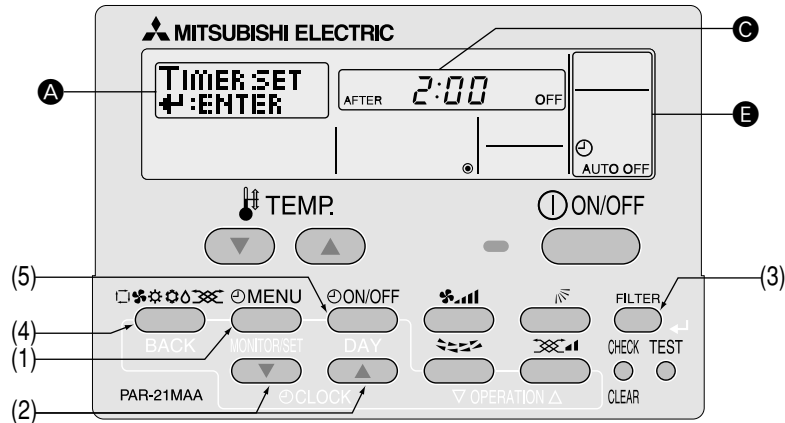[Display Ⓐ] → TIMER MODE OFF → | AUTO OFF TIMER | → SIMPLE TIMER → WEEKLY TIMER →

(5) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to return to normal mode.

  * If you press the (⏱ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

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How to Set the Auto Off Timer

■ Display example

(1) Press the ⊙MENU button for 3 seconds so that TIMER SET / ↵:ENTER appears on the screen (at Ⓐ).

[Display Ⓐ] → TIMER MONITOR → TIMER SET ↵:ENTER

(2) Press the [CLOCK] buttons (▽ and △) to set the desired time.
   (The time can be set up to 4 hours in 30-minute increments.)

[Display Ⓒ] *0:30* ←→ *1:00* ←→ — ←→ *3:30* ←→ *4:00*

(3) Press the FILTER (↵) button to confirm the setting.

(4) Press the MODE button to complete the setting procedure.

[Set display example]

[Display Ⓒ]
AFTER *2:00* OFF
Tow hours
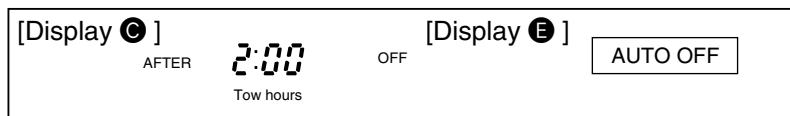
[Display Ⓔ]
AUTO OFF

Checking the Current Auto Off Timer Setting

(1) Make sure that AUTO OFF / TIMER is displayed on the screen (at Ⓔ).

(2) Press the ⊙MENU button for 3 seconds to display TIMER MONITOR on the screen (at Ⓐ).
   • The time you have set is displayed.

(3) To close the TIMER MONITOR and return to the normal screen, press the MODE button.

■ Display example

(1) Press the (⏱ ON/OFF) button for 3 seconds so that the timer execution time disappears from the screen (at **C**).

   • If the air conditioner is operated with the auto off timer turned OFF, 🔕 will appear on the screen (at **F**).

   * The auto off timer will be effective the next time that the air conditioner is operated.

■ Display example (auto off timer is off)
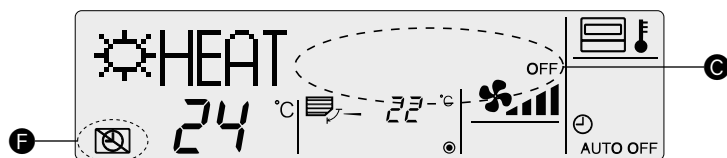
To Turn On the Auto Off Timer…

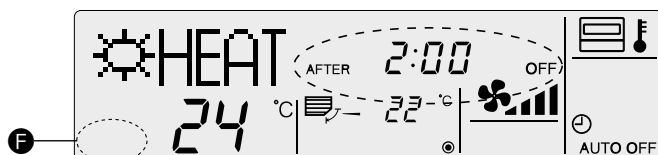(1) Press the (⏱ ON/OFF) button for three seconds while the timer is OFF, so that 🔕 disappears from the screen (at **F**) and the timer execution time appears on the screen (at **C**).

   * The timer execution time that was set previously will be displayed.

■ Display example (auto off timer is on)

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③ **Simple Timer**

■ You can set the simple timer in any of three ways.
● Start time only   : The air conditioner starts when the set time has passed.
● Stop time only   : The air conditioner stops when the set time has passed.
● Start & Stop times : The air conditioner starts and stops at the respective passed times.

■ The simple timer (Start and stop) can be set only once within a 72-hour period.
The time setting is made in hour increments.

Note 1: Timer operation is not possible when:
      A timer is operating, an error has occurred, the air conditioner is operating, the remote controller is diagnosing a problem, function selection is in progress, timer setting is in progress, or the system is centrally controlled.
      (ON/OFF operation is prohibited under the above conditions.)

■ If the simple timer is not currently selected, select it and make the necessary changes to the current settings as explained below.

Switching to the simple timer

■ Display example
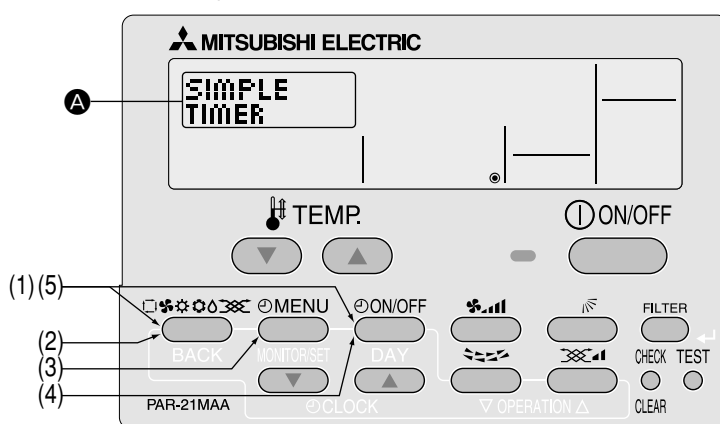
Steps (1) to (5) are necessary when switching the timer function from auto off timer, weekly timer and no timer.

(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until ᴹᴼᴰᴱ SELECTION appears on the screen (at Ⓐ).

[Display Ⓐ] ⟶ CHANGE LANGUAGE ⟶ FUNCTION SELECTION ⟶ [MODE SELECTION] ⟶ DISP MODE SETTING

(3) Press the (⏱ MENU) button so that "TIMER" appears on the screen (at Ⓐ).

(4) Press the (⏱ ON/OFF) button until "SIMPLE TIMER" appears on the screen (at Ⓐ).
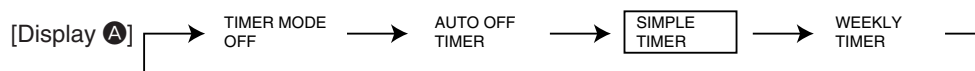
[Display Ⓐ] ⟶ TIMER MODE OFF ⟶ AUTO OFF TIMER ⟶ [SIMPLE TIMER] ⟶ WEEKLY TIMER

(5) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to return to normal mode.

    * If you press the (⏱ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

How to Set the Simple Timer

■ Display example
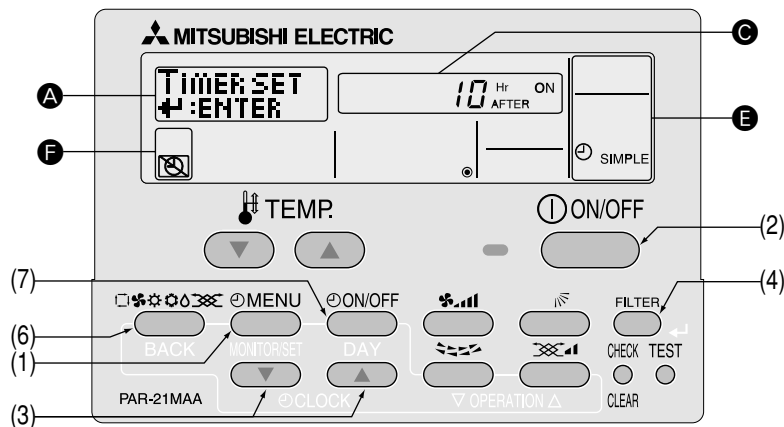
Make sure that "SIMPLE TIMER" is displayed on the screen (at **E**).

(1) Press the (⏲ MENU) button to select $\frac{\text{TIMER SET}}{↵ :\text{ENTER}}$ on the screen (at **A**).

[Display **A**]　→　TIMER MONITOR　→　| TIMER SET ↵ :ENTER |
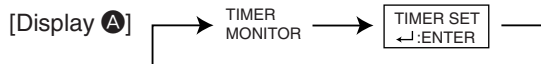
(2) Press the (① ON/OFF) button to select "Start time only" or "Stop time only".

→　Hr AFTER　ON　→　Hr AFTER　OFF
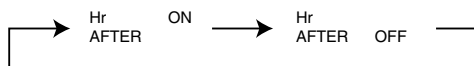
• Start time only (Displays the time at which the air conditioner starts)　: "Hr AFTER ON"
• Stop time only (Displays the time at which the air conditioner stops)　: "Hr AFTER OFF"

(3) Press the [⏲CLOCK] buttons (▽) and (△)) to set the desired time. (The time can be set up to 72 hours in 1-hour increments.)

[Display **C**]　→ 1 ↔ 2 ↔ – ↔ 71 ↔ 72
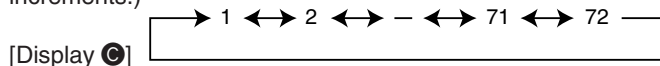
　* To cancel the time you have set, press the (CHECK) (CLEAR) button.

(4) Press the (FILTER) (↵) button to confirm the setting.

　*1. When using only the start timer or stop timer, make sure that "– –" is displayed for the timer you are not going to use.

　*2. To cancel the time you have set, press the (CHECK) (CLEAR) button to display "– –", and then press the (FILTER) (↵) button to confirm it.

(5) When using both the start and stop timers, carry out steps (2) to (4) to set both the start and stop times.
　* It is not possible to set the same time for both the start and stop times.

(6) Press the (MODE) button to complete the setting procedure.

　　　[Set display example]

　[Display **C**]　　10 Hr AFTER　ON
　　　　　　　　　Ten hours　　　[Display **E**]　| SIMPLE |
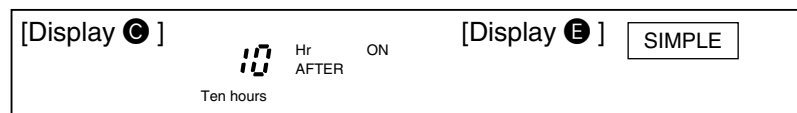
(7) Press the (⏲ ON/OFF) button. The simple timer will start to operate and the timer execution time you have set will be displayed.

If both start and stop timers are set, whichever time will come first will be displayed.

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(1) Be sure that the "SIMPLE" indicator is visible on the screen (at **E**).

(2) Press the (◷ MENU) button, so that the TIMER MONITOR appears on the screen (at **A**).
   • The time you have set to start or stop the timer appears on the screen (at **C**).

(3) Press the (MODE) button to close the TIMER MONITOR display and return to the standard control screen.

A ──── TIMER MONITOR   TIMER   **2** Hr ON AFTER ──── **C**
   ◷ SIMPLE ──── **E**
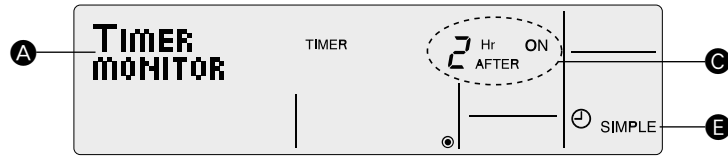
To Turn Off the Simple Timer…

(1) Press the (◷ ON/OFF) button so that the timer setting no longer appears on the screen (at **C**).

☼COOL 25 ℃ 27 ℃ ──── **C**
◷ SIMPLE ──── **E**
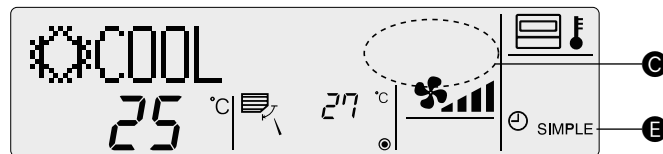
Examples

① Start timer operation : Operation starts after 2 hours.
② Stop timer operation : Operation stops after 10 hours.
③ Timer cancelled
Timer setting no longer appears

2 Hr ON AFTER ◷ SIMPLE

☼HEAT 24 ℃ 22 ℃ **10** Hr AFTER OFF ◷ SIMPLE

☼HEAT 24 ℃ 22 ℃ ◷ WEEKLY
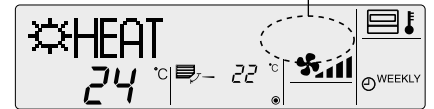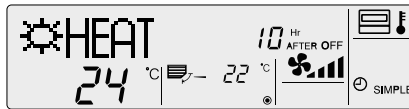
④ When both the start and stop timers are set
   Example 1 : To activate the on timer first
      Time set for the on timer: ON after 3 hours
      Time set for the off timer: OFF after 7 hours

Once seven hours have elapsed, the air conditioner will remain stopped until an operation is performed.

3 Hr ON AFTER ◷ SIMPLE

☼COOL 25 ℃ 27 ℃ **4** Hr AFTER OFF ◷ SIMPLE

◷ SIMPLE

Timer start
Displays the time set for the start timer.

After 3 hours
Displays "stop time" – "start time".

After 7 hours
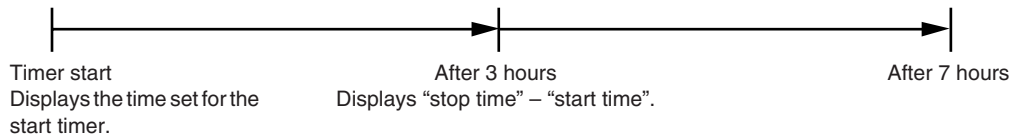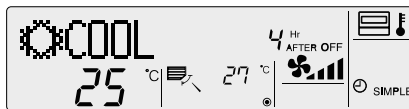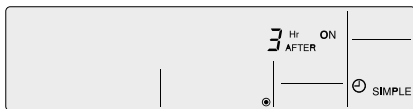
   Example 2 : To activate the off timer first
      Time set for the off timer: OFF after 2 hours
      Time set for the on timer: ON after 5 hours

Once five hours have elapsed, the air conditioner will continue operating until an operation is performed.

☼COOL 25 ℃ 27 ℃ **2** Hr AFTER OFF ◷ SIMPLE

3 Hr ON AFTER ◷ SIMPLE

☼COOL 25 ℃ 27 ℃ ◷ SIMPLE

Timer start
Displays the time set for the off timer.

After 2 hours
Displays on timer (5hr)·off timer (2hr)

After 5 hours
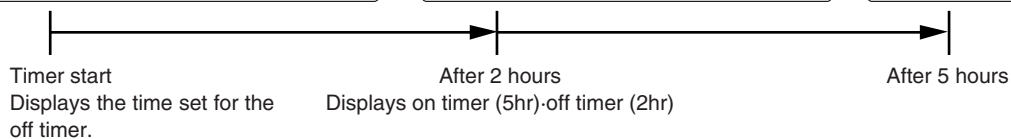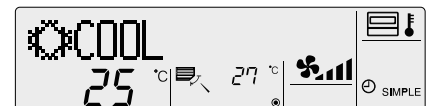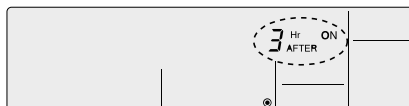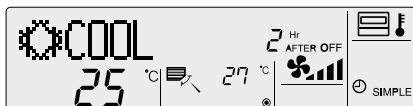
④ **Timer Mode Off**

Timer mode cannot be used.

■ Display example
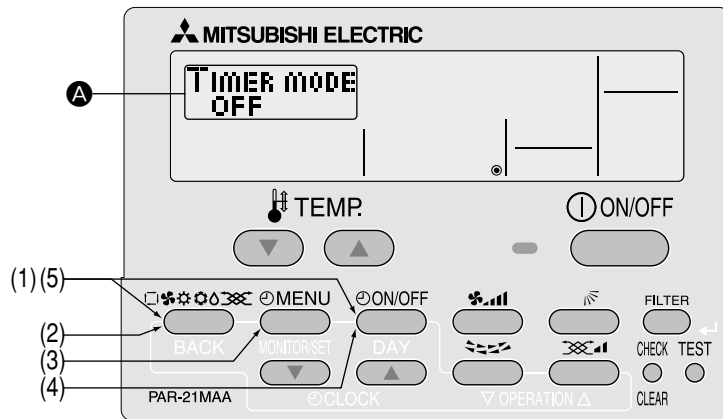
How to set the Timer mode Off

(1) While pressing the (MODE) button, press the (⊕ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until $^{MODE}_{SELECTION}$ appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING
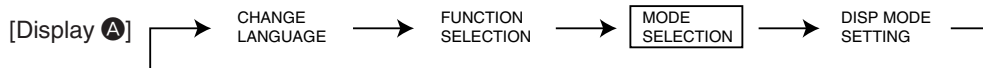
(3) Press the (⊕ MENU) button so that "TIMER" appears on the screen (at Ⓐ).

(4) Press the (⊕ ON/OFF) button until "TIMER MODE OFF" appears on the screen (at Ⓐ).

[Display Ⓐ] → TIMER MODE OFF → AUTO OFF TIMER → SIMPLE TIMER → WEEKLY TIMER

(5) While pressing the (MODE) button, press the (⊕ ON/OFF) button for two seconds to return to normal mode.

   * If you press the (⊕ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

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4.3.3 Contact Number Setting for Error Situation

The following settings can be made.
① CALL • OFF (default) : The preset contact number is not displayed even when an error occurs.
② CALL • ************   : The preset contact number is displayed when an error occurs. (The contact number can consist of up to 12 digits.)
   CALL • –   : The contact number can be set when the display is as shown on the left.

Setting the Contact Numbers

■ Display example

(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until MODE SELECTION appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING ⤾

(3) Press the (⏱ MENU) button until "CALL" appears on the screen (at Ⓐ).

[Display Ⓐ] → TIMER → CALL · → CONTROLLER → CLOCK ⤾
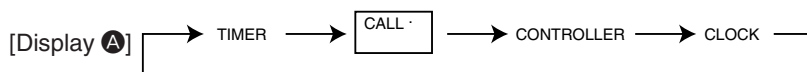
(4) Press the (⏱ ON/OFF) button to select whether or not to show the contact number.

                Do not show   Show
[Display Ⓐ]   CALL ·   CALL ·

[Display Ⓓ] → oFF → ⤾
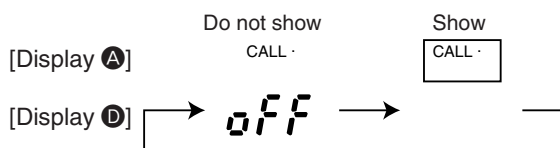
(5) Press the [⏱CLOCK] buttons ((▽) and (△)) to set the desired contact number, one digit at a time. To move the input digit position left or right, press the [♨ TEMP] buttons ((▽) and (△)).

[Display Ⓐ] → 0 ↔ 1 ↔ – ↔ 9 ↔ [ ] ⤾
                                  Space
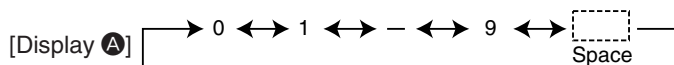
The contact number can contain up to 12 digits.
[When entering "012"]

[Display Ⓐ] CALL • 012_

"0" → Press the [⏱CLOCK] button ((△)) once.

| Each time a value is entered, press the [TEMP] button ((△)) to move the cursor to the next digit to the right. |

"1" → Press the [⏱CLOCK] button ((△)) twice.

"2" → Press the [⏱CLOCK] button ((△)) three times.

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(6) While pressing the (MODE) button, press the (⏲ ON/OFF) button for two seconds to return to normal mode.

　　* If you press the (⏲ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

(7) If you press the (CHECK) (CLEAR) button, the contact number will be displayed for five seconds.

● Once the contact number has been set, the error code and contact number will be displayed alternately when an error occurs.

```
┌──────────────────────────────┐          ┌──────────────────────────────┐
│ [ALL·×××× ┌─P2─┐        ──    │    ──▶   │ [ALL·×××× ┌─01─┐        ──    │
│ ×××××××   └ERROR CODE┘    │    │          │ ×××××××   └─IC─┘          │    │
│              │      │── ◉ │    │          │    00        │      │── ◉ │    │
└──────────────────────────────┘          └──────────────────────────────┘
        Error Code                                      Indoor unit No.

                    (Alternating Display)
      ▲                                                         │
      │                                                         ▼
┌──────────────────────────────┐          ┌──────────────────────────────┐
│ CHECK     ┌─01─┐        ──    │    ◀──   │ CHECK     ┌─P2─┐        ──    │
│  00       └─IC─┘          │    │          │           └ERROR CODE┘    │    │
│              │      │── ◉ │    │          │              │      │── ◉ │    │
└──────────────────────────────┘          └──────────────────────────────┘
        Indoor unit No.                                 Error Code
```
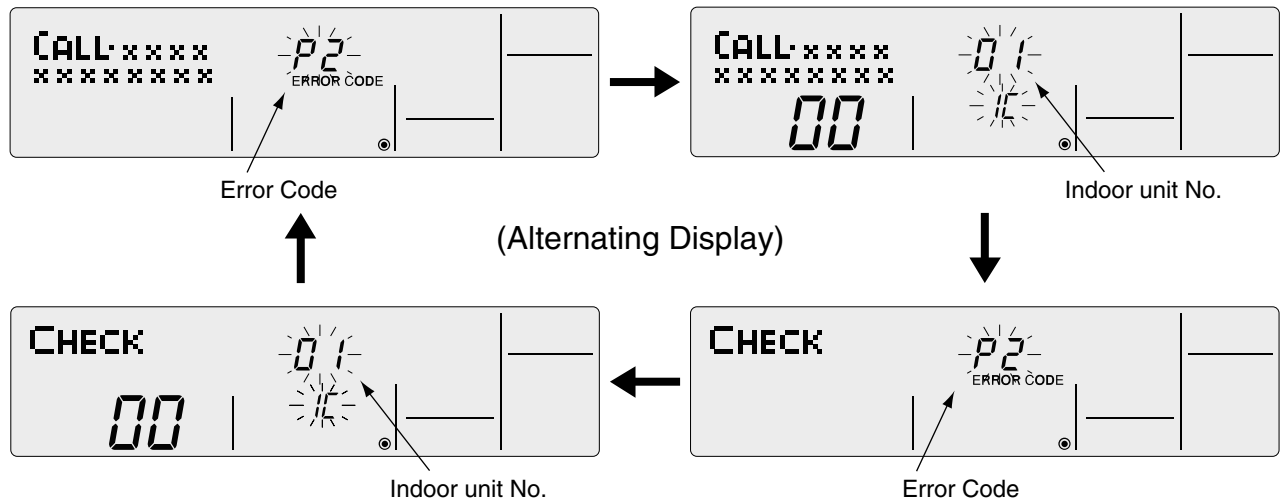
4.4 Display Change Setting

4.4.1 Temperature Display °C/°F Setting

The following settings can be made.
① °C (default) : Temperatures are displayed in Celsius.
② °F   : Temperatures are displayed in Fahrenheit.
              (Degrees F = 1.8 × degrees C + 32)

Switching the Temperature Display Unit between °C and °F

■ Display example
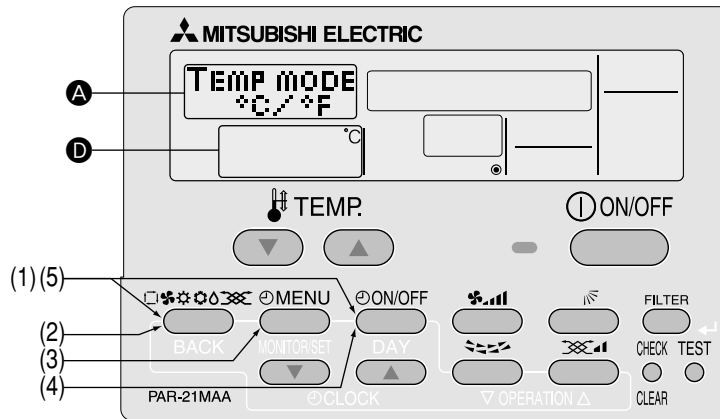
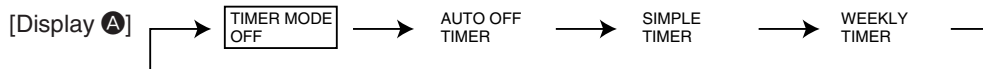
(1) While pressing the (MODE) button, press the (⏰ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until $^{DISP MODE}_{SETTING}$ appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING →

(3) Press the (⏰ MENU) button to select "TEMP MODE °C/°F" on the screen (at Ⓐ).

(4) Press the (⏰ ON/OFF) button to select "°C" or "°F" on the screen (at Ⓓ).

[Display Ⓓ] → °C → °F →
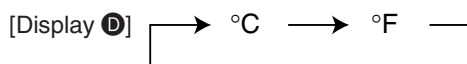
(5) While pressing the (MODE) button, press the (⏰ ON/OFF) button for two seconds to return to normal mode.

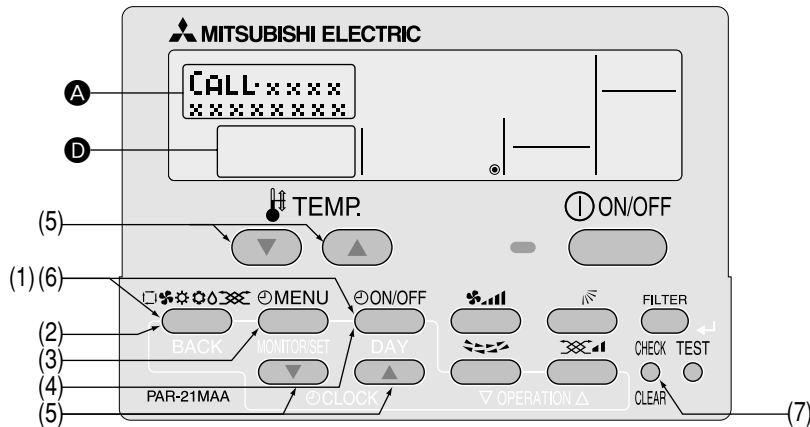   * If you press the (⏰ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

■ Temperature display example when "°C" is selected   ■ Temperature display example when "°F" is selected
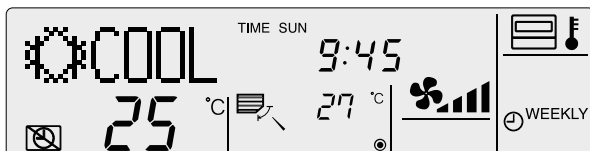
4.4.2 Inlet air Temperature Display Setting

The following settings can be made.
① ON (default) : The inlet air temperature is displayed.
② OFF   : The inlet air temperature is not displayed.

Setting the Inlet Air Temperature
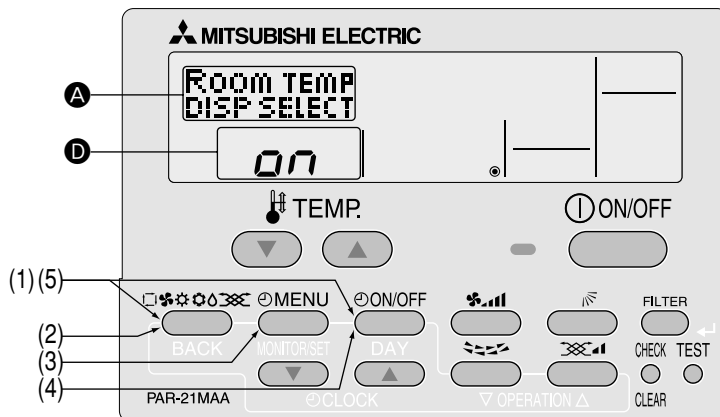
■ Display example

(1) While pressing the (MODE) button, press the (ⓓ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until DISP MODE SETTING appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING

(3) Press the (ⓓ MENU) button so that "ROOM TEMP DISP SELECT" appears on the screen (at Ⓐ).
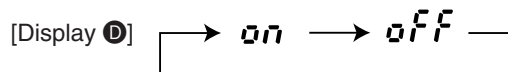
(4) Press the (ⓓ ON/OFF) button to select "on" or "oFF" on the screen (at Ⓓ).

[Display Ⓓ] → on → off

(5) While pressing the (MODE) button, press the (ⓓ ON/OFF) button for two seconds to return to normal mode.

   * If you press the (ⓓ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

■ Inlet air temperature display example
   when "ON" is selected

■ Inlet air temperature display example
   when "OFF" is selected
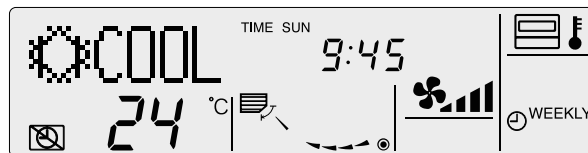
4.4.3 Automatic Cooling/Heating Display Setting

• This section explains how to set whether to display "COOL"/"HEAT" in auto mode. It will not be displayed if auto mode is set to OFF.

① ON (default) : One of "Automatic cooling" and "Automatic heating" is displayed under the automatic mode is displayed.
② OFF : Only "Automatic" is displayed under the automatic mode.

Selecting Whether to Display "COOL"/"HEAT" in Auto Mode

■ Display example
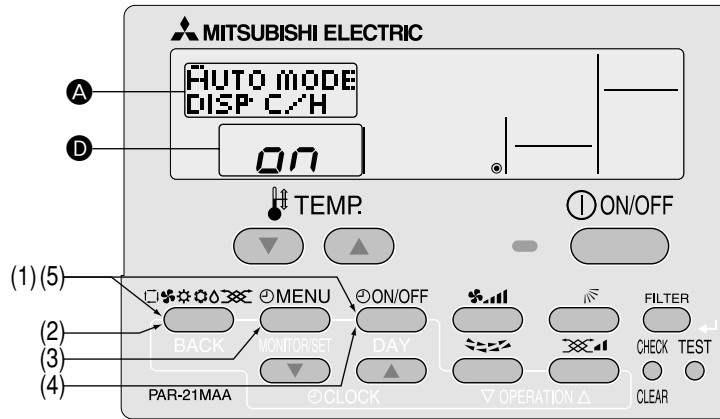
(1) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to activate the remote controller's function selection mode.

(2) Press the (MODE) button until DISP MODE SETTING appears on the screen (at Ⓐ).

[Display Ⓐ] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING →

(3) Press the (⏱ MENU) button so that "AUTO MODE DISP C/H" appears on the screen (at Ⓐ).

(4) Press the (⏱ ON/OFF) button to select "on" or "oFF" on the screen (at Ⓓ).

[Display Ⓓ] → on → off →

(5) While pressing the (MODE) button, press the (⏱ ON/OFF) button for two seconds to return to normal mode.

 * If you press the (⏱ ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.

■ Display example when "AUTO MODE DISP C/H" is set to "ON"

[During auto (cool) mode]

[During auto (heat) mode]

■ Display example when "AUTO MODE DISP C/H" is set to "OFF"
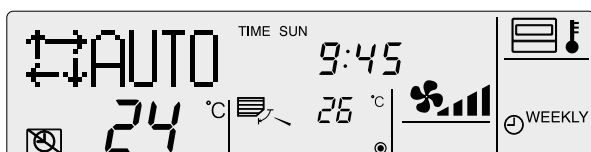
VI. Unit Function Setting by the Remote Controller (for Mr. SLIM)

> Perform the following settings only to change the functions for Mr. Slim series.
> (This setting is not possible with the City-Multi series.)

Each unit's functions can be set by a remote controller. Setting of each unit's functions is possible by remote controller only.
Table 1 Functions Available (For details regarding initial settings and operation modes of each unit, refer to the unit installation manual.)

(1) Itemised functions of the entire refrigerant system (select unit number 00)

| Function	Settings	Mode No.	Setting No.	Check	Remarks
Power failure automatic recovery	Not available	01	1		
	Available (Approx. 4-minute wait-period after power is restored.)		2		
Indoor temperature detecting *1	Indoor unit operating average	02	1		
	Set by indoor unit's remote controller		2		
	Remote controller's internal sensor		3		
LOSSNAY connectivity	Not supported	03	1		
	Supported (indoor unit in not equipped with outdoor-air intake)		2		
	Supported (indoor unit in equipped with outdoor-air intake)		3		
Power voltage	240V	04	1		
	220V, 230V		2		
Auto operating mode *2	Auto energy-saving operation ON	05	1		
	Auto energy-saving operation OFF		2		
Frost prevention temperature	2 °C	15	1		
	3 °C		2		
Change of defrosting control	Standard	17	1		
	For high humidity		2		

*1. Can be set only when a wired remote controller is used. This function cannot be set for floor type models.
　When using two remote controllers (two-remote controller operation), the remote controller with a built-in sensor must be set as the main remote controller.
*2. Can be set only when the outdoor unit is an inverter type.

(2) Itemised functions of the indoor unit (select unit numbers 01 to 03 or AL [Wired remote controller] / 07 Wireless remote controller])

Function	Settings		Mode No.	Setting No.	Check	Remarks
Filter sign	100Hr		07	1		
	2500Hr			2		
	No filter sign indicator			3		
Fan speed	Quiet	standard	08	1		
	Standard	High ceiling ① } PLA-RP·AA type		2		
	High ceiling	High ceiling ②		3		
No. of air outlets	4 directions		09	1		
	3 directions			2		
	2 directions			3		
Installed options (highperformance filter)	Not supported		10	1		
	Supported			2		
Horizontal vane setting	No vanes		11	1		
	Equipped with vane (No. 1 set)			2		
	Equipped with vane (No. 2 set)			3		
Energy saving air flow (Heating mode)	Disabled		12	1		
	Enabled			2		
Swing	Not available		23	1		
	Available			2		
Set temperature in heating mode 4deg-up	Available		24	1		
	Not available			2		
Fan speed when the heating thermostat is OFF	Extra low		25	1		
	Low			2		
	Setting fan speed			3		
Fan speed when the heating thermostat is OFF	Setting fan speed		27	1		
	Stop			2		
Detection of abnormality (P8) of the pipe temperature	Available		28	1		
	Not available			2		

Note
If a function of an indoor unit is changed by function selection after installation is complete, make sure that a "_" mark, etc., is given in the "Check" column of Table 1 to indicate the change.

[Flow of function selection]

First, try to familiarize yourself with the flow of the function selection procedure. In this section, an example of setting the room temperature detection position is given.

For actual operations, refer to steps ① to ⑩.

Mode number

Setting number   Refrigerant address   Unit number

MITSUBISHI ELECTRIC

Ⓕ ▽ △ TEMP.

ON/OFF

Ⓔ □❄☀◊◊✕ ⊙MENU ⊙ON/OFF

BACK MONITOR/SET DAY

PAR-21MAA ▽ △

⊙CLOCK ▽ OPERATION △

FILTER

CHECK TEST

CLEAR

Ⓐ

Ⓑ

Ⓘ

Ⓙ

Ⓒ Ⓓ Ⓖ

Modes 01 to 13 can be activated by pressing buttons Ⓐ and Ⓑ simultaneously, and modes 15 to 28 by pressing buttons Ⓑ and Ⓙ.

Selecting functions using the wired remote controller

① Check the function selection setting.

② Switch to function setting mode. ※
(Press Ⓐ and Ⓑ at the same time with the remote controller stopped.)

※ For modes 15 and higher, press Ⓙ and Ⓑ at the same time.

③ Specify refrigerant address 00 (outdoor unit)
④ Specify unit No. 00. (indoor unit)
(Use Ⓒ and Ⓓ.)

⑤ Enter the setting.
(Press Ⓔ.)

(Specified indoor unit: BLOW operation)

⑥ Select mode No. 02
(room temperature detection position).
⑦ Select setting No. 03 (remote controller fixed).
(Use Ⓕ and Ⓖ.)

⑧ Enter the setting.
(Press Ⓔ.)

Example:
Selecting room temperature detection position

Finished

NO

YES

⑨

Change refrigerant address unit No.

YES

NO

⑩ Function selection end screen
(Press Ⓐ and Ⓑ at the same time.)

The above procedure must be carried out only if changes are necessary.

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[Operating Procedure]

① Check the setting items provided by function selection.
   If settings for a mode are changed by function selection, the functions of that mode will be changed accordingly. Check all the current settings according to steps ②
   to ⑦, fill in the "Check" column in Table 1, and then change them as necessary. For factory settings, refer to the indoor unit's installation manual.

---

② Switch off the remote controller.
   Ⓐ Hold down the (FILTER) and Ⓑ (TEST) buttons simultaneously for at
   least two seconds. FUNCTION SELECTION will start to flash, and then the remote controller's
   display content will change as shown below.

   Refrigerant address display section

   ③ Set the outdoor unit's refrigerant address.
   Ⓒ Press the [⏰CLOCK] buttons ((▽) and (△)) to select the desired
   refrigerant address. The refrigerant address changes from "00" to "15". (This
   operation is not possible for single refrigerant systems.)

* If the unit stops after FUNCTION SELECTION flashed for two seconds or "88" flashes in the room temperature display area for two seconds, a transmission error may have occurred.
  Check to see if there are any sources of noise or interference near the transmission path.

> Note
> If you have made operational mistakes during this procedure, exit function selection (see step ⑩), and then restart from step ②.

---

④ Set the indoor unit number.
   Ⓓ Press the (⏰ ON/OFF) button so that "- -" flashes in the unit number display
   area.

   Unit number display section

   Ⓒ Press the [⏰CLOCK] buttons ((▽) and (△)) to select the unit number
   of the indoor unit for which you want to perform function selection. The unit
   number changes to "00", "01", "02", "03", "04" and "AL" each time a button is
   pressed.

* To set modes 1 to 3, select unit number "00".
* To set modes 7 to 11, carry out as follows:
• To set each indoor unit individually, select "01" to "04".
• To set all the indoor units collectively, select "AL".

⑤ Confirm the refrigerant address and unit number.
   Ⓔ Press the (MODE) button to confirm the refrigerant address and unit
   number.
   After a while, "- -" will start to flash in the mode number display area.

   Mode number display section

* "88" will flash in the room temperature display area if the selected refrigerant
  address does not exist in the system.
  Furthermore, if "F" appears and flashes in the unit number display area and the
  refrigerant address display area also flashes, there are no units that corre-
  spond to the selected unit number. In this case, the refrigerant address and unit
  number may be incorrect, so repeat steps ② and ③ to set the correct ones.

Ⓔ When the refrigerant address and unit number are confirmed by pressing the
   (MODE) button, the corresponding indoor unit will start fan operation. This
   helps you find the location of the indoor unit for which you want to perform function
   selection. However, if "00" or "AL" is selected as the unit number, all the indoor
   units corresponding to the specified refrigerant address will start fan operation.

   | Example) When the refrigerant address is set to 00 and the unit number is 02. |

   00 refrigerant address

   Outdoor unit

   Indoor unit   Unit number 01   Unit number 02   Unit number 03

   (Designate operation)   Remote controller   Fan draft
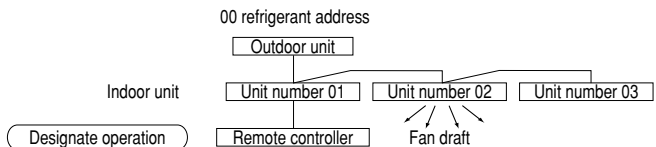
* When grouping different refrigerant systems, if an indoor unit other than the
  one to which the refrigerant address has been set performs fan operation,
  there may be another refrigerant address that is the same as the specified one.
  In this case, check the DIP switch of the outdoor unit to see whether such a
  refrigerant address exists.

---

⑥ Select the mode number.
   Ⓕ Press the [🌡TEMP] buttons ((▽) and (△)) to set the desired mode
   number.
   (Only the selectable mode numbers can be selected.)

   Mode number display section

   Mode number 02 = Indoor tempreture detection

---
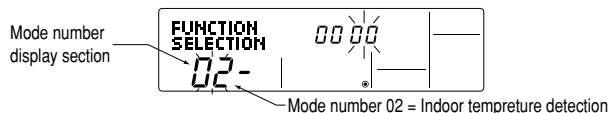
⑦ Select the setting content for the selected mode.
   Ⓖ Press the (⏰MENU) button. The currently selected setting number will
   flash, so check the currently set content.

   Setting number display section

   Setting number 1 = Indoor unit operating average

   Ⓕ Press the [🌡TEMP] buttons ((▽) and (△)) to select the desired setting
   number.

   Setting number 3 = Remote controller built-in sensor

---
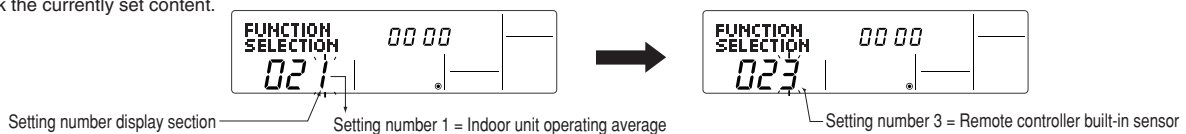
⑧ Register the settings you have made in steps ③ to ⑦.
   Ⓔ Press the (MODE) button. The mode number and setting number will start
   to flash and registration starts.

   The mode number and setting number will stop flashing and remain lit, indicating the
   end of registration.

* If "– – –" is displayed for both the mode number and setting number and "88" flashes in the room temperature display area, a transmission error may have occurred.
  Check to see if there are any sources of noise or interference near the transmission path.

---

⑨ If you wish to continue to select other functions, repeat steps ③ to ⑧.

---

⑩ Complete function selection.
   Ⓐ Hold down the (FILTER) and (TEST) buttons simultaneously for at least
   two seconds.
   After a while, the function selection screen will disappear and the air condi-
   tioner OFF screen will reappear.

* Do not operate the remote controller for at least 30 seconds after completing
  function selection. (No operations will be accepted even if they are made.)
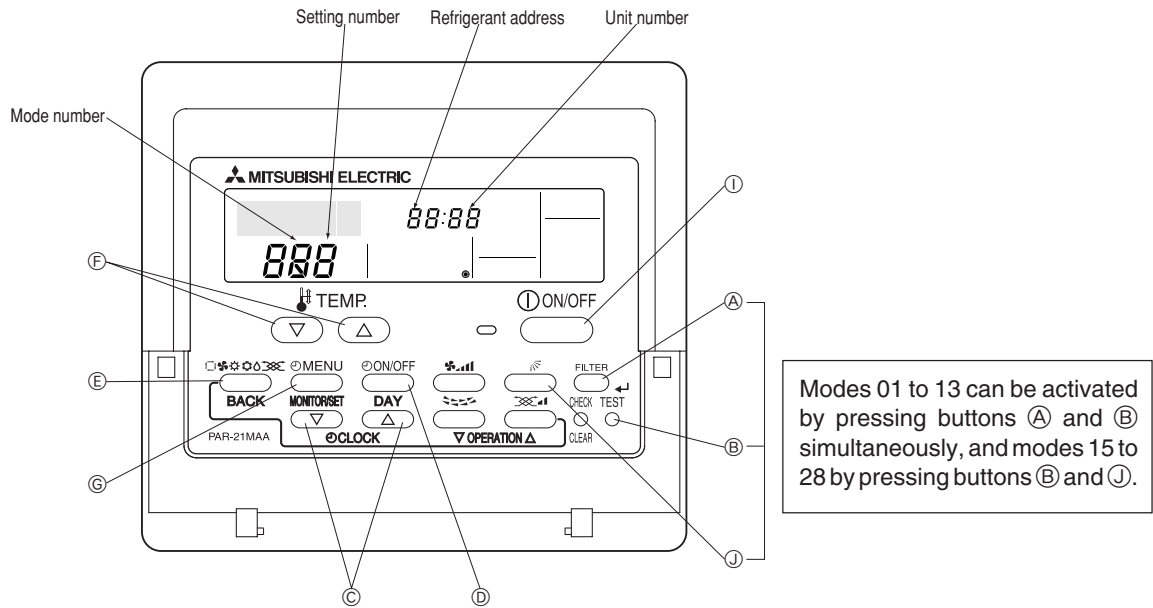

> Note
> If a function of an indoor unit is changed by function selection after installation is complete, make sure that a "○" mark, etc., is given in the "Check" column of Table
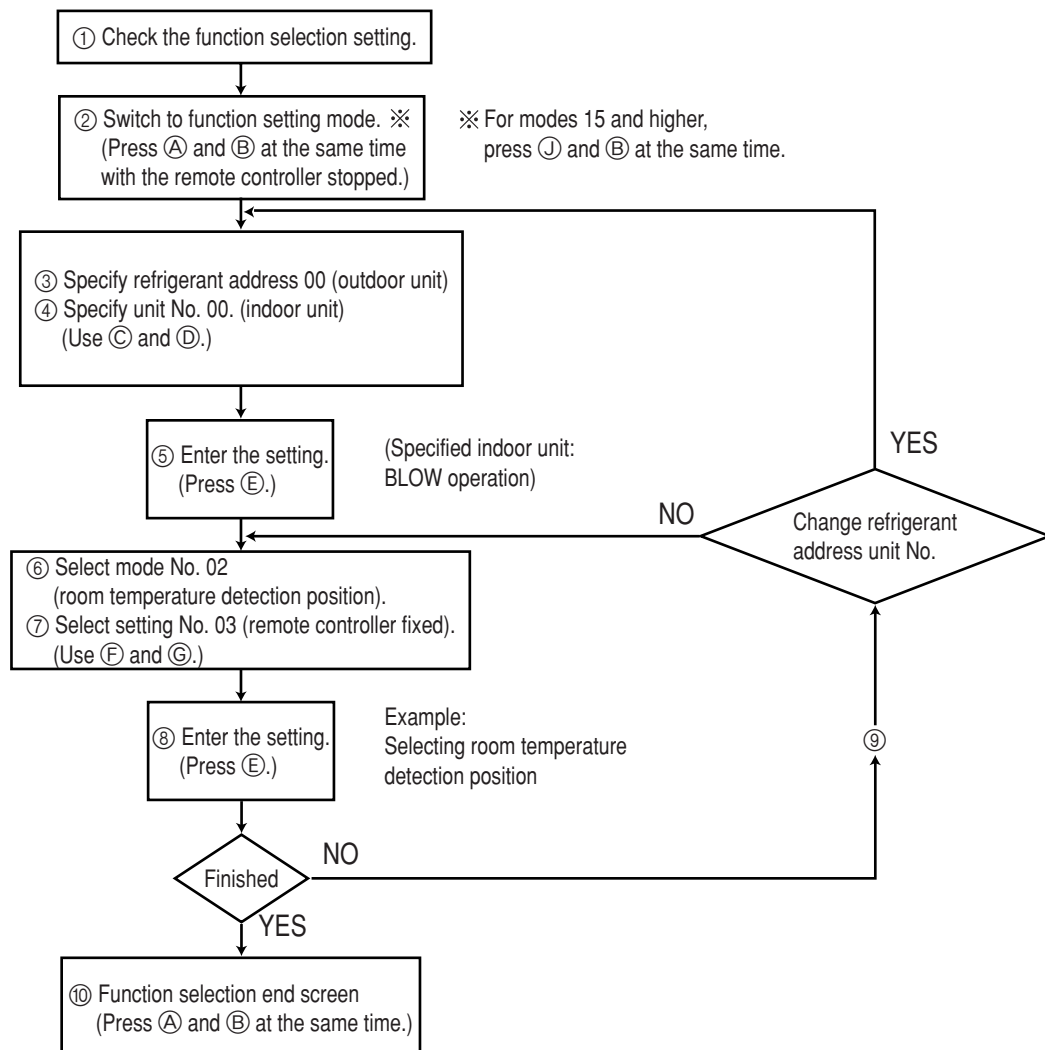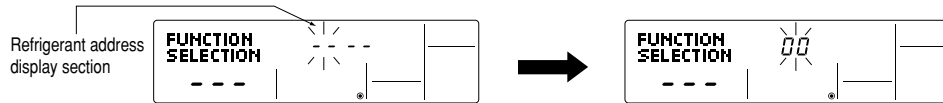> 1 to indicate the change.

Ⅶ. Test Run by the Remote Controller (for Mr. SLIM)

1. Points to be Checked before Test Run

● After installation of the indoor and outdoor units, piping work and electrical wiring work, check that there is no refrigerant leakage, loosened connections or incorrect polarity connections.
● Measure the impedance between each power line (R, S, T) of the outdoor unit and the ground using a 500 V megger, and make sure that it is 1.0 MΩ or more. If the indoor unit is equipped with a heater or if power is supplied to the outdoor and indoor units separately, also check the impedance for each power line (R, S, T) of the heater unit.
  * Never perform the above operation for indoor/outdoor unit connecting terminal block (S1, S2, S3) and remote controller terminal block (1, 2). This may cause a breakdown.
● Before turning on the power, make sure that the test run switch (SW4) on the outdoor control board is set to OFF.
● To protect the compressor, the power must be turned ON 12 hours before the start of operation.
● For models that require certain functions (e.g., airflow, auto power failure recovery) to be changed, refer to "V. Function Selection of Remote Controller" and change the settings.
● For replacement operation when using preexisting R22 refrigerant piping, refer to the outdoor unit installation manual. (Outdoor units: MPUZ-RP112 to RP280)

2. Test Run using the Remote Controller

■ Test run method

Before starting the test run, the instruction manual must be read thoroughly. (In particular, items regarding safety must be carefully read.)

"TEST RUN" and the currently selected operation mode are displayed alternately.

Displays the remaining test run time.

[TEST] button
Test run indicator
Pipe (fluid) temperature

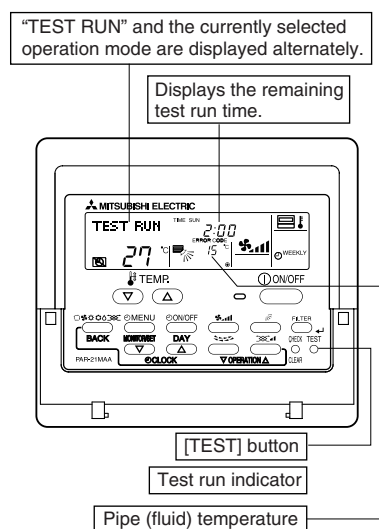| Operating Procedure	
	It is not possible to operate the remote controller if "PLEASE WAIT" is displayed in the room temperature display area. Wait until "PLEASE WAIT" disappears. "PLEASE WAIT" remains displayed for approximately two minutes after the power is turned ON. *1
1. Turn ON the main power.	
2. Press the (TEST) button twice.	"TEST RUN" and the name of the currently selected operation mode are displayed alternately.
3. Press the (MODE) button.	Cool mode .... Check that cold air is blown out. Heat mode .... Check that warm air is blown out. (It takes a while before warm air starts to blow out.) Fan/dry operation cannot be performed.
4. Press the (🌀) button.	Check that the auto vane moves.
5. Check that the outdoor unit's fan is rotating.	The outdoor unit controls the performance of the air conditioner by controlling the fan rotating speed. The fan rotates at low speeds depending on the condition of the outside air, and it will not increase speed unless performance is insufficient. This may cause the fan to stop or rotate in reverse direction due to external wind, but this is not a malfunction.
6. Press the (① ON/OFF) button to stop the test run.	
7. Register the contact number.	Register the telephone number to be contacted when an error occurs (for this procedure, refer to "4.3.3 Contact Number Setting for Error Situation"). With PAR-21MAA, the telephone number (maintenance company or distribution outlet) to be contacted when an error occurs can be registered in the remote controller. Once it is registered, it will appear when an error occurs. For the registration method, refer to the installation manual supplied with the remote controller or the outdoor unit's instruction manual.

● The OFF timer (2 hours) is activated when a test run is started, and causes the test run to stop automatically after two hours have elapsed.
● The room temperature display area shows the pipe (fluid) temperature during the test run.
*1: After the power is turned ON, system setup mode will be activated and the operation lamp (green) and "PLEASE WAIT" on the remote controller will flash. LED1 on the indoor control board will come ON, LED2 will either come ON (if the address is "0") or remain OFF (if the address is not "0"), and LED3 will flash.
Both LED1 (green) and LED2 (red) on the outdoor control board will come ON. (LED2 (red) goes OFF at the end of system setup mode.) If the LEDs on the outdoor control board are digital, [-] and [-] will be displayed alternately at 1-second intervals.
● If you are unable to complete any of the above test run operation procedures, it may be due to the following causes, so remove the cause. (The following symptoms may be observed during test run mode. The "startup" display listed in the table is described above in *1.)

Symptoms		Cause
Remote Controller Display	Outdoor Control Board LEDs (< > for digital display)	
Remote controller is displaying "PLEASE WAIT" and operation is not possible.	After the "startup" display, only the green LED lights up. < 00 >	• After power is turned ON, system startup lasts for about two minutes, during which "PLEASE WAIT" is displayed (correct operation).
After power is turned ON, "PLEASE WAIT" is displayed for approximately three minutes, and then an error code is displayed.	After the "startup" display, the green LED (once) and red LED (once) flash alternately. <F1>	• Incorrect outdoor terminal block connections (R, S, T and S1, S2, S3)
	After the "startup" display, the green LED (once) and red LED (twice) flash alternately. <F3, F5, F9>	• Outdoor unit protective device connector is open.
No display messages appear even when the remote controller's operation switch is turned ON (operation lamp does not light up).	After the "startup" display, the green LED (twice) and red LED (once) flash alternately. <EA, Eb>	• Incorrect wiring between the indoor and outdoor units (Incorrect polarity connection for S1, S2, S3) • Remote controller transmission wire is short-circuited.
	After the "startup" display, only the green LED lights up. < 00 >	• There is no outdoor unit for address "0" (an address other than "0" is set). • Wire-breakage of remote controller transmission cable.
Operation display appears when remote controller operations are executed, but soon disappears.	After the "startup" display, only the green LED lights up. < 00 >	• After cancellation of function selection, operation is not possible for about 30 seconds (correct operation).

* Self-diagnosis can be performed by pressing the (TEST) button on the remote controller twice. For an explanation of the error codes, refer to the table given below.

LCD	Error description	LCD	Error description	LCD	Error description
P1	Intake air sensor error	P8	Abnormal pipe temperature	E0 to E5	Signal transmission error between remote controller and indoor unit
P2	Pipe (fluid) sensor error	P9	Pipe (fluid) sensor error	E6 to E F	Signal transmission error between indoor and outdoor units
P4	Drain sensor error	Fb	Indoor control board error	— — — —	No error code history
P5	Drain overflow protection activated	U* to F*	Outdoor unit error	F F F F	No corresponding unit
P6	Anti-freeze/overheat protection activated	(*: Alphanumeric, except for Fb)	(Check the electric wiring of the affected unit.)		

For details of the LEDs (LED1, 2, 3) on the indoor control unit, see the table below.

LED 1 (microcomputer power supply)	Indicates whether power is supplied to the control board. Make sure that the LED is always lit.
LED 2 (power to remote controller)	Indicates whether power is supplied to the wired remote controller. Only the LED located on the indoor units that are connected to the outdoor unit (address "0") will be lit.
LED 3 (signal transmission between indoor and outdoor units)	Indicates presence of signal transmission between the indoor and outdoor units. Make sure that the LED is flashing.

Ⅷ. Self-Diagnosis by the Remote Controller (for Mr. SLIM)

1. How to Preceed "Self-diagnosis"

1.1 When a Problem Occurs During Operation

If a problem occurs in the air conditioner, the indoor and outdoor units will stop, and the problem is shown in the remote controller display.

"CHECK" and the refrigerant address are displayed on the temperature display, and the error code and unit number are displayed alternately as shown below.

① (If the outdoor unit is malfunctioning, the unit number will be "00".)

② In the case of group control, for which one remote controller controls multiple refrigerant systems, the refrigerant address and error code of the unit that first experienced trouble (i.e., the unit that transmitted the error code) will be displayed.

③ To clear the error code, press the (① ON/OFF) button.

(Alternating Display)

Error code (2 or 4 digits) ⟷ Address (3 digits) or unit number (2 digits)
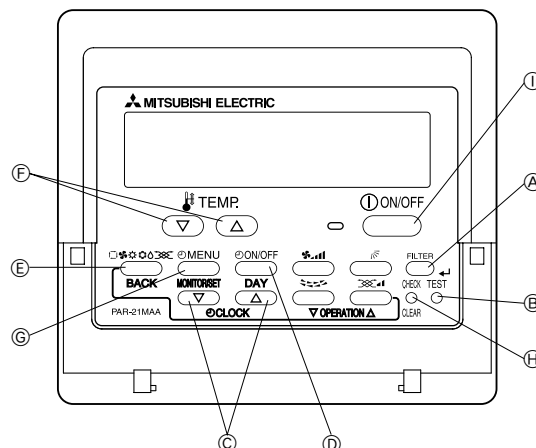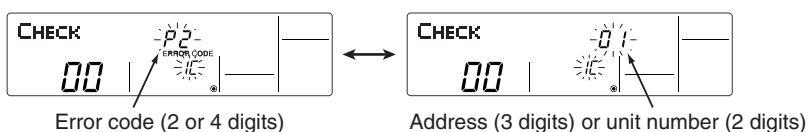
When using remote-/handheld-controller combined operation, cancel the error code after turning off remote operation. During central control by a MELANS controller, cancel the error code by pressing the (① ON/OFF) button.

1.2 Self-Diagnosis During Maintenance or Service

Since each unit has a function that stores error codes, the latest check code can be recalled even if it is cancelled by the remote controller or power is shut off.

Check the error code history for each unit using the remote controller.
① Switch to self-diagnosis mode.

ⓗ Press the (CHECK) button twice within three seconds. The display content will change as shown below.

② Set the unit number or refrigerant address you want to diagnose.

ⓕ Press the [TEMP] buttons ((▽) and (△)) to select the desired number or address. The number (address) changes between "01" and "50" or "00" and "15".

Unit number or refrigerant address to be diagnosed

The refrigerant address will begin to flash approximately three seconds after being selected and the self-diagnosis process will begin.
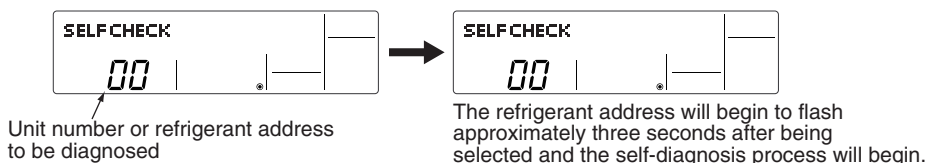
③ Display self-diagnosis results.
<When there is error code history>
(For the definition of each error code, refer to the indoor unit's installation manual or service handbook.)

(Alternating Display)

Error code (2 or 4 digits) ⟷ Address (3 digits) or unit number (2 digits)

<When there is no error code history>   <When there is no corresponding unit>
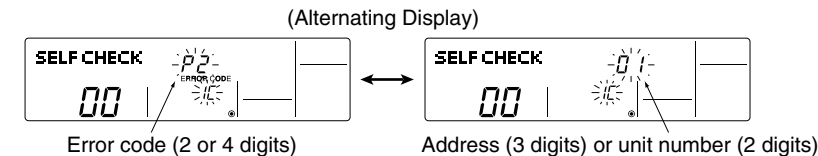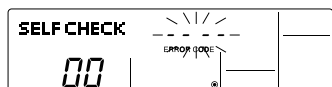
④ Reset the error history.
Display the error history in the diagnosis result display screen (see step ③).
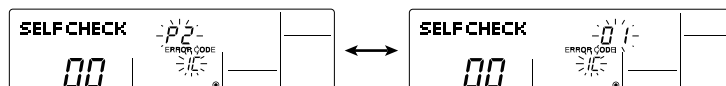
Ⓓ Press the (⏰ ON/OFF) button twice within three seconds. The self-diagnosis address or refrigerant address will flash.

When the error history is reset, the display will look like the one shown below. However, if you fail to reset the error history, the error content will be displayed again.

```
SELF CHECK
  00              →    SELF CHECK   \|/
                                   ERROR CODE
                           00
```
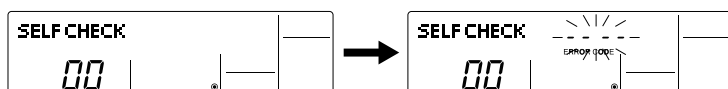
⑤ Cancel self-diagnosis.
  Self-diagnosis can be cancelled by the following two methods.

Ⓗ Press the (CHECK) button twice within three seconds. → Self-diagnosis will be cancelled and the screen will return to the previous state in effect before the start of self-diagnosis.

⑤ Press the (Ⓘ ON/OFF) button. → Self-diagnosis will be cancelled and the indoor unit will stop.

1.3 Remote Controller Diagnosis

If the air conditioner cannot be operated from the remote controller, diagnose the remote controller as explained below.

① First, check that the power-on indicator is lit.
  If the correct voltage (DC12 V) is not supplied to the remote controller, the indicator will not light.
  If this occurs, check the remote controller's wiring and the indoor unit.

```
SELF CHECK
```
└─ Power on indicator
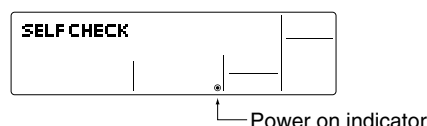
② Switch to the remote controller self-diagnosis mode.

Ⓗ Press the (CHECK) button for five seconds or more. The display content will change as shown below.

Ⓐ Press the (FILTER) button to start self-diagnosis.

```
SELF CHECK
  RC              →    SELF CHECK
                          RC
```
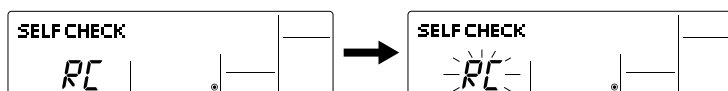
③ Remote controller self-diagnosis result

[When the remote controller is functioning correctly]

```
SELF CHECK
  RC      OK
```
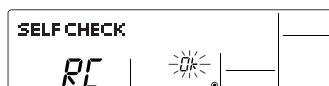
Check for other possible causes, as there is no problem with the remote controller.

[When the remote controller malfunctions]
(Error display 1) "NG" flashes. → The remote controller's transmitting-receiving circuit is defective.

```
SELF CHECK
  RC      NG
```
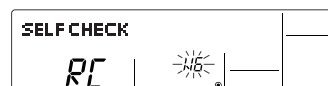
The remote controller must be replaced with a new one.

[Where the remote controller is not defective, but cannot be operated.]
(Error display 2) "E3", "6833" or "6832" flashes. → Transmission is not possible.

```
SELF CHECK      E3
                ERROR CODE
  RC
```
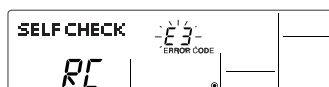
There might be noise or interference on the transmission path, or the indoor unit or other remote controllers are defective. Check the transmission path and other controllers.

(Error display 3) "ERC" and the number of data errors are displayed.
  → Data error has occurred.

```
SELF CHECK
  ERC      02
```
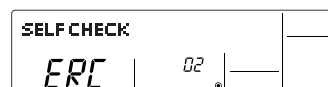
The number of data errors is the difference between the number of bits sent from the remote controller and the number actually transmitted through the transmission path. If such a problem is occurring, the transmitted data is affected by noise, etc. Check the transmission path.

☞ When the number of data errors is "02":

Transmission data from remote controller ⎍⎍⎍⎍
Transmission data on transmission path ⎍ ⎍⎍

④ To cancel remote controller diagnosis

Ⓗ Press the (CHECK) button for five seconds or more. Remote controller diagnosis will be cancelled, "PLEASE WAIT" and operation lamp will flash. After approximately 30 seconds, the state in effect before the diagnosis will be restored.

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2. Error Code List

2.1 A-Control Error Codes (E)

Displayed on remote controller	Outdoor control board LED1 "Green"	Outdoor control board LED2 "Red"	Error details	Non INV	Power INV	Location of error	Location of inspection
E0	Flashes 2 times	Flashes 3 times	Remote controller transmission error	●	●	Remote controller	① If two remote controllers are used, check whether they are set as the main and sub controllers.
E3			Remote controller transmission error	●	●		② Check if the specified 2-core cable is used.
E4			Remote controller transmission error	●	●	Indoor	(0.3 to 1.25 mm²) Cable with 3 or more cores is not acceptable.
E5			Remote controller transmission error	●	●		
E6		Flashes 2 times	Indoor/outdoor unit transmission error	●	●		Check if the cables connecting the indoor and outdoor units are connected firmly and correctly.
E7			Indoor/outdoor unit transmission error	●	●		
E8			Indoor/outdoor unit transmission error	●	●	Outdoor	② Check if 3-core VVF-type power cable is used. (In the case of superimposed power supply system)
E9			Indoor/outdoor unit transmission error	●	●		③ Check if indoor/outdoor unit connecting cables are exposed to rain.
EA		Flash 1 time	Mis-wiring of indoor/outdoor units	●	●		④ Check if indoor/outdoor unit connecting cables are extended using extension cable.
Eb			Mis-wiring of indoor/outdoor units (Incorrect connection, disconnection)	●			⑤ Check if fuse on outdoor control board is blown.
EC			"Startup" time over	●	●		⑥ Check if connectors are connected firmly.
EE		Flashes 4 times	Combination error	●	●	Indoor Outdoor	① Check combination of indoor and outdoor units.
EF			Undefined error (No corresponding M-NET error code)	●	●		① Check M-NET remote controller and central control system for abnormality.
Ed		Flashes 5 times	Transmission error between M-NET adapters	●	●		① Check for disconnected connectors between indoor control board and M-NET board.
E1	—	—	Remote controller control board error	●	●	Remote controller	① Replace the remote controller
E2	—	—					

2.2 A-Control Error Codes (F/P)

Displayed on remote controller	Outdoor control board LED1 "Green"	Outdoor control board LED2 "Red"	Error details	Non INV	Power INV	Location of error	Location of inspection
F1	Flash 1 time	Flash 1 time	Reverse phase detected / power and indoor-outdoor incorrect connection	—	—	Outdoor	① Power cable and indoor-outdoor cable are misconnected. ② Reverse phase → Replace R-phase with T-phase (outdoor power terminals). ③ Check if all three phases show the same power voltage.
F2			Detection of loss of power line phase (when no T-phase)	—	—		① Loose connection of T-phase on outdoor unit power terminal block ② Check if all three phases show the same power voltage.
F3		Flashes 2 times	Connector (63L) open	●	●		① Outdoor control board connector (63L) disconnected ② Low-pressure switch (63L) disconnected
F5			Connector (63H) open	●	●		① Outdoor control board connector (63H) disconnected ② High-pressure switch (63H) disconnected
F9			2 or more connectors open	●	●		① Check outdoor control board connector for disconnection and looseness.
F7		Flashes 3 times	Reverse-phase detecting circuit (board) error	—	—		Replace outdoor control board.
F8			Input circuit (board) error	●	●		
Fb	Flashes 2 times	Flashes 4 times	Indoor control board error	●	●	Indoor	Replace indoor control board.
P1	Flashes 4 times	Flash 1 time	Intake air sensor error	●	●		① Indoor control board connector (CN20) disconnected
P2			Pipe (fluid pipe) sensor error	●	●		② Indoor control board connector (CN21) disconnected
P4		Flashes 2 times	Drain sensor error	●	●		③ Indoor control board connector (CN31) disconnected
P5			Drain overflow protection activated, water leakage	●	●		① Check if drain pipe is tilted or clogged. ② Check if drain pan and drain sensor are dirty. ③ Indoor control board CNP connector disconnected
P6		Flashes 3 times	Anti-freeze protection (during cool mode) Overheat protection (during heat mode)	●	●	Indoor	① Dirty filter ② Gas leakage/insufficient gas ③ Check if air is blown from outdoor unit. → Check fan connector.
P8		Flashes 4 times	Abnormal pipe (fluid) temperature	●	●		① If two or more units are used, check indoor-outdoor connecting cable and pipe for incorrect connection. ② Gas leakage/insufficient gas
P9	—	—	Pipe (two-phase pipe) sensor error	●	●		② Indoor control board connector (CN29) disconnected

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2.3 A-Control Error Codes (U)

Displayed on remote controller	Outdoor control board LED1 "Green"	Outdoor control board LED2 "Red"	Error details	Non INV	Power INV	Location of error	Location of inspection
U2	Flashes 3 times	Flash 1 time	Abnormal discharge temperature / 49C activated (inner thermostat) Insufficient refrigerant	—	●	Outdoor	① Check filter for dirt → Clean if dirty. ② Gas leakage/insufficient gas ③ Check for indoor/outdoor short cycle.
U7			Abnormality of low discharge super heat	—	●		① Check if discharging thermistor is disconnected. ② Check electronic expansion valve for breakdown. ③ Check CNLEV connector on outdoor control board.
U1		Flashes 2 times	63H activated due to abnormally high pressure	●	●		① Check if ball valve is open. ② Check for indoor/outdoor short cycle.
UE			63H activated due to abnormally high pressure	●	●		① Check if ball valve is open. ② Check for indoor/outdoor short cycle. ③ Check if there is too much gas.
UL			63L activated due to abnormally low pressure	●	—		① Check if ball valve is open. ② Gas leakage/insufficient gas
Ud		Flashes 3 times	Overheat protection (overloaded operation protection / fan error)	●	—		① Check if outdoor unit's heat exchanger is dirty. → Clean if dirty. ② Check for indoor/outdoor short cycle.
U6		Flashes 4 times	Shutoff due to overcurrent in compressor (overload)	●	●		① Check if 12 hours or more have passed since crankcase heater was turned ON. (Replace outdoor control board.)
			Power module error	—	●		
UC			Compressor self-protection function activated	—	●		① Check if ball valve is open.
UF			Compressor overcurrent (lock)	●	●		① Check if ball valve is open. ② Check if power capacity is sufficient.
UP			Shutoff due to overcurrent in compressor	●	●		① Check if ball valve is open. ② Check if power capacity is sufficient.
UH			Current sensor error	●	●		① If outdoor control board has been replaced: Check wiring and board design.
U3		Flashes 5 times	Discharging thermistor (TH4) open/short-circuit	●	●		① Outdoor control board connector (TH4) disconnected
U4			Pipe thermistor (TH3) open/short-circuit	●	●		① Outdoor control board connector (TH3/TH32) disconnected
			2-phase pipe thermistor (TH6) open/short-circuit	—	●		① Outdoor control board connector (TH6) disconnected
			Outside air temperature thermistor (TH7) open/short-circuit	—	●		① Outdoor control board connector (TH7) disconnected
			Heat sink thermistor (TH8) open/short-circuit	—	●		① Outdoor control board connector (TH8) disconnected
U5		Flashes 6 times	Abnormal heat sink temperature	—	●		① Check if there are obstructions in intake/discharge ports of outdoor unit.
U6		Flashes 7 times	Abnormal voltage	—	●		① Check power line for open phase. ② Check if power voltage is high enough.

Ⅸ. Monitoring the Operation Data by the remote Controller (for Mr. SLIM)

1. How to "Monitor the Operation Data"

● Turn on the "Monitoring the opration data"

Example) Request code "004"
Discharge temperature 69 °C
Refrigerant address "00"

B: Refrigerant address
C: Data display area
D: Request code display area
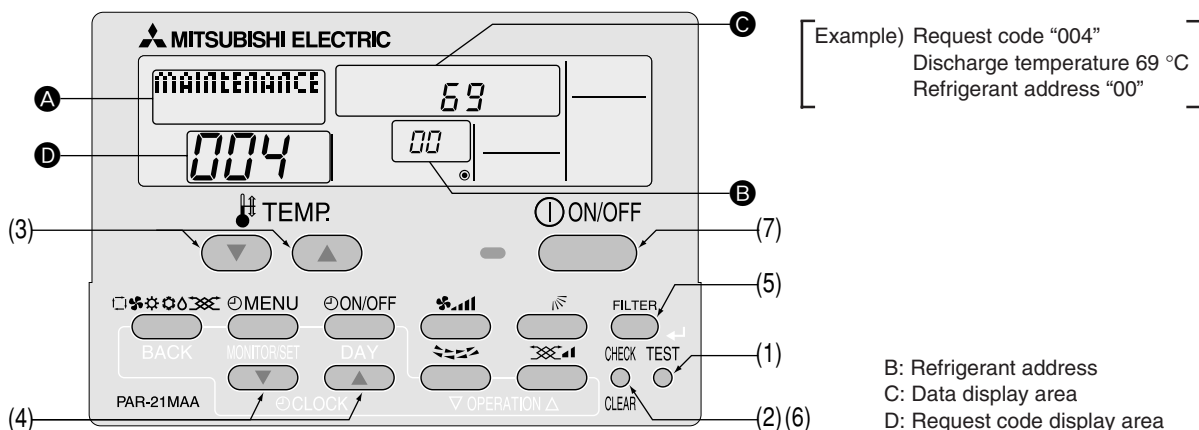
(1) Press the (TEST) button for three seconds so that "Maintenance mode" appears on the screen (at Ⓐ).

(2) Press the (CHECK) button for three seconds to switch to [Maintenance monitor].

Note) It is not possible to switch to [Maintenance monitor] during data request in maintenance mode (i.e., while "- - - -" is flashing),
since no buttons are operative.

● Operating the service inspection monitor
"- - -" appears on the screen (at Ⓓ) when [Maintenance monitor] is activated.
(The display (at Ⓓ) now allows you to set a request code No.)
(3) Press the [TEMP] buttons (▽ and △) to select the desired refrigerant address.

[Screen Ⓑ] → 00 ↔ 01 ↔ ⋯⋯ ↔ 15 ↩

(4) Press the [CLOCK] buttons (▽ and △) to set the desired request code No.

(5) Press the (FILTER) button to perform data request.

(The requested data will be displayed at Ⓒ in the same way as in maintenance mode.)

Data collected during operation of the remote controller will be displayed.
The collected data such as temperature data will not be updated automatically even if the data changes.
To display the updated data, carry out step (4) again.

● Cancelling the Monitoring the operation data

(6) While [Maintenance monitor] is displayed, press the (CHECK) button for three seconds to return to maintenance mode.

(7) To return to normal mode, press the (⏻ ON/OFF) button.

2. Request Code List

* Certain indoor/outdoor combinations do not have the request code function; therefore, no request codes are displayed.

Request code	Request content	Description (Display range)	Unit	Remarks
0	Operation state	Refer to "2.1 Detail Contents in Request Code".	—	
1	Compressor-Operating current (rms)	0 – 50	A	
2	Compressor-Accumulated operating time	0 – 9999	10 hours	
3	Compressor-Number of operation times	0 – 9999	100 times	
4	Discharge temperature (TH4)	3 – 217	°C	
5	Outdoor unit-Fluid pipe 1 temperature (TH3)	-40 – 90	°C	
6	Outdoor unit-Fluid pipe 2 temperature	-40 – 90	°C	
7	Outdoor unit-two-phase pipe temperature (TH6)	-39 – 88	°C	
8				
9	Outdoor unit-Outside air temperature (TH7)	-39 – 88	°C	
10	Outdoor unit-Heat sink temperature (TH8)	-40 – 200	°C	
11				
12	Discharge super heat (SHd)	0 – 255	°C	
13	Sub-cool (SC)	0 – 130	°C	
14				
15				
16	Compressor-Operating frequency	0 – 255	Hz	
17	Compressor-Target operating frequency	0 – 255	Hz	
18	Outdoor unit-Fan output step	0 – 10	Step	
19	Outdoor unit-Fan 1 speed (Only for air conditioners with DC fan motor)	0 – 9999	rpm	
20	Outdoor unit-Fan 2 speed (Only for air conditioners with DC fan motor)	0 – 9999	rpm	"0" is displayed if the air conditioner is a single-fan type.
21				
22	LEV (A) opening	0 – 500	Pulses	
23	LEV (B) opening	0 – 500	Pulses	
24				
25	Primary current	0 – 50	A	
26	DC bus voltage	180 – 370	V	
27				
28				
29	Number of connected indoor units	0 – 4	Units	
30	Indoor unit-Preset temperature	17 – 30	°C	
31	Indoor unit-Intake air temperature <Measured by thermostat>	8 – 39	°C	
32	Indoor unit-Intake air temperature (Unit No. 1) <Heat mode-4-deg correction>	8 – 39	°C	"0" is displayed if the target unit is not present.
33	Indoor unit-Intake air temperature (Unit No. 2) <Heat mode-4-deg correction>	8 – 39	°C	↑
34	Indoor unit-Intake air temperature (Unit No. 3) <Heat mode-4-deg correction>	8 – 39	°C	↑
35	Indoor unit-Intake air temperature (Unit No. 4) <Heat mode-4-deg correction>	8 – 39	°C	↑
36				
37	Indoor unit-Fluid pipe temperature (Unit No. 1)	-39 – 88	°C	"0" is displayed if the target unit is not present.
38	Indoor unit-Fluid pipe temperature (Unit No. 2)	-39 – 88	°C	↑
39	Indoor unit-Fluid pipe temperature (Unit No. 3)	-39 – 88	°C	↑
40	Indoor unit-Fluid pipe temperature (Unit No. 4)	-39 – 88	°C	↑
41				
42	Indoor unit-two-phase pipe temperature (Unit No. 1)	-39 – 88	°C	"0" is displayed if the target unit is not present.
43	Indoor unit-two-phase pipe temperature (Unit No. 2)	-39 – 88	°C	↑
44	Indoor unit-two-phase pipe temperature (Unit No. 3)	-39 – 88	°C	↑
45	Indoor unit-two-phase pipe temperature (Unit No. 4)	-39 – 88	°C	↑
46				
47				
48	Thermostat ON operating time	0 – 999	Minutes	
49	Test run elapsed time	0 – 120	Minutes	←Not possible to activate maintenance mode during the test run.

Request code	Request content	Description (Display range)	Unit	Remarks
50	Indoor unit-Control state	Refer to "2.1 Detail Contents in Request Code".	—	
51	Outdoor unit-Control state	Refer to "2.1 Detail Contents in Request Code".	—	
52	Compressor-Frequency control state	Refer to "2.1 Detail Contents in Request Code".	—	
53	Outdoor unit-Fan control state	Refer to "2.1 Detail Contents in Request Code".	—	
54	Actuator output state		—	
55	Error content (U9)		—	
56				
57				
58				
59				
60	Signal transmission demand capacity	0 – 255	%	
61	Contact demand capacity	Refer to "2.1 Detail Contents in Request Code".	—	
62	External input state (silent mode, etc.)	Refer to "2.1 Detail Contents in Request Code".	—	
63				
64				
65				
66				
67				
68				
69				
70	Outdoor unit-Capacity setting display	Refer to "2.1 Detail Contents in Request Code".	—	
71	Outdoor unit-Setting information	Refer to "2.1 Detail Contents in Request Code".	—	
72				
73	Outdoor unit-SW1 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
74	Outdoor unit-SW2 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
75				
76	Outdoor unit-SW4 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
77	Outdoor unit-SW5 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
78	Outdoor unit-SW6 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
79	Outdoor unit-SW7 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
80	Outdoor unit-SW8 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
81	Outdoor unit-SW9 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
82	Outdoor unit-SW10 setting information	Refer to "2.1 Detail Contents in Request Code".	—	
83				
84	M-NET adapter connection (presence/absence)	"0000": Not connected "0001": Connected	—	
85				
86				
87				
88				
89	Display of execution of replace/wash operation	"0000": Not washed "0001": Washed	—	
90	Outdoor unit-Microcomputer version information	Examples) Ver 5.01 → "0501"	Ver	
91	Outdoor unit-Microcomputer version information (sub No.)	Auxiliary information (displayed after version information) Examples) Ver 5.01 A000 → "A000"	—	
92				
93				
94				
95				
96				
97				
98				
99				
100	Outdoor unit – Error postponement history 1 (latest)	Displays postponement code. ("– –" is displayed if no postponement code is present)	Code	
101	Outdoor unit – Error postponement history 2 (previous)	Displays postponement code. ("– –" is displayed if no postponement code is present)	Code	
102	Outdoor unit – Error postponement history 3 (last but one)	Displays postponement code. ("– –" is displayed if no postponement code is present)	Code	

Request code	Request content	Description (Display range)	Unit	Remarks
103	Error history 1 (latest)	Displays error history. ("– –" is displayed if no history is present.)	Code	
104	Error history 2 (second to last)	Displays error history. ("– –" is displayed if no history is present.)	Code	
105	Error history 3 (third to last)	Displays error history. ("– –" is displayed if no history is present.)	Code	
106	Abnormal thermistor display (TH3/TH6/TH7/TH8)	"3" : TH3 "6" : TH6 "7" : TH7 "8" : TH8 "0" : No thermistor error	Sensor number	
107	Operation mode at time of error	Displayed in the same way as request code "0".	—	
108	Compressor-Operating current at time of error	0 – 50	A	
109	Compressor-Accumulated operating time at time of error	0 – 9999	10 hours	
110	Compressor-Number of operation times at time of error	0 – 9999	100 times	
111	Discharge temperature at time of error	3 – 217	°C	
112	Outdoor unit-Fluid pipe 1 temperature (TH3) at time of error	-40 – 90	°C	
113	Outdoor unit-Fluid pipe 2 temperature at time of error	-40 – 90	°C	
114	Outdoor unit-two-phase pipe temperature (TH6) at time of error	-39 – 88	°C	
115				
116	Outdoor unit-Outside air temperature (TH7) at time of error	-39 – 88	°C	
117	Outdoor unit-Heat sink temperature (TH8) at time of error	-40 – 200	°C	
118	Discharge super heat (SHd) at time of error	0 – 255	°C	
119	Sub-cool (SC) at time of error	0 – 130	°C	
120	Compressor-Operating frequency at time of error	0 – 255	Hz	
121	Outdoor unit at time of error • Fan output step	0 – 10	Step	
122	Outdoor unit at time of error • Fan 1 speed (Only for air conditioners with DC fan)	0 – 9999	rpm	
123	Outdoor unit at time of error • Fan 2 speed (Only for air conditioners with DC fan)	0 – 9999	rpm	"0" is displayed if the air conditioner is a single-fan type.
124				
125	LEV (A) opening at time of error	0 – 500	Pulses	
126	LEV (B) opening at time of error	0 – 500	Pulses	
127				
128				
129				
130	Thermostat ON time until operation stops due to error	0 – 999	Minutes	
131				
132	Indoor-Fluid pipe temperature at time of error	-39 – 88	°C	Average value of all indoor units is displayed if the air conditioner consists of two or more indoor units (twin, triple, quad).
133	Indoor-2-phase pipe temperature at time of error	-39 – 88	°C	Average value of all indoor units is displayed if the air conditioner consists of two or more indoor units (twin, triple, quad).
134	Indoor at time of error • Intake air temperature <Thermostat judge temperature>	-39 – 88	°C	
135				
136				
137				
138				
139				
140				
~				
146				
147				
148				
149				
150	Indoor-Actual intake air temperature	-39 – 88	°C	
151	Indoor-Fluid pipe temperature	-39 – 88	°C	
152	Indoor-2-phase pipe temperature	-39 – 88	°C	

Request code	Request content	Description (Display range)	Unit	Remarks
153				
154	Indoor-Fan operating time (After filter is reset)	0 – 9999	1 hour	
155	Indoor-Total operating time (Fan motor ON time)	0 – 9999	10 hours	
156				
157	Indoor fan output value (Sj value)	0 – 255 Fan control data	—	For indoor fan phase control
158	Indoor fan output value (Pulsation ON/OFF)	"00 **" "**" indicates fan control data.	—	For indoor fan pulsation control
159	Indoor fan output value (duty value)	"00 **" "**" indicates fan control data.	—	For indoor DC brushless motor control
160				
161				
162	Indoor unit-Model setting information	Refer to "2.1 Detail Contents in Request Code".	—	
163	Indoor unit-Capacity setting information	Refer to "2.1 Detail Contents in Request Code".	—	
164	Indoor unit-SW3 information	Undefined	—	
165	Wireless pair No. (indoor control board side) setting	Refer to "2.1 Detail Contents in Request Code".	—	
166	Indoor unit-SW5 information	Undefined	—	
167				
~				
189				
190	Indoor unit-Microcomputer version information	Examples) Ver 5.01 → "0501"	Ver	
191	Indoor unit-Microcomputer version information (sub No.)	Auxiliary information (displayed after version information) Examples) Ver 5.01 A000 → "A000"	— —	
192				
~				
764				
765	Stable operation (Heat mode)	This request code is not provided to collect data. It is used to fix the operation state.		
766	Stable operation (Cool mode)	This request code is not provided to collect data. It is used to fix the operation state.		
767	Stable operation cancellation	This request code is not provided to collect data. It is used to cancel the operation state that has been fixed by request codes "765" and "766".		

2.1 Detail Contents in Request Code
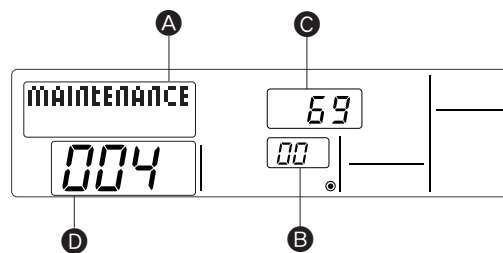
Example) Request code "004"
Discharge temperature 69 °C
Refrigerant address "00"

B: Refrigerant address
C: Data display area
D: Request code display area

● **[Operation state] (Request code "0")**

Data display

Relay output state
Operation mode

Operation mode

Display	Operation mode
0	STOP · FAN
C	COOL · DRY
H	HEAT
d	Defrost

Relay output state

Display	Power currently supplied to compressor	Compressor	Four-way valve	Solenoid valve
0	—	—	—	—
1				ON
2			ON	
3			ON	ON
4		ON		
5		ON		ON
6		ON	ON	
7		ON	ON	ON
8	ON			
A	ON		ON	

● **[Indoor unit – Control state] (Request code "50")**

Data display

Unit No. 4 state
Unit No. 3 state
Unit No. 2 state
Unit No. 1 state

Display	State
0	Normal
1	Preparing for heat operation.
2	—
3	—
4	Heater is ON.
5	Anti-freeze protection is ON.
6	Overheat protection is ON.
7	Requesting compressor to turn OFF.
F	There are no corresponding units.

● **[Outdoor unit – Control state] (Request code "51")**

Data display				State
0	0	0	0	Normal
0	0	0	1	Preparing for heat operation.
0	0	0	2	Defrost

● **[Compressor – Frequency control state] (Request code "52")**

Data display

Frequency control state ②
Frequency control state ①

Frequency control state ①

Display	Current limit control
0	No current limit
1	Primary current limit control is ON.
2	Secondary current limit control is ON.

Frequency control state ②

Display	Discharge temperature overheat prevention	Condensation temperature overheat prevention	Anti-freeze protection control	Heat sink temperature overheat prevention
0				
1	Controlled			
2		Controlled		
3	Controlled	Controlled		
4			Controlled	
5	Controlled		Controlled	
6		Controlled	Controlled	
7	Controlled	Controlled	Controlled	
8				Controlled
9	Controlled			Controlled
A		Controlled		Controlled
b	Controlled	Controlled		Controlled
C			Controlled	Controlled
d	Controlled		Controlled	Controlled
E		Controlled	Controlled	Controlled
F	Controlled	Controlled	Controlled	Controlled

● [Fan control state] (Request code "53")

Data display

| 0 | 0 | ∗ | ∗ |

Fan step correction value by heat sink temperature overheat prevention control
Fan step correction value by cool condensation temperature overheat prevention control

Display	Correction value
– (minus)	– 1
0	0
1	+ 1
2	+ 2

● [Actuator output state] (Request code "54")

Data display

| 0 | 0 | ∗ | ∗ |

Actuator output state ①
Actuator output state ②

Actuator output state ①

Display	SV1	Four-way valve	Compressor	Compressor is warming up
0				
1	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON
A		ON		ON
b	ON	ON		ON
C			ON	ON
d	ON		ON	ON
E		ON	ON	ON
F	ON	ON	ON	ON

Actuator output state ②

Display	52C	SV2	SS
0			
1	ON		
2		ON	
3	ON	ON	
4			ON
5	ON		ON
6		ON	ON
7	ON	ON	ON

● [Error content (U9)] (Request code "55")

Data display

| 0 | 0 | ∗ | ∗ |

Error content ①
Error content ②

Error content ①　　　　　　　　　　　　　　　　● : Detected

Display	Overvoltage error	Undervoltage error	T-phase open error	Power synchronizing signal error
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
b	●	●		●
C			●	●
d	●		●	●
E		●	●	●
F	●	●	●	●

Error content ②　　　　　　● : Detected

Display	Converter Fo error	PAM error
0		
1	●	
2		●
3	●	●

● **[Contact demand capacity] (Request code "61")**

Data display | 0 | 0 | 0 | ✳ |
— Setting content

Setting content

Display	Setting value	Setting	
		SW7-1	SW7-2
0	0 %		
1	50 %	ON	
2	75 %		ON
3	0 %	ON	ON

● **[External input state] (Request code "62")**

Data display | 0 | 0 | 0 | ✳ |
— Input state

Input state   ● : Input present

Display	Contact demand input	Silent mode input	Spare 1 input	Spare 2 input
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
b	●	●		●
C			●	●
d	●		●	●
E		●	●	●
F	●	●	●	●

● **[Outdoor unit – Capacity setting display] (Request code "70")**

Data display	Capacity
9	35
10	50
11	60
14	71
20	100
25	125
28	140
40	200
50	250

● **[Outdoor unit – Setting information] (Request code "71")**

Data display | 0 | 0 | ✳ | ✳ |
— Setting information ①
— Setting information ②

Setting information ①

Display	Defrost mode
0	Standard
1	For high humidity

Setting information ②

Display	Single-/three-phase	Cool and heat/cool only
0	Single-phase	Cool and heat
1		Cool only
2	Three-phase	Cool and heat
3		Cool only

● **[Outdoor unit switch setting display (SW1 to SW10, except SW3)] Request codes: "73" to "82"**

0: Swich OFF   1: Swich ON

SW1, SW2, SW6, SW7						Data display
1	2	3	4	5	6	
0	0	0	0	0	0	00 00
1	0	0	0	0	0	00 01
0	1	0	0	0	0	00 02
1	1	0	0	0	0	00 03
0	0	1	0	0	0	00 04
1	0	1	0	0	0	00 05
0	1	1	0	0	0	00 06
1	1	1	0	0	0	00 07
0	0	0	1	0	0	00 08
1	0	0	1	0	0	00 09
0	1	0	1	0	0	00 0A
1	1	0	1	0	0	00 0b
0	0	1	1	0	0	00 0C
1	0	1	1	0	0	00 0d
0	1	1	1	0	0	00 0E
1	1	1	1	0	0	00 0F
0	0	0	0	1	0	01 00
1	0	0	0	1	0	01 01
0	1	0	0	1	0	01 02
1	1	0	0	1	0	01 03
0	0	1	0	1	0	01 04
1	0	1	0	1	0	01 05
0	1	1	0	1	0	01 06
1	1	1	0	1	0	01 07
0	0	0	1	1	0	01 08
1	0	0	1	1	0	01 09
0	1	0	1	1	0	01 0A
1	1	0	1	1	0	01 0b
0	0	1	1	1	0	01 0C
1	0	1	1	1	0	01 0d
0	1	1	1	1	0	01 0E
1	1	1	1	1	0	01 0F
0	0	0	0	0	1	02 00
1	0	0	0	0	1	02 01
0	1	0	0	0	1	02 02
1	1	0	0	0	1	02 03
0	0	1	0	0	1	02 04
1	0	1	0	0	1	02 05
0	1	1	0	0	1	02 06
1	1	1	0	0	1	02 07
0	0	0	1	0	1	02 08
1	0	0	1	0	1	02 09
0	1	0	1	0	1	02 0A
1	1	0	1	0	1	02 0b
0	0	1	1	0	1	02 0C
1	0	1	1	0	1	02 0d
0	1	1	1	0	1	02 0E
1	1	1	1	0	1	02 0F
0	0	0	0	1	1	03 00
1	0	0	0	1	1	03 01
0	1	0	0	1	1	03 02
1	1	0	0	1	1	03 03
0	0	1	0	1	1	03 04
1	0	1	0	1	1	03 05
0	1	1	0	1	1	03 06
1	1	1	0	1	1	03 07
0	0	0	1	1	1	03 08
1	0	0	1	1	1	03 09
0	1	0	1	1	1	03 0A
1	1	0	1	1	1	03 0b
0	0	1	1	1	1	03 0C
1	0	1	1	1	1	03 0d
0	1	1	1	1	1	03 0E
1	1	1	1	1	1	03 0F

0: Swich OFF   1: Swich ON

SW5				Data display
1	2	3	4	
0	0	0	0	00 00
1	0	0	0	00 01
0	1	0	0	00 02
1	1	0	0	00 03
0	0	1	0	00 04
1	0	1	0	00 05
0	1	1	0	00 06
1	1	1	0	00 07
0	0	0	1	00 08
1	0	0	1	00 09
0	1	0	1	00 0A
1	1	0	1	00 0b
0	0	1	1	00 0C
1	0	1	1	00 0d
0	1	1	1	00 0E
1	1	1	1	00 0F

0: Swich OFF   1: Swich ON

SW8			Data display
1	2	3	
0	0	0	00 00
1	0	0	00 01
0	1	0	00 02
1	1	0	00 03
0	0	1	00 04
1	0	1	00 05
0	1	1	00 06
1	1	1	00 07

0: Swich OFF   1: Swich ON

SW4, SW9, SW10		Data display
1	2	
0	0	00 00
1	0	00 01
0	1	00 02
1	1	00 03

● **[Indoor unit – Model setting information] (Request code "162")**

Data display

```
0 0 * *
```
See the table on the right.

Display	Model setting state	Display	Model setting state
00	PSA-RP·GA, PSH-RPGAH	20	
01		21	PKA-RP·FA, PKH-RP·FAH
02	PEAD-RP·EA/GA, PEHD-RP·EAH	22	PCA-RP·GA, PCH-RP·GAH
03	SEZ-KA·VA	23	
04		24	
05	SLZ-KA·VA(L)	25	
06	PCA-RP·HA	26	
07		27	
08		28	
09		29	
0A		2A	
0b		2b	PKA-RP·GA, PKH-RP·GAH
0C		2C	
0d		2d	
0E		2E	
0F		2F	PLA-RP·AA
10		30	
11	PEA-RP·EA	31	PLH-RP·AAH
12	MEXZ-GA·VA(L)	32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
1A		3A	
1b		3b	
1C		3C	
1d		3d	
1E		3E	
1F		3F	

● **[Indoor unit – Capacity setting information] (Request code "163")**

Data display

```
0 0 * *
```
See the table on the right.

Display	Capacity setting state	Display	Capacity setting state
00	12	10	112
01	16	11	125
02	22	12	140
03	25	13	160
04	28	14	200
05	32	15	224
06	36	16	250
07	40	17	280
08	45	18	
09	50	19	
0A	56	1A	
0b	63	1b	
0C	71	1C	
0d	80	1d	
0E	90	1E	
0F	100	1F	

● **[Wireless pair No. (indoor control board side) setting] (Request code "165")**

Data display
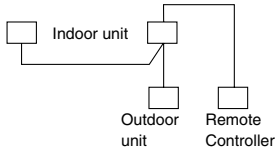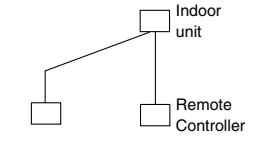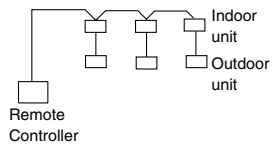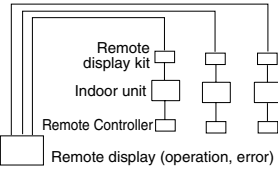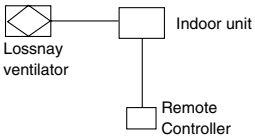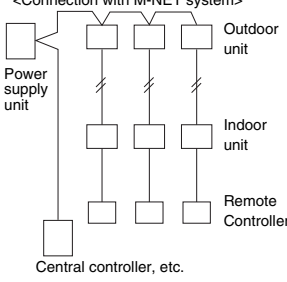
```
0 0 * *
```
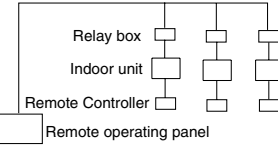See the table on the right.

Display	Pair No. setting state
00	No. "0"
01	No. "1" J41 disconnected
02	No. "2" J42 disconnected
03	No. "3" J41, J42 disconnected

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Ⅹ. System Control (for Mr. SLIM)

* The following system control is possible by using optional parts, relay circuits and control panels.

System Name	System Diagram	Features	Parts Required in Addition to Standard System Components (Indoor/Outdoor Units, Remote Controller)
1 Remote controller operation (Standard)	Indoor unit / Outdoor unit / Remote Controller	• There are two types of remote controllers: wired type and wireless type. • Simultaneous twin, triple and quad units are counted as one unit, and the indoor units are started or stopped simultaneously.	———
2 Remote controller operation [Use of two controllers enables operation of the air conditioner both from a distance and nearby.]	Indoor unit / Remote Controller / * One of the wired remote controllers must be set as a sub remote controller.	• Up to two remote controllers can be connected to one group. • Simultaneous twin, triple and quad units are counted as one unit. • Operation control by the latest command (last entered priority) • Wired and wireless remote controllers can be combined as a pair.	Wired remote controller (additional) (PAR-21MAA) For models PKA-RP-FA and PKH-RP-FA, use remote controller (PAR-21MAAT-E). * For models equipped with a terminal block.
Group control operation [Uses one remote controller to control multiple air conditioners with the same settings simultaneously.] * Outdoor unit's refrigerant address needs to be set.	Indoor unit / Outdoor unit / Remote Controller	• One group can consist of up to 16 indoor units, and they can be started sequentially by connecting the remote controller to them and assigning an address to each unit. • Simultaneous twin, triple and quad units are counted as one unit. • All the units belonging to the same group are operated in the same mode, but thermostats can be turned ON/OFF individually for each outdoor unit. • Up to two remote controllers can be connected.	For models PKA-RP-FA and PKH-RP-FA, use remote controller (PAR-21MAAT-E). * For models equipped with a terminal block.
Remote/handheld combined control operation [Allows start/stop of the air conditioner from a distance, and prohibits/permits start/stop from remote controllers.]	Relay box / Indoor unit / Remote Controller / Remote operating panel	• All the air conditioners can be turned ON/OFF collectively from a distance. • Operation can be switched between the remote operating panel and handheld controller. • Operations (e.g., temperature adjustment, airflow, airflow direction) except for start/stop operations can be performed even if the remote controller is being operated. • In the case of simultaneous twin, triple and quad units, connect the controller to one indoor unit only. If connected to two or more indoor units, an error (operation stop) may occur. • Control by an external timer is possible by connecting it.	Remote ON/OFF adapter (PAC-SE55RA-E) Relay box (Installation required) Remote operating panel (Installation required)
Operation by external signal	———	• Use of optional "remote operation adapter" enables remote control via relay. (Level signal)	Remote ON/OFF adapter (PAC–SE55RA-E)
Control and remote display by external signal (extraction of monitor signal) [Enables you to display the operation state and control start/stop from a distance.]	Remote display kit / Indoor unit / Remote Controller / Remote display (operation, error)	Extraction of non-voltage contact output • Use of optional "remote operation adapter" and "remote display panel" (installation required) provides non-voltage contact outputs of signals (operation, error) and operation/stop input function.	A-control operation display kit (PAC-SF40RM-E) Remote display panel (Installation required)
		Extraction of DC12 V contact output • Use of optional "remote display adapter" and "remote display panel" (installation required) provides DC12 V contact outputs of signals (operation, error) and operation/stop input function.	Remote display adapter (PAC-SA88HA) Remote display panel (Installation required)

System Name	System Diagram	Features	Parts Required in Addition to Standard System Components (Indoor/Outdoor Units, Remote Controller)
Timer operation ⌈Enables control of start and stop.⌋ * For control by external timer, refer to "Remote/ handheld combined control operation".	———	• Weekly timer: In addition to ON/OFF, up to eight temperature patterns can be set for each day of the week. * Only one timer can be selected; the auto off, simple and weekly timers cannot be combined. • Simple timer: Start and stop operations can each be performed once within 72 hours (can be set in 1-hour increments). • Auto off timer: Operation is stopped when the preset time elapses following the start of operation. The time can be set from 30 minutes to 4 hours in 30-minute increments. * Only one timer can be selected; the simple and auto off timers cannot be combined.	MA Remote controller (PAR-21MAA)
Interlock operation with peripheral equipment ⌈Enables control of Mitsubishi Lossnay ventilator by remote controller.⌋	Lossnay ventilator — Indoor unit Remote Controller	• Connecting a Lossnay ventilator and an indoor unit enables control of interlock/solo ventilation operation and airflow. (Only the microcomputer type Lossnay ventilator can be used.)	
Central control	<Connection with M-NET system> Power supply unit Outdoor unit Indoor unit Remote Controller Central controller, etc.	• Connecting the M-NET connection adapter to indoor unit enables connection of MELANS system controller (for M-NET). • When using A-control operation, the number of indoor units in a MELANS system is limited to the number of outdoor units. (Simultaneous twin, triple and quad units are counted as one unit.) • Number of controlled outdoor units Central controller: 50 units Group remote controller (PAC-SC30GR): 16 units	M-NET adapter (Option PARTS) Central controller (MJ-103MTR-B) (G-50) Group remote controller (PAC-SC30GR), etc.

1. One-Remote Controller (Standard) Operation

1.1 Wired Remote Controller

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Remote controller connection circuit (Controller cable)	Outdoor unit OC				
	Indoor unit IC				
	Wired remote controller R				

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, connect the remote controller to any one of the indoor units. All the functions of the connected indoor units can be controlled even if the system consists of different models. However, some functions may be restricted.
② In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)

1.2 Wireless Remote Controller

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Remote controller receiver connection circuit	Outdoor unit OC				
	Indoor unit IC				
	Wired remote controller reciever R				

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, connect the wireless remote controller receiver to any one of the indoor units. All the functions of the connected indoor units can be controlled even if the system consists of different models. However, some functions may be restricted.
② In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)
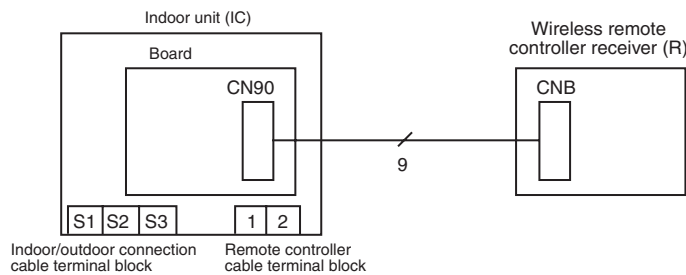③ Electrical wiring diagram

1.3 Wired Remote Controller or Wireless Remote Controller Receiver Built into Indoor Unit

[Floor type (wired remote controller)/4-way ceiling cassette type, ceiling suspended type, wall mounted type (wireless remote controller)]

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Connection circuit for remote controller or receiver	Outdoor unit OC				
	Indoor unit IC				
	Wired remote controller or reciever R				

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① For systems containing built-in wired remote controllers (or built-in wireless receiver adapters) and consisting of simultaneous twin, triple and quad units only, the installed remote controllers (or receiver adapters) must be connected without changing any settings. If the system consists of different models, keep only one of the remote controllers built into the indoor units, or remove all the remote controller cables and connect them to other models according to 1 and 2.
② Use the wired remote controllers without setting them as the main and sub controllers.

2. Two-Remote Controller Operation

2.1 When Two Wired Remote Controllers are Used

(R: Wired remote controller, R': Wireless remote controller receiver)

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Remote controller connection circuit (Controller cable)	Outdoor unit OC	OC — Indoor/outdoor connection cable 3(2)	OC — 3(2) 3(2)	OC — 3(2) 3(2) 3(2)	OC — 3(2) 3(2) 3(2) 3(2)
	Indoor unit IC	IC — Remote controller cable	IC-1 IC-2	IC-1 IC-2 IC-3	IC-1 IC-2 IC-3 IC-4
	Wired remote controller R	2 2 / R-1 R-2	2 2 / R-1 R-2	2 2 / R-1 R-2	2 2 / R-1 R-2
	Outdoor unit OC	OC ✕ 3(2)	OC ✕ 3(2) 3(2)	OC ✕ 3(2) 3(2)	OC ✕ 3(2) 3(2) 3(2)
	Indoor unit IC	IC ✕	IC-1 ✕ IC-2	IC-1 IC-2 IC-3 ✕	IC-1 IC-2 IC-3 IC-4 ✕
	Wired remote controller R	2 2 R-1 ✕ R-2	2 2 R-1 ✕ R-2	2 2 R-1 ✕ R-2	2 R-1 ✕ R-2

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, connect the remote controllers to any one of the indoor units. All the functions of the connected indoor units can be controlled even if the system consists of different models. However, some functions may be restricted.
② In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)
③ Set one of the remote controllers as the main controller (factory setting) and the other as the sub controller using the remote controller's function selection.

2.2 When Two Wireless Remote Controllers are Used

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Remote controller receiver connection circuit	Outdoor unit OC	—	OC — Indoor/outdoor connection cable 3(2) 3(2)	OC — 3(2) 3(2) 3(2)	OC — 3(2) 3(2) 3(2) 3(2)
	Indoor unit IC	—	IC-1 IC-2 Receiver connection cable	IC-1 IC-2 IC-3	IC-1 IC-2 IC-3 IC-4
	Wired remote controller R	—	9 9 R'-1 R'-2	9 9 R'-1 R'-2	9 9 R'-1 R'-2

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, connect two wireless remote controller receivers (one each) to any two of the indoor units. All the functions of the connected indoor units can be controlled even if the system consists of different models. However, some functions may be restricted.
② In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)
③ In the case of "standard 1:1" connection, it is not possible to connect two remote controller receivers to the indoor units. However, with systems consisting of simultaneous twin, triple and quad units, it is possible to connect a remote controller receiver to two indoor units. In this case, all the pair numbers will be "0" (factory setting, no change necessary), and all the units will be turned ON/OFF simultaneously.
④ When using two or more wireless remote controllers, the display contents on the remote controllers may differ from the actual settings, since the operation made last by any of the remote controllers will be effective.

2.3 When One Wired and One Wireless Remote Controller are Used

(R: Wired remote controller, R': Wireless remote controller receiver)

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
Remote controller receiver connection circuit	Outdoor unit OC	OC — Indoor/outdoor connection cable 3(2)	OC — 3(2) 3(2)	OC — 3(2) 3(2) 3(2)	OC — 3(2) 3(2) 3(2)
	Indoor unit IC	IC — Remote controller cable / Receiver connection cable	IC-1 IC-2	IC-1 IC-2 IC-3	IC-1 IC-2 IC-3 IC-4
	Wired remote controller R	2 9 R R'	2 9 R R'	2 9 R R'	2 9 R R'

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, connect both the wired remote controller and wireless remote controller receiver to any one of the indoor units. All the functions of the connected indoor units can be controlled even if the system consists of different models. However, some functions may be restricted.
② In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)
③ When using two or more wireless remote controllers, the display contents on the remote controllers may differ from the actual settings, since the operation made last by any of the wireless remote controllers will be effective.

3. Group Control Operation (Collective Operation and Control of Multiple Refrigerant Systems (2 to 16))

● Multiple Mr.Slim air conditioners can be operated with the same settings (e.g., operation mode, preset temperature, etc.) by using one remote controller. Each outdoor unit can be turned ON/OFF individually by the intake sensor.
● Up to 16 refrigerant systems can be controlled as a group by one remote controller.
● A refrigerant address must be set for each outdoor unit. Addresses "0" to "15" can be set with no duplicates. Address "0" must be set for one of the outdoor units.
* In the case of simultaneous twin, triple and quad units, only one refrigerant system is used.

Slim Air Conditioner System		Standard 1:1 × 2	Standard 1:1 + Simultaneous Twin	Standard 1:1 + Simultaneous Triple + Simultaneous Twin
Connection circuit for remote controller or receiver (Controller cable)	Outdoor unit OC / Indoor unit IC / Wired remote controller R	OC-A, OC-B — Indoor/outdoor connection cable 3(2), 3(2); IC-A, IC-B; Remote controller cable 2, 2; R; Remote controller crossover wiring	OC-A, OC — 3(2), 3(2), 3(2); IC-A, IC-B1, IC-B2; 2, 2; R; Remote controller crossover wiring	OC-A, OC-B, OC-C — 3(2), 3(2), 3(2), 3(2), 3(2), 3(2); IC-A, IC-B1, IC-B2, IC-B3, IC-CA, IC-CB; 2, 2, 2; R
	Outdoor unit OC / Indoor unit IC / Wired remote controller R	OC-A, OC-B — Indoor/outdoor connection cable 3(2), 3(2); IC-A, IC-B; Receiver connection cable 9, 2; R'; Remote controller crossover wiring	OC-A, OC — 3(2), 3(2), 3(2); IC-A, IC-B1, IC-B2; 9, 2; R'	OC-A, OC-B, OC-C — 3(2), 3(2), 3(2), 3(2), 3(2), 3(2); IC-A, IC-B1, IC-B2, IC-B3, IC-CA, IC-CB; 9, 2, 2; R'

* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

[Reference]
① For two-remote controller control, refer to "2. Two-Remote Controller Operation". However, when using both wired and wireless remote controllers, receivers must be connected to indoor units that are connected by crossover wiring.
② Connect an indoor unit having the highest functions among the group to the outdoor unit assigned to refrigerant address "0". <Refer to the example given below> If indoor units with vanes are used with those without vanes, connect the outdoor unit to a unit with vanes.

Function specifications <Example>

Item			4-way ceiling cassette		Ceiling suspended	Wall mounted			Floor mounted	Ceiling suspended (suitable for kitchen)	Celing concealed		
			PLA-RP. AA PLH-RP. AAH	SLZ-KA. VA(L)	PCA-RP. GA PCH-RP. GAH	PKA-RP. GA PKH-RP. GAH	PKA-RP. FA PKH-RP. FAH	PSA-RP. GA PSH-RP. GAH	PCA-RP. HA	PEAD-RP. EA/GA PEHD-RP. EAH	PEA-RP. EA	SEZ-KA. VA
Function	Fan	Number of fan speeds	4	3	4	4	2	2	2	2	2	2
	Up/down vane	Presence/absence	○	○	○	○	○	×	×	×	×	×
		Swing function	○	○	○	○	○	×	×	×	×	×
	Left/right swing louver	Presence/absence	×	×	×	×	×	○	×	×	×	×
Function order			1	2	1	1	3	4	5	5	5	5

③ In the case of free component multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)

■ Outdoor unit address setting
● For group control, an address must be set for each outdoor unit.
● To set addresses to outdoor units, use the DIP switch SW1 (3–6) provided on each outdoor control board (factory setting: all are set to "OFF").
● Address setting by SW1 is as follows.

		Function	Operation by switch	
			ON	OFF
SW1 Function selection	1	Forced defrosting	Start	Normal
	2	Error history clear	Clear	Normal
	3	Refrigerant address setting	Used to set outdoor unit addresses ("0" to "15").	
	4	↑		
	5	↑		
	6	↑		

Refrigerant address No.

<SW1>
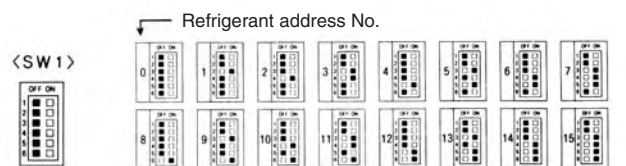
Factory setting: All switches are set to OFF (i.e., refrigerant address "0").

* Checking the outdoor unit refrigerant addresses
To find the location of an outdoor unit with a specific refrigerant address, specify the address in self-diagnosis mode. The outdoor unit will operate intermittently. (For details on using self-diagnosis mode, refer to page 46.)

■ Group operation by multiple remote controllers
● Up to two remote controllers can be connected to each group. For details, refer to "2. Two-Remote Controller Operation".

Ⅺ. External Dimensions
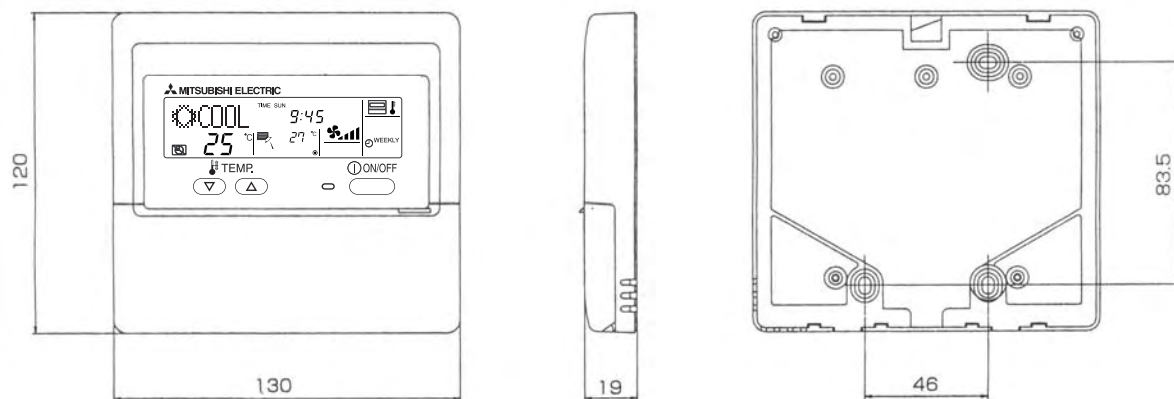
External colors : Cover   Pure white (Munsell 6.9Y 8.9/0.4)
                   LCD peripheral area Medium gray

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