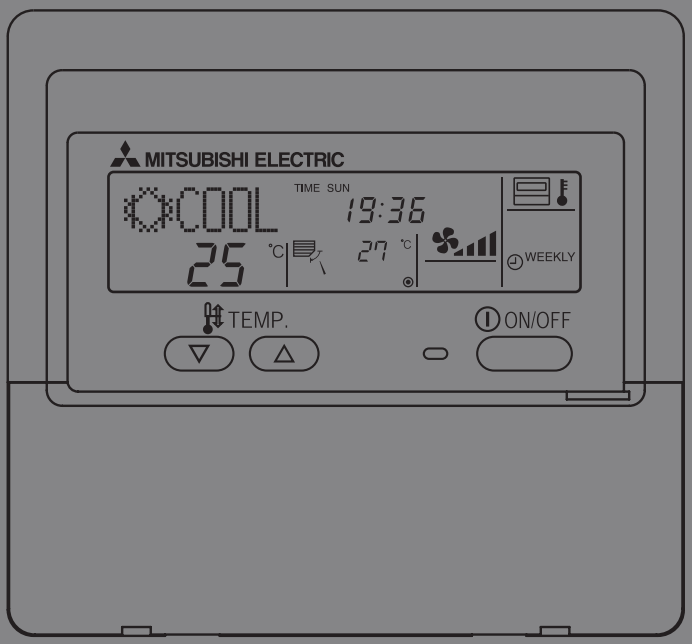
Changes for the Better

MITSUBISHI ELECTRIC

CITY MULTI and Mr.SLIM
Air Conditioners

MA Remote Controller
PAR-21MAA

TECHNICAL MANUAL



Mr.SLIM

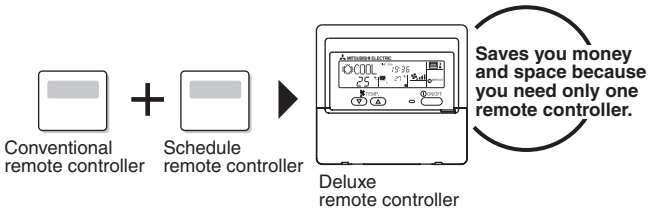
<REVISED>

CONTENTS

Ⅰ. Advantage of New MA Remote Controller

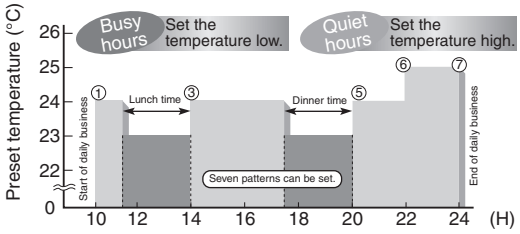
1. Weekly Timer

The built-in weekly timer enables you not only to make on/off settings but also temperature settings. Up to 8 patterns can be set for each day of the week.



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 PUHZ type)

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.

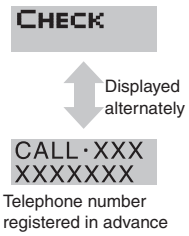
<Display information> Outputs data for nine items.

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



Telephone number registered in advance

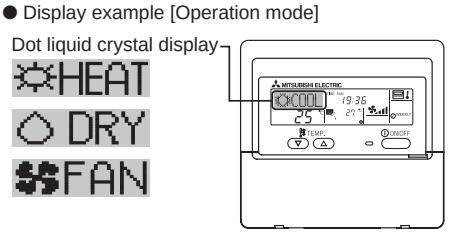
3. New Display

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]



3.2 Multi-language Display

In addition to English, contents can be displayed in 7 other languages.
This function makes the remote controller very useful in facilities where foreigners are present.

● Display example [Cool mode]

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		Go to page
		PUHZ series	PU(H) SUZ MXZ series	
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) The operation state of inverter models can be monitored using the maintenance stable-operation control (fixed frequency).	○	×	6
Operation data monitor function	Information necessary for maintenance can be displayed on the remote controller.			48
Error code monitor function	Error code is displayed in the service inspection monitor.	○	○	44
Contact number display	Displays the contact telephone number to be called when an error occurs.	○	○	33
Multi language display	In addition to English, contents can be displayed in 7 other languages. • English, German, Spanish, Russian, Italian, Chinese, French, Japanese	○	○	12
Temperature display (°C/°F) setting	Enables you to set the unit (°C/°F) in which temperatures are to be displayed.	○	○	35
Room temperature display setting	Enables you to set whether to show or hide the indoor (room) temperature.	○	○	36
Auto heat/cool display setting	Enables you to set whether to display or hide “COOL”/“HEAT” in auto mode.	○	○	37
Weekly schedule timer	Provides a built-in weekly timer that allows you to make on/off and temperature settings. Up to 8 patterns can be set for each day of the week.	○	○	23
"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.	○	○	14
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.	○	○	18
Clock function setting	Enables you to set whether to use the clock function.	○	○	21
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 weekly timer is selected. To switch to the auto off timer, select it using the remote controller’s function selection.	○	○	26
Simple timer	Enables you to set on/off settings in 1-hour increments within 72 hours.	○	○	29
Remote controller main/sub setting	Enables you to set the remote controller as the main or sub.	○	○	20

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.

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.

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

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

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

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

Fan Speed indicator
Shows the selected fan speed.

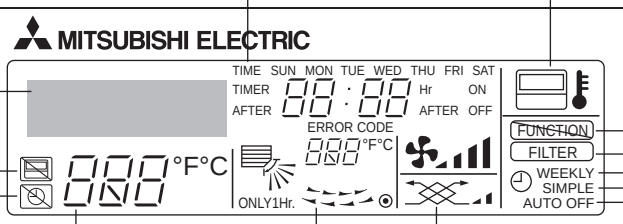
Ventilation indicator
Appears when the unit is running in Ventilation mode.

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

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

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

Temperature setting
Shows the target temperature.



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

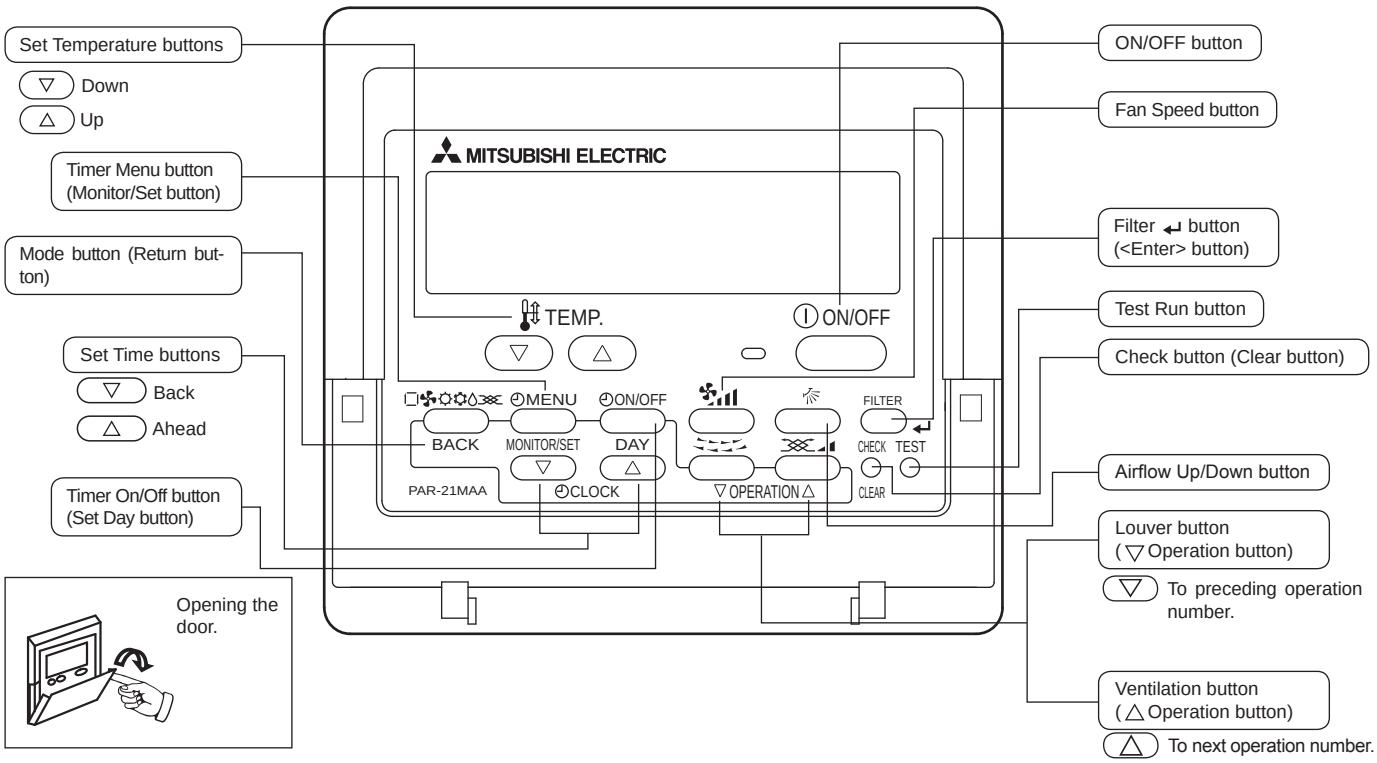
"One Hour Only" indicator
Displayed if the airflow is set to low and downward during COOL or DRY mode. (Operation varies according to model.)
The indicator goes off after 1 hour, at which time the airflow direction also changes.

Room Temperature display
Shows the room temperature.

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

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

2. Operation Section

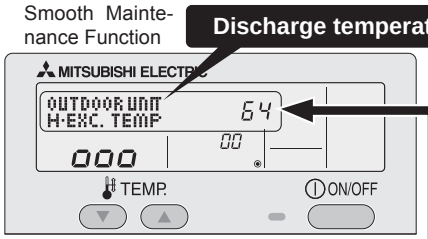


Note:
- If you press a button for a feature that is not installed at the indoor unit, the remote controller will display the "Not Available" message.
  If you are using the remote controller to drive multiple indoor units, this message will appear only if the feature is not present at every unit connected.

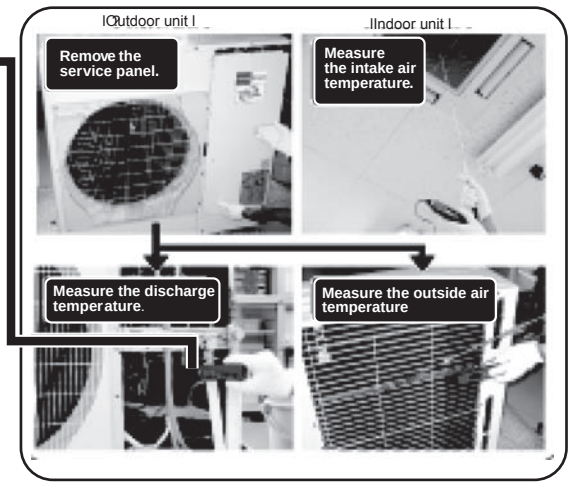
Ⅳ. Easy Maintenance Function (For Mr.SLIM PUHZ series)

- ●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 Maintenance Function



●Conventional inspection work



Easy maintenance information (unit)

Compressor		Outdoor unit		Indoor unit	
①	Accumulated operating time (×10 hours)	④	Heat exchanger temperature (°C)	⑦	Room 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)

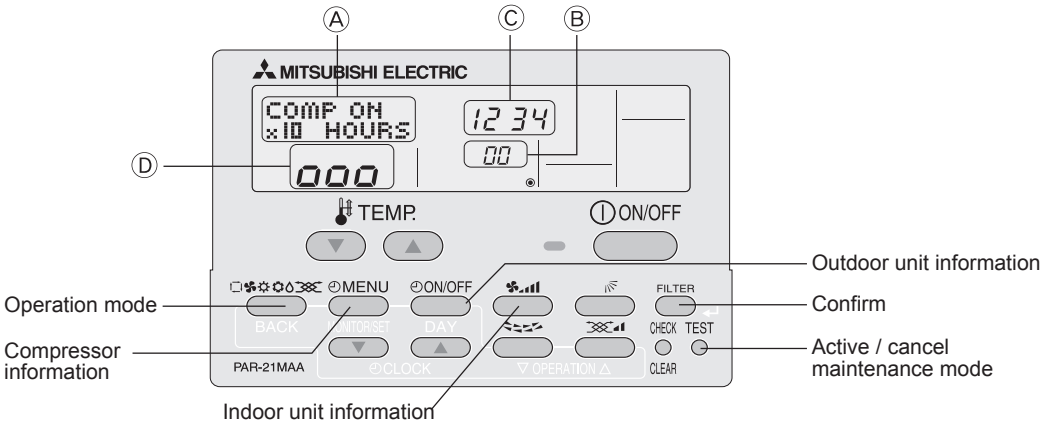
* The filter operating time is the time that has elapsed since the filter was reset.

1. Maintenance Mode Operating Method

* If you are going to use the " 2. Guide for Operation Condition ", 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 3 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 (COOL STABLE MODE) → Stable heating operation (HEAT STABLE MODE) → Stable operation cancellation (STABLE MODE CANCEL) → ↺

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

[Display Ⓓ] Waiting for stabilization → (→ 0 → 00 → 000) → Stabilized 000

● **Data measurement**

When the operation is stabilized, measure operation data as explained below.

(4) Press the [TEMP] buttons (▽ and △) to select the desired refrigerant address.

[Screen Ⓑ] → 00 ↔ 01 ↔ ····· ↔ 15 ←

(5) Select the type of data to be displayed.
After selecting, go to step (6).

Compressor information

◴ MENU button

[Display Ⓐ] → ① Cumulative operation time (COMP ON x10 HOURS) → ② ON/OFF Number (COMP ON x100 TIMES) → ③ Operating current (COMP ON CURRENT (A))

Outdoor unit information

◴ ON/OFF button

[Display Ⓐ] → ④ Heat exchanger temperature (OUTDOOR UNIT H·EXC. TEMP) → ⑤ Comp discharge temperature (OUTDOOR UNIT OUTLET TEMP) → ⑥ Outdoor ambient temperature (OUTDOOR UNIT OUTDOOR TEMP)

Indoor unit information

button

[Display Ⓐ] → ⑦ Indoor room temperature (INDOOR UNIT INLET TEMP) → ⑧ Heat exchanger temperature (INDOOR UNIT H·EXC. TEMP) → ⑨ Filter operating time (INDOOR UNIT FILTER USE H)

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

[Display example for accumulated operating time]

Display Ⓒ — Waiting for response — Blinking — After approx. 10 seconds — 1234 — 12,340 hours

(7) Data is displayed on the display (at Ⓒ).
To check the data for each item, repeat steps (5) to (7).

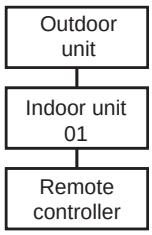
(8) To cancel maintenance mode, press the TEST button for three seconds or press the ⏻ ON/OFF button.

■ Refrigerant address

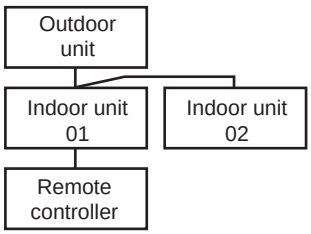
Single refrigerant system

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

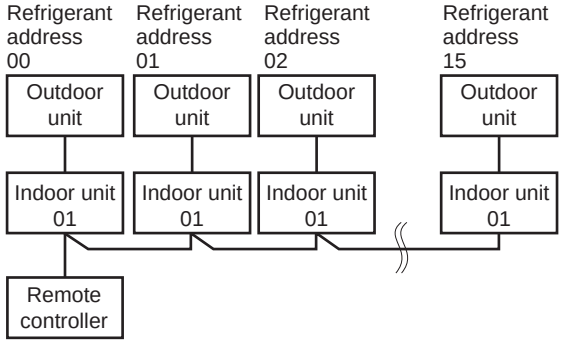


[Twin] Refrigerant address=00



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.



2. Guide for Operation Condition

Inspection item				Result	
Power supply	Loose connection	Terminal block	Breaker	Good	Retightened
			Outdoor Unit	Good	Retightened
			Indoor Unit	Good	Retightened
		(Insulation resistance)			MΩ
		(Voltage)			V
Compressor		① Accumulated operating time			Time
		② Number of ON/OFF times			Times
		③ Current			A
Outdoor Unit	Temperature	④ Refrigerant/heat exchanger temperature		COOL °C	HEAT °C
		⑤ Refrigerant/discharge temperature		COOL °C	HEAT °C
		⑥ Air/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	⑦ Air/Room air temperature		COOL °C	HEAT °C
		(Air/discharge temperature)		COOL °C	HEAT °C
		⑧ Refrigerant/heat exchanger temperature		COOL °C	HEAT °C
		⑨ Filter 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.

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.

*1 If may be judged as "Filter inspection" due to the outdoor and indoor temperature, even though it is not clogged.

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 "000" displayed stably in Display Ⓓ on the remote controller?	Stable	Unstable
	Temperature difference	(⑤ Discharge temperature) - (④ Outdoor heat exchanger temperature)	°C	
		(⑦ Indoor room temperature) - (⑧ Indoor heat exchanger temperature)	°C	
Heat	Inspection	Is "000" displayed stably in Display Ⓓ on the remote controller?	Stable	Unstable
	Temperature difference	(⑤ Discharge temperature) - (⑧ Indoor heat exchanger temperature)	°C	
		(⑧ Indoor heat exchanger temperature) - (⑦ Indoor room temperature)	°C	

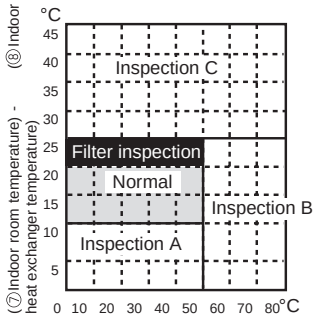
* Fixed Hz operation may not be possible under the following temperature ranges.
A) In cool mode, outdoor intake air temperature is 40 °C or higher or indoor room temperature is 23 °C or lower
B) In heat mode, outdoor intake air temperature is 20 °C or higher or indoor room temperature is 25 °C or lower

* 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.

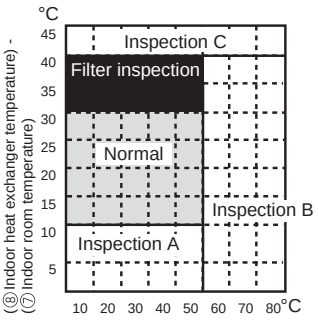
Result

Cool mode



[⑤ Discharge temperature] - [④ Outdoor heat exchanger temperature]

Heat mode



[⑤ Discharge temperature] - [⑧ Indoor heat exchanger temperature]

Ⅴ. How to Select Functions of remote controller

1. Function Items

The setting of the following remote controller functions can be changed using the remote controller function selection mode.
Change the setting when needed.

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

[Function selection flowchart] Refer to next page.
[1] Stop the air conditioner to start remote controller function selection mode.→ [2] Select from item1.→ [3] Select from item2.→ [4] Make the setting. (Details are specified in item3) → [5] Setting completed. → [6] Change the display to the normal one. (End)

[Detailed setting]
[4] -1. CHANGE LANGUAGE setting

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

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

[4] -2. Function limit (FUNCTION SELECTION)
(1) Operation function limit setting (operation lock)(LOCKING FUNCTION)

① no1 : Operation lock setting is made on all buttons other than the [① ON/OFF] button.
② no2 : Operation lock setting is made on all buttons.
③ OFF (Initial setting value) : Operation lock setting is not made
* To make the operation lock setting valid on the normal screen, it is necessary to press buttons (Press and hold down the [FILTER] and [① ON/OFF] buttons at the same time for 2 seconds.) on the normal screen after the above setting is made.

(2) Use of automatic mode setting

When the remote controller is connected to the unit that has automatic operation mode, the following settings can be made.

① ON (Initial setting value) : The automatic mode is displayed when the operation mode is selected.
② OFF : The automatic mode is not displayed when the operation mode is selected.

(3) Temperature range limit setting (LIMIT TEMP FUNCTION)

After this setting is made, the temperature can be changed within the set range.

① LIMIT TEMP COOL MODE :
The temperature range can be changed on cooling/dry mode.
② LIMIT TEMP HEAT MODE :
The temperature range can be changed on heating mode.
③ LIMIT TEMP AUTO MODE :
The temperature range can be changed on automatic mode.
④ OFF (initial setting) : The temperature range limit is not active.

* When the setting, other than OFF, is made, the temperature range limit setting on cooling, heating and automatic mode is made at the same time. However the range cannot be limited when the set temperature range has not changed.

- To increase or decrease the temperature, press the [TEMP (▽) or (△)] button.
- To switch the upper limit setting and the lower limit setting, press the [ ] button. The selected setting will blink and the temperature can be set.
- Settable range

Cooling/Dry mode :	Lower limit: 19℃ ~ 30℃	, 67°F~87°F
	Upper limit: 30℃ ~ 19℃	, 87°F~67°F
Heating mode :	Lower limit: 17℃ ~ 28℃	, 63°F~83°F
	Upper limit: 28℃ ~ 17℃	, 83°F~63°F
Automatic mode :	Lower limit: 19℃ ~ 28℃	, 67°F~83°F
	Upper limit: 28℃ ~ 19℃	, 83°F~67°F

[4] -3. Mode selection setting (MODE SELECTION)
(1) Remote controller main/sub setting

① Main : The controller will be the main controller.
② Sub : The controller will be the sub controller.

(2) CLOCK setting

① ON : The clock function can be used.
② OFF : The clock function cannot be used.

(3) Timer function setting

① WEEKLY TIMER (initial setting): 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: The timer mode cannot be used.
* When CLOCK setting is OFF, the "WEEKLY TIMER" cannot be used.

(4) Contact number setting for error situation

① CALL OFF : The set contact numbers are not displayed in case of error.
② CALL **** *** **** : The set contact numbers are displayed in case of error.
③ CALL_ : The contact number can be set when the display is as shown on the left.

- Setting the contact numbers

To set the contact numbers, follow the following procedures.
Move the blinking cursor to set numbers. Press the [TEMP. (▽) and(△)] button to move the cursor to the right (left). Press the [CLOCK (▽) and (△)] button to set the numbers.

[4] -4. Display change setting (DISP MODE SETTING)
(1) Temperature display ℃ / °F setting

①℃ : The temperature unit ℃ is used.
②°F : The temperature unit °F is used.

(2) Room temperature display setting (ROOM TEMP DISP SELECTION)

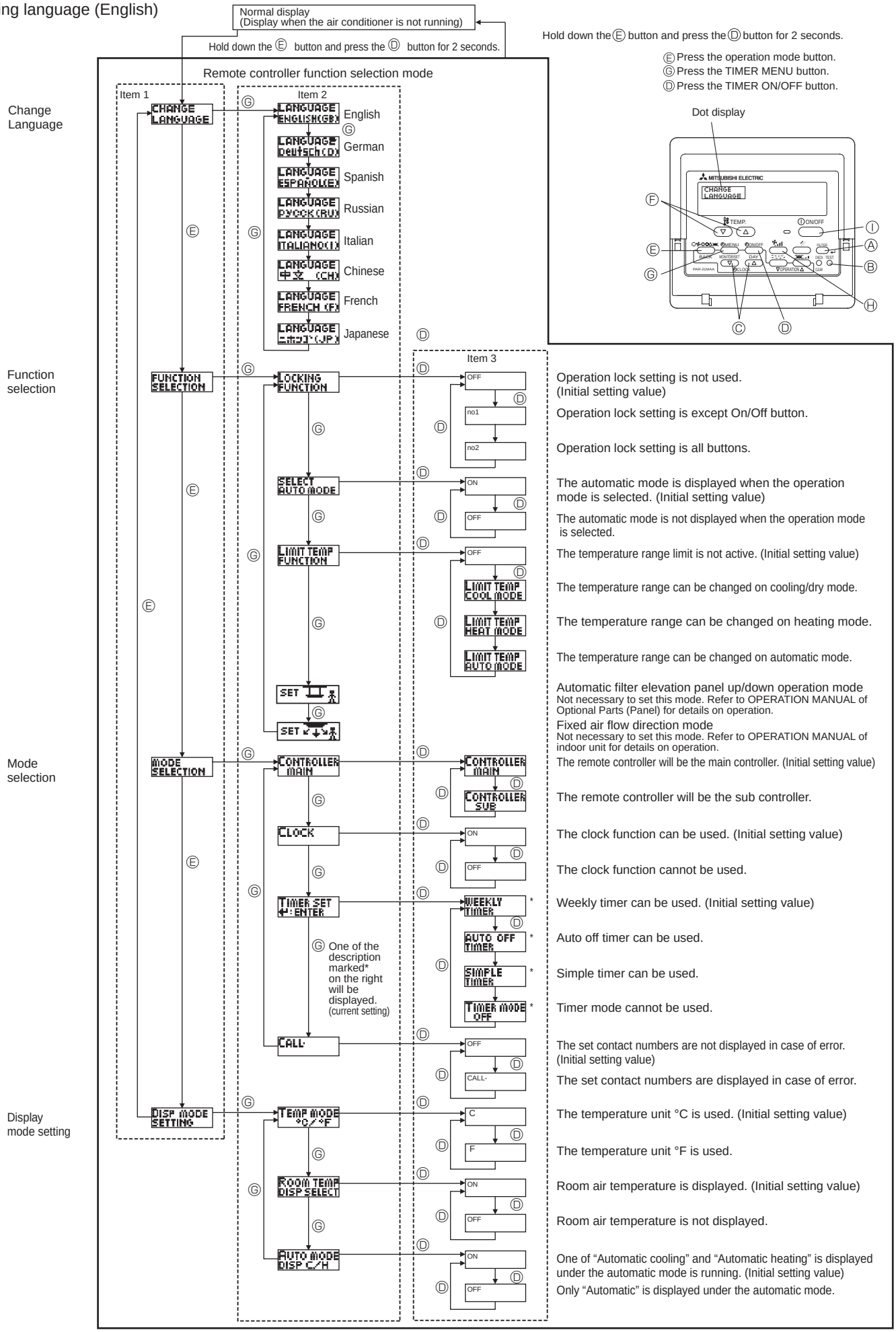
① ON : The room temperature is displayed.
② OFF : The room temperature is not displayed.

(3) Automatic cooling/heating display setting (AUTO MODE DISP C/H)

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

2. Flowchart of Function Setting

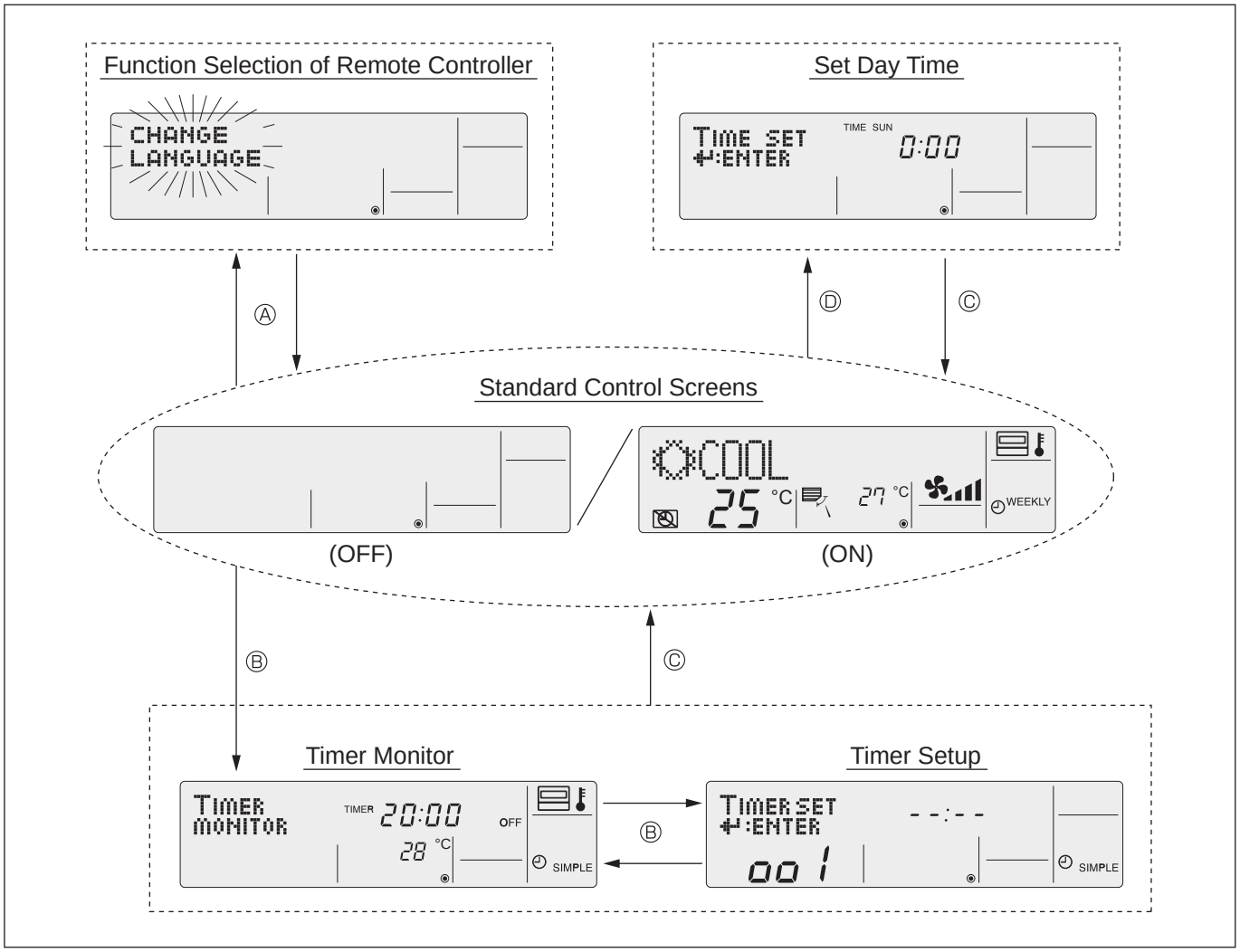
Setting language (English)



3. Screen Structure for Function Setting

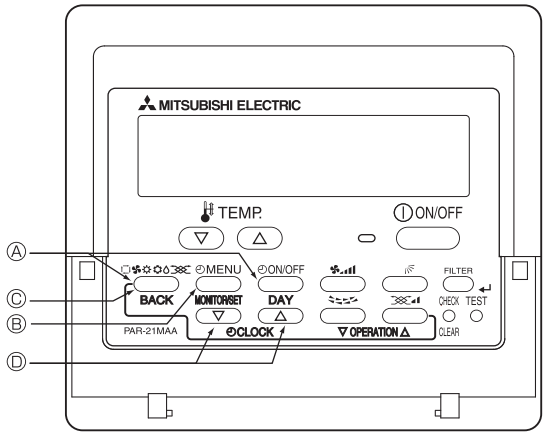
Description of each screen

- Function selection of remote controller : Used to set the timer function and operation limit function, etc.
- Set day time : Used to set the current day of the week and time.
- Standard control 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 set up screen : Used to set the timers (weekly, simple, auto off).



How to change the screen display

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



4. Function Setting Mode

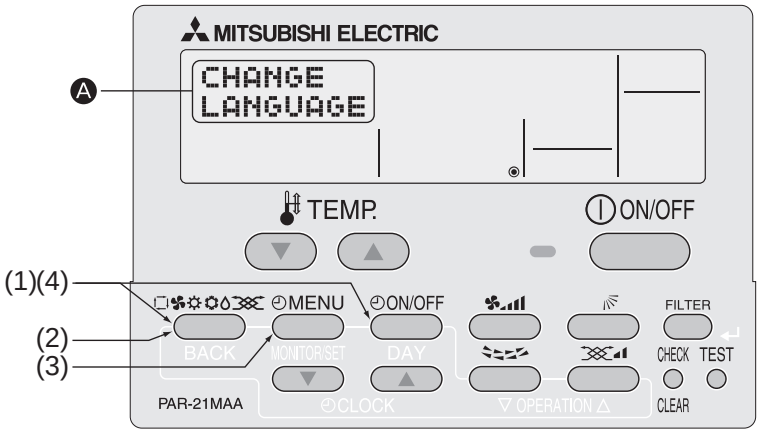
4.1 Change Language

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

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

Changing the Display Language

■ Display example



(1) While pressing the MODE button, press the ON/OFF button for 2 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 → (back to CHANGE LANGUAGE)

(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) → [Italian] LANGUAGE ITALIANO(I) → [Chinese] LANGUAGE 中文 (CH) → [French] LANGUAGE FRENCH(F) → [Japanese] LANGUAGE ニホンゴ(JP) → (back to [English])

(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
Italian	COOL	Chinese	制冷	French	FROID	Japanese	冷房

Multi Language Display

[Dot display table]

Selecting language		English	German	Spanish	Russian	Italian	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-DIFICACION	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	VENTI-LAZIONE	送风	VENTI-LATION	送風
	Ventilation	VENTI-LATION	Gebläse betrieb	VENTI-LACIÓN	Вентиляция	ARIA ESTERNA	换气	VENTI-LATION	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	SBRINA MENTO	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 Verfugbar	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	自己ｼﾝﾀﾞﾝ
Unit function selection		FUNCTION SELECTION	Funktion sauswahl	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 wahlen	CONFIG. VENTILACIÓN	НАСТРОЙКА ВЕНТУСТАН.	IMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定

Selecting language	English	German	Spanish	Russian	Italian	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	操作ﾓｰﾄﾞ
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	自動ﾓｰﾄﾞｼｮｳ
Temperature range limit setting	LIMIT TEMP FUNCTION	Limit Temp Funktion	LÍMIT TEMP CONSIGNA	Ограниченне уст.температ	LIMITAZIONE TEMPERATURA	温度限制	LIMITATION TEMPERATURE	温度制限
Limit temperature cooling/day mode	LIMIT TEMP COOL MODE	Limit Kuhl Temp	LÍMIT TEMP MODO FRIO	Ограничено охлаждение	LIMITAZIONE MODO COOL	制冷范围	LIMITE TEMP MODE FROID	ｵﾝﾄﾞﾊﾝｲﾝ冷房
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	ｵﾝﾄﾞﾊﾝｲ暖房
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	ｵﾝﾄﾞﾊﾝｲ自動
Mode selection	MODE SELECTION	Betriebsart wahlen	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	TELCOMMANDE 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	TELCOMMANDE 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	定时器 ↵: 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	定时器状态	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	每周定时器	PROG HEBDO MADAIRE	ﾀｲﾏｰ週間
Timer mode off	TIMER MODE OFF	Zeitschaltuhr AUS	TEMPORIZA - DOR APAGADO	Таймер выкл.	TIMER OFF	定时器无效	PROG HORAIRE INACTIF	ﾀｲﾏｰ無効
Auto off timer	AUTO OFF TIMER	AUTO Zeit funktion AUS	APAGADO AUTOMÁTICO	Автоотключ. по таймеру	AUTO OFF TIMER	解除定时	PROG HORAIRE ARRET AUTO	ﾀｲﾏｰｹﾞﾝｿｳｽﾙﾎﾞｳｼ
Simple timer	SIMPLE TIMER	Einfa che Zeitfunktion	TEMPORIZA - DOR SIMPLE	Простой таймер	TIMER SEMPLIFICATO	简易定时器	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	TEMP.GRADOS °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 gewahlt	MOSTRAR TEMP	Показывать темп.в комн.	TEMPERATURA AMBIENTE	吸入温度	TEMPERATURE AMBIANTE	ｽｲｺﾐｵﾝﾄﾞ ﾋｮｳｼﾞ
Automatic cooling/heating display setting	AUTO MODE DISP C/H	Auto Betrieb C/H	MOSTRAR F/C EN AUTO	Инд.T/X в режиме авто	AUTO C/H	自动表示	AFFICHAGE AUTO F/C	自動ﾚｲﾀﾞﾝﾋｮｳｼﾞ

4.2 Function Setting

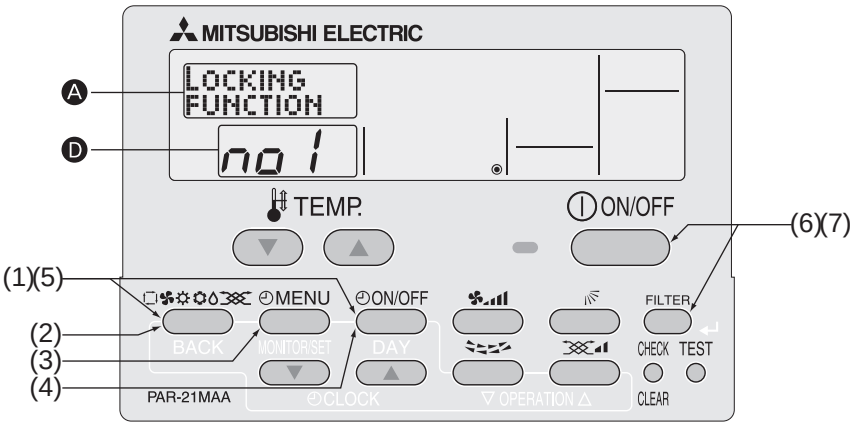
4.2.1 Operation Lock (Operation Function Limit Setting)

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

* To activate this operation lock function on the normal screen, hold down the ⏻ ON/OFF button for 2 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 2 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 (off) → Lock All Except ON/OFF (no1) → Lock All Buttons (no2) →

(5) While pressing the MODE button, press the ⏲ ON/OFF button for 2 seconds to return to normal mode. Setting is now complete.

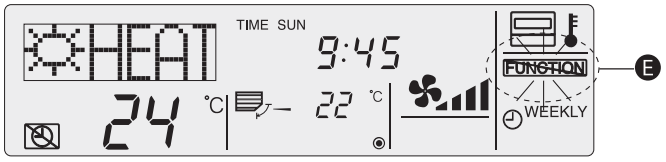
Completing steps (1) to (5) allows use of the operation lock function.
To enable the lock function, carry out the following steps.

Enabling the Lock Function

(6) While pressing the FILTER (↵) button, press the ⏻ ON/OFF button for 2 seconds to enable the operation lock function.
FUNCTION appears on the screen (at Ⓔ).

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

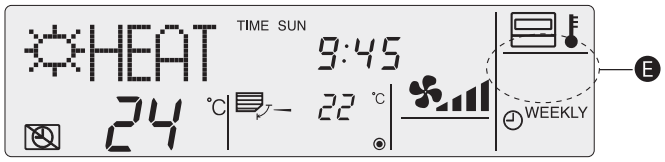
■ Display example when operation lock function is in use



How to Unlock the Buttons

(7) While pressing the FILTER (↵) button, press the ⏻ ON/OFF button for 2 seconds.
FUNCTION disappears from the screen (at Ⓔ).

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



4.2.2 Auto Mode Setting

The following settings can be made.

①ON (default) : Auto mode is displayed when selecting an operation mode only if the unit to be connected supports the auto mode.
However, this does not apply if the unit to be connected does not support the auto mode.
Operation mode can be switched :

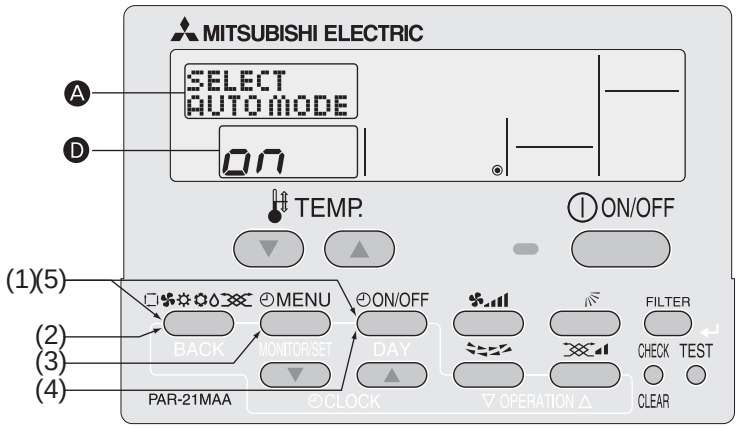
→ COOL → DRY → FAN → AUTO → HEAT →

②OFF : Even if the unit supports the auto mode, auto mode is not displayed when selecting an operation mode.
Operation mode can be switched :

→ COOL → DRY → FAN → HEAT →

How to Set Auto Mode

■ Display example



(1) While pressing the MODE button, press the ON/OFF button for 2 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 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 Ⓓ] → SELECT AUTO MODE off → SELECT AUTO MODE on →

(5) While pressing the MODE button, press the ON/OFF button for 2 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 ⏲ ON/OFF button.

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

(2) Press the MODE button.

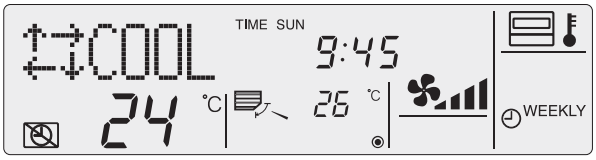
Each time the MODE button is pressed, the operation mode switches from one to another. “AUTO” is also displayed.

→ COOL → DRY → FAN → AUTO *1 → HEAT *1 →

*1: If the remote controller is connected with the unit 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 the remote controller is connected with the unit 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.
①Cool mode : The temperature setting range for cool/dry mode can be changed.
②Heat mode : The temperature setting range for heat mode can be changed.
③Auto mode : The temperature setting range for auto mode can be changed.
④OFF (default) : The temperature setting range is not limited.

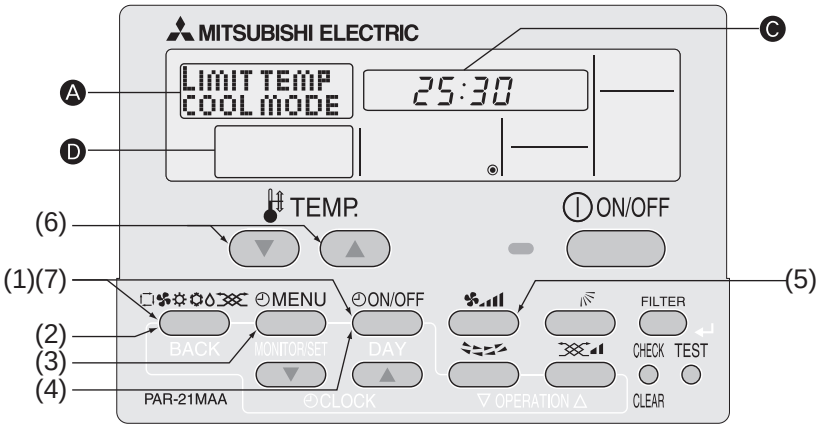
* When a mode other than OFF mode is set, temperature setting range limit setting for cool, heat and auto modes will be made simultaneously.
However, limit setting will not be made unless the range has been changed.

	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 2 seconds to activate the remote controller’s function selection mode.

(2) Press the MODE button to select FUNCTION SELECTION on the screen (at A).

[Display A] → CHANGE LANGUAGE → FUNCTION SELECTION → MODE SELECTION → DISP MODE SETTING → (back to CHANGE LANGUAGE)

(3) Press the MENU button to select LIMIT TEMP FUNCTION on the screen (at A).
* 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 A]

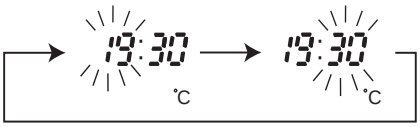
DRY mode / COOL mode	HEAT mode	AUTO mode*	No limitation
LIMIT TEMP COOL MODE	LIMIT TEMP HEAT MODE	LIMIT TEMP AUTO MODE	LIMIT TEMP FUNCTION
		Display D	oFF

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

(5) Press the [fan] button to select lower limit or upper limit.

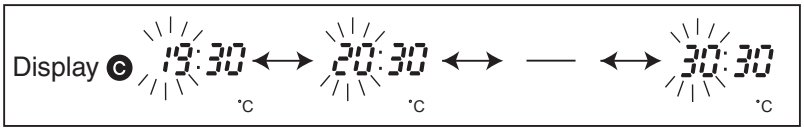
Lower limit blinks. Upper limit blinks.

[Display C]



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

[Setting example for lower limit]



(7) While pressing the MODE button, press the ON/OFF button for 2 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.

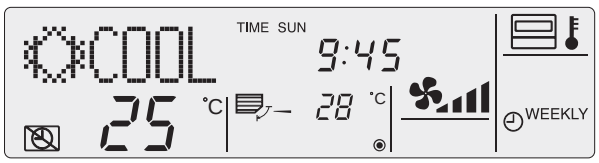
* If an attempt is made to set a temperature outside the range when the temperature range limit function is in use, “LIMIT TEMP FUNCTION” will blink.

■ Display example when the temperature range limit function is in use

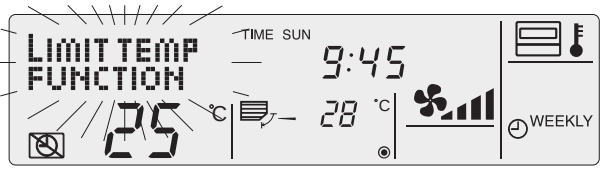
If employees tend to lower the temperature excessively in the office without permission, set the temperature setting range for cool/dry mode to 25 °C - 30 °C.

Setting

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 blinks and the command is not accepted.



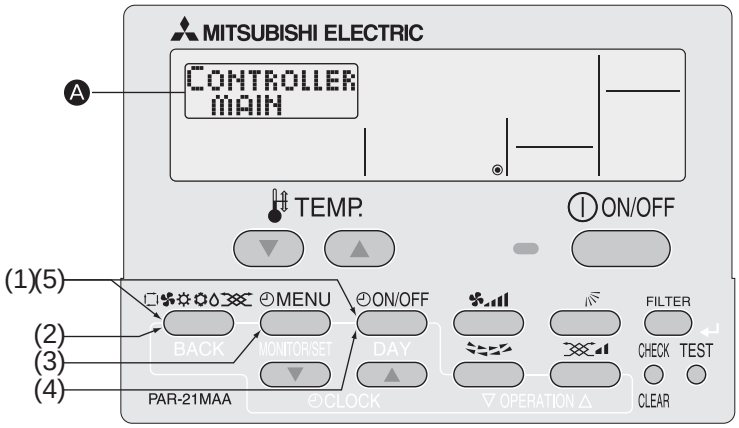
4.3 Basic Functions Setting

4.3.1 Remote Controller Main/Sub Setting

When using 2 remote controllers, they must be designated as the main and sub remote controllers.
The following settings can be made.
①MAIN (default) : The remote controller is set as the main controller.
②SUB : 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 2 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 2 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.

①Weekly Timer (default) : The weekly timer can be used.
②Auto Off Timer : The auto off timer can be used.
③Simple Timer : The simple timer can be used.
④Timer Mode Off : Timer mode cannot be used.

* If the clock function is disabled (OFF), “Weekly Timer” cannot be selected.

■ Clock function setting

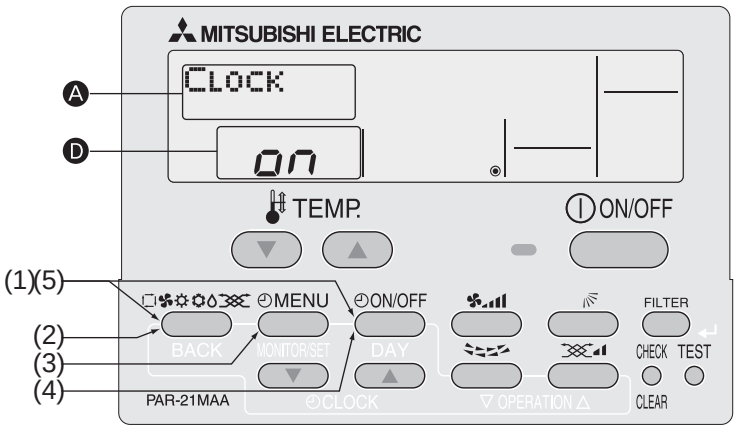
The following settings can be made.

①ON (default) : The clock function can be used.
②OFF : 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 2 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 “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 2 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.

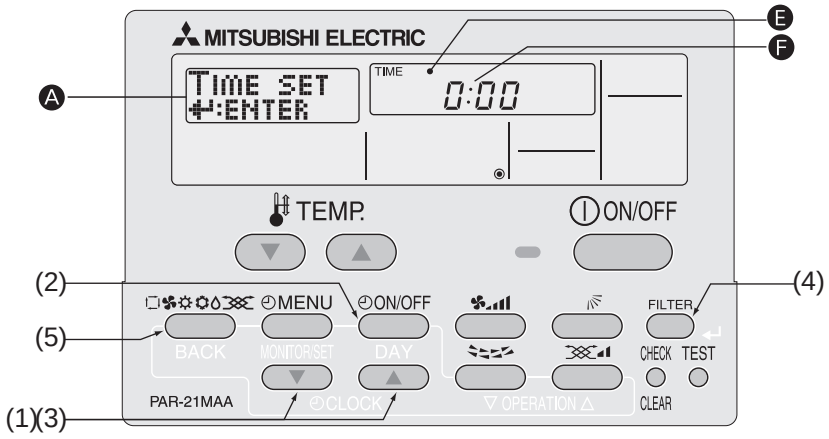
■ Day of the week and time setting

● 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 △) to display TIME SET ↵: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 △) to set the desired time.

Press the [CLOCK] buttons (▽ and △) 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 8 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.

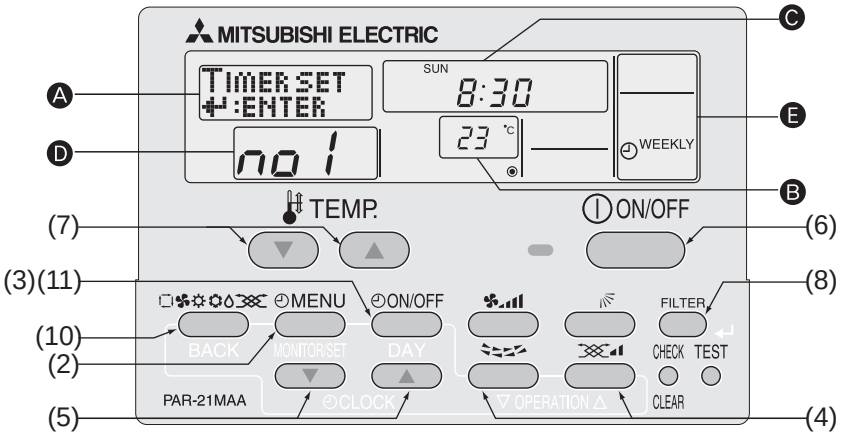
■ The time for the weekly timer can be set in 1-minute increments.

* 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 4.3.2)

> 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 E).

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

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

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

[Display C] → 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 D] → 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 (▽ and △) to set the desired time. (0:00 to 23:59)

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

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

[Display Ⓒ] → (Space) → ON → OFF →

(7) Press the [TEMP] buttons (▽ and △) to set the desired room temperature. (12 °C to 30 °C)

[Display Ⓑ] → (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 4-2-3.)

(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 2 seconds or more until the settings blink. All of the settings will be cleared.)

> Note
> The settings you have made can be cancelled by pressing the MODE (BACK) button before pressing FILTER (↵) button.
> When 2 or more different operations for the same time are set, only the operation with the large operation No. will be effective.

(9) Repeat steps (3) to (8) to set the contents in the setup matrix.

(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 " " will disappear from the screen.

Make sure that " " disappears.

How to Review the Weekly Timer Settings

(1) Make sure that "WEEKLY" is displayed on the screen (at Ⓔ).

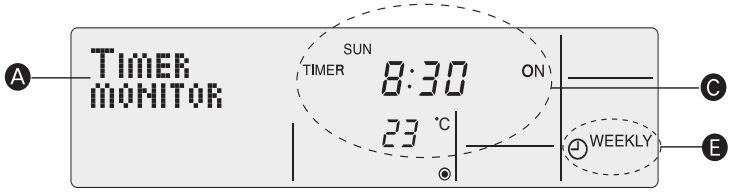
(2) Press the ⏻ MENU button to display TIMER MONITOR on the screen (at Ⓐ).

(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.

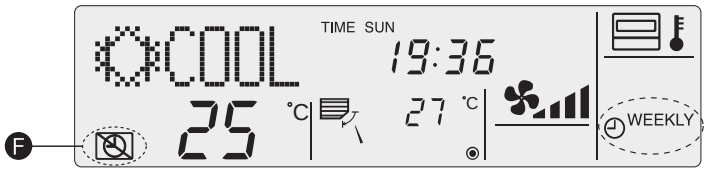
* The settings are displayed in order of time setting.

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



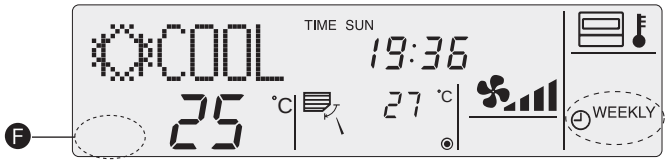
To Turn Off the Weekly Timer

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



To Turn On the Weekly Timer

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



● **Weekly timer setting procedure**

To facilitate weekly timer setting, it is recommended to input the set up table below with the settings (day of the week, time, operation (on/off)) that you are going to make.

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 ON/OFF button to select the desired operation (ON, OFF, (space)).

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

② Auto Off Timer

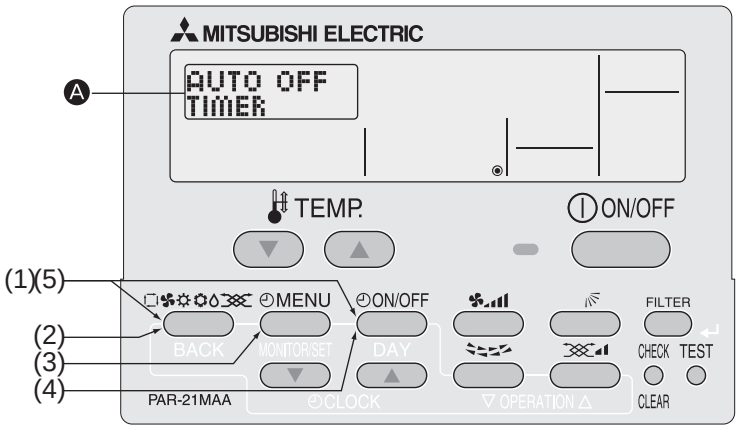
- The auto off timer begins counting down when the air conditioner starts, and shuts off the air conditioner when the set time passed.
- The time on the auto off timer can be set in a range of 30 minutes to 4 hours, in 30-minute increments.
  * By default, the weekly timer is selected as the remote controller's 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 2 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 Ⓐ).

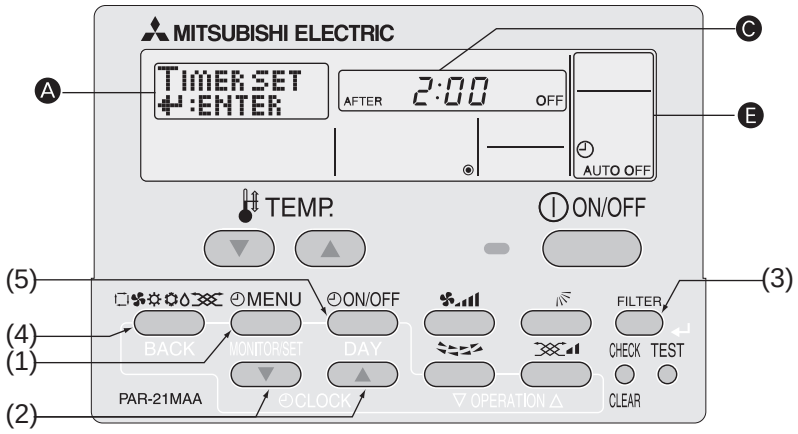
[Display Ⓐ] → TIMER MODE OFF → AUTO OFF TIMER → SIMPLE TIMER → WEEKLY TIMER →

(5) While pressing the MODE button, press the ON/OFF button for 2 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 Auto Off Timer

■ Display example



(1)Press the [MENU] button for 3 seconds so that TIME SET ↵:ENTER appears on the screen (at A).

[Display A] → 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 C] 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 C] AFTER 2:00 (Two hours) OFF [Display E] AUTO OFF

Checking the Current Auto Off Timer Setting

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

(2) Press the [MENU] button for 3 seconds to display TIMER MONITOR on the screen (at A).

• 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

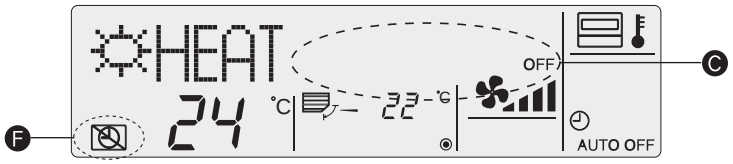
To Turn Off the Auto Timer…

(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)

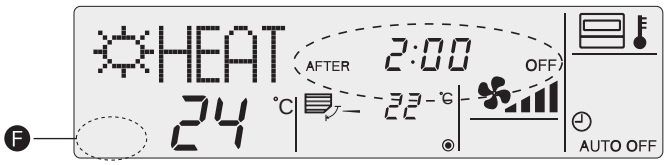


To Turn On the Auto Off Timer…

(1) Press the ON/OFF button for 3 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)



③ Simple Timer

■ You can set the simple timer in any of 3 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.

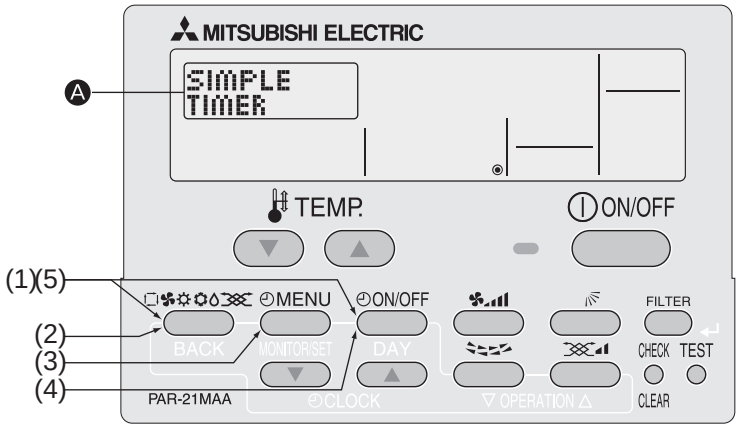
■ The simple timer (Start and stop) can be set only once within a 72-hour period.
The time setting is made in hour increments.

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 2 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 Ⓐ).

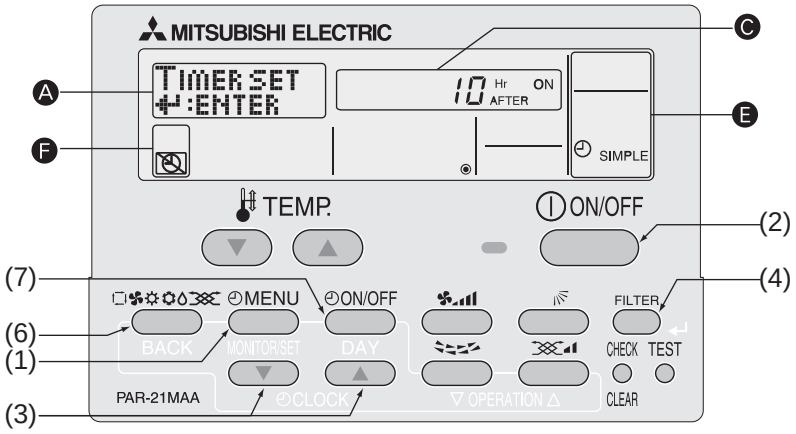
[Display Ⓐ] → TIMER MODE OFF → AUTO OFF TIMER → SIMPLE TIMER → WEEKLY TIMER →

(5) While pressing the MODE button, press the ON/OFF button for 2 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 Ⓔ).

(1) Press the [MENU] button to select TIME SET ↵:ENTER on the screen (at Ⓐ).

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

(2) Press the [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 Ⓒ] → 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.

[Display Ⓒ] 10 Hr AFTER ON (Ten hours) [Display Ⓔ] 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.

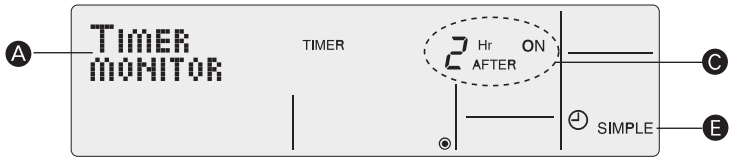
Review the Current Simple Timer Settings

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

(2) Press the MENU button, so that the TIMER MONITOR appears on the screen (at Ⓐ).

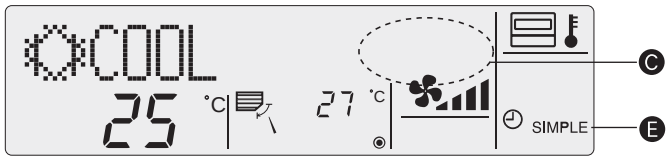
• The time you have set to start or stop the timer appears on the screen (at Ⓒ).

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



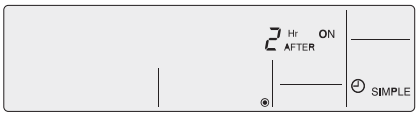
To Turn Off the Simple Timer…

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

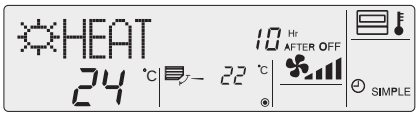


Examples

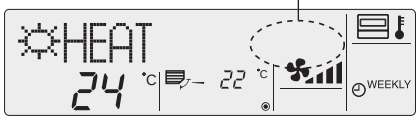
1 Start timer operation : Operation starts after 2 hours.



2 Stop timer operation : Operation stops after 10 hours.



3 Timer cancelled : Timer setting no longer appears



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

Timer start
Displays the time set for the start timer.

After 3 hours
Displays “stop time” – “start time”.

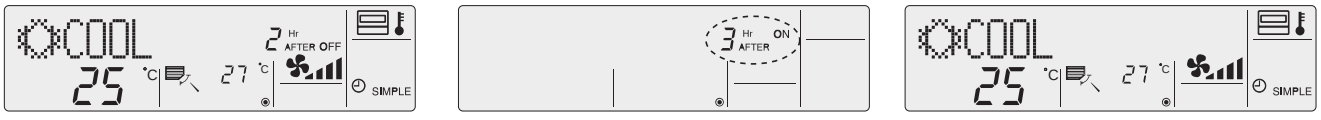
After 7 hours

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



Timer start
Displays the time set for the off timer.

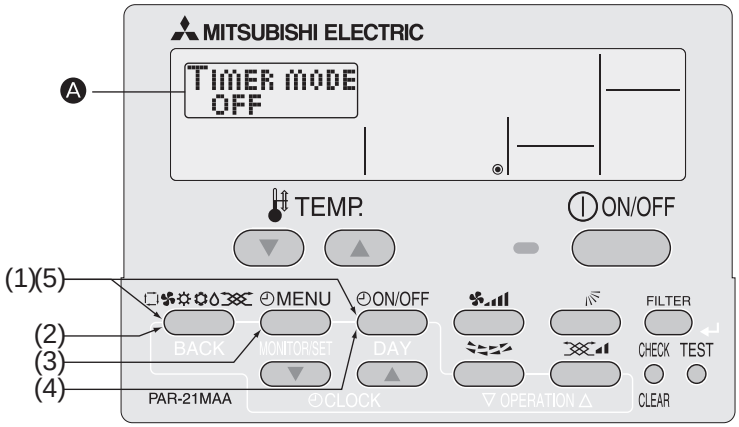
After 2 hours
Displays on timer (5hr)·off timer (2hr)

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 2 seconds to activate the remote controller's function selection mode.

(2) Press the MODE button until 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 2 seconds to return to normal mode.

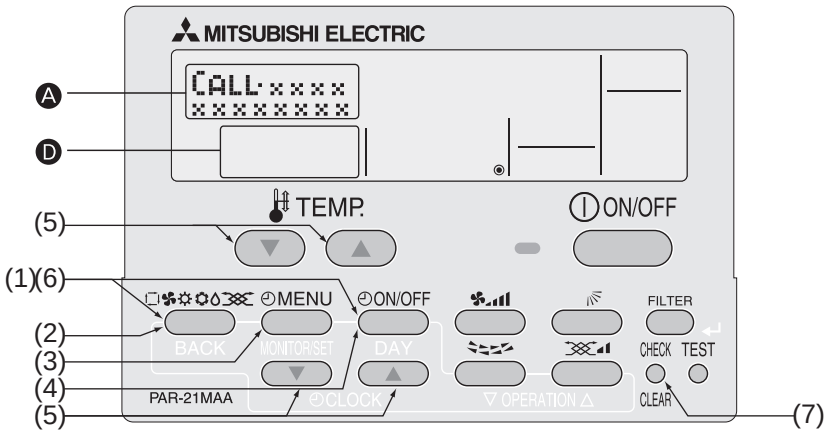
* If you press the ON/OFF button before the MODE button, the settings you have made will be cancelled.

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 is not set in default setting. It is displayed.

Setting the Contact Numbers

■ Display example



(1) While pressing the MODE button, press the ON/OFF button for 2 seconds to activate the remote controller's function selection mode.

(2) Press the MODE button until 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.

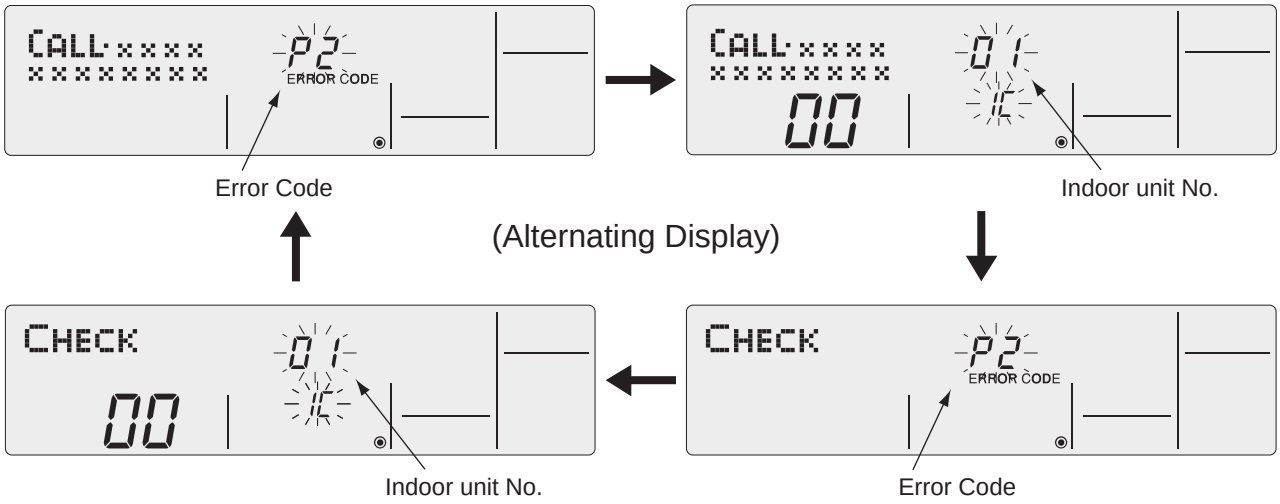
"1" → Press the [CLOCK] button (△) twice.

"2" → Press the [CLOCK] button (△) 3 times.

(6) While pressing the MODE button, press the ON/OFF button for 2 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 5 seconds.

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



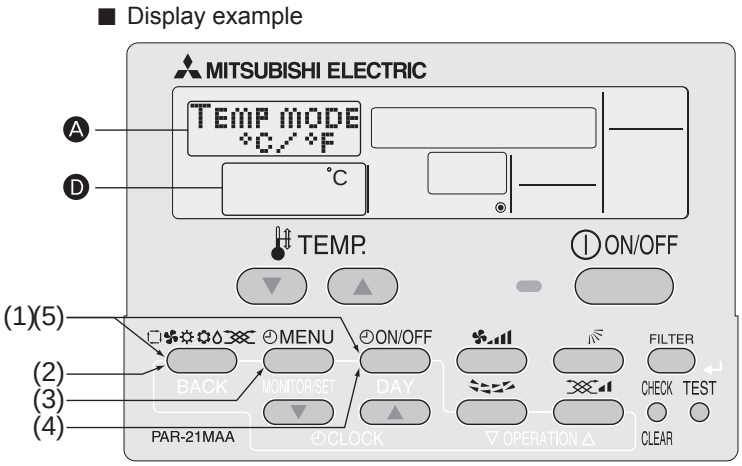
4.4 Display Change Setting

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 °F and °C

■ Display example



(1) While pressing the MODE button, press the ON/OFF button for 2 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 Ⓐ).

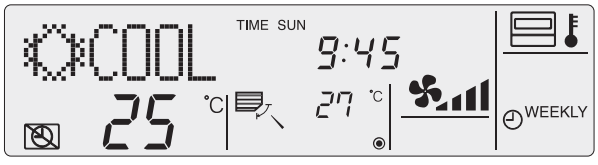
(4) Press the ON/OFF button to select "°C" or "°F"on the screen (at Ⓓ).

[Display Ⓓ] → °C → °F →

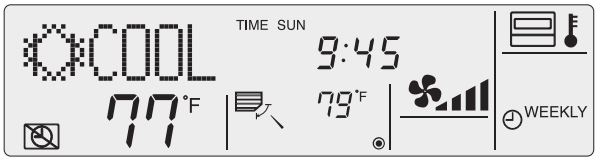
(5) While pressing the MODE button, press the ON/OFF button for 2 seconds to return to normal mode.

* 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

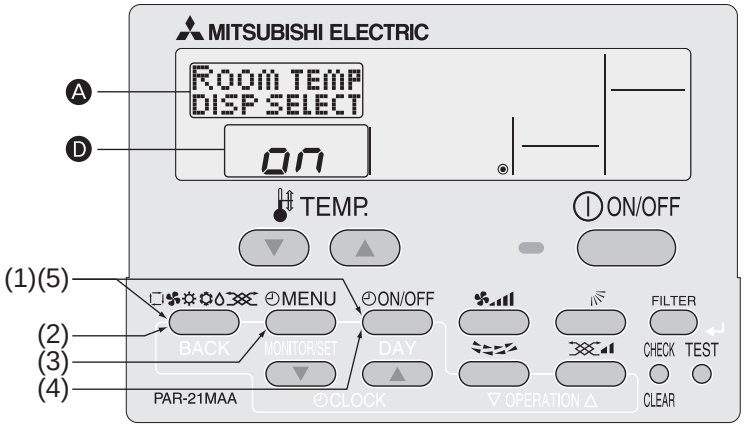


4.4.2 Room Temperature Display Setting

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

Setting the Room Temperature

■ Display example



(1) While pressing the MODE button, press the ON/OFF button for 2 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 Ⓐ).

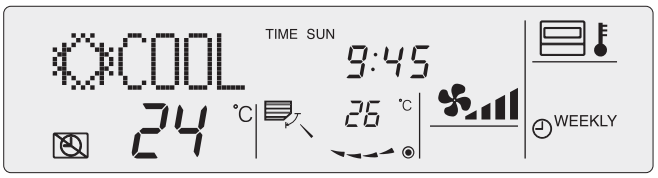
(4) Press the ON/OFF button to select "on" or "oFF" on the screen (at Ⓓ).

[Display Ⓓ] → on → oFF →

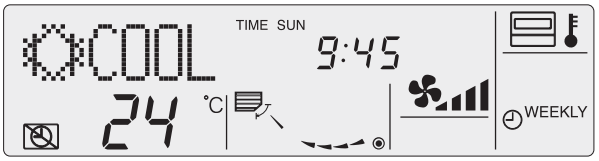
(5) While pressing the MODE button, press the ON/OFF button for 2 seconds to return to normal mode.

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

■ Room temperature display example when "ON" is selected



■ Room temperature display example when "OFF" is selected



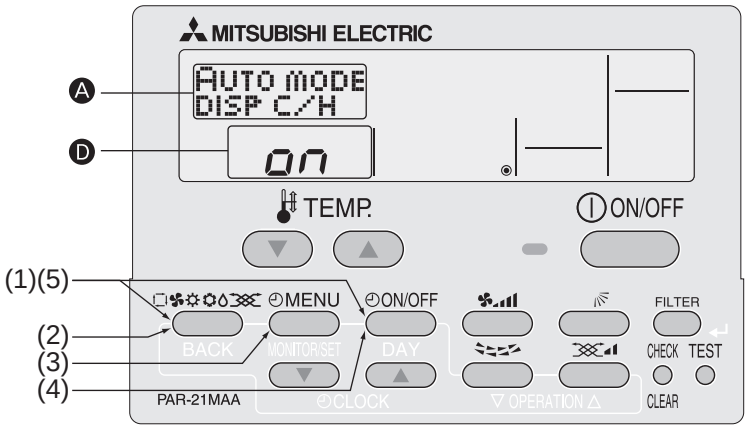
4.4.3 Automatic Cooling/Heating Display Setting

- 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 2 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 Ⓓ).

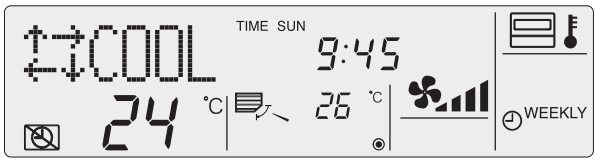
[Display Ⓓ] → on → oFF →

(5) While pressing the MODE button, press the ON/OFF button for 2 seconds to return to normal mode.

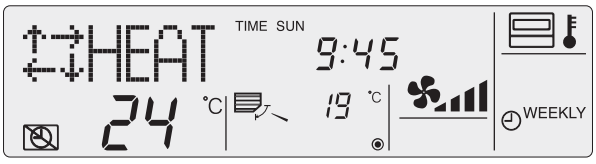
* If you press the ON/OFF button before the MODE button, the settings you have made will be cancelled.

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

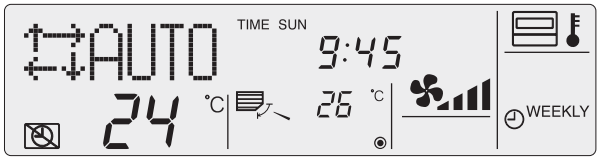
[During auto (cool) mode]



[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 function can be set according to necessity using the remote controller. The setting of function for each unit can only be done by the remote controller. Select available function from the table. (For details regarding initial settings and operation modes of each unit, refer to the unit installation manual.)

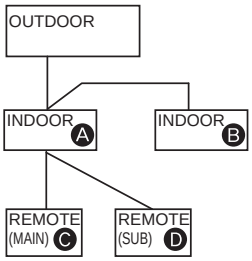
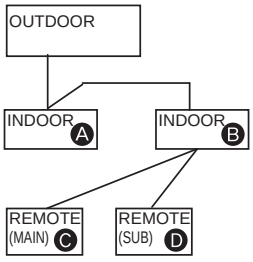
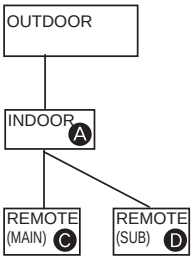
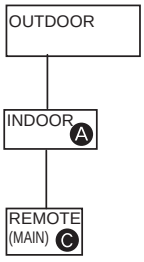
(1) Itemised functions of the entire refrigerant system (select unit number 00)

Function	Settings	Mode No.	Setting No.	Check	Remarks
Power failure automatic recovery	OFF	1	1		
	ON		2		
Indoor temperature detecting *1	Average data from each indoor unit	2	1		
	Data from the indoor unit with remote controller		2		
	Data from main remote controller		3		
LOSSNAY connectivity	Not supported	3	1		
	Supported (indoor unit does not intake outdoor air through LOSSNAY)		2		
	Supported (indoor unit intakes outdoor air through LOSSNAY)		3		
Power voltage	240V	4	1		
	220V, 230V		2		
Auto operating mode *2	Auto energy-saving operation ON	5	1		
	Auto energy-saving operation OFF		2		
Frost prevention temperature	2℃ (Normal)	15	1		
	3℃		2		
Defrosting control	Standard	17	1		
	For high humidity		2		
Refrigerant leakage setting(%) *3	70% (RP35, 50) / 80% (RP60-140, HRP)	21	1		
	50% (RP35, 50) / 60% (RP60-140, HRP)		2		

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

Meaning of "Function setting"

Mode02 : indoor temperature detecting

No	indoor temperature(ta)					
No.1	Average data of the sensor on all the indoor units	Intial setting	ta=(A+B)/2	ta=(A+B)/2	ta=A	ta=A
No.2	The data of the sensor on the indoor unit that connected with remote controller		ta=A	ta=B	ta=A	ta=A
No.3	The data of the sensor on main remote controller.		ta=C	ta=C	ta=C	ta=C

(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		
	"Clean the filter" indicator is not displayed.				3		
Air flow (Fan speed) *2	Silent	Standard	PLA-RP·AA type	08	1		
	Standard	High ceiling①			2		
	High ceiling	High ceiling②			3		
No. of air outlets (not for SLZ)	4 directions			09	1		
	3 directions				2		
	2 directions				3		
Installed options (high performance filter) *2	Not supported			10	1		
	Supported				2		
Vane setting	No vanes (Vane No.3 setting : PLA only)			11	1		
	Vane No. 1 setting				2		
	Vane No. 2 setting				3		
Swing	Not available	Swing	PLA-RP·BA type	23	1		
	Available	Wave air flow			2		
Set temperature in heating mode 4deg-up *1	ON			24	1		
	OFF				2		
Fan speed when the heating thermostat is OFF *1	Extra low			25	1		
	Stop				2		
	Set fan speed				3		
Fan speed when the cooling thermostat is OFF	Set fan speed			27	1		
	Stop				2		
Detection of abnormality (P8) of the pipe temperature	Detect			28	1		
	Neglect				2		

*1 SLZ/SEZ-KC/SEZ-KA type : when SW3-5 (indoor controller board) is ON, the setting of SW3 takes precedence.

		Dip switch	Function	Action by switch operation	
				OFF	ON
SW3	Function setting	SW3-1	Power failure automatic recovery	OFF	ON
		SW3-2	Set temperature in heating mode (4 deg up)	Available	Not available
		SW3-3	Fan speed when the heating the thermostat is OFF	Extra low	Stop
		SW3-4	—	—	—
		SW3-5*	SW3 function	Not available	Available

· Function setting becomes effective, when the Dip switch SW3-5 is ON.
* Switch off SW3-5 when the function setting is done by wired remote controller.
· SEZ-KD·VA(L) model is excluded.

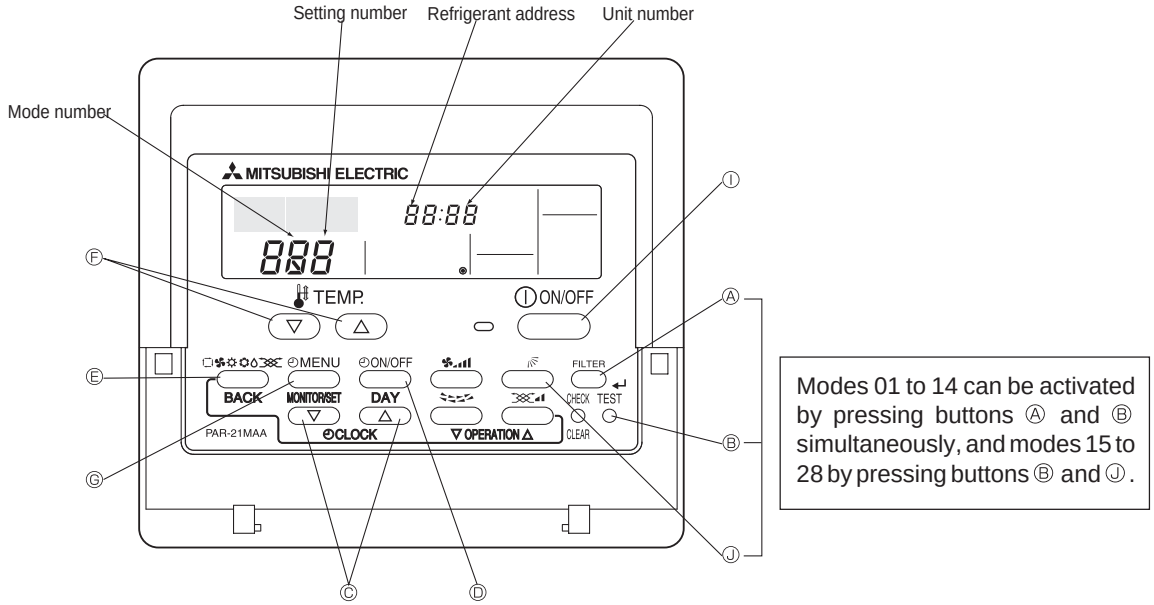
*2 SEZ-KD · VA(L) MODE No. 08,10

Function	Settings	Mode No.	Setting No.	Check	Remarks
External static pressure	15Pa	08	1		
	35Pa		2		
	50Pa		3		
	The same as setting of mode No. 08	10	1		
	5Pa (set made No. 08 to 1)		2		

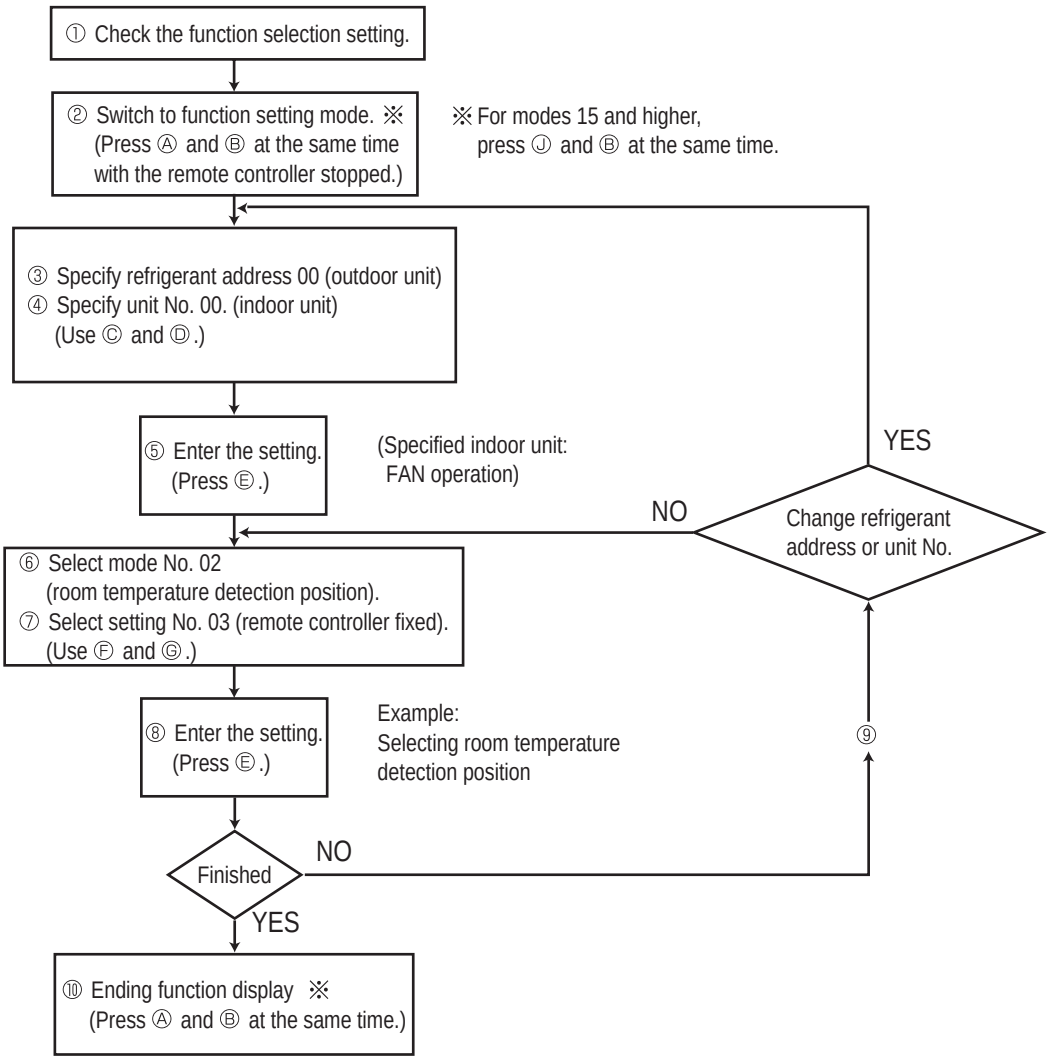
Note
If a function of an indoor unit is changed by function selection after installation is complete, make sure that a "✓" mark, etc., is given in the "Check" column of Table to indicate the change

[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.



Selecting functions using the wired remote controller

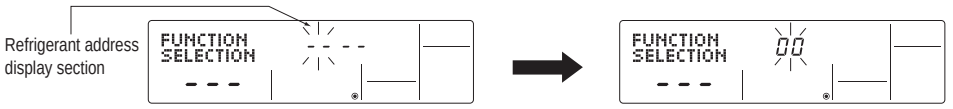


The above procedure must be carried out only if changes are necessary.

[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, and then change them as necessary. For initial settings, refer to the indoor unit's installation manual.

② Switch off the remote controller.
Ⓐ Hold down the FILTER (mode is 15 to 28) and Ⓑ TEST buttons simultaneously for at least 2 seconds. FUNCTION SELECTION will start to blink, and then the remote controller's display content will change as shown below.

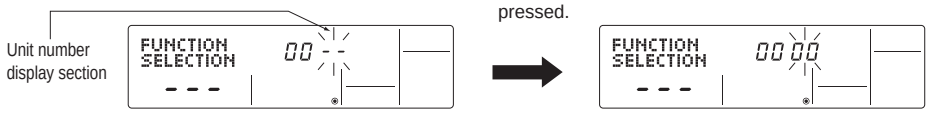


③ Set the outdoor unit's refrigerant address.
Ⓒ Press the [CLOCK] buttons (and) to select the desired refrigerant address. The refrigerant address changes from "00" to "15". (This operation is not possible for single refrigerant systems.)

* If the unit stops after FUNCTION SELECTION blinked for 2 seconds or "88" blinks in the room temperature display area for 2 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.

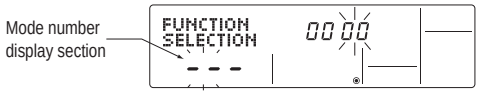
④ Set the indoor unit number.
Ⓓ Press the ON/OFF button so that "- -" blinks in the unit number display area.



Ⓒ 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 01 to 06 or 15 to 22 select unit number "00".
* To set modes 07 to 14 or 23 to 28 carry out as follows:
To set each indoor unit individually, select " 01" to "04".
To set all the indoor units collectively, select " AL".

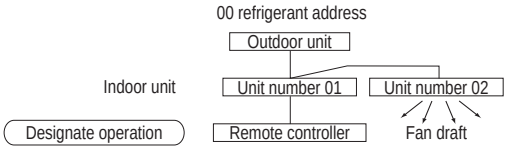
⑤ Confirm the refrigerant address and unit number.
Ⓔ Press the MODE button to confirm the refrigerant address and unit number.
After a while, "- - " will start to blink in the mode number display area.



* "88" will blink in the room temperature display area if the selected refrigerant address does not exist in the system.
Furthermore, if "F" appears and blinks in the unit number display area and the refrigerant address display area also blinks, there are no units that correspond 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.

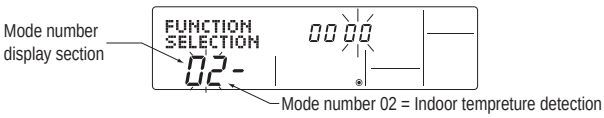
Ⓔ When the refrigerant address and unit number are confirmed by pressing the MODE button, the corresponding indoor unit will start fan operation. This helps you find the location of the indoor unit for which you want to perform function selection. However, if "00" or "AL" is selected as the unit number,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



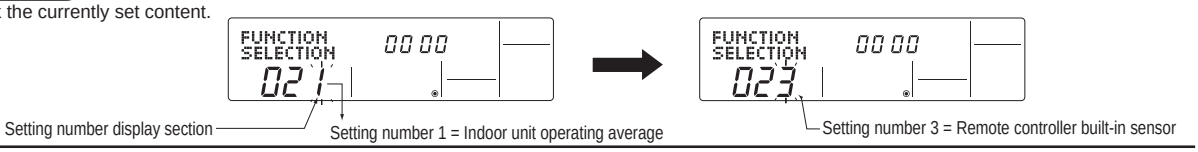
* When grouping different refrigerant systems, if an indoor unit other than the one to which the refrigerant address has been set performs fan operation, there may be another refrigerant address that is the same as the specified one. In this case, check the DIP switch of the outdoor unit to see whether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



⑦ Select the setting content for the selected mode.
Ⓖ Press the MENU button. The currently selected setting number will blink, so check the currently set content.

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



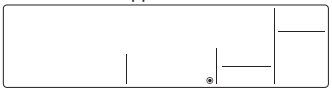
⑧ Register the settings you have made in steps ③ to ⑦.
Ⓔ Press the MODE button. The mode number and setting number will start to blink and registration starts.

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

* If " - - - " is displayed for both the mode number and setting number and "88 " blinks 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 (mode is 15 to 28) and TEST buttons simultaneously for at least 2 seconds.
After a while, the function selection screen will disappear and the air conditioner 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 to indicate the change.

Ⅶ. Test Run by the Remote Controller (for Mr. SLIM)
1. Check Points Under Test Run

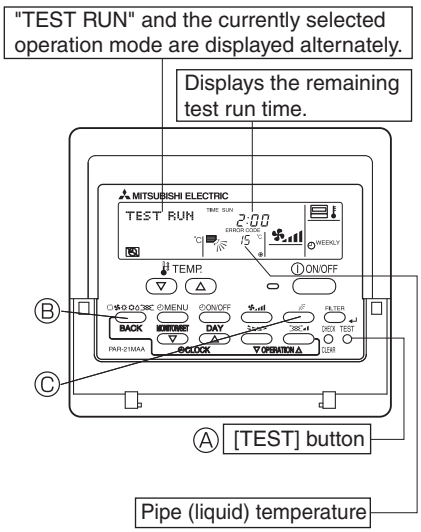
■ Before test run
- After installation of indoor and outdoor units, piping work and electric wiring work, re-check that there is no refrigerant leakage, loosened connections and incorrect polarity.
- Measure impedance between the ground and the power supply terminal block(L, N) on the outdoor unit by 500V Megger and check that it is 1.0MΩ or over.

※Don't use 500V Megger to indoor/outdoor connecting wire terminal block(S1, S2, S3) and remote controller terminal block (1, 2). This may cause malfunction.

- Make sure that test run switch (SW4) is set to OFF before turning on power supply.
- Turn on power supply 12 hours before test run in order to protect compressor.
- For specific models which requires higher ceiling settings or auto-recovery feature from power failure, make proper changes of settings referring to the description of Selection of Functions through Remote Controller.

Make sure to read operation manual before test run. (Especially items to secure safety.)

2.Test Run using the Wired Remote Controller



Operating procedures	
1. Turn on the main power supply.	While the room temperature display on the remote controller is "PLEASE WAIT", the remote controller is disabled. Wait until "PLEASE WAIT" disappears before using remote controller. "PLEASE WAIT" appears for about 2 minutes after power supply is turned on. ※1
2. Press Ⓐ TEST button twice.	The TEST RUN appears on the screen.
3. Press Ⓑ OPERATION SWITCH button.	Cooling mode: Check if cool air blows and water is drained. Heating mode: Check if warm air blows. (It takes a little while until warm air blows.)
4. Press Ⓒ AIR DIRECTION button.	Check for correct motion of auto-vanes.
5. Check the outdoor unit's fan is rotating.	The outdoor unit features automatic capacity control to provide optimum fan speeds. Therefore, the fan keeps running at a low speed to meet the current outside air condition unless it exceeds its available maximum power. Then, in actuality, the fan may stop or run in the reverse direction depending on the outside air, but this does not mean malfunction.
6. Press the ⏻ ON/OFF button to reset the test run in progress.	
7. Register the contact number. (Refer to V.4.3.3.)	

- In case of test run, the OFF timer will be activated, and the test run will automatically stop after 2 hours.
- The room temperature display section shows the pipe temperature of indoor units during the test run.
- Check that all the indoor units are running properly in case of simultaneous twin and triple operation. Malfunctions may not be displayed regardless of incorrect wiring.

※1 After turning on the power supply, the system will go into startup mode, "PLEASE WAIT" will blink on the display section of the room temperature, and lamp(green) of the remote controller will blink.
As to INDOOR BOARD LED, LED1 will be lit up, LED2 will either be lit up in case the address is 0 or turned off in case the address is not 0. LED3 will blink.
As to OUTDOOR BOARD LED, LED1(green) and LED2(red) will lit up. (After the startup mode of the system finishes, LED2(red) will be turned off.)
In case OUTDOOR BOARD LED is digital display, [–] and [–] will be displayed alternately every second.

- If one of the above operations doesn't function correctly, the causes written below should be considered. Find causes from the symptoms.
The below symptoms are under test run mode. "start up" in the table means the display status of ※1 written above.

Symptoms in test run mode		Cause
Remote Controller Display	**OUTDOOR BOARD LED Display** < > indicates digital display.	
Remote controller displays "PLEASE WAIT", and cannot be operated.	After "startup" is displayed, only green lights up. <00>	• After power is turned on, "PLEASE WAIT" is displayed for 2 minutes during system startup. (Normal)
After power is turned on, "PLEASE WAIT" is displayed for 3 minutes, then error code is displayed.	After "startup" is displayed, green(once) and red(once) blink alternately. <F1>	• Incorrect connection of outdoor terminal block (L_1, L_2, L_3 and S1, S2, S3.)
	After "startup" is displayed, green(once) and red(twice) blink alternately. <F3, F5, F9>	• Outdoor unit's protection device connector is open.
No display appears even when remote controller operation switch is turned on. (Operation lamp does not light up.)	After "startup" is displayed, green(twice) and red(once) blink alternately. <EA. Eb>	• Incorrect wiring between the indoor and outdoor unit (Polarity is wrong for S1, S2, S3.) • Remote controller transmission wire short.
	After "startup" is displayed, only green lights up. <00>	• There is no outdoor unit of address 0. (Address is other than 0.) • Remote controller transmission wire open.
Display appears but soon disappears even when remote controller is operated.	After "startup" is displayed, only green lights up. <00>	• After canceling function selection, operation is not possible for about 30 seconds. (Normal)

※ Press the remote controller's CHECK button twice to perform self-diagnosis. See the table below for the contents of LCD display. For details, please refer to " Ⅷ.2.Error code list "

LCD	Contents of inferior phenomena
P1~9	Malfunction outdoor unit
Fb	Malfunction indoor unit
U1~UP	Malfunction outdoor unit
F3~F9	Malfunction outdoor unit
E0~E5	Remote controller transmitting error
E6~EF	Indoor/outdoor unit communication error
----	No error history
FFFF	No applied unit

See the table below for details of the LED display (LED 1, 2, 3) on the indoor controller board.

LED1 (microcomputer power supply)	Lits when power is supplied.
LED2 (remote controller)	Lits when power is supplied for wired remote controller. The indoor unit should be connected to the outdoor unit with address "0" setting.
LED3 (indoor/outdoor communication)	Blink when indoor and outdoor unit are communicating.

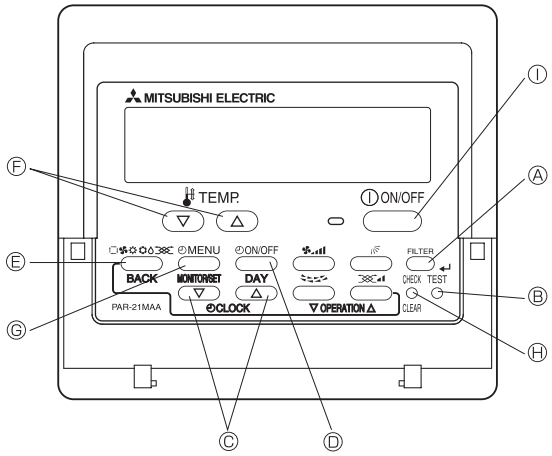
Ⅷ. Self-Diagnosis by the Remote Controller (for Mr.SLIM)

1. How To Proceed "Self-Diagnosis"

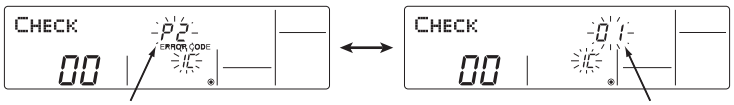
1-1. When a Problem Occurs During Operation

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.
③To 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)

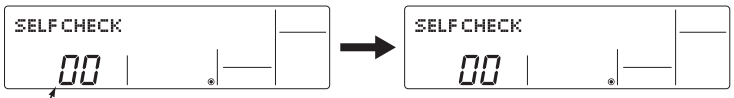
[When using remote operation of remote/local combined control, clear the error code by pressing the (① ON/OFF) button on remote controller after changing operation from remote to local.
During central control by a MELANS controller, clear the error code by pressing the (① ON/OFF) button on MELANS remote controller.]

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 3 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 blink approximately 3 seconds after being selected and the self-diagnosis process will begin.

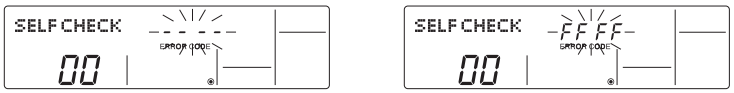
---

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>



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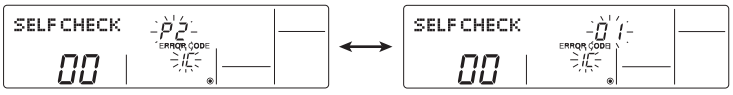
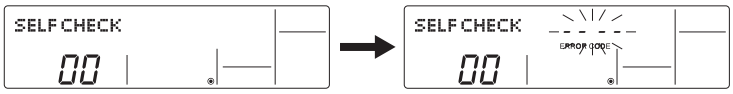
④ Reset the error history.
Display the error history in the diagnosis result display screen (see step ③).



Ⓓ Press the (ON/OFF) button twice within 3 seconds. The self-diagnosis address or refrigerant address will blink.

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.



⑤ Cancel self-diagnosis.
Self-diagnosis can be cancelled by the following 2 methods.

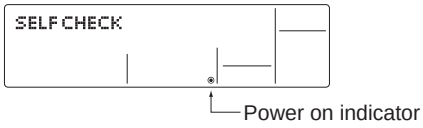
Ⓗ Press the (CHECK) button twice within 3 seconds. ➔ Self-diagnosis will be cancelled and the screen will return to the previous state in effect before the start of self-diagnosis.

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.

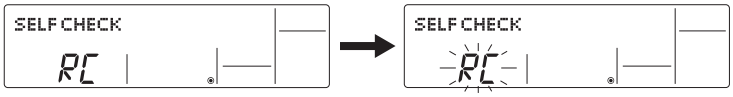
① First, check that the power-on indicator is lit.
If the correct voltage (DC12 V) is not supplied to the remote controller, the indicator will not light.
If this occurs, check the remote controller's wiring and the indoor unit.



② Switch to the remote controller self-diagnosis mode.

Ⓗ Press the (CHECK) button for 5 seconds or more. The display content will change as shown below.

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

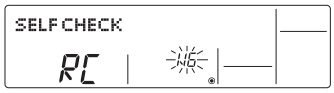


③ Remote controller self-diagnosis result

[When the remote controller is functioning correctly]

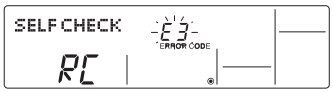
Check for other possible causes, as there is no problem with the remote controller.

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



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] blinks. → Transmission is not possible.



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.

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 5 seconds or more. Remote controller diagnosis will be cancelled, "PLEASE WAIT" and operation lamp will blink. After approximately 30 seconds, the state in effect before the diagnosis will be restored.

2.Error Code List (for Mr.SLIM)

<Display function of inspection for outdoor unit>

The blinking patterns of both LED1(green) and LED2(red) indicate the types of abnormality when it occurs. Types of abnormality can be indicated in details by connecting an optional part A-Control Service Tool (PAC-SK52ST) to connector CNM on outdoor controller board.

[Display]

(1)Normal condition

Unit condition	Outdoor controller board		A-Control Service Tool	
	LED1 (Green)	LED2 (Red)	Error code	Indication of the display
When the power is turned on	Lighted	Lighted	—⇔—	Alternately blinking display
When unit stops	Lighted	Not lighted	00, etc.	Operation mode
When compressor is warming up	Lighted	Not lighted	08, etc.	
When unit operates	Lighted	Lighted	C5, H7 etc.	

(2)Abnormal condition

Indication		Error		
Outdoor controller board		Contents	Error code ※1	Inspection method
LED1 (Green)	LED2 (Red)			
1 blinking	2 blinking	Connector(63L) is open.	F3	①Check if connector (63L or 63H) on the outdoor controller board is not disconnected. ②Check continuity of pressure switch (63L or 63H) by tester.
		Connector(63H) is open.	F5	
		2 connectors are open.	F9	
2 blinking	1 blinking	Miswiring of indoor/outdoor unit connecting wire, excessive number of indoor units (4 units or more)	(EA)	①Check if indoor/outdoor connecting wire is connected correctly. ②Check if 4 or more indoor units are connected to outdoor unit. ③Check if noise entered into indoor/outdoor connecting wire or power supply. ④Re-check error by turning off power, and on again.
		Miswiring of indoor/outdoor unit connecting wire (converse wiring or disconnection)	(Eb)	
		Startup time over	(EC)	
	2 blinking	Indoor/outdoor unit communication error (signal receiving error) is detected by indoor unit.	E6	①Check if indoor/outdoor connecting wire is connected correctly. ②Check if noise entered into indoor/outdoor connecting wire or power supply. ③Check if noise entered into indoor/outdoor controller board. ④Re-check error by turning off power, and on again.
		Indoor/outdoor unit communication error (transmitting error) is detected by indoor unit.	E7	
		Indoor/outdoor unit communication error (signal receiving error) is detected by outdoor unit.	(E8)	
		Indoor/outdoor unit communication error (transmitting error) is detected by outdoor unit.	(E9)	
	3 blinking	Remote controller signal receiving error is detected by remote controller.	E0	①Check if connecting wire of indoor unit or remote controller is connected correctly. ②Check if noise entered into transmission wire of remote controller. ③Re-check error by turning off power, and on again.
		Remote controller transmitting error is detected by remote controller.	E3	
		Remote controller signal receiving error is detected by indoor unit.	E4	
		Remote controller transmitting error is detected by indoor unit.	E5	
	4 blinking	Error code is not defined.	EF	①Check if remote controller is MA remote controller(PAR-21MAA). ②Check if noise entered into transmission wire of remote controller. ③Check if noise entered into indoor/outdoor connecting wire. ④Re-check error by turning off power, and on again.
	5 blinking	Serial communication error <Communication between outdoor controller board and outdoor power board> <Communication between outdoor controller board and M-NET P.C. board>	Ed	①Check if connector (CN4) on outdoor controller board and outdoor power board is not disconnected. ②Check if there is poor connection of connector on outdoor controller board(CNMNT and CNVMNT). ③Check M-NET communication signal.
		Communication error of M-NET system	A0~A8	

※1.Error code displayed on remote controller.Error codes given in ( ) are not displayed on remote controller.

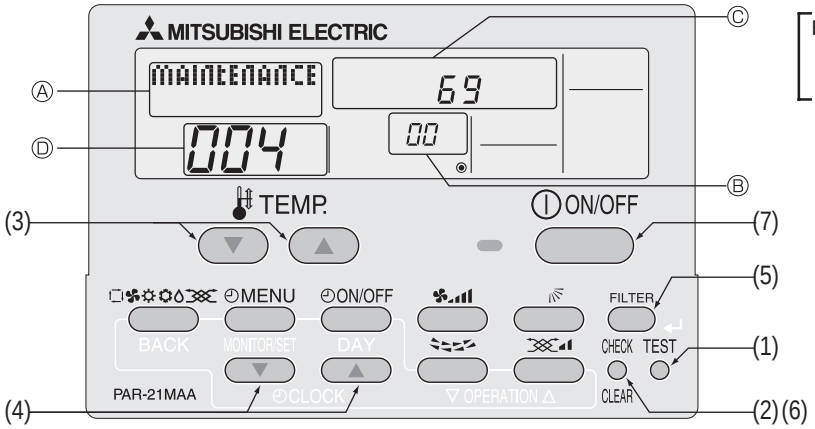
Indication		Error		
Outdoor controller board		Contents	Error code ※1	Inspection method
LED1 (Green)	LED2 (Red)			
3 blinking	1 blinking	Abnormality of shell thermistor (TH32) and discharging temperature (TH4)	U2	①Check if stop valves are open. ②Check if connectors (TH4, TH32, LEV-A and LEV-B) on outdoor controller board are not disconnected. ③Check if unit fills with specified amount of refrigerant. ④Measure resistance values among terminals on indoor valve and outdoor linear expansion valve with a tester.
		Abnormality of superheat due to low discharge temperature	U7	
	2 blinking	Abnormal high pressure (High pressure switch 63H worked.)	U1	①Check if indoor/outdoor units have a short cycle on their air ducts. ②Check if connector (63H) on outdoor controller board is not disconnected. ③Check if heat exchanger and filter is not dirty. ④Measure resistance values among terminals on linear expansion valve with a tester.
	3 blinking	Abnormality of outdoor fan motor rotational speed	U8	①Check the outdoor fan motor.
		Protection from overheat operation (TH3)	Ud	
	4 blinking	Compressor over current breaking (Start-up locked)	UF	①Check if stop valves are open. ②Check looseness, disconnection, and converse connection of compressor wiring. ③Measure resistance values among terminals on compressor with a tester. ④Check if outdoor unit has a short cycle on its air duct.
		Compressor over current breaking	UP	
		Abnormality of current sensor (P.B.)	UH	
		Abnormality of power module	U6	
	5 blinking	Open/short of discharge thermistor (TH4) and shell thermistor (TH32)	U3	①Check if connectors (TH3, TH4, TH7/6, TH32) on outdoor controller board and connector (CN3) on outdoor power board are not disconnected. ②Measure resistance value of outdoor thermistors
		Open/short of outdoor thermistors (TH3, TH6, TH7 and TH8)	U4	
	6 blinking	Abnormality of heatsink temperature	U5	①Check if indoor/outdoor units have a short cycle on their air ducts. ②Measure resistance value of outdoor thermistor(TH8).
	7 blinking	Abnormality of voltage	U9	①Check looseness, disconnection, and converse connection of compressor wiring. ②Measure resistance value among terminals on compressor using a tester. ③Check the continuity of contactor (52C). ④Check if power supply voltage decreases. ⑤Check the wiring of CN52C. ⑥Check the wiring of CNAF.
4 blinking	1 blinking	Abnormality of room temperature thermistor (TH1)	P1	①Check if connectors (CN20, CN21, CN29 and CN44) on indoor controller board are not disconnected. ②Measure resistance value of indoor thermistors.
		Abnormality of pipe temperature thermistor /Liquid (TH2)	P2	
		Abnormality of pipe temperature thermistor/Condenser-Evaporator	P9	
	2 blinking	Abnormality of drain sensor (DS) Float switch (FS) connector open	P4	①Check if connector (CN31,CN4F) on indoor controller board is not disconnected. ②Measure resistance value of indoor thermistors. ③Measure resistance value among terminals on drain-up machine using a tester. ④Check if drain-up machine works. ⑤Check drain function.
		Indoor drain overflow protection	P5	
	3 blinking	Freezing (cooling)/overheating (heating) protection	P6	①Check if indoor unit has a short cycle on its air duct. ②Check if heat exchanger and filter is not dirty. ③Measure resistance value on indoor and outdoor fan motors. ④Check if the inside of refrigerant piping is not clogged.
	4 blinking	Abnormality of pipe temperature	P8	①Check if indoor thermistors (TH2 and TH5) are not disconnected from holder. ②Check if stop valve is open. ③Check converse connection of extension pipe. (on plural units connection) ④Check if indoor/outdoor connecting wire is connected correctly. (on plural units connection)
	5 blinking	Abnormality of Indoor controller board	Fb	①Replace indoor controller board.
—	—	Abnormality of remote controller board	E1, E2	①Replace the remote controller.

※1. Error code displayed on remote controller. Error codes given in ( ) are not displayed on remote controller.

Ⅸ. Monitoring the Operation Data by the Remote Controller (for Mr. SLIM PUHZ series)

1.How to "Monitor the Operation Data"

● Turn on the [Monitoring the operation 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 3 seconds so that [Maintenance mode] appears on the screen (at Ⓐ).

(2) Press the CHECK button for 3 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 blinking), 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.

● Canceling the Monitoring the operation data

(6) While [Maintenance monitor] is displayed, press the CHECK button for 3 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.

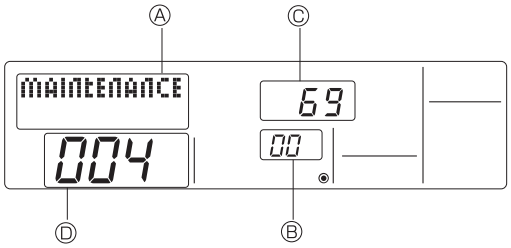
Request code	Request content	Description (Display range)	Unit	Remarks
0	Operation state	Refer to 2-1. Detail Contents in Request Code.	–	
1	Compressor-Operating current (rms)	0 – 50	A	
2	Compressor-Accumulated operating time	0 – 9999	10 hours	
3	Compressor-Number of operation times	0 – 9999	100 times	
4	Discharge temperature (TH4)	3 – 217	℃	
5	Outdoor unit - Liquid pipe 1 temperature (TH3)	-40 – 90	℃	
6	Outdoor unit - Liquid pipe 2 temperature	-40 – 90	℃	
7	Outdoor unit-2-phase pipe temperature (TH6)	-39 – 88	℃	
8	Outdoor unit-Suction pipe temperature (TH32)	-39 – 88	℃	PUHZ-HRP type
9	Outdoor unit-Outside air temperature (TH7)	-39 – 88	℃	
10	Outdoor unit-Heatsink temperature (TH8)	-40 – 200	℃	
11				
12	Discharge superheat (SHd)	0 – 255	℃	
13	Sub-cool (SC)	0 – 130	℃	
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	LEV (C) opening	0 – 500	Pulses	
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-Setting temperature	17 – 30	℃	
31	Indoor unit-Intake air temperature <Measured by thermostat>	8 – 39	℃	
32	Indoor unit-Intake air temperature (Unit No. 1) <Heat mode-4-deg correction>	8 – 39	℃	"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	℃	↑
34	Indoor unit-Intake air temperature (Unit No. 3) <Heat mode-4-deg correction>	8 – 39	℃	↑
35	Indoor unit-Intake air temperature (Unit No. 4) <Heat mode-4-deg correction>	8 – 39	℃	↑
36				
37	Indoor unit - Liquid pipe temperature (Unit No. 1)	-39 – 88	℃	"0" is displayed if the target unit is not present.
38	Indoor unit - Liquid pipe temperature (Unit No. 2)	-39 – 88	℃	↑
39	Indoor unit - Liquid pipe temperature (Unit No. 3)	-39 – 88	℃	↑
40	Indoor unit - Liquid pipe temperature (Unit No. 4)	-39 – 88	℃	↑
41				
42	Indoor unit-Cond./Eva. pipe temperature (Unit No. 1)	-39 – 88	℃	"0" is displayed if the target unit is not present.
43	Indoor unit-Cond./Eva. pipe temperature (Unit No. 2)	-39 – 88	℃	↑
44	Indoor unit-Cond./Eva. pipe temperature (Unit No. 3)	-39 – 88	℃	↑
45	Indoor unit-Cond./Eva. pipe temperature (Unit No. 4)	-39 – 88	℃	↑
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	Refer to 2-1.Detail Contents in Request Code.	–	
55	Error content (U9)	Refer to 2-1.Detail Contents in Request Code.	–	
56				
57				
58				
59				
60	Signal transmission demand capacity	0 – 255	%	
61	Contact demand capacity	Refer to2-1.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	℃	
112	Outdoor unit - Liquid pipe 1 temperature (TH3) at time of error	-40 – 90	℃	
113	Outdoor unit - Liquid pipe 2 temperature at time of error	-40 – 90	℃	
114	Outdoor unit-2-phase pipe temperature (TH6) at time of error	-39 – 88	℃	
115				
116	Outdoor unit-Outside air temperature (TH7) at time of error	-39 – 88	℃	
117	Outdoor unit-Heatsink temperature (TH8) at time of error	-40 – 200	℃	
118	Discharge superheat (SHd) at time of error	0 – 255	℃	
119	Sub-cool (SC) at time of error	0 – 130	℃	
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 - Liquid pipe temperature at time of error	-39 – 88	℃	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	℃	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	℃	
135				
136				
137				
138				
139				
140				
~				
146				
147				
148				
149				
150	Indoor-Actual intake air temperature	-39 – 88	℃	
151	Indoor - Liquid pipe temperature	-39 – 88	℃	
152	Indoor-2-phase pipe temperature	-39 – 88	℃	

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

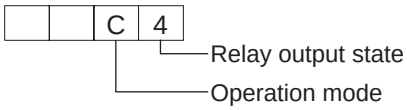


[Example) Request code "004"
Discharge temperature 69°C
Refrigerant address "00"]

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

[Operation state] (Request code "0")

Data display



Operation mode

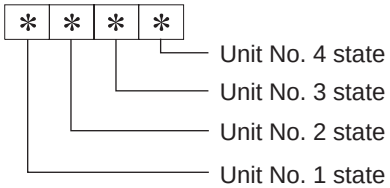
Display	Operation mode
0	STOP • FAN
C	COOL • DRY
H	HEAT
d	Defrost

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



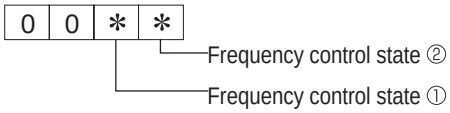
Display	State
0	Normal
1	Preparing for heat operation.
2	–
3	–
4	Heater is ON.
5	Anti-freeze protection is ON.
6	Overheat protection is ON.
7	Requesting compressor to turn OFF.
F	There are no corresponding units.

[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 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	L_1-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	100%	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	170/200
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	Heat pump/ cooling only
0	Single-phase	Heat pump
1		Cooling only
2	Three-phase	Heat pump
3		Cooling 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	00 10
1	0	0	0	1	0	00 11
0	1	0	0	1	0	00 12
1	1	0	0	1	0	00 13
0	0	1	0	1	0	00 14
1	0	1	0	1	0	00 15
0	1	1	0	1	0	00 16
1	1	1	0	1	0	00 17
0	0	0	1	1	0	00 18
1	0	0	1	1	0	00 19
0	1	0	1	1	0	00 1A
1	1	0	1	1	0	00 1B
0	0	1	1	1	0	00 1C
1	0	1	1	1	0	00 1D
0	1	1	1	1	0	00 1E
1	1	1	1	1	0	00 1F
0	0	0	0	0	1	00 20
1	0	0	0	0	1	00 21
0	1	0	0	0	1	00 22
1	1	0	0	0	1	00 23
0	0	1	0	0	1	00 24
1	0	1	0	0	1	00 25
0	1	1	0	0	1	00 26
1	1	1	0	0	1	00 27
0	0	0	1	0	1	00 28
1	0	0	1	0	1	00 29
0	1	0	1	0	1	00 2A
1	1	0	1	0	1	00 2B
0	0	1	1	0	1	00 2C
1	0	1	1	0	1	00 2D
0	1	1	1	0	1	00 2E
1	1	1	1	0	1	00 2F
0	0	0	0	1	1	00 30
1	0	0	0	1	1	00 31
0	1	0	0	1	1	00 32
1	1	0	0	1	1	00 33
0	0	1	0	1	1	00 34
1	0	1	0	1	1	00 35
0	1	1	0	1	1	00 36
1	1	1	0	1	1	00 37
0	0	0	1	1	1	00 38
1	0	0	1	1	1	00 39
0	1	0	1	1	1	00 3A
1	1	0	1	1	1	00 3B
0	0	1	1	1	1	00 3C
1	0	1	1	1	1	00 3D
0	1	1	1	1	1	00 3E
1	1	1	1	1	1	00 3F

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

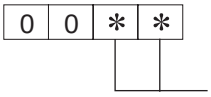
SW8			Data display
1	2	3	
0	0	0	00 00
1	0	0	00 01
0	1	0	00 02
1	1	0	00 03
0	0	1	00 04
1	0	1	00 05
0	1	1	00 06
1	1	1	00 07

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)

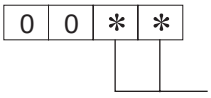
Data display



Display	Model setting state	Display	Model setting state
00	PSA-RP•GA, PSH-PGAH	20	
01		21	PKA-RP•FAL(2), PKH-P•FALH
02	PEAD-RP•EA(2)/GA, PEHD-P•EAH	22	PCA-RP•GA(2), PCH-P•GAH, PLA-RP•BA(2)
03	SEZ-KA•VA	23	
04		24	
05	SLZ-KA•VA(L)	25	
06	PCA-RP•HA	26	
07		27	
08		28	
09	PEA-RP400/500GA	29	
0A		2A	
0b	PEA-RP200/250GA	2b	PKA-RP•GAL, PKH-P•GALH
0C		2C	
0d		2d	
0E		2E	
0F		2F	PLA-RP• AA
10		30	
11	PEA-RP•EA	31	PLH-P•AAH
12	MEXZ-GA•VA(L)	32	
13		33	
14		34	
15		35	
16		36	PLA-RP•AA2
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)

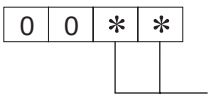
Data display



Display	Capacity setting state	Display	Capacity setting state
00	12	10	112
01	16	11	125
02	22	12	140
03	25	13	
04	28	14	
05	32	15	
06	35, 36	16	
07	40	17	
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)

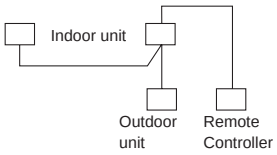
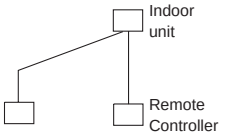
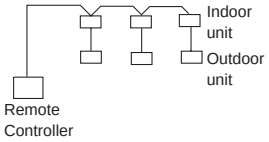
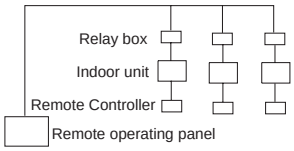
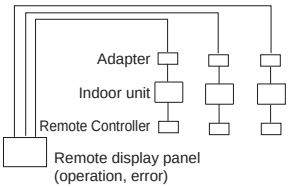
Data display

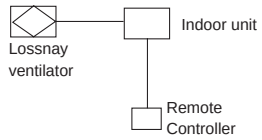
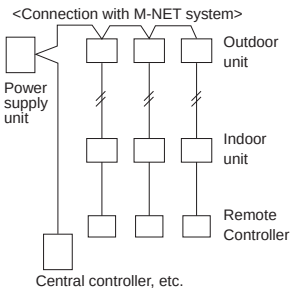
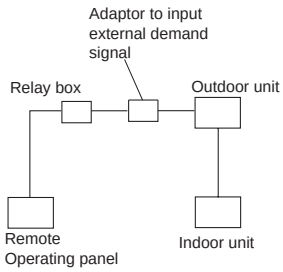
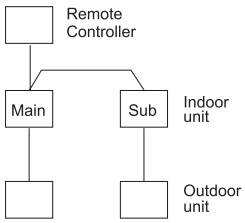


Display	Pair No. setting state
00	No. 0
01	No. 1 J41 disconnected
02	No. 2 J42 disconnected
03	No. 3 J41, J42 disconnected

X. System Control (for Mr. SLIM)

■ VARIETY OF SYSTEM FUNCTION

System Name	System Diagram	Features	Parts Required in Addition to Standard System Components (Indoor/Outdoor Units, Remote Controller)
A.Remote controller operation (Standard)		There are 2 types of remote controllers: wired type and wireless type. Simultaneous twin, triple and quad units are counted as 1 unit, and the indoor units are started or stopped simultaneously.	———
B.Remote controller operation Use of 2 controllers enables operation of the air conditioner both from a distance and nearby.	 * One of the wired remote controllers must be set as a sub remote controller.	Up to 2 remote controllers can be connected to one group. Simultaneous twin, triple and quad units are counted as 1 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 PKA type, use remote controller (PAR-21MAAT-E) * For models equipped with a terminal block.
C.Group control operation Use of 1 remote controller to control multiple air conditioners with the same settings simultaneously. * Outdoor unit`s refrigerant address needs to be set.		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 outdoor unit. Simultaneous twin , triple and quad units are counted as 1 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 2 remote controllers can be connected.	For PKA type, use remote controller (PAR-21MAAT-E) * For models equipped with a terminal block.
D.Remote/local combined control operation Allows start/stop of the air conditioner from a distance, and prohibits/permits start/stop from remote controllers.		All the air conditioners can be turned ON/OFF collectively from a distance. Operation can be switched between the remote operating panel and local controller. Operations (e.g., temperature adjustment, airflow, airflow direction) except for start/stop operations can be performed even if operations from the local remote controller are prohibited. In the case of simultaneous twin, triple, quad units, connect the controller to one indoor unit only. If connected to 2 or more indoor units, an error may occur.(operation stop) Control by an external timer is possible by connecting it.	Remote ON/OFF adapter (PAC-SE55RA-E) Relay box (Part to be provided at your site) Remote operating panel (Part to be provided at your site)
E.Operation by external signal	———	Use of optional "remote ON/OFF adapter" enables remote control via relay. (Level signal)	Remote ON/OFF adapter (PAC-SE55RA-E)
F.Control by external signal and remote display Enables you to display the operation state and control start/stop from a distance.		Extraction of non-voltage contact output Use of optional "remote operation adapter" and "remote display panel" (Part to be provided at your site) provides non-voltage contact outputs of signals (operation, error) and operation/stop input function.	Remote operation adapter (PAC-SF40RM-E) Remote display panel (Part to be provided at your site)
		Extraction of DC12 V contact output Use of optional "Multiple remote controller adapter" and "remote display panel" (Part to be provided at your site)provides DC12 V contact outputs of signals (operation, error) and operation/stop input function.	Multiple remote controller adapter (PAC-SA88HA) Remote display panel (Part to be provided at your site)

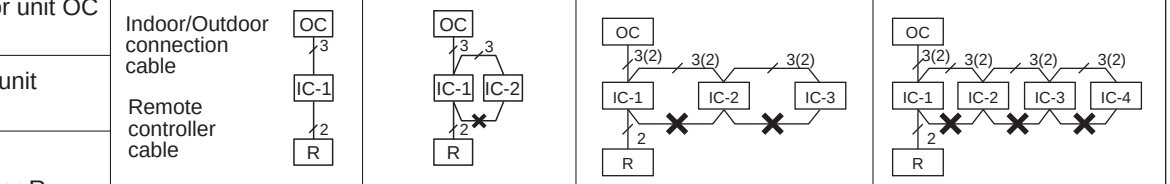
System Name	System Diagram	Features	Parts Required in Addition to Standard System Components (Indoor/Outdoor Units, Remote Controller)
G. Timer operation [Enables control of start and stop.] * For control by external timer, refer to Remote/ local combined control operation".	——	• Weekly timer: In addition to ON/OFF, up to 8 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)
H.Interlock operation with peripheral equipment [Enables control of Mitsubishi Lossnay ventilator by 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.)	
I.Central control		• Connecting the M-NET connection adapter to outdoor 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 1 unit.) • Number of controlled outdoor units Central controller: 50 units Group remote controller (PAC-SC30GR): 16 units	M-NET adapter (Option PARTS) Central controller (G-50A) Group remote controller (PAC-SC30GR), etc.
J.Demand control		• Demand control is available by external input. In this mode, power consumption is decreased within the range of usual 0-100%.	Adapter to input external demand signals. (PAC-SC36NA) Relay box (Part to be provided at your site) Remote operating panel (Part to be provided at your site)
K.Rotation		• Rotation Main and sub unit operate alternately according to the interval of roration setting. • Back-up When abnormality occurs while operation, it changes into operating the backup unit, and operation is continued. • 2nd stage cut-in · Number of operating units is determined according to the room temperature and set point. · When room temperature becomes higher than set point, standby unit starts.(2 units operation) · When room temperature falls below set point -4°C, standby unit stops.(1 unit operation)	• This function is available when only 2 indoor units are connected to each PUHZ type outdoor unit. Application model Indoor unit PLA-RP • BA2/BA#2.UK PCA-RP • GA(2)#1/HA#1 PKA-RP • GAL#1/FAL(2)#1 PSA-RP • GA#1 PEAD-RP • EA(2)#1/GA#1

1. 1 Remote Controller (Standerd) Operation

1-1 1 Wired Remote Controller

(OC: Outdoor unit IC: Indoor unit R: Remote controller (for wireless type: optical receiver adapter)

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



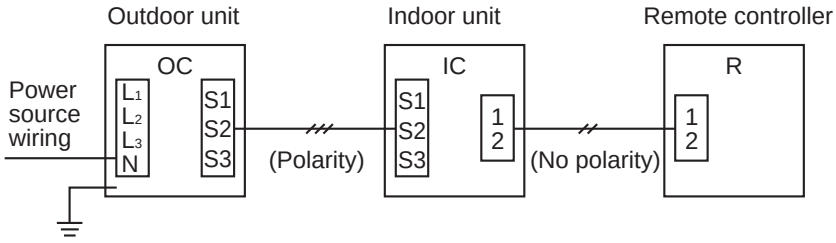
* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

(Reference)

① If simultaneous twin or triple or quad, connect the remote controller to any one of the indoor units. All functions of the indoor unit can be controlled even if different models (different types) are mixed.

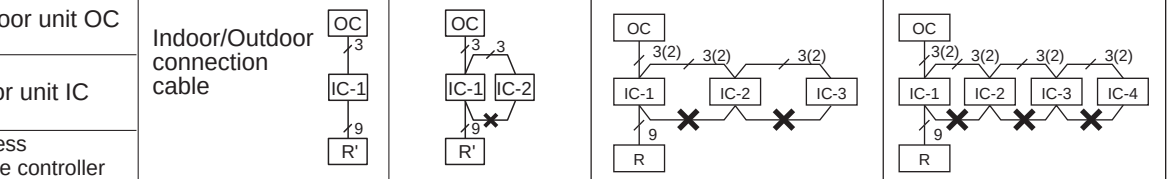
② Do not use crossover wiring among indoor units with simultaneous twin, triple, quad units. (Prohibited item.)

③ Electrical wiring diagram



1-2 Wireless remote controller

Slim Air Conditioners System		Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
System diagram (Wireless remote controller receiver)	Outdoor unit OC Indoor unit IC Wireless remote controller receiver section R'	Indoor/Outdoor connection cable			



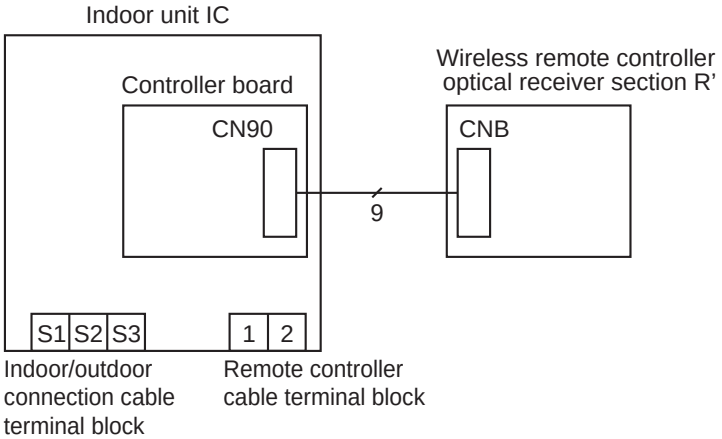
* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

(Reference)

① If simultaneous twin or triple or quad, connect the remote controller to any one of the indoor units. All functions of the indoor unit can be controlled even if different models (different types) are mixed.

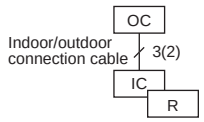
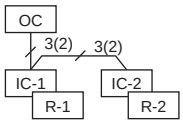
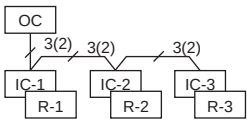
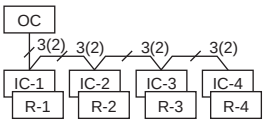
② Do not use crossover wiring among indoor units with simultaneous twin, triple, quad units. (Prohibited item.)

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
System diagram (Wired remote controller or wireless remotecontroller 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]

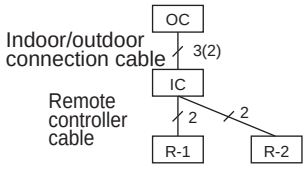
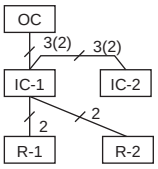
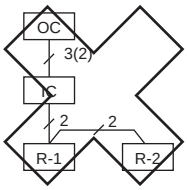
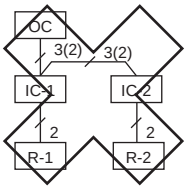
① For systems containing built-in wired remote controllers (or built-in wireless receiver adapters) and consisting of simultaneous twin, triple and quad units only, the installed remote controllers (or receiver adapters) must be connected without changing any settings. If the system consists of different 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 1-1 or 1-2.

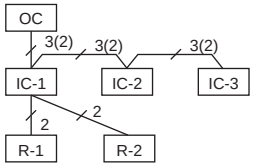
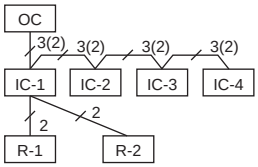
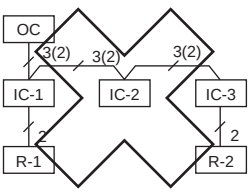
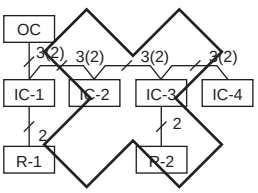
② Use the wired remote controllers without setting them as the main and sub controllers.

2. 2-remote Controller Operation

2-1 2 Wired Remote Controllers

(R: Wired remote controller)

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin
System diagram (Wired remote controller)	Outdoor unit OC Indoor unit IC Wired remote controller R		
	Outdoor unit OC Indoor unit IC Wired remote controller R		

Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad
System diagram (Wired remote controller)	Outdoor unit OC Indoor unit IC Wired remote controller R		
	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]

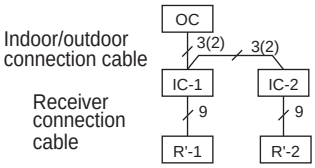
① If simultaneous twin or triple or quad, connect the remote controller to any one of the indoor units. All functions of the indoor unit can be controlled even if different models (different types) are mixed.

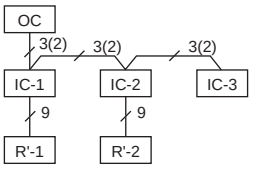
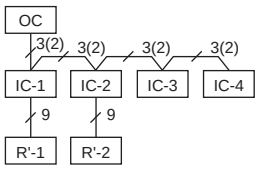
② Do not use crossover wiring among indoor units with simultaneous twin, triple, quad units. (Prohibited item.)

③ Set one of the remote controllers as the main controller (initial setting) and the other as the sub controller using the remote controller's function selection.

2-2 2 Wireless Remote Controllers

(R': Wireless remote controller receiver)

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin
System diagram (Wireless remote controller receiver)	Outdoor unit OC Indoor unit IC Wireless remote controller receiver section R'	—	

Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad
System diagram (Wireless remote controller receiver)	Outdoor unit OC Indoor unit IC Wireless remote controller receiver section R'		

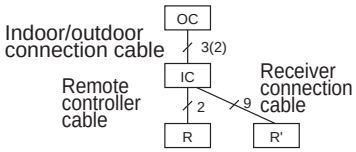
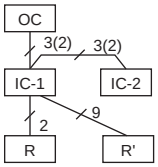
* Numbers given in ( ) apply when power is supplied to the indoor and outdoor units separately.

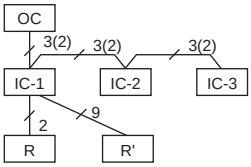
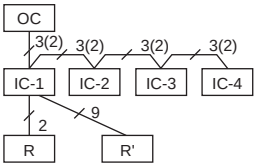
[Reference]

① If simultaneous twin or triple or quad, connect 2 wireless remote controller receivers (one each) to any 2 of the indoor units. All the functions of the indoor unit can be controlled even if different models (different types) are mixed.
② Do not use crossover wiring among indoor units with simultaneous twin, triple, quad units. (Prohibited item.)
③ In the case of "standard 1:1" connection, it is not possible to connect 2 remote controller receivers to the indoor units. However, with systems consisting of simultaneous twin or triple or quad units, it is possible to connect a remote controller receiver to 2 indoor units. In this case, all the pair numbers will be "0" (intial setting, no change necessary), and all the units will be turned ON/OFF simultaneously.
④ When using 2 or more wireless remote controllers, the display contents on the remote controllers may differ from the actual settings, since the operation mode last by any of the remote controllers will be effective.

2-3 1 Wired and 1 Wireless Remote Controller

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

Slim Air Conditioner System		Standard 1:1	Simultaneous Twin
System diagram (Wired remote controller and wireless remote controller receiver)	Outdoor unit OC Indoor unit IC Wired remote controller Receiver R·R'		

Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad
System diagram (Wired remote controller and wireless remote controller receiver)	Outdoor unit OC Indoor unit IC Wired remote controller Receiver R·R'		

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

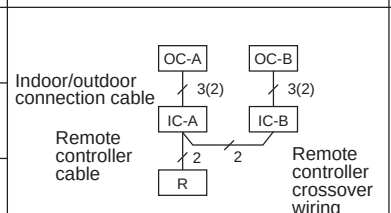
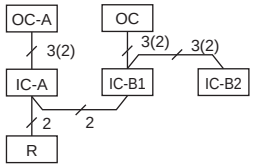
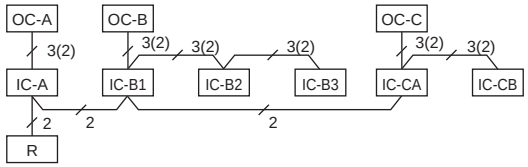
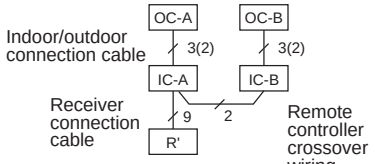
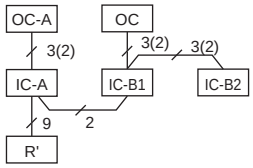
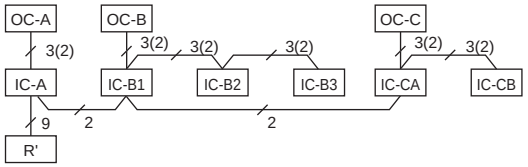
[Reference]

① If simultaneous twin or triple or quad, connect both the wired remote controller and wireless remote controller receiver to any one of the indoor units. All the functions of the indoor unit can be controlled even if different models (different types) are mixed.
② Do not use crossover wiring among indoor units with simultaneous twin, triple, quad units. (Prohibited item.)
③ When using 2 or more remote controllers, the display contents on the remote controllers may differ from the actual settings, since the operation mode 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 1 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 1 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 1 refrigerant system is used.

Slim Air Conditioner System	Standard 1:1 2	Standard 1:1 + Simultaneous Twin	Standard 1:1 + Simultaneous Triple + Simultaneous Twin
System diagram (Wired remote controller or wireless remote controller receiver) Outdoor unit OC / Indoor unit IC / Wired remote controller R			
System diagram (Wired remote controller or wireless remote controller receiver) Outdoor unit OC / Indoor unit IC / Wireless remote controller receiver section R'			

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

[Reference]

① For 2-remote controller control, refer to "2. 2-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	PLA-RP.BA(2)	SLZ-KA.VA(L)	PCA-RP.GA(2) PCH-RP.GAH	PKA-RP.GAL PKH-RP.GALH	PKA-RP.FAL(2) PKH-RP. FALH	PSA-RP.GA PSH-RP.GAH	PCA-RP.HA	PEAD-RP.EA(2) /GA PEHD-RP.EAH	PEA-RP.EA(2)	SEZ-KA/KC.VA	SEZ-KD.VA
Function	Fan	Number of fan speeds	4	4+Auto	3	4	4	2	2	2	2	2	2	3
	Up/down vane	Presence/absence	○	○	○	○	○	○	×	×	×	×	×	×
		Swing function	○	○	○	○	○	○	×	×	×	×	×	×
	Left/right swing louver	Presence/absence	×	×	×	×	×	×	○	×	×	×	×	×
Function order			1	1	2	1	1	3	4	6	6	6	6	5

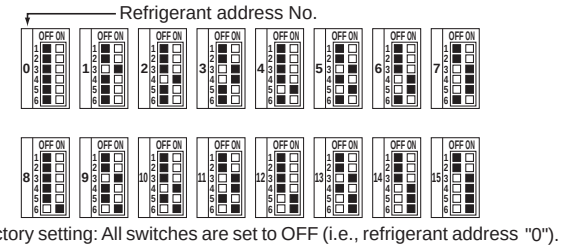
③ In the case of multi type systems consisting of simultaneous twin, triple and quad units, the indoor units should not be connected by crossover wiring. (Prohibited)

■ 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 (initial 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	↑		

<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.)

■ Group operation by multiple remote controllers

- Up to 2 remote controllers can be connected to each group. For details, refer to "2.2-REMOTE CONTROLLER OPERATION".

4. Rotation Function (and back-up function, 2nd stage cut-in function)

4-1. Operation

(1) Rotation function (and Back-up function)

• Outline of functions

· Main and sub units operate alternately according to the interval of rotation setting.

※ Main and sub unit should be set by refrigerant address. (Outdoor Dip switch setting)
Refrigerant address "00" ⟶ Main unit
Refrigerant address "01" ⟶ Sub unit

· When error occurrs to one unit, another unit will start operation. (Back-up function)

• System constraint

· This function is available only by the grouping control system(INDOOR UNIT : OUTDOOR UNIT=1:1) of 2 refrigerant groups. (Refer to Fig. 1)

· Main indoor unit should be connected for wired remote controller and the transmission line(TB5) for main and sub unit should also be connected. (Refer to Fig. 1)
(This function cannot be set by wireless remote controller.)

· Set refrigerant address of each unit. (Dip switch on the outdoor unit ··· Refrigerant address 00/01)

Operation pattern

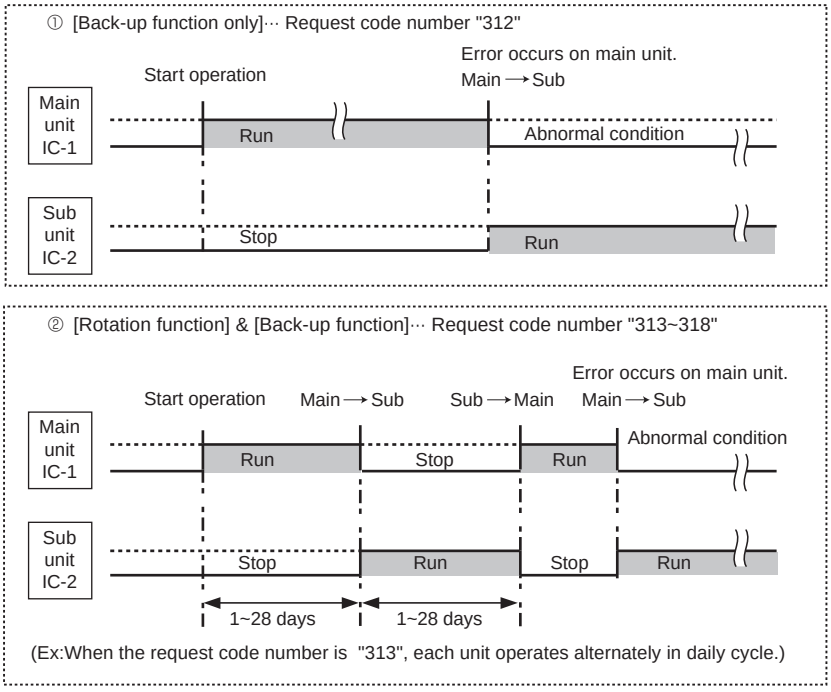
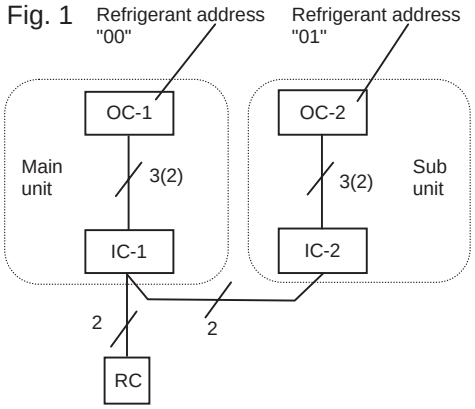


Fig. 1



OC : Outdoor unit
IC : Indoor unit
RC : Wired remote controller

Note:

· When the uint is restarted to operate after turning off the power or OFF operation, the unit which was operating will start operation.

· To operate the main unit, refer to the 4-2. and set the requet code No. which is not the same as the current one, and set again the former request code No.

(2) 2nd stage cut-in function

• Outline of functions

· When the 1st unit can NOT supply with sufficient capacity for exceptionally high-demand conditions and the actual room temperature reaches set point *, the 2nd unit starts operation in conjunction with the 1st unit.

· Once the actual room temperature goes down to 4degrees C below set point *, the 2nd unit stops operation automatically.
(* set point = set temperature by R/C (remote controller) + 4, 6, 8℃ (selectable))

· Number of operating units is determined according to the room temperature and set point.

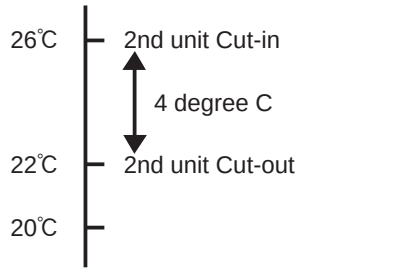
· When room temperature becomes higher than set point, standby unit starts.(2 units operation)

· When room temperature falls below set point -4℃, standby unit stops.(1 unit operation)

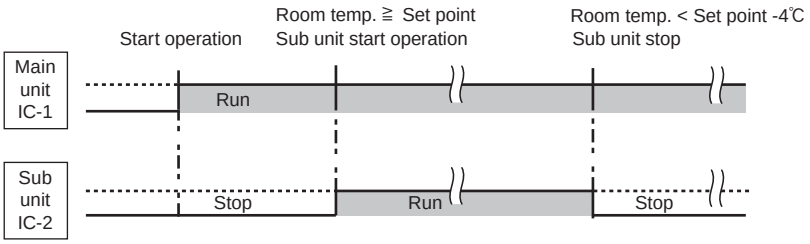
• System constraint

· This function is available only in cooling mode.

Ex.) Set temp. by R/C = 20℃
Set point = 26℃
When request code number is “323”.



[2nd stage cut-in function]··· Request code number "322~324"



4-2. How to set rotation function(Back-up function, 2nd stage cut-in function)

You can set these functions by wired remote controller.(Maintenance monitor)

NOTICE

Both main and sub unit should be set in same setting.
Every time replacing indoor controller board for servicing, the function should be set again.

(1) Request Code List

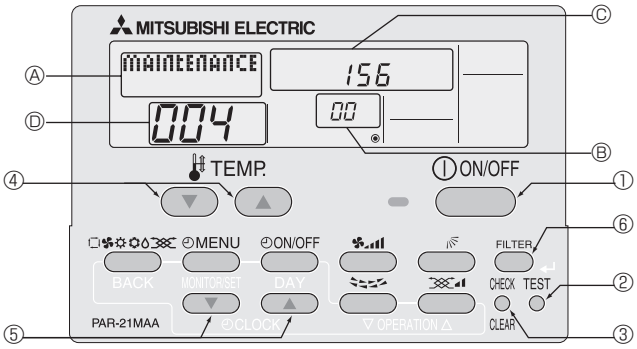
Rotation setting

Setting No. (Request code)	Setting contents	Initial setting
No.1 (310)	Monitoring the request code of current setting.	
No.2 (311)	Rotation and Back-up OFF (Normal group control operation)	◎
No.3 (312)	Back-up function only	
No.4 (313)	Rotation ON (Alternating interval = 1day) and back up function	
No.5 (314)	Rotation ON (Alternating interval = 3day) and back up function	
No.6 (315)	Rotation ON (Alternating interval = 5day) and back up function	
No.7 (316)	Rotation ON (Alternating interval = 7day) and back up function	
No.8 (317)	Rotation ON (Alternating interval = 14day) and back up function	
No.9 (318)	Rotation ON (Alternating interval = 28day) and back up function	

2nd stage cut-in setting

Setting No. (Request code)	Setting contents	Initial setting
No.1 (320)	Monitoring the request code of current setting.	
No.2 (321)	Cut-in function OFF	◎
No.3 (322)	Cut-in Function ON(Set point = Set temp.+ 4°C(7.2°F))	
No.4 (323)	Cut-in Function ON(Set point = Set temp.+ 6°C(10.8°F))	
No.5 (324)	Cut-in Function ON(Set point = Set temp.+ 8°C(14.4°F))	

(2) Setting method of each function by wired remote controller



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

1. Stop operation(①).

2. Press the TEST button (②) for 3 seconds so that [Maintenance mode] appears on the screen (Ⓐ).
   After a while, [00] appears in the refrigerant address number display area.(at Ⓑ)

3. Press the CHECK button (③) for 3 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 blinking) since no buttons are operative.

   [----] appears on the screen (Ⓓ) when [Maintenance monitor] is activated.
   (The display (Ⓓ) now allows you to set a request code No.)

4. Press the [TEMP (▽ and △)] buttons (④) to select the desired refrigerant address.

   [ScreenB] 00 ⟷ 01 ⟷ ····· ⟷ 15

5. Press the [CLOCK (▽ and △)] buttons (⑤) to set the desired request code No.("311~318", "321~324")

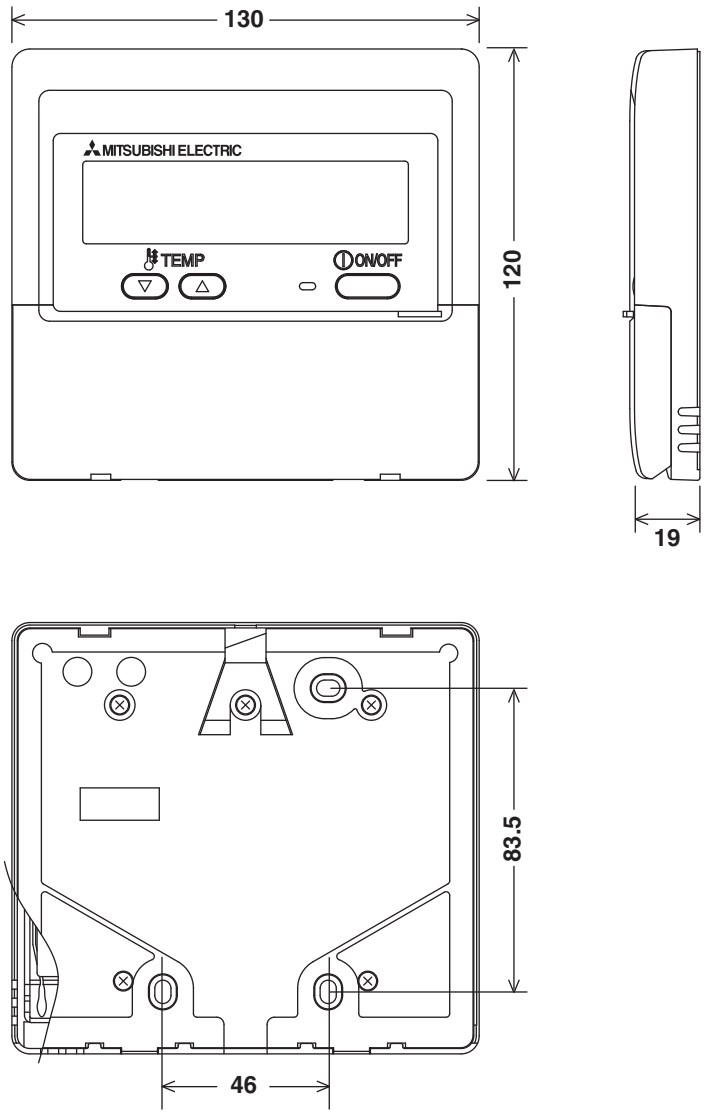
6. Press the FILTER button (⑥) to perform function setting.
   If above setting operations are done correctly, "Request code number" will appear in data display area.(Ⓒ)
   [Example: When the "311" of "Request code number" is set, [311] appears on the screen.(Ⓒ)]

[Refererence]
You can check current "request code number" setting by setting the "request code number"("310" or "320") and pressing the FILTER button.(⑥)
[Example: When the current setting is "Setting No.2(Request code 311)", [311] appears on the screen.(Ⓒ)]

7. To return to normal mode, press the ON/OFF button (①).

Ⅺ. External Dimensions

unit : mm



External colors : Cover Pure white (Munsell 6.9Y 8.9/0.4)

LCD peripheral area Medium gray

MEMO

MEMO

MEMO

MEMO

MEMO

CITY MULTI and Mr.SLIM Air Conditioners

MA Remote Controller
PAR-21MAA

MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

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