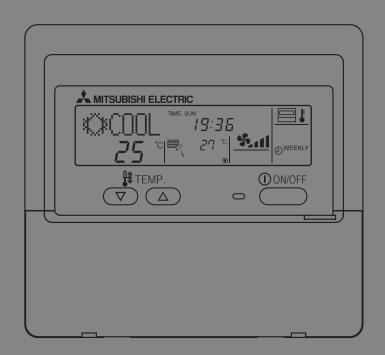


CITY MULTI and Mr.SLIM Air Conditioners

MA Remote Controller PAR-21MAA

TECHNICAL MANUAL





CONTENTS

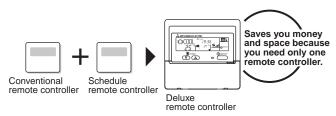
Ι.	Advantage of New MA Remote Controller	
	1. Weekly Timer	2
	2. Easy Maintenance Function (Only for PUHZ type)	2
	New Display	
	3.2 Multi-language Display	
	4. The Other Functions	3
	4.1 Temperature Range Limit Setting	
	4.2 Auto Off Timer	
Π.	New Functions	
	Appearance	
Ⅲ.	1. Display Section	
	Display Section Display Section	
IV.	Easy Maintenance Function (Only for Mr. SLIM PUHZ series)	
14.	Maintenance Mode Operating Method	
	Wainterfance Mode Operating Method Guide for Operation Condition	
	Check Points	
v.	How to Select Functions of remote controller	9
	1. Function Items	9
	2. Flowchart of Function Setting	
	Screen Structure for Function Setting	
	4. Function Setting Mode	
	4.1 Change Language	
	4.2.1 Operation Lock (Operation Function Limit Setting)	14
	4.2.2 Auto Mode Setting	16
	4.3 Basic Functions Setting	
	4.3.1 Remote Controller Main/Sub Setting	20
	4.3.2 Timer function setting (Weekly timer/Auto off timer/Simple timer) 4.3.3 Contact Number Setting for Error Situation	21
	4.4 Display Change Setting	35
	4.4.1 Temperature Display °C/°F Setting	
	4.4.2 Room Temperature Display Setting	
VI.	Unit Function Setting by the Remote Controller (for Mr. SLIM)	
VII.	Test Run by the Remote Controller (for Mr. SLIM)	
·	Check Points Under Test Run	
	Test Run using the Wired Remote Controller	
VII.	Self-Diagnosis by the Remote Controller (for Mr. SLIM)	
	1. How to Proceed "Self-diagnosis"	
	1.1 When a Problem Occurs During Operation	
	Self-Diagnosis During Maintenance or Service Remote Controller Diagnosis	
	Remote Controller Diagnosis	
IX.	Monitoring the Operation Data by the remote Controller (for Mr. SLIM)	
ш.	How to "Monitor the Operation Data"	
	Request Code List	
	2.1 Detail Contents in Request Code	
Х.	System Control (for Mr. SLIM)	58
	1. 1-Remote Controller (Standard) Operation	60
	1.1 1 Wired Remote Controller Wireless Remote Controller	
	2. 2-Remote Controller Operation	
	2.1 2 Wired Remote Controllers	
	2.2 2 Wireless Remote Controllers	
	1 Wired and 1 Wireless Remote Controller Group Control Operation (Collective Operation and Control of Multiple Refrigerant)	61
	Systems (2 to 16))	62
	4. Rotation function (and back-up function, 2nd stage cut-in function)	
	4.1 Operation	63
	4.2 How to set rotation function(back-up function, 2nd stage cut-in function)	
XI.	External Dimensions	66

- I . Advantage of New MA Remote Controller
- ${\rm I\hspace{-.1em}I}$. New Functions
- ■. Appearance
- IV . Easy Maintenance Function (For Mr. SLIM PUHZ series)
- V. How to Select Functions of remote controller
- VI. Unit Function Setting by the Remote Controller (for Mr. SLIM)
- VII. Test Run by the Remote Controller (for Mr. SLIM)
- VIII. Self-Diagnosis by the Remote Controller (for Mr. SLIM)
- IX . Monitoring the Operation Data by the remote Controller (for Mr. SLIM)
- X. System Control (for Mr.SLIM)
- XI. External Dimensions

I . Advantage of New MA Remote Controller

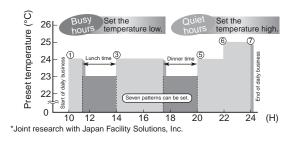
1. Weekly Timer

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



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.

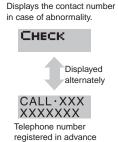
<Display information> Outputs data for nine items.

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

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

This helps smooth contact with appropriate personnel 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.



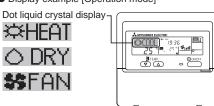
3. New Display

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

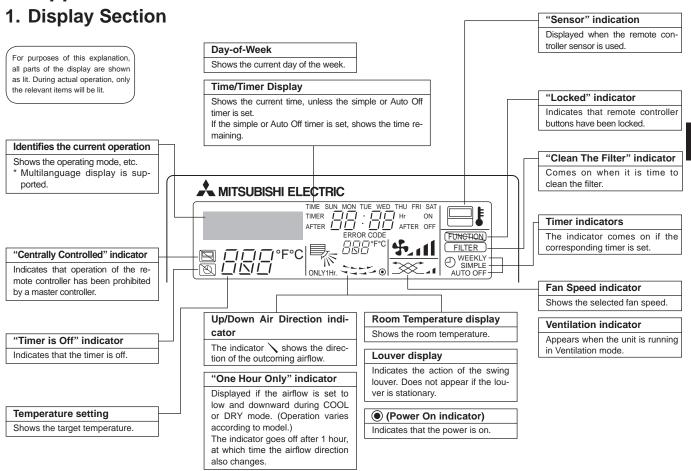
Prevents others from changing settings without permission.

This lets you disable all the buttons or all the buttons except for the [ON/OFF] button, preventing mischief and incorrect operations.

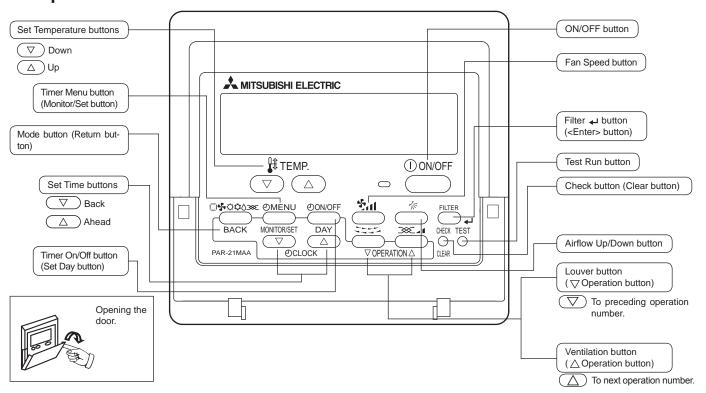
I. New Functions

			le when nect	
Function	Description	PUHZ series	PU(H) SUZ MXZ series	Go to page
Easy maintenance function	Displays information necessary for maintenance. Below information for easy maintenance of air-conditioner can be displayed. • Compressor • Accumulated operating time • Number of ON/OFF times • Operating current (A) • Outdoor unit • Heat exchanger temperature (°C) • Discharge temperature (°C) • Outside air temperature (°C) • Indoor unit • Intake air temperature (°C) • Heat exchanger temperature (°C) • Titler operating time (hours) The operation state of inverter models can be monitored using the maintenance stable-operation control (fixed frequency).	0	×	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.	0	0	44
Contact number display	Displays the contact telephone number to be called when an error occurs.	0	0	33
Multi language display	In addition to English, contents can be displayed in 7 other languages. • English, German, Spanish, Russian, Italian, Chinese, French, Japanese	0	0	12
Temperature display (°C/°F) setting	Enables you to set the unit (°C/°F) in which temperatures are to be displayed.		0	35
Room temperature display setting	Enables you to set whether to show or hide the indoor (room) temperature.	0	0	36
Auto heat/cool display setting	Enables you to set whether to display or hide "COOL"/"HEAT" in auto mode.	0	0	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.	0	0	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.	0	0	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.	0	0	18
Clock function setting	Enables you to set whether to use the clock function.	0	0	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.	0	0	26
Simple timer	Enables you to set on/off settings in 1-hour increments within 72 hours.	0	0	29
Remote controller main/sub setting	Enables you to set the remote controller as the main or sub.	0	0	20

■. Appearance



2. Operation Section



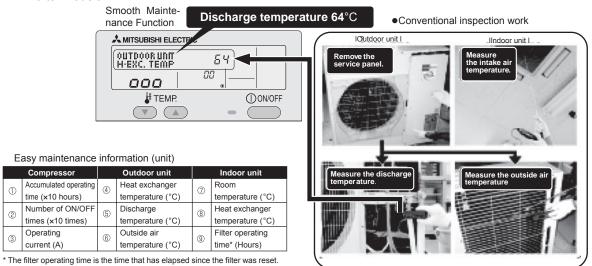
Note:

 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.



1. Maintenance Mode Operating Method

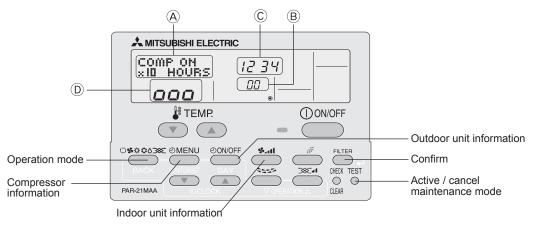
* If you are going to use the "2. Guide for Operation Condition", set the airflow to "High" before activating maintenance mode.

• 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 A] MAINTENANCE

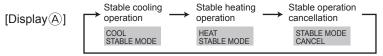
If stable operation is unnecessary or if you want to check the data with the air conditioner stopped, skip to step (4).

• 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.

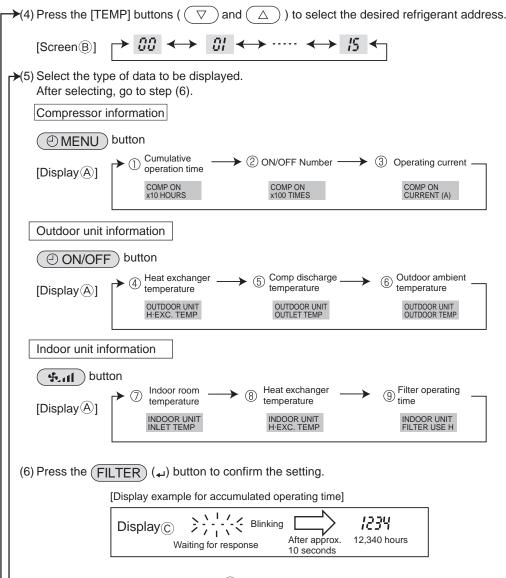
(2) Press the MODE button to select the desired operation mode.



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

Data measurement

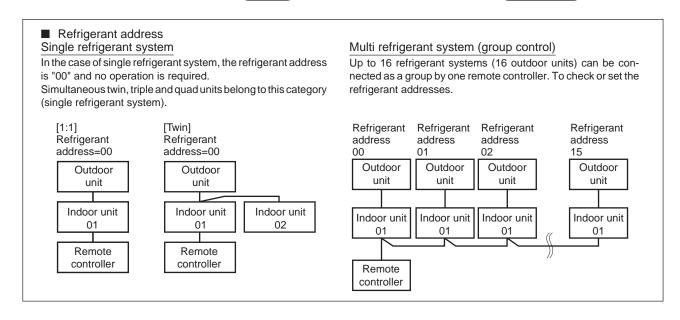
When the operation is stabilized, measure operation data as explained below.



(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.



2. Guide for Operation Condition

		Inspection ite	Result				
>	-uo		Breaker	Good		Retigh	itened
lddr	Loose con- nection	Terminal block	Outdoor Unit	Good		Retigh	itened
Power supply	Loo		Indoor Unit	Good		Retigh	itened
)we		(Insulation resista	ance)				МΩ
۵		(Voltage)					V
Co.m		Accumulated or	perating time				Time
Com		② Number of ON	OFF times				Times
pres	SOI	③ Current					Α
	<u>r</u> e	Refrigerant/heat exc	hanger temperature	COOL	°C	HEAT	°C
L .	Temperature	⑤ Refrigerant/discha	COOL	°C	HEAT	°C	
- E	μ	6 Air/outside air t	COOL	°C	HEAT	°C	
Outdoor Unit	Tel	(Air/discharge t	emperature)	COOL	°C	HEAT	°C
ontd	<u>-</u>	Appearance		Good		Cleaning	required
0	Cleanli- ness	Heat exchanger		Good		Cleaning	required
	Clea	Sound/vibration		None		Pres	sent
	ē	⑦ Air/Room air te	mperature	COOL	°C	HEAT	°C
	Temperature	(Air/discharge t	emperature)	COOL	°C	HEAT	°C
	mpe	8 Refrigerant/heat exc	changer temperature	COOL	°C	HEAT	°C
Indoor Unit	Te	9 Filter operating	time*				Time
o l	5 Decorative pane			Good		Cleaning	required
ppu	ess	Filter		Good		Cleaning	required
_	nlin	Fan		Good		Cleaning	required
	Cleanliness	Heat exchanger		Good		Cleaning	required
		Sound/vibration		None		Pres	sent

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

Area	Check item	Judgment		
Allou	Chook Rolli	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.

Check Points

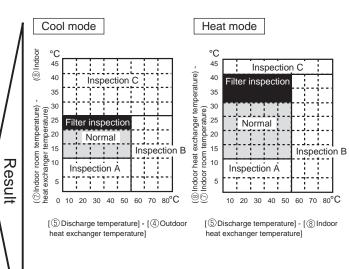
Enter the temperature differences between (5,4,7) and (8) into the graph given below.

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.

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



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.

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	(1) Operation function limit setting (operation lock) ("LOCKING FUNCTION")	Setting the range of operation limit (operation lock)
("FUNCTION SELECTION")	(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	(1) Remote controller main/sub setting ("CONTROLLER MAIN/SUB")	Selecting main or sub remote controller
("MODE SELECTION")		* 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	(1) Temperature display °C/°F setting ("TEMP MODE °C/°F")	Setting the temperature unit (°C or °F) to display
("DISP MODE SETTING")	(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) \rightarrow [5] Setting completed. \rightarrow [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 [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 [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.

②LIMIT TEMP HEAT MODE:

The temperature range can be changed on heating mode.

③LIMIT 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 | (2) Room temperature display setting (ROOM TEMP DISP SELECTION) on cooling, heating and automatic mode is made at the same time. However I ① ON : The room temperature is displayed. the range cannot be limited when the set temperature range has not changed. | ② OFF: The room temperature is not displayed.
- To increase or decrease the temperature, press the [#TEMP() or (\triangle)] button.
- To switch the upper limit setting and the lower limit setting, press the [4,1] 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
- Main: The controller will be the main controller.
- 1 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

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

- © CALL OFF: The set contact numbers are not displayed in case of error.
- ② CALL **** *** **** : The set contact numbers are displayed in case
- 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 [\oiint TEMP. (\heartsuit) and (\triangle)] button to move the cursor to the right (left). Press the [@CLOCK

 (∇) and (\triangle)] button to set the numbers.

[4] -4. Display change setting (DISP MODE SETTING)

(1) Temperature display °C / °F setting

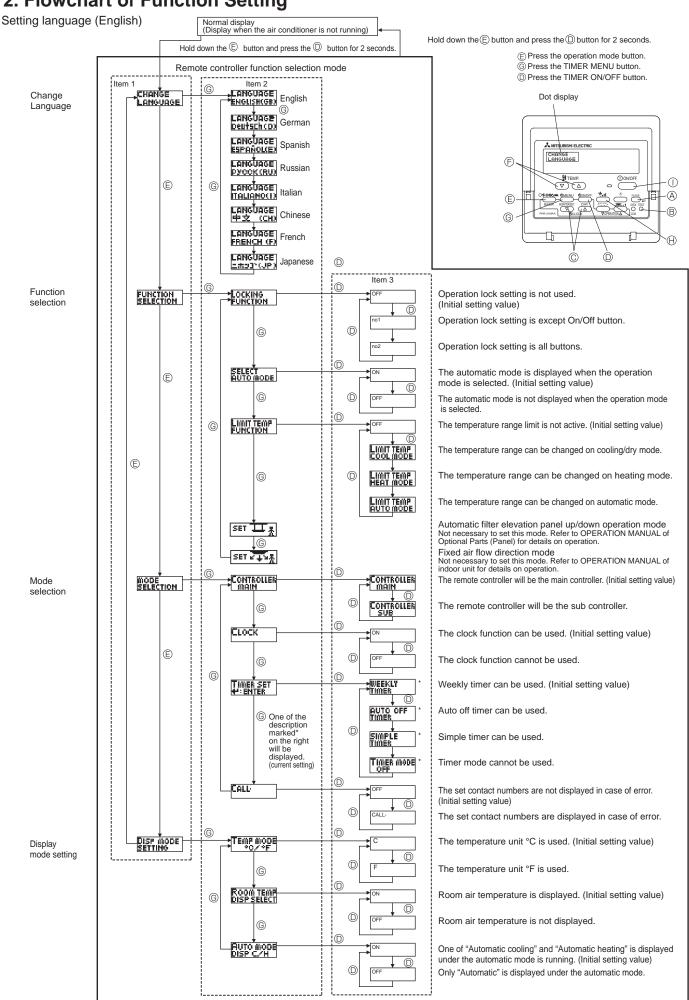
① ℃: The temperature unit ℃ is used.

②°F: The temperature unit °F is used.

(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



3. Screen Structure for Function Setting

Description of each screen

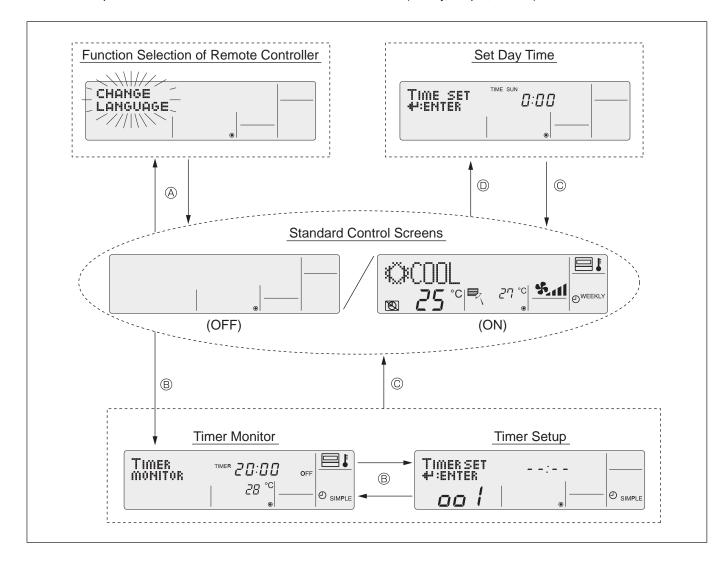
Function selection of remote controller
 Used to set the timer function and operation limit function, etc.

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.

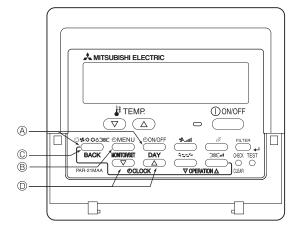
Timer monitor screen : Used to display the current settings of the timers (weekly, simple, auto off).

Timer set up screen : Used to set the timers (weekly, simple, auto off).



How to change the screen display

- A: Press the [ON/OFF] button for two seconds while holding down the [MODE] button.
- **®: Press the [MENU] button.**
- ©: Press the [MODE] (BACK) button.
- 0: Press the [CLOCK] buttons (\bigtriangledown and \triangle).



4. Function Setting Mode

4.1 Change Language

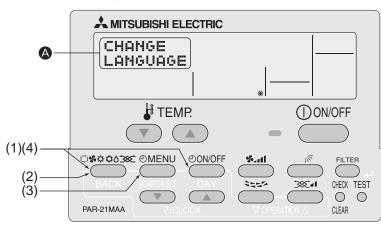
The language that appears on the dot display can be selected.

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

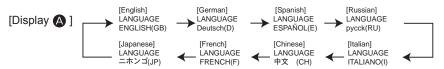
■ Display example



- (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 \fbox{MODE} button until $^{\text{CHANGE}}_{\text{LANGUAGE}}$ appears on the screen (at \blacksquare).



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



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



Multi Language Display

[Dot display table]

[Dot display tal		English	Comme	Cnanish	Dunain	Italia	Ohinass	Evanst	lonen
Selecting Waiting for start-u	language	English PLEASE WAIT	German	Spanish	Russian	Italian	Chinese	French	Japanese
Operation mode	Cool		←	← 	.25. (7	← -×	← -×	← -×	←
Operation mode		*©*COOL	ÆKühlen	ØFRÍO.	© Холол	© COOL	心制冷	♥FROID	♥冷房
	Dry	○ DRY	⊙Trocknen	ODIFICACION	ОСушка	○ DRY	○除湿	○DESHU	0 F51
	Heat	☆HEAT	≭Heizen	☆(ALOR	⇔ Тепло	☆HEAT	举制热	;¤(HAUD	☆暖房
	Auto	₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	↑→AUTO- ←↓MÁTICO	₽₽₽ Дари	₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	料自动	₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽	紅自動
	Auto(Cool)	###COOL	₽⊋Kühlen	₽₽FRÍO	₽₽Холоа	₽₽COOL	料制冷	₽₽FROID	⇔净房
	Auto(Heat)	₽₹HEAT	‡; Heizen	2;‡(ALOR	₽₽Тепло	₽₹HEAT	≇制热	‡‡(HAUD	⇔暖房
	Fan	\$\$FAN	\$\$Lüfter	UENTI- LACIÓN	\$\$ Вент	COVENTI COLAZIONE	舒送风	S VENTI	舒送風
	Ventilation	382 VENTI	₩Gebläse ₩betrieb	382 VENTI-	₩Венти- Жляция	₩ ARIA SESTERNA	総換 气	₩ VENTI	382換気
	Stand by	STAND BY	STAND BY	CALENTANDO	OBOFPEB: NAVSA	STAND BY	准备中	PRE CHAUFFAGE	準備中
	(Hot adjust) Defrost	DEFROST	Altaven	DESCONGE -	ПАУЗА Оттаивание	SBRINA MENTO	除霜中	DEGIVRAGE	霜取中
Set temperature		SET TEMP		LACIÓN					
Fan speed		FAN SPEED	TEMP einstellen	TEMP. CONSIGNA VELOCIDAD	TEMPERATYPA CKODOCTH	IMPOSTAZIONE TEMPERTURO	设定温度	REGLAGE TEMPERATURE	設定温度
Not use button			Lüftergesch windigkeit	VENTILADOR	скорость вентилятора	VELOCITA' VENTILATORE	风速	VITESSE DE VENTILATION	風速
		NOT AVAILABLE	Nicht Verfusbar	NO DISPONIBLE	НЕ ДОСТУПНО	NON DISPONIBILE	无效按钮	NON DISPONIBLE	無効能別
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	試ウソテソ
Self check		SELF CHECK	Selbst- diagnose	AUTO REVISIÓN	ЕАМОДИАГ- НОЕТИКА	SELFCHECK	自我诊断	AUTO CONTROLE	自己シングン
Unit function sele	ection	FUNCTION SELECTION	FUNKTION SAUSWAHI	SELECCIÓN DE FUNCIÓN	Вывор ФУНКЦИИ	SELEZIONE FUNZIONI	功能选择	SELECTION FONCTIONS	もノウ選択
Setting of ventilat	tion	SETTING OF VENTILATION	Lüfterstufen Wahlen	CONFIG. VENTILACIÓN	Настройка Вентустан.	ÎMPOSTAZIONE ARIA ESTERNA	换气设定	SELECTION VENTILATION	換気設定
		VEITTERNIVII	WHIIISH	VEITHERCOTT	PENTO ETHIL	HIIIN ESTEININ	154 (164)	VEITHERITORI	15 45 4474
Selecting	language	English	German	Spanish	Russian	Italian	Chinese	French	Japanese
		CHANGE LANGUAGE	←	←	←	←	←	←	←
Function selection	n	FUNCTION SELECTION	Funktion auswahlen	SELECCIÓN DE FUNCIONES	Вывор ФУНКЦИИ	SELEZIONE FUNZIONI	功能限制	SELECTION FONCTIONS	キノウ制限
Operation functio	n limit setting	LOCKING FUNCTION	Sperr - Funktion	FUNCIÓN BLOQUEADA	ФУНКЦИЯ БЛОКИРОВКИ	BLOCCO FUNZIONI	操作限制	BLOCAGE FONCTIONS	操作等
Use of automatic	mode setting	SELECT AUTO MODE	Auswahl Auto Betrieb	SELECCIÓN MODO AUTO	ВЫБОР РЕЖИМА ЯВТО	SELEZIONE MODO AUTO	自动模式	SELECTION DU MODE AUTO	自動點
Temperature rang	ge limit setting	LIMIT TEMP FUNCTION	Limit Temp FUNKTION	LÍMIT TEMP CONSIGNA	Ограничение Уст. температ	LIMITAZIONE TEMPERATURA	温度限制	LIMITATION TEMPERATURE	温度制限
Limit temperature mode	cooling/day	LIMIT TEMP COOL MODE	Limit Kuhl Temp	LÍMIT TEMP MODO FRIO	Ограничено	LIMITAZIONE MODO COOL	制冷范围	LIMITE TEMP MODE FROID	排冷房
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	ができる。
Limit temperature	auto mode	LIMITTEMP	Limit	LÍMIT TEMP	Ограничен	LIMITAZIONE	4	LIMITE TEMP	
Mode selection		AUTOMODE	AUTÓ TEMP Betriebsart Wahlen	MODO AUTO	РЕЖИМ АВТО Вывор	MODO AUTO SELEZIONE MODO	自动范围	MODE AUTO	群自動
Remote controlle	r setting MAIN	MODE SELECTION		SELECCIÓN DE MODO CONTROL	Вывор РЕЖИМА Огновной		基本模式	SELECTION DU MODE	基本もグ
Remote controlle	r setting SUB	CONTROLLER	Haupt controller	PRINCIPAL	Основной ПУЛЬТ	CONTROLLO	遥控 主	TELCOMMANDE MAITRE	^{)托33} 直 従
Use of clock setti		CONTROLLER	Neben controller	SECUNDARIO RELOJ	Дополните- льнын пульт	CONTROLLO	選控 辅	TELCOMMANDE ESCLAVE	主题主
Setting the day of		CLOCK	Uhr		Часы	OROLOGIO	时钟	AFFICHAGE HORLOGE	時計調力
time	i the week and	TIME SET	Uhrstellen 4:einstellen	CONFIGRELOJ	Часы: уст. ₩:ВВОА	OROLOGIO #:ENTER	时间都据	HORLOGE	トケイセッティ 中:カクティ
Timer set		TIMER SET #:ENTER	Zeitschaltuhr 4:einstellen	TEMPORIZA - Dor#:Config	TAЙMEP:YET. ₩:BBOA	TIMER #:ENTER	定機器能能	PROG HORAIRE	タイマ・セッティ #: カクティ
Timer monitor		TIMER MONITOR	Uhrzeit Anzeise	VISUALIZAR Temporizad.	ПРОЕМОТР ТАИМЕРА	VISUALIZ TIMER	定體状态	AFFICHAGE PROG HORAIRE	917-E=9-
Weekly timer		WEEKLY TIMER	Wochenzeit Schalt Uhr	TEMPORIZA - DOR SEMANAL	НЕДЕЛЬНЫЙ ТАЙМЕР	TIMER SETTIMANALE	毎周定時器	PROG HEBDO MADAIRE	917-週間
Timer mode off		TIMER MODE OFF	Zeitschaltuhr AUS	TEMPORIZA - Dor apagado	Таймер выкл.	TIMER	定艦无效	PROG HORAIRE INACTIF	917-無効
Auto off timer		AUTO OFF TIMER	Auto Zeit funktion aus	APAGADO	Автоотключ. По таймеру	AUTO OFF TIMER	解除定时	PROG HORAIRE	タイマーケシウスレ
Simple timer		SIMPLE TIMER	Einfache Zeitfunktion	AUTOMÁTICO TEMPORIZA -	ПРОСТОЙ ТАЙМЕР	TIMER SEMPLIFICATO	简易定据	PROG HORAIRE	#**** カンイ
Contact number s	setting of error	TIMER CALL:	ZeittUnktion ←	DOR SIMPLE ←	TAMMEP —	SEMPLIFICATO	← ←	SIMPLIFIE ←	← ←
situation Display change				MOSTRAR					
Temperature disp	olay °C/°F setting	DISP MODE SETTING	Anzeise Betriebsart Illerhsel	MODO	НАСТРОЙКА ИНДРЕЖИМА Единтемпер	IMPOSTAZIONE MODO DISPLAY	转换表示	AFFICHAGE SOUS MENU	表示切替
Room air tempera	,	TEMP MODE	Wethsel *C/*F	TEMPGRADOS *C/*F	EAUH.TEMPER *C/*F	TEMPERATURA *C/*F	温度*%	TEMPERATURE *C/*F	温度°%
setting		ROOM TEMP DISP SELECT	Raum TEMP sewahit	MOSTRAR TEMP	Показывать темп.в комн.	TEMPERATURA AMBIENTE	吸入温度	TEMPERATURE AMBIANTE	スイコミオンド ヒヨウシ
Automatic cooling/heating display setting		AUTO MODE DISP C/H	Auto Betrieb	MOSTRAR F/C EN AUTO	ИНД.Т/Х В РЕЖИМЕ АВТО	AUTO C/H	自动表示	AFFICHAGE AUTO F/C	自動路線

4.2 Function Setting

4.2.1 Operation Lock (Operation Function Limit Setting)

The following settings can be made.

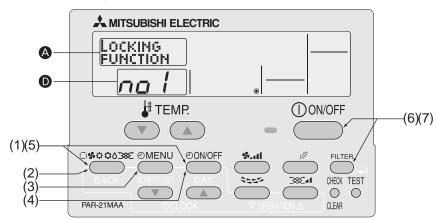
①no1 :All buttons except for the [ON/OFF] button are locked.

②no2 :All buttons are locked.③OFF (default) :No buttons are locked.

* To activate this operation lock function on the normal screen, hold down the ① ON/OFF button for 2 seconds while holding down the FILTER (←) button.

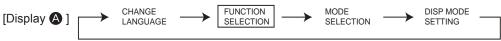
How to Lock the Buttons

■ 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 \fbox{MODE} button to select $^{\rm FUNCTION}_{\rm SELECTION}$ on the screen (at A).



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



- * 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 **D**).



(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 ① 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 (\checkmark) button, press the \bigcirc ON/OFF button for 2 seconds. FUNCTION disappears from the screen (at \bigcirc).
 - Display example when the operation lock function is not in use



4.2.2 Auto Mode Setting

The following settings can be made.

ON (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:

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

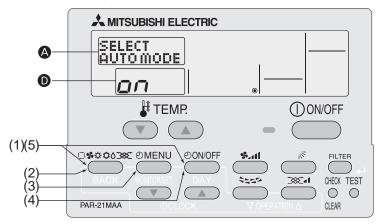
②OFF : Even if the unit supports the auto mode, auto mode is not displayed when selecting an operation mode.

Operation mode can be switched:

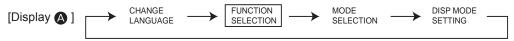
$$\longrightarrow$$
 COOL \longrightarrow DRY \longrightarrow FAN \longrightarrow HEAT $-$

How to Set Auto Mode

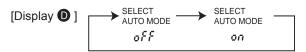
■ Display example



- (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 \bigcirc button to select \bigcirc FUNCTION on the screen (at \bigcirc).



- (3) Press the \bigcirc MENU button so that $_{\text{AUTO MODE}}^{\text{SELECT}}$ appears on the screen (at \bigcirc).
 - * The current setting is displayed.
- (4) Press the (② ON/OFF) button to select whether auto mode is to be used (on) or not (off).



- (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.

$$\longrightarrow$$
 COOL \longrightarrow DRY \longrightarrow FAN \longrightarrow AUTO \longrightarrow HEAT \longrightarrow *1 *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.

$$\longrightarrow$$
 COOL \longrightarrow DRY \longrightarrow FAN \longrightarrow 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
②Heat mode
③Auto mode
: The temperature setting range for cool/dry mode can be changed.
: The temperature setting range for heat mode can be changed.
: 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.

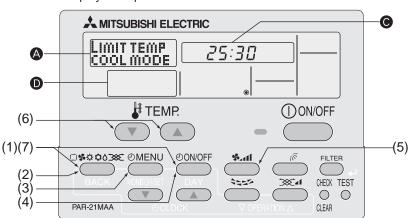
However, limit setting will not be made unless the range has been changed.

	Set	Setting range			
COOL-DRY Mode	Lower limit	19 °C – 30 °C	19 °C – 30 °C		
	Upper limit	30 °C – 19 °C	19 0 - 30 0		
HEAT Mode	Lower limit	17 °C – 28 °C	17 °C – 28 °C		
	Upper limit	28 °C – 17 °C	17 0 - 28 0		
AUTO Mode	Lower limit	19 °C – 28 °C	19 °C – 28 °C		
	Upper limit	28 °C – 19 °C	19 0 - 28 0		

^{*} Temperatures can be set within the range of "upper limit ≥ " "lower limit".

Limiting the Temperature Range

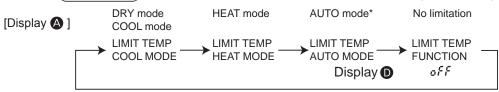




- (1) While pressing the MODE button, press the ON/OFF button for 2 seconds to activate the remote controller's function selection mode.
- (2) Press the MODE button to select FUNCTION on the screen (at (A)).



- (3) Press the \bigcirc MENU button to select $_{\text{FUNCTION}}^{\text{LIMIT TEMP}}$ on the screen (at \bigcirc).
 - * 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.



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

(5) Press the (4.11) button to select lower limit or upper limit.

Lower limit blinks. Upper limit blinks.



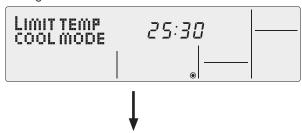
(6) Press the [TEMP] buttons (∇) and \triangle) to set the desired temperature setting range.

[Setting example for lower limit]



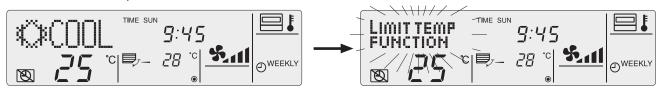
- (7) While pressing the MODE button, press the ON/OFF button for 2 seconds to return to normal mode. Setting is now complete.
 - * If you press the (ON/OFF) button before the (MODE) button, the settings you have made will be cancelled.
 - * If an attempt is made to set a temperature outside the range 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...

FUNCTION blinks and the command is not accepted.



4.3 Basic Functions Setting

4.3.1 Remote Controller Main/Sub Setting

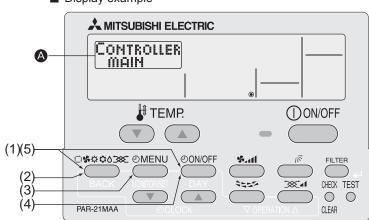
When using 2 remote controllers, they must be designated as the main and sub remote controllers.

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 ${\color{red} \overline{\text{MODE}}}$ button until ${\color{red} \underline{\text{MODE}}}$ appears on the screen (at ${\color{red} \underline{\textbf{A}}}$).



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



(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.

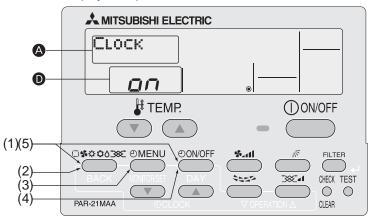
■ Clock function setting

The following settings can be made.

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

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.



- (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).



- (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

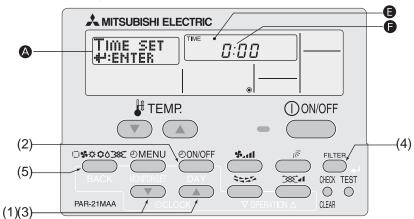
- This setting is not possible if the clock function is disabled by the function setting.
- The day of the week and time are not displayed if the clock function is disabled by function selection.
- This setting is not possible if the simple timer or auto off timer has been selected.

^{*} If the clock function is disabled (OFF), "Weekly Timer" cannot be selected.

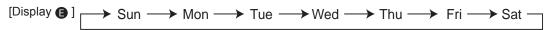
^{*} If "OFF" is selected to disable the clock function, the weekly timer cannot be used to make day of the week/time settings. To use the weekly timer to set the day of the week and time, the clock function must be set to "ON" (default).

Setting the Day of the Week and Time

■ Display example



- (1) Press the $[\bigcirc CLOCK]$ buttons (\bigcirc and \bigcirc) to display $^{\text{TIME SET}}_{\ \ \Box: ENTER}$ on the screen (at \bigcirc).
- (2) Press the ON/OFF button until the desired day of the week appears.



- (3) Press the $[\bigcirc CLOCK]$ buttons $(\bigcirc \nabla)$ and (\triangle) to set the desired time.
 - Press the [\bigcirc CLOCK] buttons (\bigcirc and \bigcirc) longer will switch the time in 10-minute and 1-hour increments.

[Display
$$\bigcirc$$
] \longrightarrow One-minute \longrightarrow Ten-minute \longrightarrow One hour \bigcirc

(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

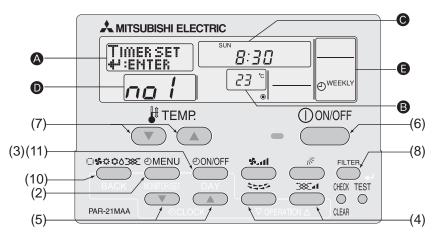
- The weekly timer allows you to set up to 8 operations per day of the week.
- For each operation, you can set the ON (start) or OFF (stop) timer and temperature. The start timer, stop timer and temperature can also be set individually.
- The air conditioner is operated at the times you have set and 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



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

(2) Press the (MENU) button to select \leftarrow :ENTER on the screen (at (A)).

→ (3) Press the ② ON/OFF button until the desired day of the week appears.

[Display
$$\bullet$$
] \longrightarrow Sun-Sat \longrightarrow Sun \rightarrow Mon \rightarrow \longrightarrow Fri \rightarrow Sat \longrightarrow

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

[Display
$$\bullet$$
] $\rightarrow no! \longleftrightarrow no? \longleftrightarrow \cdots \longleftrightarrow no? \longleftrightarrow \cdots \otimes \longleftrightarrow$

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

Set up Matrix

set up ivia	atrix					
Op No.	Sunday	Monday		Saturday		
no1	• 8:30 • ON					- Setting contents - Starts the air conditioner at 8:30 with the tem-
	• 23 °C					perature set to 23 °C.
no2	• 10:00	• 10:00	• 10:00	• 10:00		
	• OFF	• OFF	• OFF	• OFF —	-	- Setting contents -
			A			Stops the air conditioner at 10:00.
no8						

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 (\bigcirc and \bigcirc) to set the desired time. (0:00 to 23:59)

[Display
$$\bullet$$
] \longrightarrow 9:00 \longleftrightarrow 9:01 \longleftrightarrow 23:59 \longleftrightarrow 0:00 \longleftrightarrow 0:01 \longleftrightarrow \longrightarrow 8:58 \longleftrightarrow 8:59 \longleftrightarrow

(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
$$\bigcirc$$
] \longrightarrow ON \longrightarrow OFF \longrightarrow (Space)

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

[Display
$$lackbox{0}$$
] \longrightarrow C (Space) C (Space)

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 1).
- (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 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 1).



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
		Time setting							
1	no 1	On/off setting							
		Temperature							
		Time setting							
2	no 2	On/off setting							
		Temperature							
		Time setting							
3	no 3	On/off setting							
		Temperature							
		Time setting							
4	no 4	On/off setting							
		Temperature							
		Time setting							
5	no 5	On/off setting							
		Temperature							
		Time setting							
6	no 6	On/off setting							
		Temperature							
		Time setting							
7	no 7	On/off setting							
		Temperature							
		Time setting							
8	no 8	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 [\bigcirc CLOCK] buttons (\bigcirc and \bigcirc) 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 [\P TEMP] buttons (∇ and \triangle) 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.

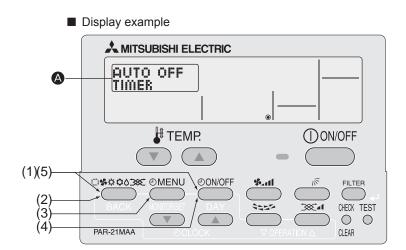
To use the auto off timer, switch the timer function to the auto off timer using the remote controller's function selection.

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:

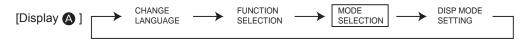
A timer is operating, an error has occurred, the air conditioner is operating, the remote controller is diagnosing a problem, function selection is in progress, timer setting is in progress, or the system is centrally controlled. (ON/OFF operation is prohibited under the above conditions.)

Selecting the Auto Off Timer



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 \fbox{MODE} button until $^{\scriptsize MODE}_{\scriptsize SFLECTION}$ appears on the screen (at $\large \triangle$).



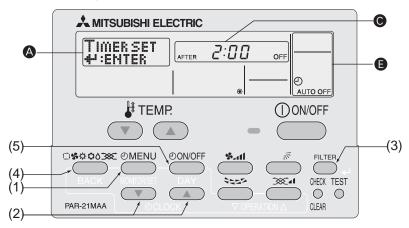
- (3) Press the MENU button so that "Timer" appears on the screen (at (A)).
- (4) Press the \bigcirc ON/OFF button until $^{\text{AUTO OFF}}_{\text{TIMER}}$ appears on the screen (at \bigcirc).



- (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 \rightleftarrows :ENTER appears on the screen (at A).



(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
$$lacktriangle$$
] $0.30 \leftrightarrow 1.00 \leftrightarrow --- \leftrightarrow 3.30 \leftrightarrow 4.00$

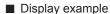
- (3) Press the FILTER (←) button to confirm the setting.
- (4) Press the MODE button to complete the setting procedure.

[Set display example]



Checking the Current Auto Off Timer Setting

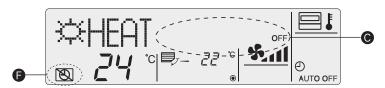
- (1) Make sure that AUTO OFF is displayed on the screen (at 1).
- (2) Press the MENU button for 3 seconds to display MONITOR on the screen (at A).
 - The time you have set is displayed.
- (3) To close the $_{\text{MONITOR}}^{\text{TIMER}}$ and return to the normal screen, press the $\boxed{\text{MODE}}$ button.





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 🕒).
 - * 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 (a) disappears from the screen (at (b)) 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.

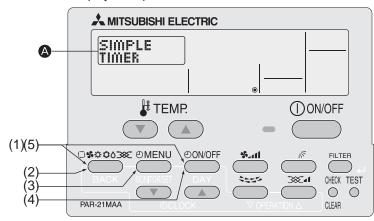
Note 1: Timer operation is not possible when:

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 ${\color{red} {\rm MODE}}$ button until ${\color{red} {\rm MODE}}$ appears on the screen (at ${\color{red} f A}$).



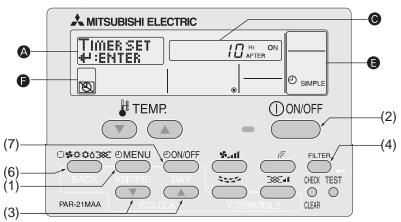
- (3) Press the (MENU) button so that "TIMER" appears on the screen (at (A)).
- (4) Press the (ON/OFF) button until "SIMPLE TIMER" appears on the screen (at (A)).



- (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).

(1) Press the \bigcirc MENU button to select $\stackrel{\text{TIME SET}}{\leftarrow}$ on the screen (at \triangle).



(2) Press the ON/OFF button to select "Start time only" or "Stop time only".



- 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
$$\bigcirc$$
] \longrightarrow 1 \longleftrightarrow 2 \longleftrightarrow 71 \longleftrightarrow 72 \longrightarrow

- * 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.



(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

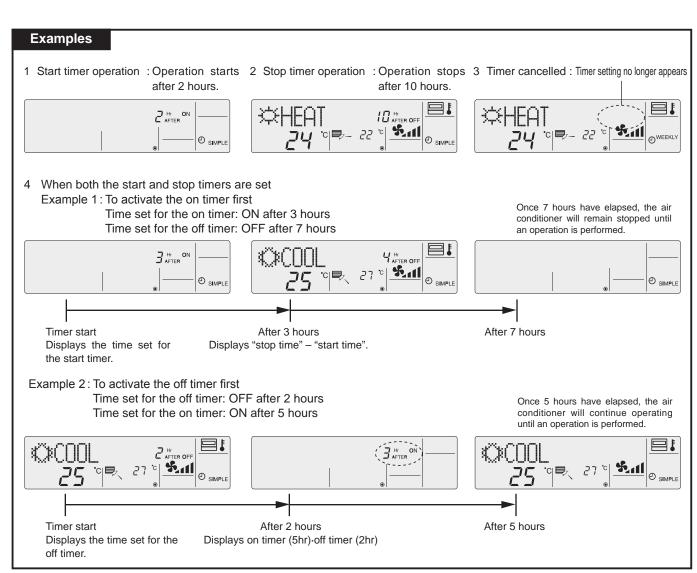
- (1) Be sure that the "SIMPLE" indicator is visible on the screen (at 1).
- (2) Press the \bigcirc MENU button, so that the $_{\text{MONITOR}}^{\text{TIMER}}$ appears on the screen (at \triangle).
 - The time you have set to start or stop the timer appears on the screen (at **©**).
- (3) Press the MODE button to close the TIMER 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 C).

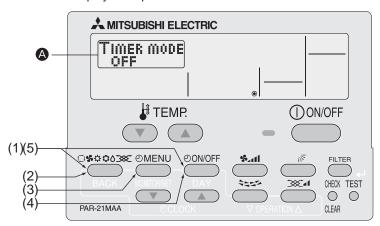




4 Timer Mode Off

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 (A)).



- (3) Press the (4) MENU button so that "TIMER" appears on the screen (at (A)).
- (4) Press the ON/OFF button until "TIMER MODE OFF" appears on the screen (at A).



- (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

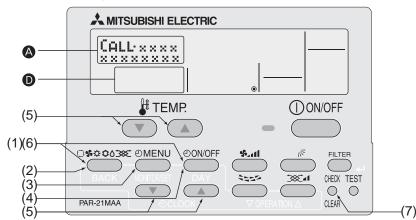
The following settings can be made.

- ① CALL OFF (default): The preset contact number is not displayed even when an error occurs.

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 A).



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



(4) Press the ② ON/OFF button to select whether or not to show the contact number.



(5) Press the $[\bigcirc CLOCK]$ buttons ($\bigcirc \bigcirc$ and $\bigcirc \bigcirc$) to set the desired contact number, one digit at a time. To move the input digit position left or right, press the [TEMP] buttons ($\bigcirc \bigcirc$ and $\bigcirc \bigcirc$).

The contact number can contain up to 12 digits.

[When entering "012"]

[Display A] CALL • 012_

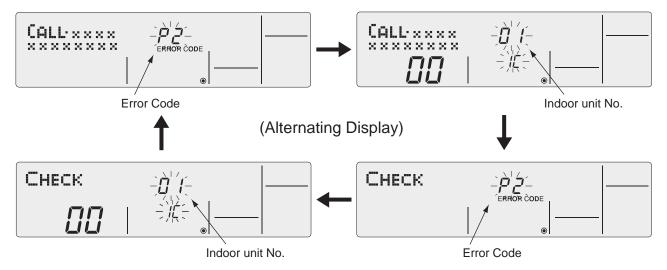
"0" \rightarrow Press the [\bigcirc CLOCK] button (\bigcirc) once.

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

- "1" \rightarrow Press the [\bigcirc CLOCK] button ((\triangle)) twice.
- "2" \rightarrow Press the [\bigcirc CLOCK] button (\bigcirc) 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

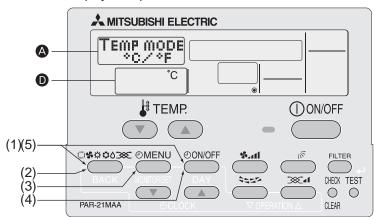
The following settings can be made.

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

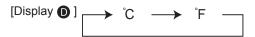
■ Display example



- (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 \fbox{MODE} button until $^{\scriptsize DISP\ MODE}_{\scriptsize SETTING}$ appears on the screen (at \ref{A}).



- (3) Press the (MENU) button to select "TEMP MODE °C/°F" on the screen (at (A)).
- (4) Press the ON/OFF button to select "°C" or "°F"on the screen (at **1**).



- (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



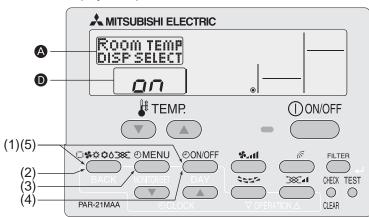
4.4.2 Room Temperature Display Setting

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 \fbox{MODE} button until $^{\scriptsize DISP\,MODE}_{\scriptsize SETTING}$ appears on the screen (at \ref{A}).



- (3) Press the (MENU) button so that "ROOM TEMP DISP SELECT" appears on the screen (at (A)).
- (4) Press the ON/OFF button to select "on" or "oFF" on the screen (at **0**).

[Display
$$lacktriangle$$
] \longrightarrow $lacktriangle$ \rightarrow $lacktriangle$ \rightarrow $lacktriangle$ \rightarrow

- (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

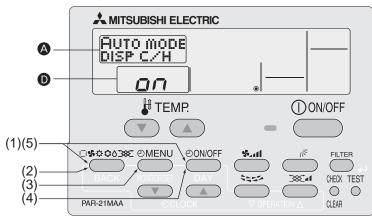


4.4.3 Automatic Cooling/Heating Display Setting

- 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 \fbox{MODE} button until $^{\scriptsize DISP\ MODE}_{\scriptsize SETTING}$ appears on the screen (at \ref{A}).



- (3) Press the (MENU) button so that "AUTO MODE DISP C/H" appears on the screen (at (A)).
- (4) Press the ON/OFF button to select "on" or "oFF" on the screen (at 1).

[Display
$$lacktriangle$$
] \longrightarrow $lacktriangle$ \longrightarrow $lacktriangle$ \cap

- (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	OFF	1	1		
automatic recovery	ON	'	2		
Indoor tomporatura	Average data from each indoor unit		1		
Indoor temperature detecting *1	Data from the indoor unit with remote controller	2	2		
detecting 1	Data from main remote controller		3		
	Not supported		1		
I OOONIAN/	Supported (indoor unit does not intake outdoor air		2		
LOSSNAY	through LOSSNAY)	3	-		
connectivity	Supported (indoor unit intakes outdoor air through				
	LOSSNAY)		3		
Dower voltage	240V	4	1		
Power voltage	220V, 230V] 4	2		
Auto operating mode	Auto energy-saving operation ON	5	1		
*2	Auto energy-saving operation OFF	3	2		
Frost prevention	2°C (Normal)	15	1		
temperature	3℃	15	2		
Defrecting central	Standard	17	1		
Defrosting control	For high humidity] ''	2		
Refrigerant leakage	70% (RP35, 50) / 80% (RP60-140, HRP)	21	1		
setting(%) *3	50% (RP35, 50) / 60% (RP60-140, HRP)	Z 1	2		

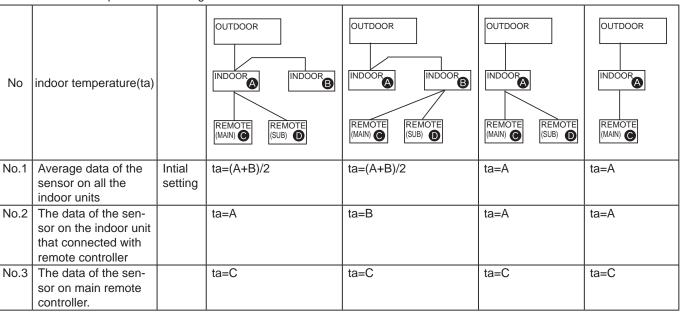
^{*1.} Can be set only when a wired remote controller is used. This function cannot be set for floor type models.

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



(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
	100Hr			1			
Filter sign	2500Hr			07	2		
	"Clean the filter" indicator is not displayed.]	3		
Air flow	Silent	Standard	_]		1		
(Fan speed) *2	Standard	High ceiling①	PLA-RP-AA type	08	2		
(Fair speed) 2	High ceiling	High ceiling@			3		
No. of air outlets	4 directions				1		
(not for SLZ)	3 directions			09	2		
(Hot for SLZ)	2 directions				3		
Installed options	Not supported			10	1		
(high performance filter) *2	Supported			10	2		
	No vanes (Vane No.3 setting : PLA only)			11	1		
Vane setting	Vane No. 1 setting				2		
	Vane No. 2 setting				3		
Not available Swing		ng	DI A DD DA tuno	22	1		
Swing	Available Wav	e air flow	PLA-RP-BA type	23	2		
Set temperature in heating	ON			24	1		
mode 4deg-up *1	OFF			24	2		
Fan anadal whom the bact	Extra low			1			
Fan speed when the heating thermostat is OFF *1	Stop			25	2		
Ing thermostat is OFF	Set fan speed				3		
Fan speed when the cool-	Set fan speed			27	1		
ing thermostat is OFF	Stop			21	2		
Detection of abnormality (P8)	Detect			28	1		
of the pipe temperature	Neglect				2		

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

		Din switch	Function	Action by switch operation		
		Dip switch Function OFF		OFF	ON	
			Power failure automatic recovery	OFF	ON	
SW3	SW3 Function setting	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	_	_	_	
	SW3-8		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

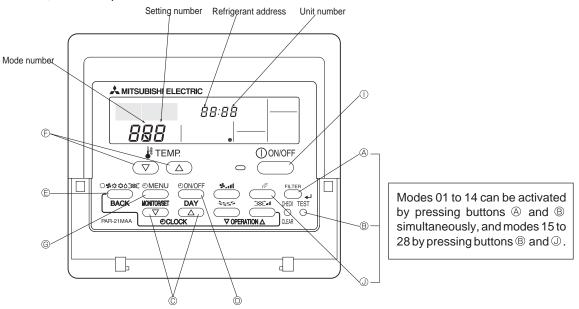
Function	Settings	Mode No.	Setting No.	Check	Remarks
	15Pa		1		
	35Pa		2		
External static pressure	50Pa		3		
	The same as setting of mode No. 08	10	1		
	5Pa (set made No. 08 to 1)	10	2		

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

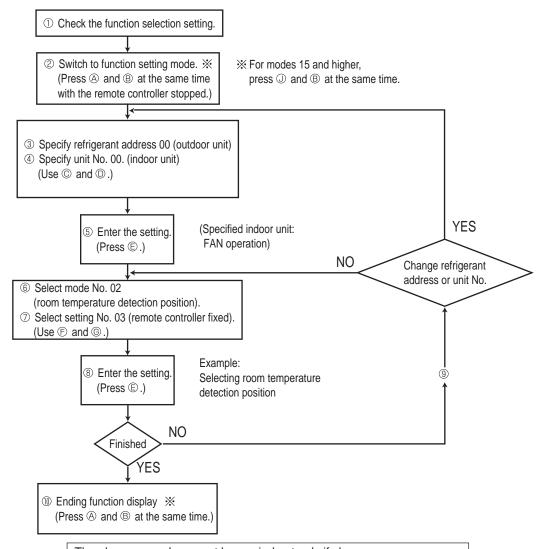
[Flow of function selection]

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]

	ction selection, the functions of that mod	de will be changed accordingly. Check all the current settings according to steps @ or initial settings, refer to the indoor unit's installation manual.
buttons simultaneously for at least 2 se	ode is 15 to 28) and ® TEST conds. FUNCTION will start to blink, ay content will change as shown below.	③ Set the outdoor unit's refrigerant address. ⑤ Press the [④ 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.)
Refrigerant address display section	FUNCTION SELECTION /	FUNCTION DE CONTRACTOR DE CONT
Check to see if there are any sources of Note	noise or interference near the transmiss	·
	uring this procedure, exit function select	tion (see step ®), and then restart from step ②.
Set the indoor unit number. Press the ON/OFF button so the area.	at "" blinks in the unit number display	© Press the [
Unit number display section	FUNCTION BB	FUNCTION 00 00 0
* To set modes 01 to 06 or 15 to 22 select * To set modes 07 to 14 or 23 to 28 carry or To set each indoor unit individually, so To set all the indoor units collectively, (§) Confirm the refrigerant address and unit	out as follows: elect " 01" to "04". select " AL".	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 with corresponding to the programment address the different selection.
© Press the MODE button to confinumber. After a while, " " will start to blink in	firm the refrigerant address and unit	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.
Mode number FUNCTION SELECTION	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00 refrigerant address Outdoor unit Indoor unit Unit number 01 Unit number 02
* "88" will blink in the room temperature address does not exist in the system. Furthermore, if "F" appears and blinks i refrigerant address display area also spond to the selected unit number. In thi number may be incorrect, so repeat st	blinks, there are no units that corre- is case, the refrigerant address and unit	Memote controller Fan draft When grouping different refrigerant systems, if an indoor unit other than the one to which the refrigerant address has been set performs fan operation there may be another refrigerant address that is the same as the specified one In this case, check the DIP switch of the outdoor unit to see whether such a refrigerant address exists.
 ⑤ Select the mode number. ⑥ Press the [♣ TEMP] buttons (and \triangle) to set the desired mode an be selected.)	Mode number display section FUNCTION GRADE TO THE SELECTION GRADE TO THE SELECTION GRADE TO THE SELECTION AND THE SELEC
 ⑦ Select the setting content for the selecter ⑤ Press the ② MENU button. The blink, so check the currently set content 	currently selected setting number will	⑤ Press the [♣ TEMP] buttons (and) to select the desired setting number.
,	FUNCTION 00 00 -	FUNCTION 00 00
Setting number display sect	tion Setting number 1 = Indoor u	unit operating average
Register the settings you have made in s Press the MODE button. The mod to blink and registration starts.	steps ③ to ⑦.	The mode number and setting number will stop blinking and remain lit, indicating the end of registration.
FUNCTI SELEÇT DÇ	ON 0000 — — — — — — — — — — — — — — — — —	FUNCTION 00 00 —
* If " " is displayed for both the mode nu Check to see if there are any sources of		s in the room temperature display area, a transmission error may have occurred. sion path.
(9) If you wish to continue to select other fur	nctions, repeat steps ③ to ⑧.	
Complete function selection. Hold down the FILTER (mod simultaneously for at least 2 seconds. After a while, the function selection so tioner OFF screen will reappear.	de is 15 to 28) and TEST buttons creen will disappear and the air condi-	* 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 "O" mark, etc., is given in the "Check" column of Table to indicate the change.

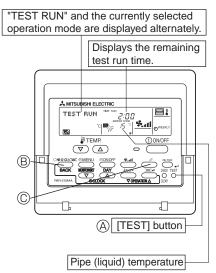
WI. Test Run by the Remote Controller (for Mr. SLIM) 1. Check Points Under Test Run

■ 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.			
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	Causa
Remote Controller Display	OUTDOOR BOARD LED Display < > indicates digital display.	Cause
Remote controller displays "PLEASE	After "startup" is displayed, only	After power is turned on, "PLEASE WAIT" is displayed for 2
WAIT", and cannot be operated.	green lights up. <00>	minutes during system startup. (Normal)
After power is turned on, "PLEASE WAIT"	After "startup" is displayed, green(once) and red(once) blink alternately. <f1></f1>	• Incorrect connection of outdoor terminal block (L1, L2, L3 and S1, S2, S3.)
is displayed for 3 minutes, then error code is displayed.	After "startup" is displayed, green(once) and red(twice) blink alternately. <f3, f5,="" f9=""></f3,>	Outdoor unit's protection device connector is open.
No display appears even when remote	After "startup" is displayed, green(twice) and red(once) blink alternately. <ea. eb=""></ea.>	Incorrect wiring between the indoor and outdoor unit (Polarity is wrong for S1, S2, S3.) Remote controller transmission wire short.
controller operation switch is turned on. (Operation lamp does not light up.)	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 " WI.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)

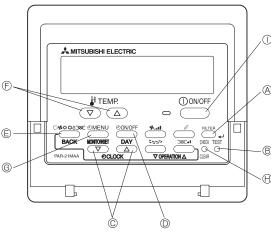
1. How To Proceed "Self-Diagnosis"

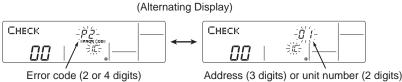
1-1. When a Problem Occurs During Operation

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 **○ON/OFF** button.





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.

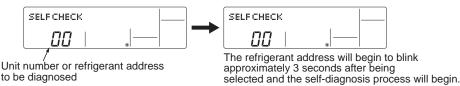
During central control by a MELANS controller, clear the error code by pressing the ON/OFF button on MELANS remote controller.

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.

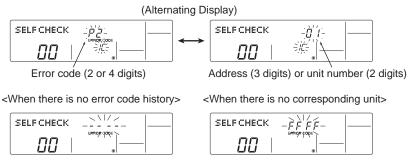
Check the error code history for each unit using the remote controller. ① Switch to self-diagnosis mode.

- 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.
 - ⑤ Press the [TEMP] buttons (and) to select the desired number or address. The number (address) changes between [01] and [50] or [00] and [15].



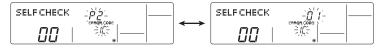
- ③ Display self-diagnosis results
- <When there is error code history>

(For the definition of each error code, refer to the indoor unit's installation manual or service handbook.)



Reset the error history.

Display the error history in the diagnosis result display screen (see step $\ensuremath{\mathfrak{G}}).$



Press the ON/OFF	button twice within 3 seconds.	The self-diagnosis
address or refrigerant add	ress 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.



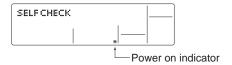
- ⑤ Cancel self-diagnosis. Self-diagnosis can be cancelled by the following 2 methods.
- ⊕ Press the CHECK button twice within 3 seconds. → Self-diagnosis will be cancelled and the screen will return to the previous state in effect before the start of self-diagnosis.
- ⑤ Press the ① ON/OFF button.
- → 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.

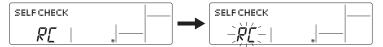
First, check that the power-on indicator is lit.
 If the correct voltage (DC12 V) is not supplied to the remote controller, the indicator will not light.

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.

A 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		
Unit condition	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 con	troller board	Contents	Error	Inspection method	
LED1 (Green)	LED2 (Red)	Contents	code *1	mspection method	
1 blinking	linking 2 blinking Connector(63L) is open.		F3	①Check if connector (63L or 63H) on the outdoor controller board is not	
		Connector(63H) is open.	F5	disconnected.	
		2 connectors are open.	F9	©Check continuity of pressure switch (63L or 63H) by tester.	
2 blinking	1 blinking	Miswiring of indoor/outdoor unit connecting wire, excessive number of indoor units (4 units or more)	(EA)	(2) Check if 4 or more indoor units are connected to outdoor unit.	
		Miswiring of indoor/outdoor unit co- nnecting wire (converse wiring or di- sconnection)	(Eb)	③ Check if noise entered into indoor/outdoor connecting wire or power supply.	
		Startup time over	(EC)	④Re-check error by turning off power, and on again.	
	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	
(transmitting unit. Indoor/outde (signal receoutdoor unit Indoor/outde (transmitting	Indoor/outdoor unit communication error (transmitting error) is detected by indoor unit.	E7	supply. 3 Check if noise entered into indoor/outdoor controller board.		
	Indoor/outdoor unit communication error (signal receiving error) is detected by outdoor unit.	(E8)	④Re-check error by turning off power, and on again.		
	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.	
		Remote controller transmitting error is detected by remote controller.	E3	©Check if noise entered into transmission wire of remote controller®Re-check error by turning off power, and on again.	
		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<br="">controller board and outdoor power board> <communication between="" outdoor<br="">controller board and M-NET P.C. board></communication></communication>	Ed	power board is not disconnected. ②Check if there is poor connection of connector on outdoor controller board(CNMNT and CNVMNT).	
		Communication error of M-NET system	A0~A8	③ Check M-NET communication signal.	
		-1			

^{*1.}Error code displayed on remote controller.Error codes given in () are not displayed on remote controller.

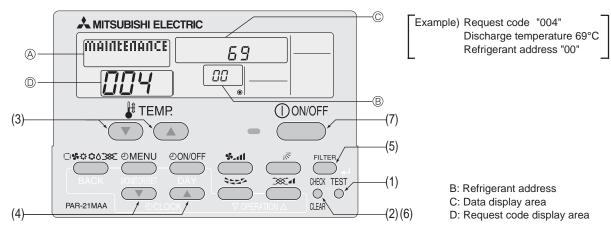
Indic	ation			Error	
Outdoor con					
		Contents	Error code	Inspection method	
LED1 (Green)	LED2 (Red)		* 1	· ·	
3 blinking	1 blinking	Abnormality of shell thermistor (TH32) and discharging temperature (TH4)	U2 U7	①Check if stop valves are open. ②Check if connectors (TH4, TH32, LEV-A and LEV-B) on	
		Abnormality of superheat due to low discharge temperature		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.	
	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 con-	
		Compressor over current breaking	UP	nection of compressor wiring.	
		Abnormality of current sensor (P.B.)	UH	Measure resistance values among terminals on com-	
		Abnormality of power module	U6	pressor with a tester.	
	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	
		Open/short of outdoor thermistors (TH3, TH6, TH7 and TH8)	U4	power board are not disconnected. ②Measure resistance value of outdoor thermistors	
	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.	
		Abnormality of pipe temperature thermistor /Liquid (TH2)	P2	②Measure resistance value of indoor thermistors.	
		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.	
		Indoor drain overflow protection	P5	 @Measure resistance value of indoor thermistors. @Measure resistance value among terminals on drain-up machine using a tester. @Check if drain-up machine works. @Check drain function. 	
	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	Check if indoor thermistors (TH2 and TH5) are not disconnected from holder. Check if stop valve is open. Check converse connection of extension pipe. (on plural units connection) Check 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]



- (1) Press the TEST button for 3 seconds so that [Maintenance mode] appears on the screen (at (a)).
- (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 ①) when [Maintenance monitor] is activated.

(The display (at ①) now allows you to set a request code No.)

(3) Press the [TEMP] buttons (\bigcirc and \bigcirc) to select the desired refrigerant address.

[Screen
$$\textcircled{B}$$
] \rightarrow $\textcircled{GG} \leftrightarrow$ $\textcircled{GH} \leftrightarrow \cdots \cdots \leftrightarrow$ $\textcircled{IS} \leftarrow$

- (4) Press the [CLOCK] buttons (\bigcirc and \bigcirc) 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.

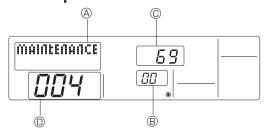
Request code	Request content	Description (Display range)	Unit	Remarks
0	Operation state	Refer to 2-1. Detail Contents in Request Code.	-	
1	Compressor-Operating current (rms)	0 – 50	А	
2	Compressor-Accumulated operating time	0 – 9999	10 hours	
3	Compressor-Number of operation times	0 – 9999	100 times	
4	Discharge temperature (TH4)	3 – 217	°C	
5	Outdoor unit - Liquid pipe 1 temperature (TH3)	-40 – 90	Ĉ	
6			°C	
_	Outdoor unit - Liquid pipe 2 temperature	-40 – 90		
7	Outdoor unit-2-phase pipe temperature (TH6)	-39 – 88	°C	
8	Outdoor unit-Suction pipe temperature (TH32)	-39 – 88	°C	PUHZ-HRP type
9	Outdoor unit-Outside air temperature (TH7)	-39 – 88	°C	
10	Outdoor unit-Heatsink temperature (TH8)	-40 – 200	°C	
11				
12	Discharge superheat (SHd)	0 – 255	°C	
13	Sub-cool (SC)	0 – 130	°C	
14				
15				
16	Compressor-Operating frequency	0 – 255	Hz	
-				
17	Compressor-Target operating frequency	0 – 255	Hz	
18	Outdoor unit-Fan output step	0 – 10	Step	
19	Outdoor unit-Fan 1 speed	0 – 9999	rpm	
	(Only for air conditioners with DC fan motor)	0 0000	· Piii	
20	Outdoor unit-Fan 2 speed	0 0000		"0" is displayed if the air conditioner is a single-fan
20	(Only for air conditioners with DC fan motor)	0 – 9999	rpm	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	°C	
31	Indoor unit-Intake air temperature <measured by="" thermostat=""></measured>	8 – 39	°C	
	Indoor unit-Intake air temperature (Unit No. 1)	8 – 39	°0	"0"is displayed if the target unit is not present.
32	<heat correction="" mode-4-deg=""></heat>		C	
	Indoor unit-Intake air temperature (Unit No. 2)	8 – 39	_	
33	<pre><heat correction="" mode-4-deg=""></heat></pre>		°C	↑
	Indoor unit-Intake air temperature (Unit No. 3)	8 – 39		
34		0 – 39	°C	↑
	,	0.00		
35	Indoor unit-Intake air temperature (Unit No. 4)	8 – 39	°C	↑
	<heat correction="" mode-4-deg=""></heat>			
36				
37	Indoor unit - Liquid pipe temperature (Unit No. 1)	-39 – 88	$^{\circ}$	"0" is displayed if the target unit is not present.
38	Indoor unit - Liquid pipe temperature (Unit No. 2)	-39 – 88	°C	1
39	Indoor unit - Liquid pipe temperature (Unit No. 3)	-39 – 88	°C	1
40	Indoor unit - Liquid pipe temperature (Unit No. 4)	-39 – 88	°C	1
41	, , , , , , , , , , , , , , , , , , , ,			
42	Indoor unit-Cond./Eva. pipe temperature (Unit No. 1)	-39 – 88	°C	"0" is displayed if the target unit is not present.
	Indoor unit-Cond./Eva. pipe temperature (Unit No. 1) Indoor unit-Cond./Eva. pipe temperature (Unit No. 2)		°C	Is displayed if the target unit is not present.
43		-39 – 88		
44	Indoor unit-Cond./Eva. pipe temperature (Unit No. 3)	-39 – 88	℃	1
45	Indoor unit-Cond./Eva. pipe temperature (Unit No. 4)	-39 – 88	°C	1
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.

st code		Description		
Request code	Request content	(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	External input state (short mede, ste.)			
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				
98				
99		Displays postponement code. (" " is		
100	Outdoor unit - Error postponement history 1 (latest)	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
_	Error history 1 (latest)	Displays error history. ("" is displayed if no history is present.)	Code	
_	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	Α	
109	Compressor-Accumulated operating time at time of error	0 – 9999	10 hours	
110	Compressor-Number of operation times at time of error	0 – 9999	100 times	
111	Discharge temperature at time of error	3 – 217	°C	
112	Outdoor unit - Liquid pipe 1 temperature (TH3) at time of error	-40 – 90	°C	
113	Outdoor unit - Liquid pipe 2 temperature at time of error	-40 – 90	°C	
114	Outdoor unit-2-phase pipe temperature (TH6) at time of error	-39 – 88	°C	
115			_	
116	Outdoor unit-Outside air temperature (TH7) at time of error	-39 – 88	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
117	Outdoor unit-Heatsink temperature (TH8) at time of error	-40 – 200		
_	Discharge superheat (SHd) at time of error	0 – 255		
118			°	
_	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	0 – 9999	rpm	
122	• Fan 1 speed (Only for air conditioners with DC fan)	0 – 9393	тртт	
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	(/ 1 3			
128				
129				
130	Thermostat ON time until operation stops due to error	0 – 999	Minutes	
131	Thermostat Grv time until operation stops due to error	0 333	Williates	
132	Indoor - Liquid pipe temperature at time of error	-39 – 88	°C	Average value of all indoor units is displayed if the air condi-
	Index 2 phase size to receive at 2			tioner 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	$^{\circ}$	
135				
136				
137				
138				
139				
140				
140				
1.40				
146				
147				
148				
149			2-	
150	Indoor-Actual intake air temperature	-39 – 88	°C	
151	Indoor - Liquid pipe temperature	-39 – 88	°C	
152	Indoor-2-phase pipe temperature	-39 – 88	°C	

Request code	Request content	Description (Display range)	Unit	Remarks
153				
154	Indoor-Fan operating time (After filter is reset)	0 – 9999	1 hour	
155	Indoor-Total operating time (Fan motor ON time)	0 – 9999	10 hours	
156				
157	Indoor fan output value (Sj value)	0 – 255 Fan control data	-	For indoor fan phase control
158	Indoor fan output value (Pulsation ON/OFF)	"00 **" "**" indicates fan control data.	-	For indoor fan pulsation control
159	Indoor fan output value (duty value)	"00 **" "**" indicates fan control data.	_	For indoor DC brushless motor control
160				
161				
162	Indoor unit-Model setting information	Refer to 2-1. Detail Contents in Request Code.	-	
163	Indoor unit-Capacity setting information	Refer to 2-1. Detail Contents in Request Code.	_	
164	Indoor unit-SW3 information	Undefined	_	
165	Wireless pair No. (indoor control board side) setting	Refer to 2-1. Detail Contents in Request Code.	_	
166	Indoor unit-SW5 information	Undefined	_	
167				
~				
189				
190	Indoor unit-Microcomputer version information	Examples) Ver 5.01 → "0501"	Ver	
191	Indoor unit-Microcomputer version information (sub No.)	Auxiliary information (displayed after version information)	_	
		Examples) Ver 5.01 A000 → "A000"		
192				
~				
764				
765	Stable operation (Heat mode)	This request code is not provided to collect data. It is used to fix the operation state.		
766	Stable operation (Cool mode)	This request code is not provided to collect data. It is used to fix the operation state.		
767	Stable operation cancellation	This request code is not provided to collect data. It is used to cancel the operation state that has been fixed by request codes "765" and "766".		

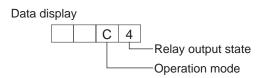
2-1. Detail Contents in Request Code



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

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

[Operation state] (Request code "0")



Operation mode

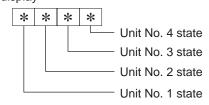
Display	Operation mode
0	STOP • FAN
С	COOL • DRY
Н	HEAT
d	Defrost

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			
Α	ON		ON	

[Indoor unit - Control state] (Request code: "50")





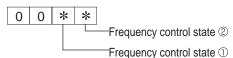
Display	State
0	Normal
1	Preparing for heat operation.
2	_
3	_
4	Heater is ON.
5	Anti-freeze protection is ON.
6	Overheat protection is ON.
7	Requesting compressor to turn OFF.
F	There are no corresponding units.

[Outdoor unit - Control state] (Request code "51")

Data display			ıy	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



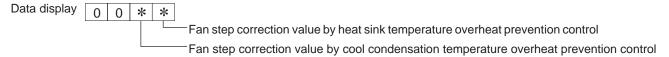
Frequency control state $\ \ \bigcirc$

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

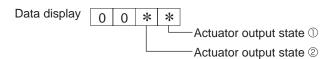
Display	Discharge temperature	Condensation temperature	Anti-freeze	Heat sink temperature
Display	overheat prevention	overheat prevention	protection control	overheat prevention
0				
1	Controlled			
2		Controlled		
3	Controlled	Controlled		
4			Controlled	
5	Controlled		Controlled	
6		Controlled	Controlled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

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



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

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



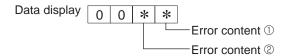
Actuator output state ①

Actuator of	1			Compressor is
Display	SV1	Four-way valve	Four-way valve Compressor	
0				warming up
1	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON
Α		ON		ON
b	ON	ON		ON
С			ON	ON
d	ON		ON	ON
Е		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")



Error conte	nt ①			: Detected
Display	Overvoltage	Undervoltage	L ₁ -phase	Power synchronizing
Display	error	error	open error	signal error
0				
1	•			
2		•		
3	•	•		
4			•	
5	•		•	
6		•	•	
7	•	•	•	
8				•
9	•			•
Α		•		•
b	•	•		•
С			•	•
d	•		•	•
Е		•	•	•

Error cont	ent ②	: Detected
Display	Converter Fo error	PAM error
0		
1	•	
2		•

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

Data display 0 0 0 * Setting content

Setting	content
---------	---------

	Display	Setting value -	Set	ting			
			SW7-1	SW7-2			
	0	0%					
	1	50%	ON				
	2	75%		ON			
	3	100%	ON	ON			

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

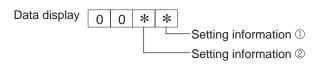
Data display 0 0 0 * Input state

Input state				•: Input present
Display	Contact demand	Silent mode	Spare 1	Spare 2
Display	input	input	input	input
0				
1	•			
2		•		
3	•	•		
4			•	
5	•		•	
6		•	•	
7	•	•	•	
8				•
9	•			•
Α		•		•
b	•	•		•
С			•	•
d	•		•	•
Е		•	•	•
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")



Setting information ①					
Display Defrost mode					
0	Standard				
1	For high humidity				

Setting information ②						
Diaplay	Single-/	Heat pump/				
Display	three-phase	cooling only				
0	Single-phase	Heat pump				
1	Sirigle-priase	Cooling only				
2	Three-phase	Heat pump				
3	Tillee-pilase	Cooling only				

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

0: Swich OFF 1: Swich ON

0: Sv	vich (OFF	1:	Swi	ch O	N
SV	N1, S	SW2,	SW6	3, SV	V7	Data d'autau
1	2	3	4	5	6	Data display
=	0	0	0		0	00.00
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	80 00
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 OC
1	0	1	1	0	0	00 0d
-		1			_	
0	1		1	0	0	00 0E
1	1	1	1	0	0	00 OF
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 13
-						
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	_	1	1	_	
_		0			0	
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
_			1		1	
0	0	0		0		
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		1		1	1	
-	0		0			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 3A
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

	SV	V5		Data display
1	2	3	4	Data display
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 OC
1	0	1	1	00 0d
0	1	1	1	00 0E
1	1	1	1	00 OF

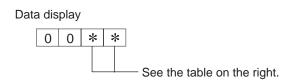
0: Swich OFF 1: Swich ON

	SW8		Data display
1	2	3	Data display
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

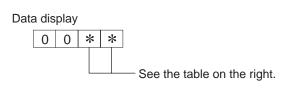
SW4, SW	/9, SW10	Data display
1	2	Data display
0	0	00 00
1	0	00 01
0	1	00 02
1	1	00 03

[Indoor unit – Model setting information] (Request code : 162)



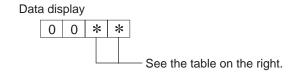
Display	Model setting state	Display	Model setting state
00	PSA-RP•GA, PSH-PGAH	20	
01		21	PKA-RP•FAL(2), PKH-P•FALH
02	PEAD-RP•EA(2)/GA, PEHD-P•EAH	22	PCA-RP•GA(2), PCH-P•GAH, PLA-RP•BA(2)
03	SEZ-KA•VA	23	
04		24	
05	SLZ-KA•VA(L)	25	
06	PCA-RP•HA	26	
07		27	
08		28	
09	PEA-RP400/500GA	29	
0A		2A	
0b	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)



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)



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
System Name	System Diagram		Components (Indoor/Outdoor Units, Remote Controller)
A.Remote control- ler operation (Standard)	Outdoor Remote unit Controller	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.	Indoor unit Outdoor unit Remote Controller	One group can consist of up to 16 indoor units, and they can be started sequentially by connecting the remote controller to them and assigning an address to each 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.	Relay box Indoor unit Remote Controller Remote operating panel	All the air conditioners can be turned ON/OFF collectively from a distance. Operation can be switched between the remote operating panel and 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	Adapter Indoor unit Remote Controller Remote display panel (operation, error)	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)
control start/stop from a distance.		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
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.	Components (Indoor/Outdoor Units, Remote Controller) MA Remote controller (PAR-21MAA)
H.Interlock operation with peripheral equipment Enables control of Mitsubishi Lossnay ventilator by remote controller.	Lossnay ventilator Remote Controller	Connecting a Lossnay ventilator and an indoor unit enables control of interlock/solo ventilation opera- tion and airflow. (Only the microcomputer type Lossnay ventilator can be used.)	
I.Central control	Connection with M-NET system> Outdoor unit Power supply unit Indoor unit Remote Controller Central controller, etc.	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	Adaptor to input external demand signal Relay box Outdoor unit Remote Indoor unit Operating panel	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	Remote Controller Main Sub Indoor unit Outdoor unit	 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

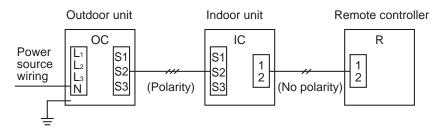
1-1 1 Wired Remote Controller

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

Slim Air C	onditioners System	Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
ram te	Outdoor unit OC	Indoor/Outdoor Oconnection	C OC 33 33	OC Large	OC 3(2) 3(2) 3(2) 3(2)
en diagrar ed remote roller)	Indoor unit IC	cable IC-	-1 IC-1 IC-2	3(2) 3(2) 3(2) IC-1 IC-2 IC-3	3(2), 3(2), 3(2) IC-1 IC-2 IC-3 IC-4
System (Wired control	Wired remote controller R	cable R	R	12 R	12 R

(Reference)

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

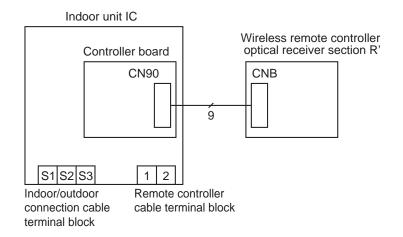


1-2 Wireless remote controller

	nditioners System	Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
System diagram (Wireless remote controller receiver)	Outdoor unit OC	Indoor/Outdoor OC	OC /3 ,3	OC 3(2) . 3(2) . 3(2)	OC 3(2), 3(2), 3(2), 3(2)
m diagr ess ren oller rec	Indoor unit IC	cable IC-1	IC-1 IC-2	3(2) 3(2) 1C-1 1C-2 1C-3	IC-1 IC-2 IC-3 IC-4
Syster (Wirel contro	Wireless remote controller receiver section R'	R'	R'	7 9 R	R

(Reference)

- * Numbers given in () apply when power is supplied to the indoor and outdoor units separately.
- 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.)
- $\ensuremath{\ensuremath}\amb}\amb}\amb}}}}}}}}}}}}}}$



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 Cond	itioner System	Standard 1:1	Simultaneous Twin	Simultaneous Triple	Simultaneous Quad
am e wireless oller	Outdoor unit OC	OC	ОС	ОС	ОС
	Indoor unit IC	Indoor/outdoor connection cable 3(2)	3(2) 3(2) IC-1 IC-2	3(2), 3(2) IC-1 IC-2 IC-3	3(2), 3(2), 3(2), 3(2) IC-1
System (Wired controll remote receive	Wired remote controller or reciever R	R	R-1 R-2	R-1 R-2 R-3	R-1 R-2 R-3 R-4

^{*} 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
	Outdoor unit OC	Indoor/outdoor OC 3(2)	OC 3(2) , 3(2)
System	Indoor unit IC	connection cable 1 3(2) Remote controller 12 2	IC-1 IC-2
diagram (Wired remote	Wired remote controller R	cable R-1 R-2	R-1 R-2
controller)	Outdoor unit OC	3(2)	OC 3(2) 3(2)
	Indoor unit IC		
	Wired remote controller R	R-1 R-2	R-1 R-2
Slim Air Cond	itioner System	Simultaneous Trinla	Simultaneous Ouad

Slim Air Cond	litioner System	Simultaneous Triple	Simultaneous Quad
	Outdoor unit OC	OC 3(2) 3(2) 3(2)	oc 3(2), 3(2), 3(2), 3(2)
System	Indoor unit IC	IC-1 IC-2 IC-3	IC-1 IC-2 IC-3 IC-4
diagram (Wired remote	Wired remote controller R	12 R-1 R-2	12 R-1 R-2
controller)	Outdoor unit OC	OC 3(2) 3(2) 3(2)	OC 3(2) 3(2) 3(2) 2(2)
	Indoor unit IC	IC-1 IC-2 IC-3	IC-1 S-2 IC-3 IC-4
	Wired remote controller R	R-1 R-2	R-1 R-2

* 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	Outdoor unit OC		Indoor/outdoor [,3(2) 3(2)
(Wireless remote controller receiver)	Indoor unit IC	_	connection cable 3(2) 3(2) 1C-1 1C-2 Receiver 9
	Wireless remote controller receiver section R'		connection 19 19 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20

Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad		
System diagram	Outdoor unit OC	OC 3(2) , 3(2) , 3(2)	OC , 3(2) , 3(2) , 3(2)		
(Wireless remote	Indoorunit IC	IC-1 IC-2 IC-3			
controller receiver)	Wireless remote controller receiver section R'	1 1 1 R-2	1° 1° R'-2		

^{*} 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.
- 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	Outdoor unit OC	Indoor/outdoor oc	OC 3(2) . 3(2)
	Indoor unit IC	connection cable 3(2) Remote IC Receiver connection controller 2 2 2 2 2 2 2 2 2	3(2) 3(2) IC-1 IC-2
remote controller receiver)	Wired remote controller Receiver R-R'	cable R R'	1 2 R R'
Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad

Slim Air Conditioner System		Simultaneous Triple	Simultaneous Quad		
System diagram (Wired remote	Outdoor unit OC	OC 3(2), 3(2), 3(2)	OC		
controller and wireless remote		IC-1 IC-2 IC-3	IC-1 IC-2 IC-3 IC-4		
controller receiver)	Wired remote controller Receiver R-R'	1 ₂ R R'	1 2 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.)
- 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 receiver)	Outdoor unit OC Indoorunit IC Wired remote controller R	Indoor/outdoor connection cable 3(2) 3(2) Remote controller cable R Remote controller crossover wiring	OC-A OC 3(2) 3(2) 1C-B1 IC-B2 R	OC-A OC-B OC-C OC-C OC-C OC-C OC-C OC-C OC-C
System (Wired remote controller or wire	Outdoor unit OC Indoorunit IC Wireless remote controller receiver section R'	Indoor/outdoor connection cable Receiver connection cable Receiver connection cable R' OC-B 3(2) 3(2) IC-B Remote controller crossover wiring	OC-A OC 3(2) 3(2) 1C-A 1C-B1 1C-B2 R'	OC-A OC-B OC-C OC-C OC-C OC-C OC-C OC-C OC-C

[Reference]

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

	and the second s													
	Item		4-wa	y ceiling ca	ssette	Ceiling suspended	Wall m	ounted	Floor mounted	Ceiling suspended (suitable for kitchen)		Celing co	ncealed	
			PLA-RP.AA			PCA-RP.GA(2)	PKA-RP.GAL	PKA-RP.FAL(2)	PSA-RP.GA		PEAD-RP.EA(2)			
			PLH-RP.AAH	PLA-RP.BA(2)	SLZ-KA.VA(L)	PCH-RP.GAH	PKH-RP.GALH	PKH-RP. FALH	PSH-RP.GAH	PCA-RP.HA	/GA PEHD-RP.EAH	PEA-RP.EA(2)	SEZ-KA/KC.VA	SEZ-KD.VA
Γ,		Number of fan speeds	4	4+Auto	3	4	4	2	2	2	2	2	2	3
1	Up/down	Presence/absence	0	0	0	0	0	0	×	×	×	×	×	×
		Swing function	0	0	0	0	0	0	×	×	×	×	×	×
1	Left/right swing louver	Presence/absence	X	×	×	×	×	×	0	×	×	×	×	×
	Function ord	ler	1	1	2	1	1	3	4	6	6	6	6	5

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)

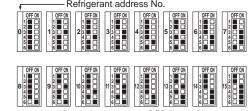
Outdoor unit address setting

- 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").

<SW1>

Address setting by SW1 is as follows.

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



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)

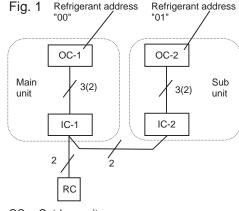
System constraint

- 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.)

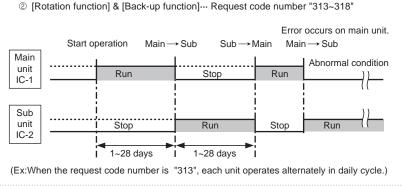
· Set refrigerant address of each unit. (Dip switch on the outdoor unit ··· Refrigerant address 00/01)

Operation pattern ① [Back-up function only]··· Request code number "312" Error occurs on main unit. Start operation Main →Sub Main unit Abnormal condition Run IC-1 Sub unit Run ② [Rotation function] & [Back-up function] ··· Request code number "313~318" Error occurs on main unit.



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.

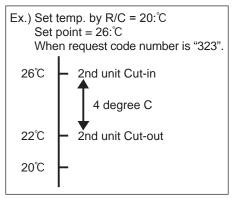
(2) 2nd stage cut-in function

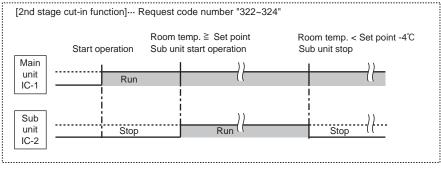
• Outline of functions

- · 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°C (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°C, standby unit stops.(1 unit operation)

System constraint

· This function is available only in cooling mode.





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

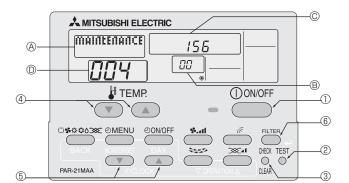
Rotation setting

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)	0
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 (③). After a while, [00] appears in the refrigerant address number display area.(at ③)
- 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 (\bigcirc and \bigcirc)] buttons (4) to select the desired refrigerant address. [ScreenB] \longrightarrow 00 \longleftrightarrow 01 \longleftrightarrow \longleftrightarrow 15 \longleftrightarrow
- 5. Press the [CLOCK (and)] buttons (5) to set the desired request code No.("311~318", "321~324")
- 6. Press the FILTER button (®) 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.(©)]

[Reference]

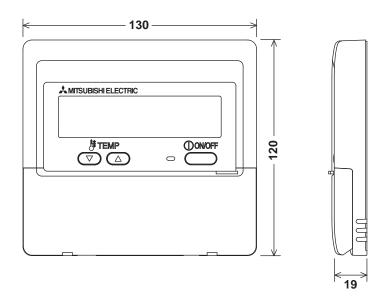
You can check current "request code number" setting by setting the "request code number" ("310" or "320") and pressing the FILTER button.(6)

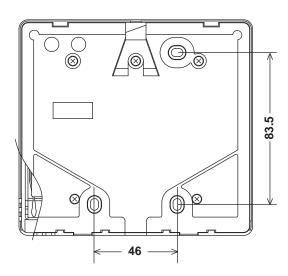
[Example: When the current setting is "Setting No.2(Request code 311)", [311] appears on the screen.(©)]

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

XI. External Dimensions

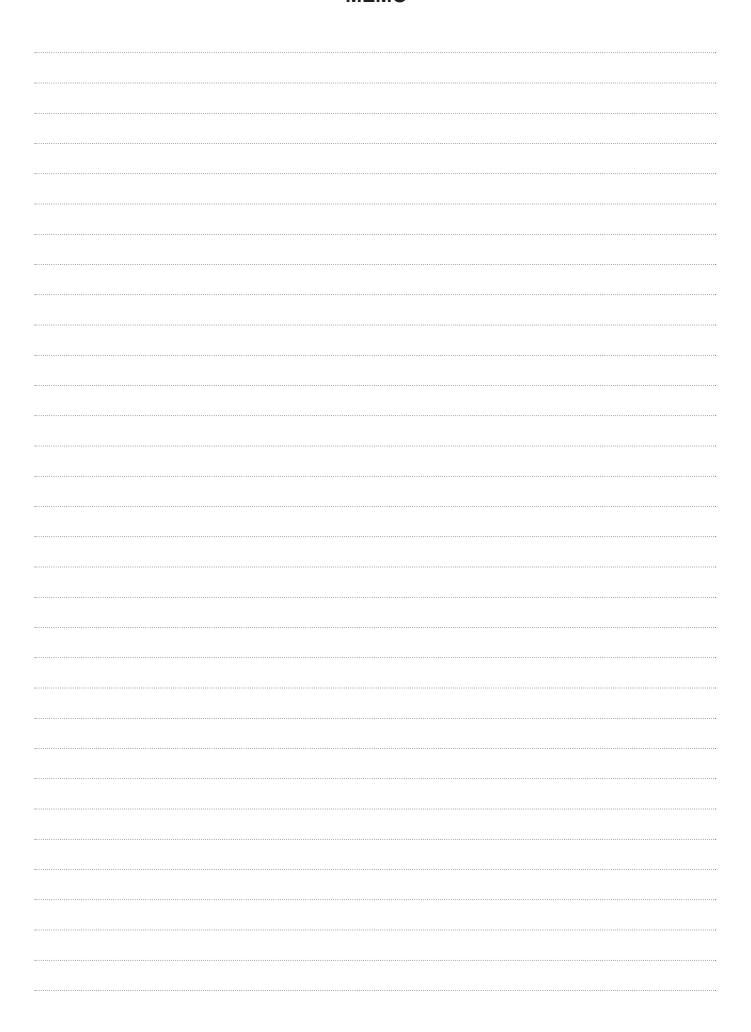
unit: mm

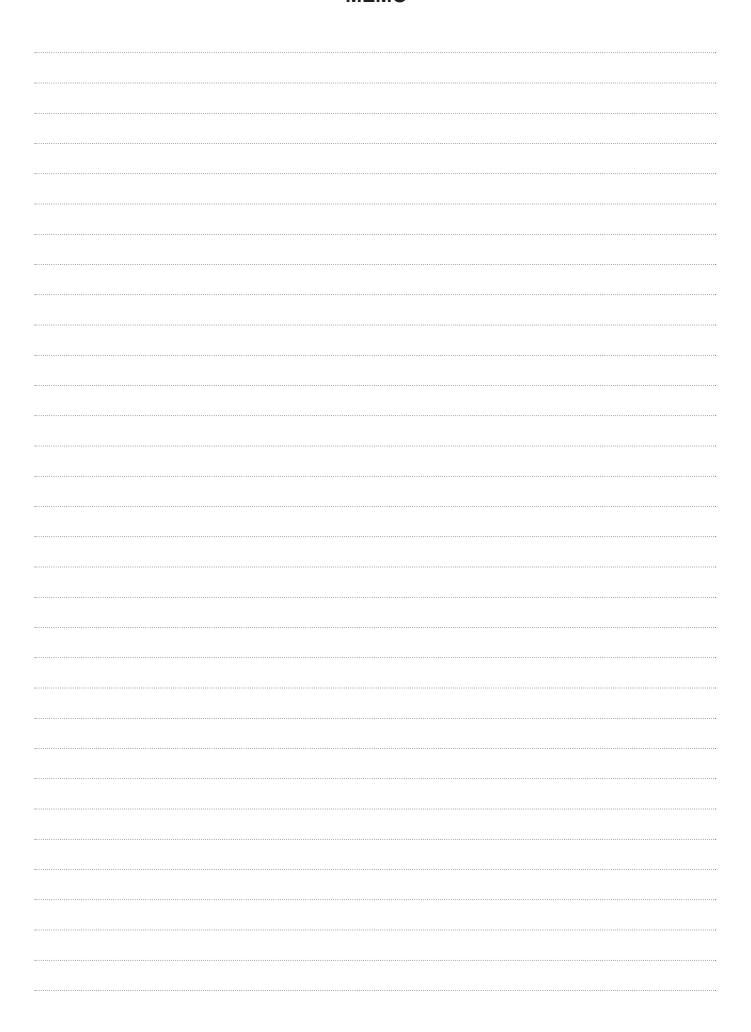


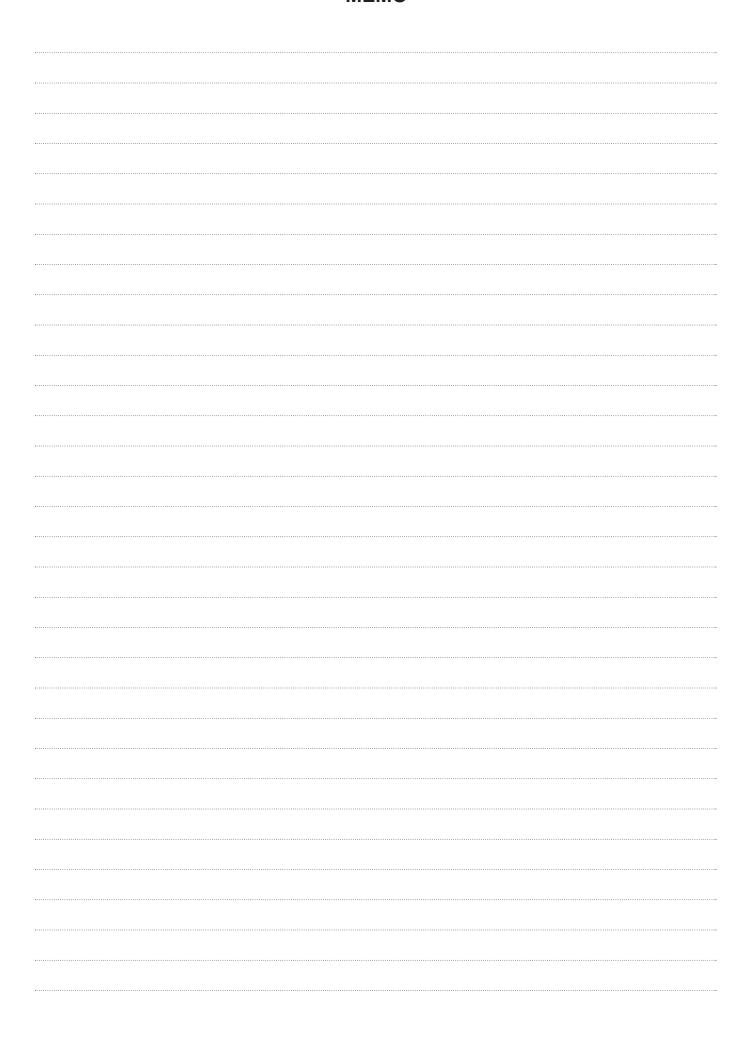


External colors: Cover Pure white (Munsell 6.9Y 8.9/0.4)

LCD peripheral area Medium gray







CITY MULTI and Mr.SLIM Air Conditioners

MA Remote Controller PAR-21MAA

