

MITSUBISHI ELECTRIC

CITY MULTI R410A SERIES HOT WATER SUPPLY, AIR TO WATER, and FLOW TEMP. CONTROLLER Remote Controller PAR-W21MAA

Installation Manual

This instruction manual describes how to install the Remote Controller for CITY MULTI R410A SERIES HOT WATER SUPPLY, AIR TO WATER, and FLOW TEMP. CONTROLLER. Please read this manual thoroughly and install the remote controller accordingly. For information on how to wire and install CITY MULTI R410A SERIES HOT WATER SUPPLY, AIR TO WATER, and FLOW TEMP. CONTROLLER Remote Controller, 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 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-W21MAA.
CAUTION	This symbol denotes what could lead to a personal injury or damage to your property if you misuse the PAR-W21MAA.

- After reading this installation manual, give it and units installation manual to the end user.
- The end user should keep this manual and units installation manual in a place where he or she can see it at anytime. When someone moves or repairs the PAR-W21MAA, make sure that this manual is forwarded to the end user.

WARNING

<p>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.</p> <p>Install in a place which is strong enough to withstand the weight of the PAR-W21MAA. Any lack of strength may cause the PAR-W21MAA to fall down, resulting in personal injury.</p> <p>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.</p> <p>Never modify or repair the PAR-W21MAA by yourself. Any deficiency caused by your modification or repair may result in an electric shock or fire. Consult with your dealer about repairs.</p>	<p>Ensure that installation work is done correctly following this installation manual. Any deficiency caused by installation may result in an electric shock or fire.</p> <p>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.</p> <p>Do not move and re-install the PAR-W21MAA yourself. Any deficiency caused by installation may result in an electric shock or fire. Ask your distributor or special vendor for moving and installation.</p> <p>To dispose of this product, consult your dealer.</p>
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CAUTION

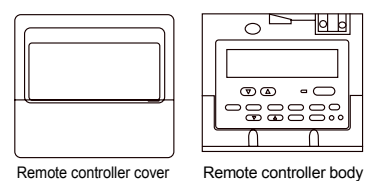
<p>Do not install in any place exposed to flammable gas leakage. Flammable gases accumulated around the body of PAR-W21MAA may cause an explosion.</p> <p>Do not use in any special environment. Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.</p> <p>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 affect communication equipment and prevent medical operations on the human body or interfere with image transmission and cause noise.</p> <p>Wire so that it does not receive any tension. Tension may cause wire breakage, heating or fire.</p> <p>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.</p> <p>Do not install in any place at a temperature of more than 40°C [104°F] or less than 0°C [32°F] or exposed to direct sunlight. Doing so may cause deformation or malfunction.</p>	<p>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.</p> <p>Do not install in any steamy place such as a bathroom or kitchen. Avoid any place where moisture is condensed into dew. Doing so may cause an electric shock or a malfunction.</p> <p>Use standard wires in compliance with the current capacity. A failure to this may result in an electric leakage, heating or fire.</p> <p>Do not touch any control button with your wet hands. Doing so may cause an electric shock or a malfunction.</p> <p>Do not wash with water. Doing so may cause an electric shock or a malfunction.</p> <p>Do not press any control button using a sharp object. Doing so may cause an electric shock or a malfunction.</p>
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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 16 languages) 1

Use the cable specified in the Installation Manual that comes with the units for remote controllers.



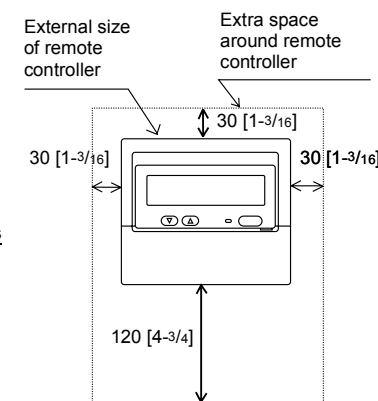
1

3 How To Install

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

Be sure to observe the following steps:

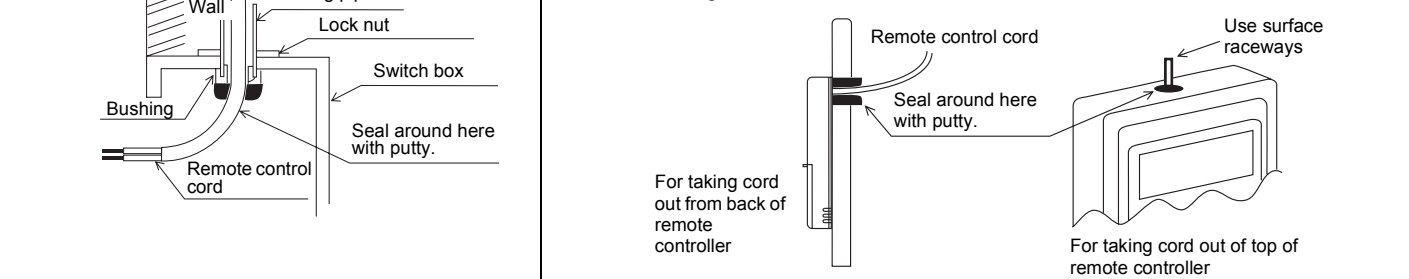
- (1) When installing on either the switch box or the wall, allow extra space around the remote controller as shown in the figure at the right.
- (2) Parts which must be supplied on site:
 - Switch box for two units
 - Thin-copper wiring pipe
 - Lock nut and bushing
 - Surface raceways



(Unit: mm [in])

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.

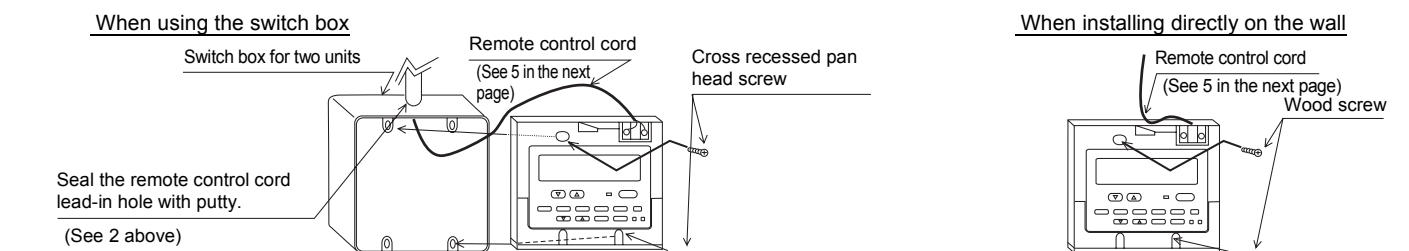


3. Remove the remote controller cover.
 - Insert a minus screwdriver into one of the open slots and move the screwdriver in the arrow direction.



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

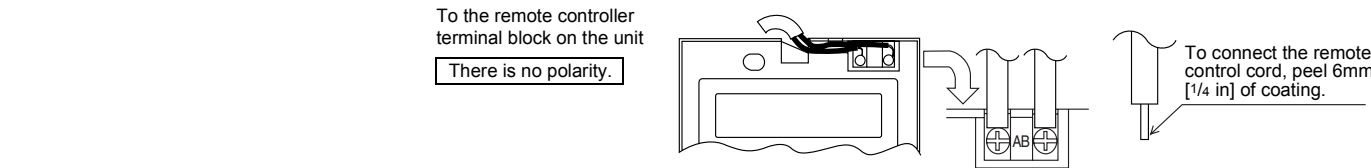
4. Install the lower case on the switch box or directly on the wall.



2

CAUTION	Do not tighten the screws too tight. Doing so may deform or crack the lower cover.
NOTE	<ul style="list-style-type: none"> • 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.



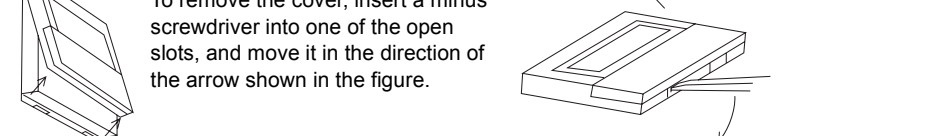
CAUTION Do not use crimp terminals to connect to remote controller terminal blocks. The terminals may contact the board and cause trouble or contact the cover and damage the cover.

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, nipers, etc.
- Take out the remote control cord connected to the terminal block via this portion.

7. Install the cover to the remote controller.



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

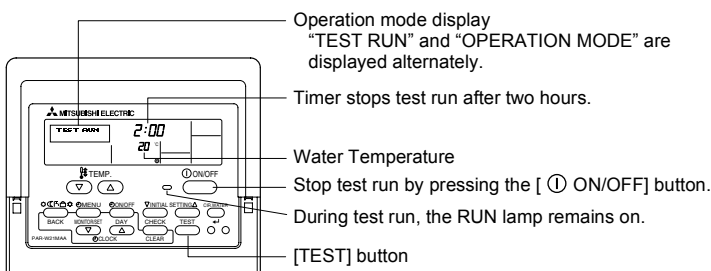
CAUTION Press the cover until it snaps shut. If not, it may fall off. **CAUTION** Do not turn into the screwdriver in the slot. Doing so may damage the slot.

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

4 Test Run

This testing cannot be made with FLOW TEMP. CONTROLLER.

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



5 Function Selection

- (1) Function selection of remote controller

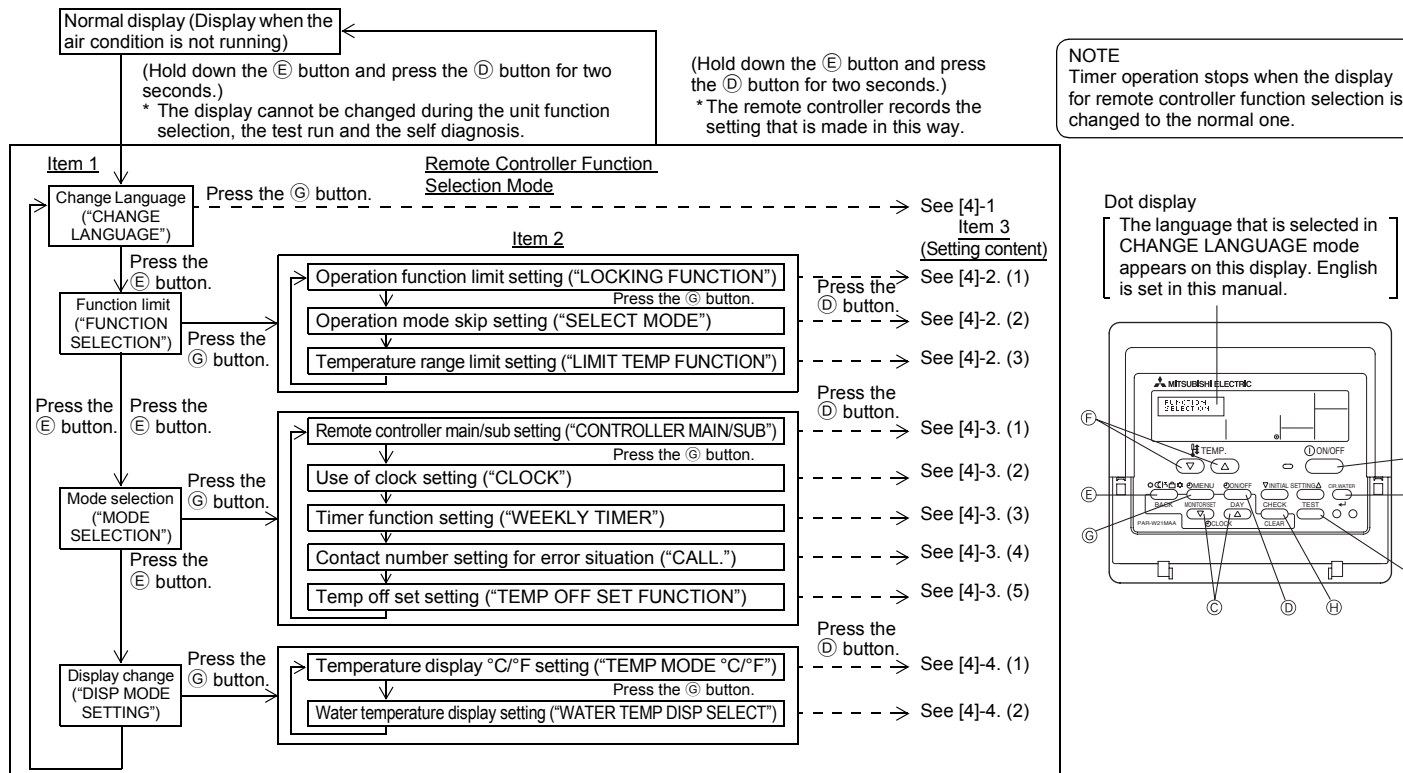
The setting of the following remote controller functions can be changed using the remote controller function selection mode. Change the setting when needed.

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") (2) Operation mode skip setting ("SELECT MODE") (3) Temperature range limit setting ("LIMIT TEMP FUNCTION")	• Setting the range of operation limit (operation lock) • Setting the use or non-use of each operation mode • Setting the temperature adjustable range (maximum, minimum)
3. Mode selection ("MODE SELECTION")	(1) Remote controller main/sub setting ("CONTROLLER MAIN/SUB") (2) Use of clock setting ("CLOCK") (3) Timer function setting ("WEEKLY TIMER") (4) Contact number setting for error situation ("CALL")	• Selecting main or sub remote controller • When two remote controllers are connected to one group, one controller must be set to sub. • Setting the use or non-use of clock function • Setting the timer type • 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") (2) Water temperature display setting ("WATER TEMP DISP SELECT")	• Setting the use or non-use of setback amount setting • Setting the temperature unit ("C" or "F") to display • Setting the use or non-use of the display of water temperature

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[Function selection flowchart]

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



[Detailed setting]

[4]-1. CHANGE LANGUAGE setting

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

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

① English (GB), ② German (D), ③ Spanish (E), ④ Russian (RU), ⑤ Italian (I), ⑥ French (F), ⑦ Swedish

[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 [CIR.WATER] and [ON/OFF] buttons at the same time for two seconds.) on the normal screen after the above setting is made.

• When the setting, other than OFF, is made, the skip settings of the Heating, Heating ECO, Hot Water, Anti-freeze, and Cooling modes are executed at the same time.

• A mode that is not available on the unit to connect cannot be used even if the setting is "AVAILABLE."

- (2) Operation mode skip setting

After setting is changed, the operation mode can be changed within the changed range.

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

① Heating mode : Sets the use or non-use of the Heating mode.

② Heating ECO mode : Sets the use or non-use of the Heating ECO mode.

③ Hot Water mode : Sets the use or non-use of the Hot Water mode.

④ Anti-freeze mode : Sets the use or non-use of the Anti-freeze mode.

⑤ Cooling mode : Sets the use or non-use of the Cooling mode.

⑥ OFF (Initial setting value) : Operation mode skip is not executed.

• When the setting, other than OFF, is made, the skip settings of the Heating, Heating ECO, Hot Water, Anti-freeze, and Cooling modes are executed at the same time.

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