

MITSUBISHI ELECTRIC



CITY MULTI Control System
and Mitsubishi Mr. SLIM Air Conditioners

MA Remote Controller

PAR-21MAA

Installation Manual

This instruction manual describes how to install the MA Remote Controller for Mitsubishi Building Air Conditioning System, direct expansion type CITY MULTI air conditioner indoor units ("A" type and later), and Mitsubishi Mr. SLIM packaged air conditioners. Please read this manual thoroughly and install the remote controller accordingly. For information on how to wire and install the air conditioning units, refer to the installation manual. After the installation, hand over this manual to users.

1 Safety Precautions

- Read these Safety Precautions and perform installation work accordingly.
- The following two symbols are used to denote dangers that may be caused by incorrect use and their degree:

	WARNING	This symbol denotes what could lead to serious injury or death if you misuse the PAR-21MAA.
	CAUTION	This symbol denotes what could lead to a personal injury or damage to your property if you misuse the PAR-21MAA.

- After reading this installation manual, give it and the indoor unit installation manual to the end user.
- The end user should keep this manual and the indoor unit installation manual in a place where he or she can see it at anytime. When someone moves or repairs the PAR-21MAA, make sure that this manual is forwarded to the end user.

WARNING

Ask your dealer or technical representative to install the unit.

Any deficiency caused by your own installation may result in an electric shock or fire.

Install in a place which is strong enough to withstand the weight of the PAR-21MAA.

Any lack of strength may cause the PAR-21MAA to fall down, resulting in personal injury.

Firmly connect the wiring using the specified cables. Carefully check that the cables do not exert any force on the terminals.

Improper wiring connections may produce heat and possibly a fire.

Never modify or repair the PAR-21MAA by yourself.

Any deficiency caused by your modification or repair may result in an electric shock or fire.

Consult with your dealer about repairs.

Ensure that installation work is done correctly following this installation manual.

Any deficiency caused by installation may result in an electric shock or fire.

All electrical work must be performed by a licensed technician, according to local regulations and the instructions given in this manual.

Any lack of electric circuit or any deficiency caused by installation may result in an electric shock or fire.

Do not move and re-install the PAR-21MAA yourself.

Any deficiency caused by installation may result in an electric shock or fire.

Ask your distributor or special vendor for moving and installation.

To dispose of this product, consult your dealer.

CAUTION

Do not install in any place exposed to flammable gas leakage.

Flammable gases accumulated around the body of PAR-21MAA may cause an explosion.

Do not use in any special environment.

Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.

When installing the remote controller in a hospital or communication facility, take ample countermeasures against noise.

Inverters, emergency power supply generators, high-frequency medical equipment, and wireless communication equipment can cause the remote controller to malfunction or to fail. Radiation from the remote controller may effect communication equipment and prevent medial operations on the human body or interfere with image transmission and cause noise.

Wire so that it does not receive any tension.

Tension may cause wire breakage, heating or fire.

Completely seal the wire lead-in port with putty etc.

Any dew, moisture, insects entering the unit may cause an electric shock or a malfunction.

Do not install in any place at a temperature of more than 40°C or less than 0°C or exposed to direct sunlight.

Doing so may cause deformation or malfunction.

Do not apply AC100V or AC200V to the remote controller. The maximum voltage that can be applied to the remote controller is 12V.

The remote controller may be damaged or may generate heat and cause a fire.

Do not install in any steamy place such a bathroom or kitchen.

Avoid any place where moisture is condensed into dew. Doing so may cause an electric shock or a malfunction.

Do not install in any place where acidic or alkaline solution or special spray are often used.

Doing so may cause an electric shock or malfunction.

Use standard wires in compliance with the current capacity.

A failure to this may result in an electric leakage, heating or fire.

Do not touch any control button with your wet hands.

Doing so may cause an electric shock or a malfunction.

Do not wash with water.

Doing so may cause an electric shock or a malfunction.

Do not press any control button using a sharp object.

Doing so may cause an electric shock or a malfunction.

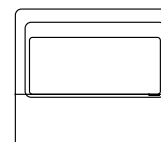
2 Confirming the Supplied Parts

Confirm that the box includes the following parts, in addition to this installation manual:

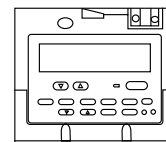
1. Remote controller (cover, body) 1
2. Cross recessed pan head screw (M4 × 30) 2
3. Wood screw (4.1 × 16, used for directly hooking to the wall) 2
4. Caution label (in 12 languages) 1

*1 For the remote control, obtain a 2-core cable between 0.3 and 1.25 mm² at the site.

*2 PAC-YT32PTA cannot be connected.



Remote controller cover



Remote controller body

3 How To Install

1. Choose a place in which to install the remote controller (switch box).

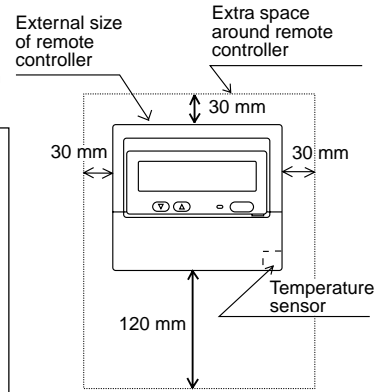
Be sure to observe the following steps:

- (1) Temperature sensors are provided with both the remote controller and the indoor units. When using the remote controller temperature sensor, the master remote controller detects the room temperature. Install the master remote controller in a place where the average room temperature can be detected and which is not affected by any heat source from direct sunlight or air blown from air conditioning units.

CAUTION The place where (when) the difference between the room temperature and the wall temperature is large, the wall temperature that is affected by the temperature of the wall on which the remote controller is installed is measured. Therefore, the difference between the room temperature and the measured wall temperature may be large.
When the installation site is one of the followings, use of a temperature sensor for an indoor unit is recommended.

- When the room is not well-ventilated and the air does not reach the wall on which the remote controller is installed.
- When the difference between the temperature of the wall on which the remote controller is installed and the room temperature.
- When the backside of the wall on which the remote controller is installed is exposed to the outdoor air.

When the temperature changes drastically, the temperature may not be measured accurately.



When a remote controller temperature sensor is used in a place which is likely to be affected by the wall on which the remote controller is installed, use of an optional spacer (Model: PAC-YT83RS) for a remote controller is recommended.

(For how to set the main and sub remote controller, see step (1) "Remote controller" [4]-3. (1) in section (6) Function Selection.)

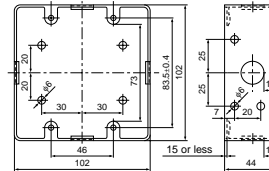
(For how to set the temperature sensor, see step (2) "Unit function selection" in section (6) Function Selection.)

- (2) When installing on either the switch box or the wall, allow extra space around the remote controller as shown in the figure at the right.

NOTE: Make sure that there is no wiring or wire near the remote controller sensor. If there is, the remote controller cannot detect the exact room temperature.

- (3) Parts which must be supplied on site.

- Switch box for two units
- Thin-copper wiring pipe
- Lock nut and bushing
- Surface raceways

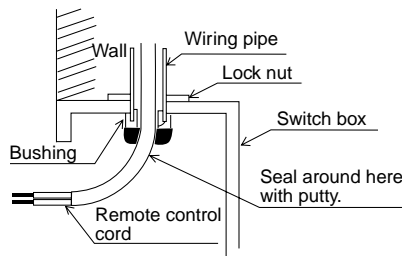


Switch box two units

2. Seal the remote controller cord with putty in order to prevent the possible entry of dew, water droplets, cockroaches, other insects, etc.

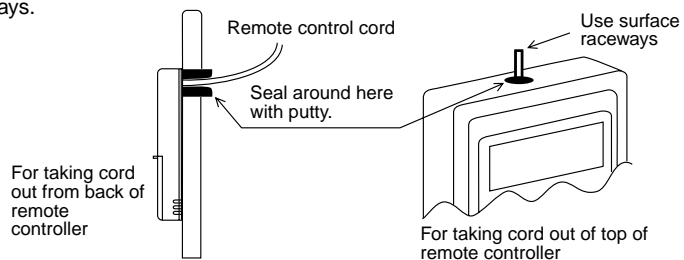
When using the switch box

- When installing on the switch box, seal the connections between the switch box and wiring pipe with putty.



When installing directly on the wall

- When opening a hole using a drill for the remote controller cord (or when taking the cord out of the back of the remote controller), seal the hole with putty.
- When routing the cord via the portion cut off from the upper cover, similarly seal that portion with putty.
- When taking the remote controller cord from back of the controller, use surface raceways.



3. Remove the remote controller cover.

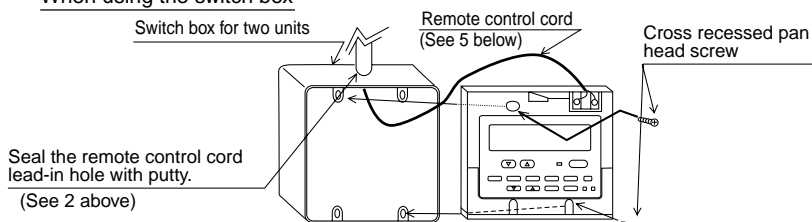
- Insert a minus screwdriver into one of the open slots and move the screwdriver in the arrow direction.



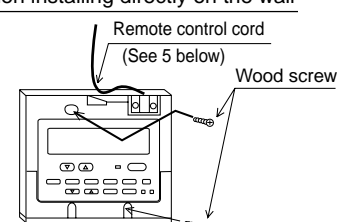
CAUTION Do not turn the screwdriver in the slot. Doing so may damage the slot.

4. Install the lower case on the switch box or directly on the wall.

When using the switch box



When installing directly on the wall



CAUTION Do not tighten the screws too tight. Doing so may deform or crack the lower cover.

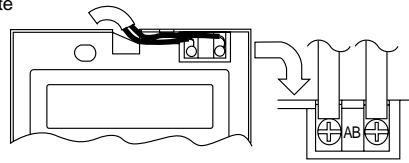
NOTE:

- Choose a flat plane for installation.
- Fasten the switch box at more than two places when installing directly on the wall.
- When reinstalling on the wall, fasten securely using anchors.

5. Connect the remote control cord to the remote controller terminal block.

To indoor unit MA remote controller or A control terminal block

There is no polarity.



To connect the remote control cord, peel 6mm of coating.

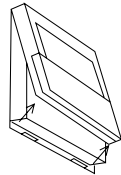
CAUTION Do not use crimp terminals to connect to remote controller terminal blocks. The terminals may contact the board and cause trouble or contact the cover and damage the cover.

CAUTION Prevent remote cord chips from getting into the remote controller. Electric shock or malfunction may result.

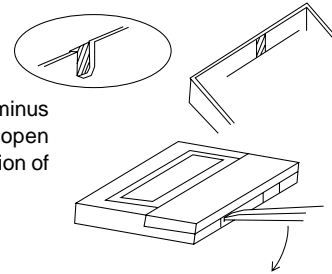
6. Wiring hole for installing directly on the wall (or open wiring)

- Cut off the shaded area from the upper cover using a knife, nippers, etc.
- Take out the remote control cord connected to the terminal block via this portion.

7. Install the cover to the remote controller.



To remove the cover, insert a minus screwdriver into one of the open slots, and move it in the direction of the arrow shown in the figure.



First, hook the cover to the two upper claws and then fit it to the remote controller.

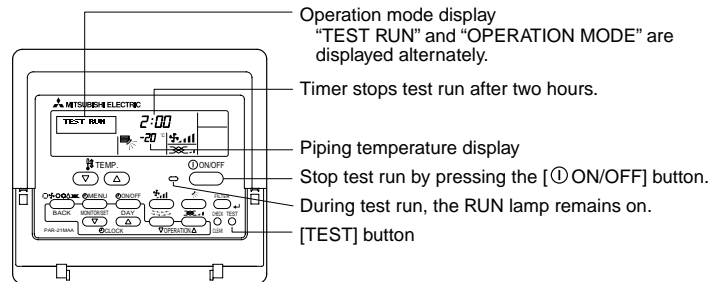
CAUTION Press the cover until it snaps shut. If not, it may fall off.

CAUTION Do not insert the screwdriver in the slot. Doing so may damage the slot.

NOTE: A protection sheet is stuck to the operation section. Peel off this protection sheet before use.

4 Test Run

1. Before making a test run, refer to the "Test Run" section of the indoor unit installation manual.
2. Press the [TEST] button twice successively within three seconds. Test run starts.
3. Stop the test run by pressing the [ON/OFF] button.
4. If trouble occurred during the test run, refer to the "Test Run" section of the indoor unit installation manual.



5 Ventilation Setting

Make this setting only when interlocked operation with LOSSNAY is necessary with CITY MULTI models.

(This setting cannot be made with Mr. SLIM air conditioners.)

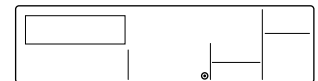
* When the upper controller is connected, make the setting using the upper controller.

NOTE: When using LOSSNAY units in conjunction, interlock the addresses of all indoor units within the group and address of LOSSNAY units.

Perform this operation when you want to register the LOSSNAY, confirm the registered units, or delete the registered units controlled by the remote controller. The following uses indoor unit address 05 and LOSSNAY address 30 as an example to describe the setting procedure.

[Setting Procedure]

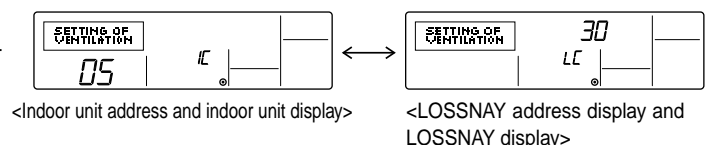
- ① Stop the air conditioner using the remote controller [ON/OFF] button.
If the OFF display shown below does not appear at this time, step ② cannot be performed.



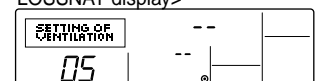
- ② Press and hold down the [FILTER] and [ON/OFF] buttons at the same time for two seconds. The display shown below appears. The remote controller confirms the registered LOSSNAY addresses of the currently connected indoor units.



- ③ Registration confirmation result
- The indoor unit address and registered LOSSNAY address are displayed alternately.



- When LOSSNAY are not registered

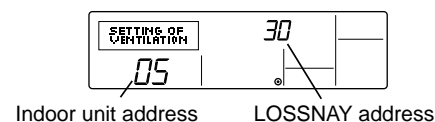


- ④ If registration is unnecessary, end registration by pressing and holding down the [FILTER] and [ON/OFF] buttons at the same time for two seconds.
If a new LOSSNAY must be registered, go to step 1. **Registration procedure**. If you want to confirm another LOSSNAY, go to step 2. **Confirmation procedure**. To delete a registered LOSSNAY, go to step 3. **Deletion procedure**.

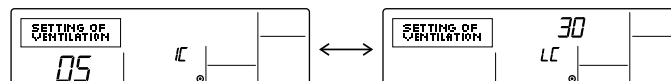
< 1. Registration procedure >

- ⑤ Set the address of the LOSSNAY and the indoor unit connected by the remote controller you want to register using the [TEMP. (▽)] and [TEMP. (△)] buttons. (01 to 50)

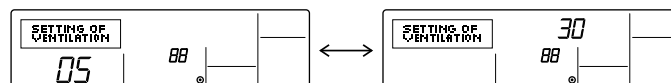
- ⑥ Set the address of the LOSSNAY you want to register using the [⊖CLOCK (▽) and (△)] buttons.
(01 to 50)



- ⑦ Press the [TEST] button, and register the set indoor unit address and LOSSNAY address.
- Registration end display
The indoor unit address and "IC" and LOSSNAY address and "LC" are alternately displayed.



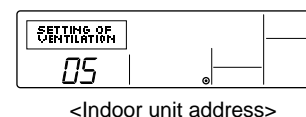
- Registration error display
If the address was not correctly registered, the indoor unit address and registered LOSSNAY address are alternately displayed.



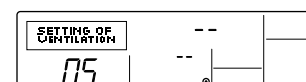
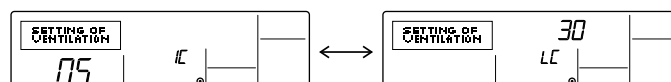
Cannot be registered because the registered indoor unit or LOSSNAY does not exist.
Cannot be registered because another LOSSNAY was registered at the registered indoor unit.

< 2. Confirmation procedure >

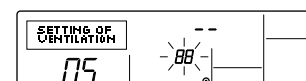
- ⑧ Set the address of the indoor unit connected by the remote controller whose LOSSNAY you want to confirm using the [⊖TEMP. (▽) and (△)] buttons. (01 to 50)



- ⑨ Press the [⊖MENU] button and confirm the LOSSNAY address registered at the set indoor unit address.
- Confirmation end display (When LOSSNAY is connected.)
The indoor unit address and "IC" and registered LOSSNAY address and "LC" are alternately displayed.
- Confirmation end display (When LOSSNAY is not connected.)



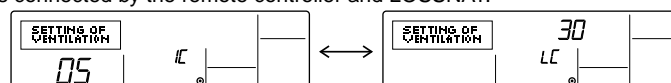
Registered indoor unit address does not exist.



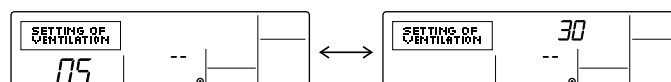
< 3. Deletion procedure >

Use this procedure when you want to delete registration of indoor units connected by the remote controller and LOSSNAY.

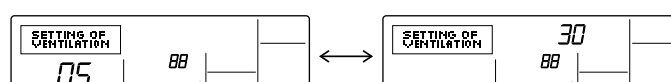
- ⑩ Confirm (see 2. Confirmation procedure) the LOSSNAY you want to delete and display the indoor units and LOSSNAY confirmation results.



- ⑪ Press the [⊖ON/OFF] button twice and delete registration of the LOSSNAY registered at the set indoor unit.
- Deletion end display
Indoor unit address and "–" and registered LOSSNAY address and "–" are alternately displayed.



- Deletion error display
When deletion was not performed properly.



6 Function Selection

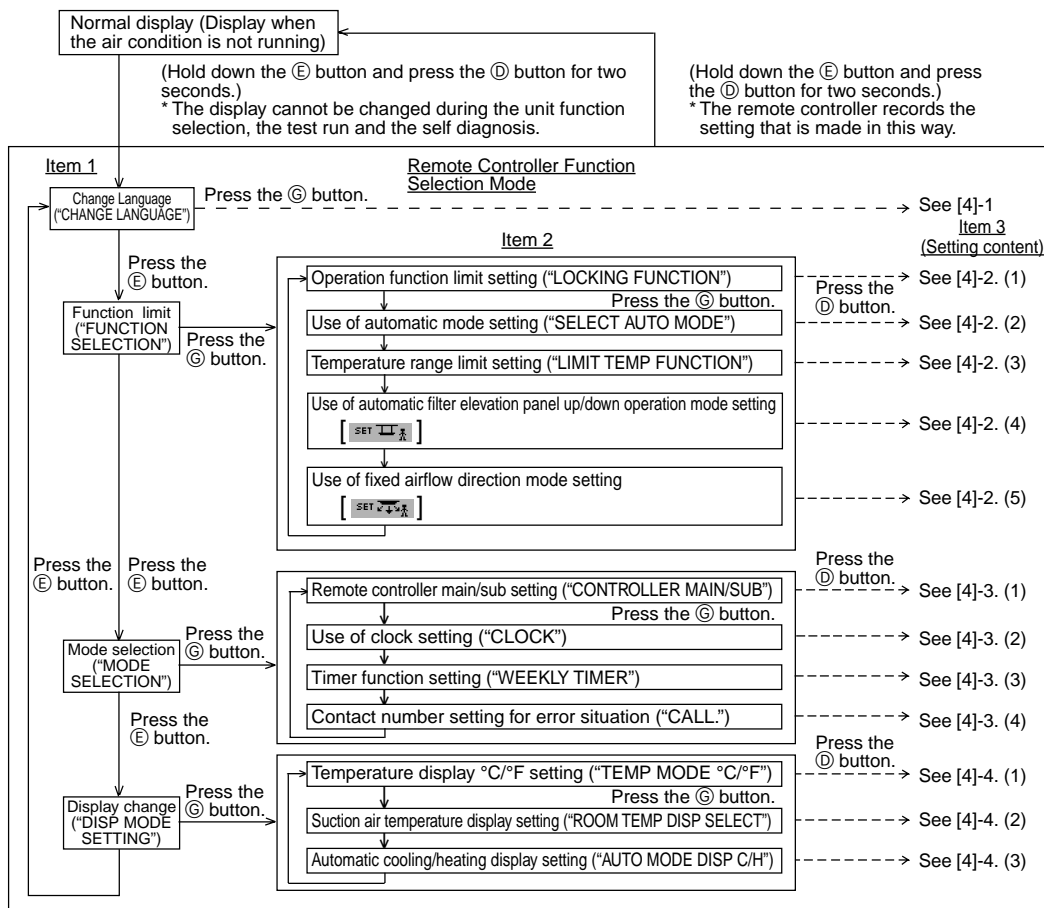
(1) Function selection of remote controller

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

Item 1	Item 2	Item 3 (Setting content)
1. Change Language ("CHANGE LANGUAGE")	Language setting to display	• Display in multiple languages is possible.
2. Function limit ("FUNCTION SELECTION")	(1) Operation function limit setting (operation lock) ("LOCKING FUNCTION")	• Setting the range of operation limit (operation lock)
	(2) Use of automatic mode setting ("SELECT AUTO MODE")	• Setting the use or non-use of "automatic" operation mode
	(3) Temperature range limit setting ("LIMIT TEMP FUNCTION")	• Setting the temperature adjustable range (maximum, minimum)
	(4) Use of automatic filter elevation panel up/down operation mode setting	• Setting the use or non-use of the automatic filter elevation panel up/down operation mode
	(5) Use of fixed airflow direction mode setting	• Setting the use or non-use of the fixed airflow direction mode
3. Mode selection ("MODE SELECTION")	(1) Remote controller main/sub setting ("CONTROLLER MAIN/SUB")	• Selecting main or sub remote controller * When two remote controllers are connected to one group, one controller must be set to sub.
	(2) Use of clock setting ("CLOCK")	• Setting the use or non-use of clock function
	(3) Timer function setting ("WEEKLY TIMER")	• Setting the timer type
	(4) Contact number setting for error situation ("CALL.")	• Contact number display in case of error • Setting the telephone number
4. Display change ("DISP MODE SETTING")	(1) Temperature display °C/°F setting ("TEMP MODE °C/°F")	• Setting the temperature unit (°C or °F) to display
	(2) Suction air 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

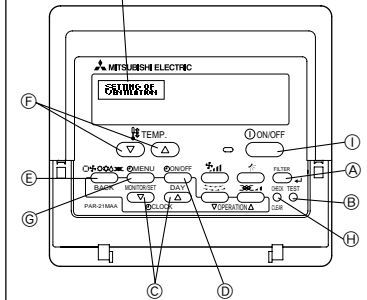
[Function selection flowchart]

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



NOTE
Timer operation stops when the display for remote controller function selection is changed to the normal one.

Dot display
The language that is selected in CHANGE LANGUAGE mode appears on this display. English is set in this manual.



[Detailed setting]

[4]-1. CHANGE LANGUAGE setting

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

- Press the [MENU] button to change the language.
- 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

(1) Operation function limit setting (operation lock)

- To switch the setting, press the [ON/OFF] button.
- 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 two 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.

- To switch the setting, press the [ON/OFF] button.
- 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

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

- To switch the setting, press the [ON/OFF] button.
- ① LIMIT TEMP COOL MODE : The temperature range can be changed on cooling/dry mode.
- ② LIMIT TEMP HEAT MODE : The temperature range can be changed on heating mode.
- ③ LIMIT TEMP AUTO MODE : The temperature range can be changed on automatic mode.
- ④ OFF (initial setting) : The temperature range limit is not active.
- * When the setting, other than OFF, is made, the temperature range limit setting on cooling, heating and automatic mode is made at the same time. However, the range cannot be limited when the set temperature range has not changed.

- To increase or decrease the temperature, press the [TEMP (▽) or (△)] button.
- To switch the upper limit setting and the lower limit setting, press the [SET] button. The selected setting will flash and the temperature can be set.
- Settable range
Cooling/Dry mode : Lower limit: 19°C ~ 30°C Upper limit: 30°C ~ 19°C
Heating mode : Lower limit: 17°C ~ 28°C Upper limit: 28°C ~ 17°C
Automatic mode : Lower limit: 19°C ~ 28°C Upper limit: 28°C ~ 19°C
- * The settable range varies depending on the unit to connect (Mr. Slim units, Free-plan units, and intermediate temperature units)

(4) Use of automatic filter elevation panel up/down operation mode setting

- To switch the setting, press the [ON/OFF] button.
- ① ON : The operation to switch to the automatic filter elevation panel up/down operation mode is valid.
- ② OFF : The operation to switch to the automatic filter elevation panel up/down operation mode is always invalid.
- * Switching operation: Press the filter button and the ventilation button together for 2 seconds while the display of stopped unit appears on the remote controller.
- For details of the automatic filter elevation panel up/down operation mode settings, refer to the installation manual for the indoor unit. With the automatic filter elevation panel up/down operation mode, the elevating operation of the panel (grill) on the indoor unit can be made.

(5) Use of fixed airflow direction mode setting

- ① ON : The operation to switch to the fixed airflow direction mode is valid.
- ② OFF : The operation to switch to the fixed airflow direction mode is always invalid.
- * Switching operation: Press the filter button and the Fan Speed button together for 2 seconds while the display of stopped unit appears on the remote controller.
- For details of the fixed airflow direction mode settings, refer to the installation manual for the indoor unit. With the fixed airflow direction mode settings, the position of the vane can be fixed for each air outlet.

[4]-3. Mode selection setting

(1) Remote controller main/sub setting

- To switch the setting, press the [ON/OFF] button.
- ① Main : The controller will be the main controller.
- ② Sub : The controller will be the sub controller.

(2) Use of clock setting

- To switch the setting, press the [⊕ON/OFF] button.

- ON : The clock function can be used.
- OFF: The clock function cannot be used.

(3) Timer function setting

- To switch the setting, press the [⊕ON/OFF] button (Choose one of the followings.).

- WEEKLY TIMER (Initial setting value):
The weekly timer can be used.
- AUTO OFF TIMER: The auto off timer can be used.
- SIMPLE TIMER: The simple timer can be used.
- TIMER MODE OFF: The timer mode cannot be used.

* When the use of clock setting is OFF, the "WEEKLY TIMER" cannot be used.

(4) Contact number setting for error situation

- To switch the setting, press the [⊕ON/OFF] button.

- CALL OFF: The set contact numbers are not displayed in case of error.
- CALL **** * : The set contact numbers are displayed in case of error.

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 flashing cursor to set numbers. Press the [TEMP. (▽) and (△)] button to move the cursor to the right (left). Press the [⊕CLOCK (▽) and (△)] button to set the numbers.

[4] -4. Display change setting

(1) Temperature display °C/°F setting

- To switch the setting, press the [⊕ON/OFF] button.
- ① °C: The temperature unit °C is used.
- ② °F: The temperature unit °F is used.

(2) Suction air temperature display setting

- To switch the setting, press the [⊕ON/OFF] button.
- ① ON : The suction air temperature is displayed.
- ② OFF: The suction air temperature is not displayed.

(3) Automatic cooling/heating display setting

- To switch the setting, press the [⊕ON/OFF] button.
- 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) Unit Function Selection Perform only when change is necessary with Mr. SLIM air conditioner.

(Cannot be performed with CITY MULTI control system.)

Set the functions of each indoor unit from the remote controller, as required. The functions of each indoor unit can be selected only from the remote controller.

Set the functions by selecting the necessary items from Table 1.

Table 1. Function selection contents (For a detailed description of the factory settings and mode of each indoor unit, refer to the indoor unit installation manual.)

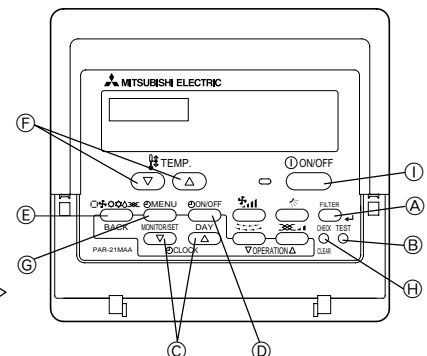
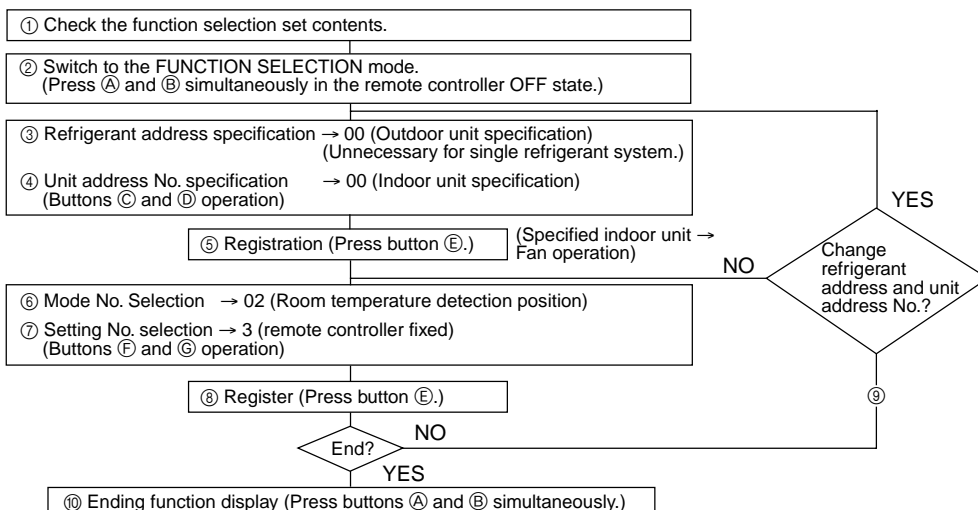
Function	Settings	Mode No.	Setting No.	Check	Object unit address No.
Power failure automatic recovery	Not available Available (Approximate 4 minutes wait-period after power is restored.)	01 01	1 2		Unit address No. 00
Indoor temperature detecting	Indoor unit operating average Set by indoor unit's remote controller Remote controller's internal sensor	02 02 02	1 2 3		These items are set for all indoor units.
LOSSNAY connectivity	Not Supported Supported (indoor unit is not equipped with outdoor-air intake) Supported (indoor unit is equipped with outdoor-air intake)	03 03 03	1 2 3		
AUTO mode	Energy saving cycle automatically enabled Energy saving cycle automatically disabled	05 05	1 2		
Filter sign	100 Hr 2500 Hr No filter sign indicator	07 07 07	1 2 3		Unit address No. 01 to 04 or AL
Fan speed	Quiet Standard High ceiling	08 08 08	1 2 3		These items are set for each indoor unit.
No. of air outlets	4 directions 3 directions	09 09	1 2		
Installed options	Not supported Supported	10 10	1 2		
Up/down vane setting	No vanes Equipped with vanes (No. 1 set) Equipped with vanes (No. 2 set)	11 11 11	1 2 3		
Energy saving air flow	Disabled Enabled	12 12	1 2		
Humidifier	Not supported Supported	13 13	1 2		

NOTE: When the indoor unit functions were changed using the function selection after installation is complete, always indicate the set contents by entering ○ or other mark in the appropriate check field of Table 1.

[Function selection flow]

First grasp the function selection flow. The following describes setting of "Room temperature detection position" of Table 1 as an example.

(For the actual setting procedure, see [Setting procedure] ① to ⑩.)



[Procedure] (Set only when change is necessary.)

- ① Check the set contents of each mode. When the set contents of a mode were changed by function selection, the functions of that mode also change. Check the set contents as described in steps ② to ⑦ and change the setting based on the entries in the Table 1 check field. For the factory settings, refer to the indoor unit installation manual.

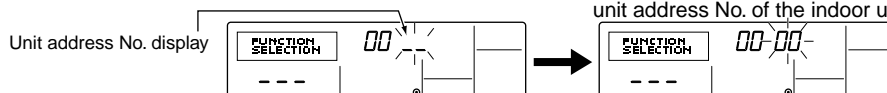
- ② Set the remote controller to Off.
Press and hold down the Ⓐ [FILTER] and Ⓑ [TEST] buttons at the same time for two seconds or longer.
"FUNCTION SELECTION" blinks for a while, then the remote controller display changes to the display shown below.



* If the remote controller enters the OFF state after the "FUNCTION SELECTION" and room temperature displays "88" have flashes for two seconds, communication is probably abnormal. Make sure there are no noise sources near the transmission line.

NOTE: If you make a mistake during operation, end function selection by step ⑩ and repeat selection from step ②.

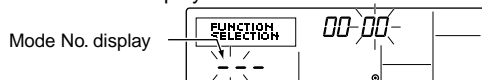
- ④ Set the indoor unit address No.
Press the Ⓓ [ON/OFF] button. The unit address No. display "—" flashes.



When the Ⓒ [CLOCK (▽) and (△)] buttons are pressed, the unit address No. changes in 00 → 01 → 02 → 03 → 04 → AL order. Set it to the unit address No. of the indoor unit whose functions you want to set.

- * When setting mode 1 to 3, set the unit address No. to "00".
* When setting modes 7 to 11:
- When setting for each indoor unit, set the unit address No. to "01-04".
- When batch setting for all indoor units, set the unit address No. to "AL".

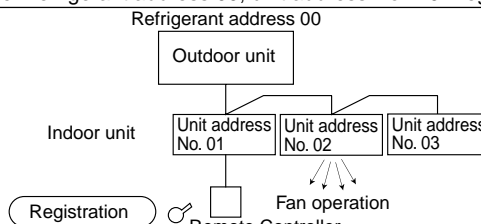
- ⑤ Refrigerant address and unit address No. registration
Press the Ⓔ [REFRIGERANT ADDRESS] button. The refrigerant address and unit address No. are registered.
After a while, the mode No. display "—" flashes.



- * When "88" flashes at the room temperature display, the selected refrigerant address is not in the system.
When "F" is displayed at the unit address No. display, and when it flashes together with the refrigerant address display, the selected unit address No. does not exist. Correctly set the refrigerant address and unit address No. by repeating steps ② and ③.

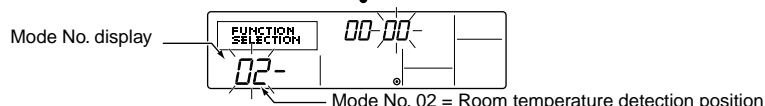
- Ⓒ When registered using the Ⓔ [REFRIGERANT ADDRESS] button, the registered indoor unit begins fan operation. When you want to know the location of the indoor units of the unit address No. whose functions were selected, check here. When the unit address No. is 00 or AL, all the indoor units of the selected refrigerant address perform the fan operation.

Ex) When refrigerant address 00, unit address No. = 02 registered



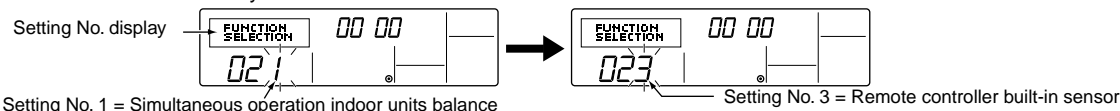
- * When grouping by different refrigerant systems and an indoor unit other than the specified refrigerant address performs the fan operation, the refrigerant address set here is probably duplicated.
Recheck the refrigerant address at the outdoor unit rotary switches.

- ⑥ Mode No. selection
Select the mode No. you want to set with the Ⓕ [TEMP. (▽) and (△)] buttons. (Only the settable mode numbers can be selected.)

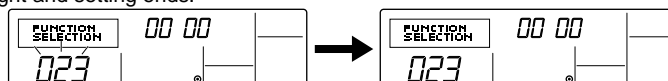


- ⑦ Select the setting contents of the selected mode.
When the Ⓒ [MENU] button is pressed, the current setting No. flashes. Use this to check the currently set contents.

Select the setting No. using the Ⓕ [TEMP. (▽) and (△)] buttons.



- ⑧ The contents set at steps ③ to ⑦ are registered.
When the Ⓔ [REFRIGERANT ADDRESS] button is pressed, the mode No. and setting No. flash and registration begins. The flashing mode No. and setting No. change to a steady light and setting ends.

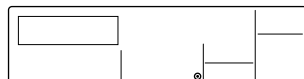


- * When "—" appears at the mode No. and setting No. displays and "88" flashes at the room temperature display, communication is probably abnormal. Make sure there are no noise sources near the transmission line.

- ⑨ To select more functions, repeat steps ③ to ⑧.

- ⑩ End function selection.

Press and hold down the Ⓐ [FILTER] and Ⓑ [TEST] buttons at the same time for two seconds or longer.
After a while, the function selection display disappears and the remote controller returns to the air conditioner off display.



- * Do not operate the air conditioner from the remote controller for 30 seconds after the end of function selection.

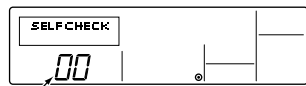
NOTE: When the functions of an indoor unit were changed by function selection after the end of installation, always indicate the set contents by entering a ○ or other mark in the appropriate check field of Table 1.

7 Self check

Retrieve the error history of each unit using the remote controller.

① Switch to the self check mode.

When the **[CHECK]** button is pressed twice successively within three seconds, the display shown below appears.



Self check address or self check refrigerant address

② Set the address or refrigerant address No. you want to self check.

When the **[TEMP. (▽) and (△)]** buttons are pressed, the address decreases and increases between 01 and 50 or 00 and 15. Set it to the address No. or refrigerant address No. you want to self check.

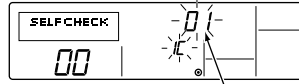
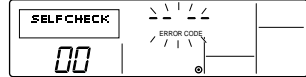


Approximately three seconds after the change operation, the self check refrigerant address changes from flashing to a steady light and self check begins.

③ Self check result display <Error history> (For the contents of the error code, refer to the indoor unit installation manual or service handbook.)



Error code 4 digits or error code 2 digits
<When there is no error history>

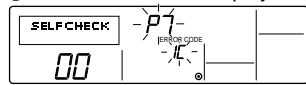


Address 3 digits or unit address No. 2 digits
<When opposite side does not exist>

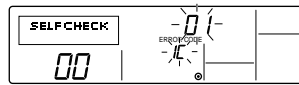
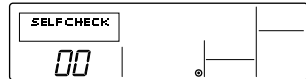


④ Error history reset

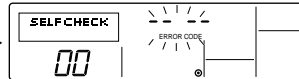
The error history is displayed in ③ Self check results display.



When the **[MENU]** button is pressed twice successively within three seconds, the self check address or refrigerant address flashes.



When the error history was reset, the display shown below appears. When error history reset failed, the error contents are displayed again.



⑤ Self check reset

There are the following two ways of resetting self check.

Press the **[CHECK]** button twice successively within three seconds → Resets self check and returns to the state before self check.

Press the **[ON/OFF]** button → Self check resets and indoor units stop.

(When operation is prohibited, this operation is ineffective.)

8 Remote Controller Check

When the air conditioner cannot be controlled from the remote controller, use this function to check the remote controller.

① First check the power mark.

When normal voltage (DC12V) is not applied to the remote controller, the power mark goes off.

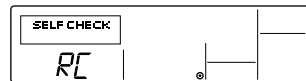
When the power mark is off, check the remote controller wiring and the indoor unit.



Power mark

② Switch to the remote controller check mode.

When the **[CHECK]** button is held down for five seconds or longer, the display shown below appears.

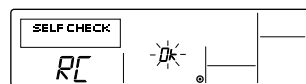


When the **[FILTER]** button is pressed, remote controller check begins.



③ Remote controller check result

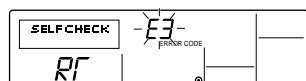
When remote controller is normal



Since there is no problem at the remote controller, check for other causes.

When the problem is other than the checked remote controller

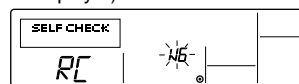
(Error code 2) "E3" "6833" "6832" flash → Cannot send



There is noise on the transmission line, or the indoor unit or another remote controller is faulty. Check the transmission line and the other remote controllers.

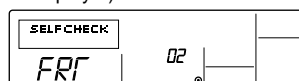
When remote controller is faulty

(Error display 1) "NG" flashes → Remote controller send/receive circuit abnormal

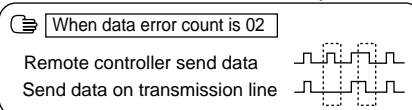


Remote controller switching is necessary.

(Error display 3) "ERC" and data error count are displayed → Data error generation



"Data error count" is the difference between the number of bits of remote controller send data and the number of bits actually sent to the transmission line. In this case, the send data was disturbed by the noise, etc. Check the transmission line.



④ Remote controller check reset

When the **[CHECK]** button is held down for five seconds or longer, remote controller check resets and the "PLEASE WAIT" and RUN lamp flash. Approximately 30 seconds later, the remote controller returns to the state before remote controller check.



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7 自检

使用遥控器检索每个机组的错误记录。

① 切换到自检模式。

当在3秒钟内连续按两次 **Ⓜ** [CHECK]按钮时，出现如下显示。

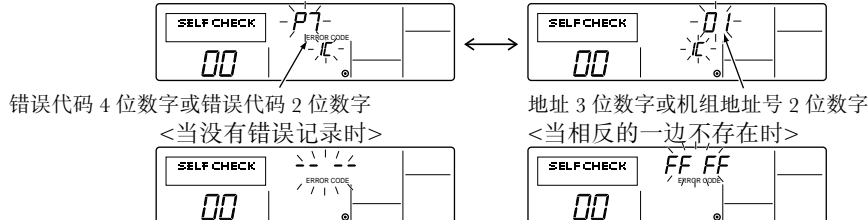


② 设定您希望自检的地址或制冷系统地址。

当按下 **Ⓜ** [TEMP.(▽)] 和 **Ⓜ** [TEMP.(△)]按钮时，地址在 01 和 50 或 00 和 15 之间减少或增加。将其设定到您希望自检的地址号或制冷系统地址号。

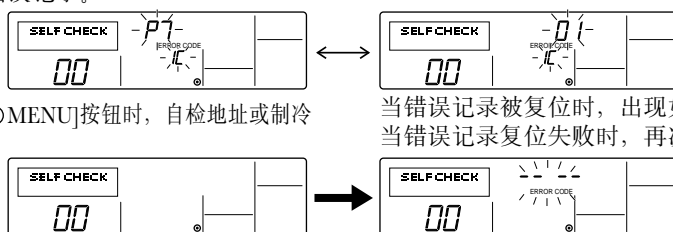


③ 自检结果显示<错误记录> (有关错误代码的内容，参见室内机组安装手册或维修手册。)



④ 复位错误记录

在 ③ 自检结果显示中显示错误记录。



⑤ 自检复位

有以下两种方法可以复位自检。

当在 3 秒钟内连续按 2 次 **Ⓜ** [CHECK]按钮。→ 复位自检并且回到自检前的状态。

按 **Ⓜ** [Ⓜ ON/OFF] (开启 / 关闭) 按钮 → 自检复位，并且室内机组停机。(当操作被禁止时，此操作无效。)

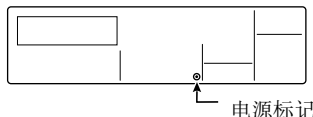
8 遥控器检查

当不能使用遥控器控制空调器时，使用此功能检查遥控器。

① 首先检查电源标记。

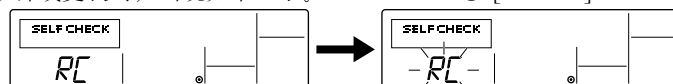
当没有给遥控器提供正常的电压 (DC12V) 时，电源标记熄灭。

当电源标记熄灭时，检查遥控器和室内机组的接线。



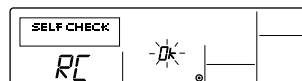
② 切换到遥控器检查模式。

当按住 **Ⓜ** [CHECK]按钮 5 秒钟或更长时，出现如下显示。



③ 遥控器检查结果

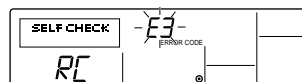
当遥控器正常时



遥控器没有问题，检查其他原因。

当是被检查的遥控器以外的问题时

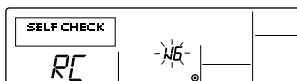
(错误代码 2) “E3” “6833” “6832” 闪烁 → 不能发送



在传输线上有噪声，或室内机组或其他遥控器有问题。检查传输线和其他遥控器。

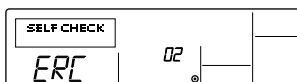
当遥控器有问题时

(错误显示 1) “NG” 闪烁 → 遥控器传送 / 接收回路异常



需要更换遥控器。

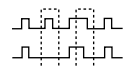
(错误显示 3) 显示 “ERC” 和数据错误计数 → 产生数据错误



“数据错误计数”是遥控器发送的数据位数和实际发送到传输线的位数之间的差别。在这种情况下，发送的数据被噪声干扰。检查传输线。

当数据错误计数为02时

遥控器发送数据
在传输线上发送数据



④ 遥控器检查复位

当 **Ⓜ** [CHECK]按钮被按下5秒钟或更长时，遥控器检查复位，并且“PLEASE WAIT” (请稍候) 和RUN灯闪烁。大约30秒钟后，遥控器回到遥控器检查之前的状态。



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