MITSUBISHI ELECTRIC

<ORIGINAL>
GB WT08011X02

# Hot Water Heat Pump & Chilling Units
# Remote Controller
# PAR-W31MAA

CE

## Installation Manual

For distribution to dealers and contractors

Refer to the Installation Manuals that are provided with the connected units (Hot Water Heat Pump & Chilling Units) for how to connect cables and how to install them.

To ensure safety and correct use of the product, thoroughly read this manual prior to installation.
Retain this manual for future reference.

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# Safety Precautions

- ► Thoroughly read the following safety precautions prior to installation.
- ► Observe these precautions carefully to ensure safety.
- ► After reading this manual, pass it on to the end user to retain for future reference.
- ► Keep this manual for future reference and refer to it as necessary. This manual should be made available to those who repair or relocate the controller. Make sure that the manual is passed on to any future users.
- ► All electrical work must be performed by qualified personnel.

| | |
|---|---|
| ⚠ WARNING | : indicates a hazardous situation which, if not avoided, could result in death or serious injury. |
| ⚠ CAUTION | : indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. |
| CAUTION | : addresses practices not related to personal injury, such as product and/or property damage. |

## General precautions

### ⚠ WARNING

**Do not install the unit in a place where large amounts of oil, steam, organic solvents, or corrosive gases, such as sulfuric gas, are present or where acidic/alkaline solutions or sprays are used frequently. These substances can compromise the performance of the unit or cause certain components of the unit to corrode, which can result in electric shock, malfunctions, smoke, or fire.**

**To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not wash the controller with water or any other liquid.**

**To reduce the risk of electric shock, malfunctions, smoke or fire, do not operate the switches/buttons or touch other electrical parts with wet hands.**

**To reduce the risk of injury or electric shock, before spraying a chemical around the controller, stop the operation and cover the controller.**

**To reduce the risk of injury or electric shock, stop the operation and switch off the power supply before cleaning, maintaining, or inspecting the controller.**

**Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and water can cause electric shock, smoke, or fire.**

**To reduce the risk of injury, keep children away while installing, inspecting, or repairing the controller.**

### ⚠ CAUTION

**To reduce the risk of fire or explosion, do not place flammable materials or use flammable sprays around the controller.**

**To reduce the risk of damage to the controller, do not directly spray insecticide or other flammable sprays on the controller.**

**To reduce the risk of electric shock or malfunctions, do not touch the touch panel, switches, or buttons with a pointy or sharp object.**

**To reduce the risk of injury and electric shock, avoid contact with sharp edges of certain parts.**

**To avoid injury from broken glass, do not apply excessive force on the glass parts.**

**To reduce the risk of injury, wear protective gear when working on the controller.**

### Precautions during installation

**⚠ WARNING**

**Do not install the controller where there is a risk of leaking flammable gas. If flammable gas accumulates around the controller, it may ignite and cause a fire or explosion.**

**Properly dispose of the packing materials. Plastic bags pose suffocation hazard to children.**

**Take appropriate safety measures against earthquakes to prevent the controller from causing injury.**

**To prevent injury, install the controller on a flat surface strong enough to support its weight.**

**⚠ CAUTION**

**To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not install the controller in a place exposed to water or in a condensing environment.**

**Controller must be installed by qualified personnel according to the instructions detailed in the Installation Manual.**
**Improper installation may result in electric shock or fire.**

**When attaching the cover and the top case to the bottom case, push it until it they click into place. If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.**

### Precautions during wiring

**⚠ WARNING**

**To reduce the risk of damage to the controller, malfunctions, smoke, or fire, do not connect the power cable to the signal terminal block.**

**Properly secure the cables in place and provide adequate slack in the cables so as not to stress the terminals. Improperly connected cables may break, overheat, and cause smoke or fire.**

**To reduce the risk of injury or electric shock, switch off the main power before performing electrical work.**

**All electric work must be performed by a qualified electrician according to the local regulations, standards, and the instructions detailed in the Installation Manual. Capacity shortage to the power supply circuit or improper installation may result in malfunction, electric shock, smoke, or fire.**

**To reduce the risk of current leakage, overheating, smoke, or fire, use properly rated cables with adequate current carrying capacity.**

**⚠ CAUTION**

**To reduce the risk of electric shock, shorting, or malfunctions, keep wire pieces and sheath shavings out of the terminal block.**

**To reduce the risk of shorting, current leakage, electric shock, or malfunctions, keep the cables out of contact with controller edges.**

**To reduce the risk of electric shock, malfunctions, or fire, seal the gap between the cables and cable access holes with putty.**

## Precautions for moving or repairing the controller

**⚠ WARNING**

**The controller should be repaired or moved only by qualified personnel. Do not disassemble or modify the controller.**
**Improper installation or repair may cause injury, electric shock, or fire.**

**⚠ CAUTION**

**To reduce the risk of shorting, electric shock, fire, or malfunction, do not touch the circuit board with tools or with your hands, and do not allow dust to accumulate on the circuit board.**

## Additional precautions

**CAUTION**

**To reduce the risk of malfunctions and damage to the controller, avoid installing the controller on an electrically conductive surface, such as an unpainted metal sheet.**

**To avoid damage to the controller, use appropriate tools to install, inspect, or repair the controller.**

**This controller is designed for exclusive use with the Building Management System by Mitsubishi Electric. The use of this controller for with other systems or for other purposes may cause malfunctions.**

**Take appropriate measures against electrical noise interference when installing the air conditioners in hospitals or facilities with radio communication capabilities. Inverter, high-frequency medical, or wireless communication equipment as well as power generators may cause the air conditioning system to malfunction. Air conditioning system may also adversely affect the operation of these types of equipment by creating electrical noise.**

**To avoid malfunctions, do not bundle power cables and signal cables together, or place them in the same metallic conduit.**

**When drilling a hole, remove the front cover from the top case to prevent damage to the circuit board.**

**To prevent malfunctions, do not remove the protective film or the circuit board from the case.**

**To avoid damage to the controller, do not overtighten the screws.**

**Use a flat-head screwdriver with a blade width of 4-7 mm (5/32-9/32 inch). The use of a screwdriver with a narrower or wider blade tip may damage the controller case.**

**To prevent damage to the control board, do not insert the driver into the slot strongly.**

**To prevent damage to the controller case, do not force the driver to turn with its tip inserted in the slot.**

**To avoid discoloration, do not use benzene, thinner, or chemical rag to clean the controller. To clean the controller, wipe with a soft cloth soaked in water with mild detergent, wipe off the detergent with a wet cloth, and wipe off water with a dry cloth.**

**To avoid damage to the controller, provide protection against static electricity.**

**Do not use solderless terminals to connect cables to the terminal block.**
**Solderless terminals may come in contact with the circuit board and cause malfunctions or damage the controller cover.**

**To avoid damage to the controller, do not make holes on the controller cover.**

**To avoid deformation and malfunction, do not install the controller in direct sunlight or where the ambient temperature may exceed 40ºC (104ºF) or drop below 0ºC (32ºF).**

**Do not install the controller on the control panel door.**
**Vibrations or shocks to the controller may damage the controller or cause the controller to fall.**

**Hold the cables in place with clamps to prevent undue force from being applied to the terminal block and causing cable breakage.**

**To prevent cable breakage and malfunctions, do not hang the top controller case hang by the cable.**

**If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**

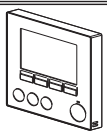
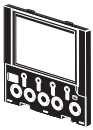
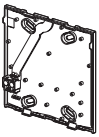
**This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.**

**This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**
**Children should be supervised to ensure that they do not play with the appliance.**

# 1. Parts to be used

## 1-1. Package contents

The table below lists all the parts and their quantities included in the package.

| Parts name | Qty. | Appearance |
|---|---|---|
| Remote controller (front cover)*1 | 1 |  |
| Remote controller (top case)*1 | 1 |  |
| Remote controller (bottom case) | 1 |  |

| Parts name | Qty. | Appearance |
|---|---|---|
| Roundhead cross slot screw M4×30 | 2 | — |
| Wood screw 4.1×16 (for direct wall installation) | 2 | — |
| Installation Manual (this manual) | 1 | — |
| Instruction Book | 1 | — |

*1 The front cover is already installed on the top case at factory shipment.

*2 Remote controller cable is not included.

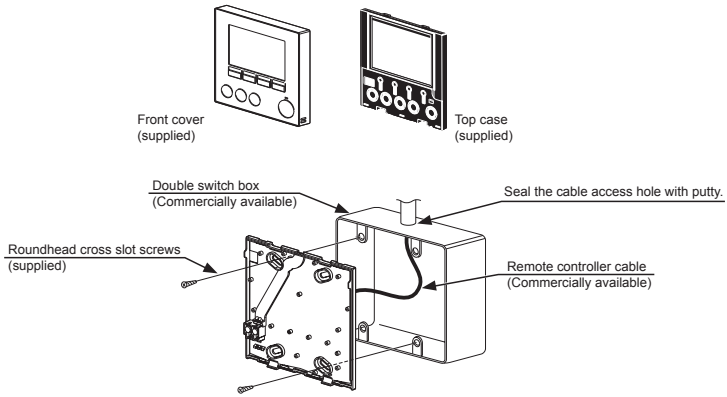
## 1-2. Commercially available parts

Obtain the parts listed below on site.

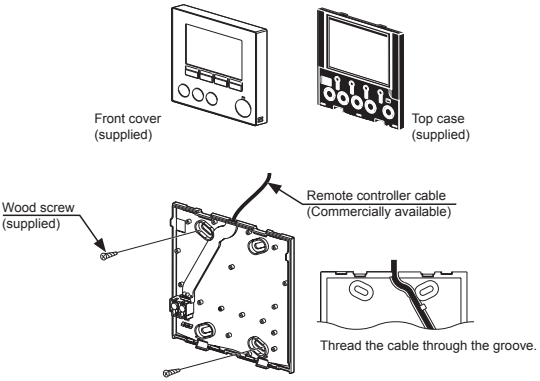
| Parts name | Qty. | Notes |
|---|---|---|
| Double switch box | 1 | Not required for direct wall installation. |
| Thin metal conduit | Required number | |
| Lock nut and bushing | Required number | |
| Cable cover | Required number | Required for routing remote controller cable along the wall. |
| Putty | As appropriate | |
| Molly anchor | Required number | |
| Remote controller cable (Use a 0.3 mm² (AWG22) 2-core sheathed cable.) | Required number | |

# 2. General description of installation

### [1] Installation using a double switch box




### [2] Direct wall installation



# 3. Selecting an installation site

**⚠ WARNING**

**Do not install the controller where there is a risk of leaking flammable gas. If flammable gas accumulates around the controller, it may ignite and cause a fire or explosion.**

**To prevent injury, install the controller on a flat surface strong enough to support its weight.**

**⚠ CAUTION**

**To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not install the controller in a place exposed to water or in a condensing environment.**

**CAUTION**

**To reduce the risk of malfunctions and damage to the controller, avoid installing the controller on an electrically conductive surface, such as an unpainted metal sheet.**

**To avoid deformation and malfunction, do not install the controller in direct sunlight or where the ambient temperature may exceed 40ºC (104ºF) or drop below 0ºC (32ºF).**

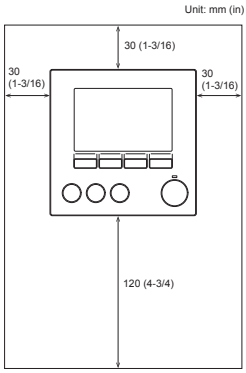
**Take appropriate measures against electrical noise interference when installing the air conditioners in hospitals or facilities with radio communication capabilities. Inverter, high-frequency medical, or wireless communication equipment as well as power generators may cause the air conditioning system to malfunction. Air conditioning system may also adversely affect the operation of these types of equipment by creating electrical noise.**

## 3-1. Notes to ensure optimal product functionality

This remote controller is specified for wall installation. You can select either “Installation using a double switch box” or “Direct wall installation”. For “Direct wall installation”, you can select either “From the rear” or “From the top” as method for routing the wiring.
Install the remote controller (double switch box) on a flat section of wall.

### [1] Installation space

Leave a space around the remote controller as shown in the figure at right, regardless of whether the controller is installed in the double switch box or directly on the wall. Removing the remote controller will not be easy with insufficient space.
Also, leave an operating space in front of the remote controller.



# 4. Installation/wiring work

## 4-1. Construction work procedures and installation

When the installation site is ready for installation, carry out the installation work.

**[1] Installation using a double switch box**

Before applying a wall finish material, install the double switch box, connect it to the conduit tube and route the cable beforehand.
Then apply the wall finish material.

**[2] Direct wall installation**

Before applying a wall finish material, route the cable to the location where the remote controller will be installed.
Then apply the wall finish material.

## 4-2. Differences with previous installation methods

Please note that the wiring for the remote controller differs depending on the system configuration.
For details on the wiring to the connected units and on the installation work for the connected units, refer to the Installation Manual for the connected units.

Note

- Do not route wiring that bridges the remote controller terminal block.
- The total length should be 250 m (820 ft).

## 4-3. Installation and electrical work

### 4-3-1. Required tools

- Flat-tip screwdriver (blade width: 4-7 mm (5/32-9/32 in)) or Plate service tool (parts code: R61 008 235)
- Nippers
- Other general tool



Plate service tool

### 4-3-2. Installation work

**[1] Installing the remote controller**

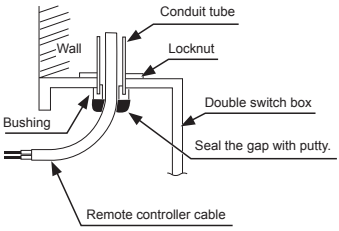
The method for the installation work is either “Installation using a double switch box” or “Direct wall installation”.
Carry out the work needed for the respective installation method.

**(1) Drill a hole in the wall.**

■ Installation using a double switch box

Procedures

1. Drill a hole in the wall, and install the double switch box on the wall.
2. Connect the double switch box to the conduit tube.




■ Direct wall installation

Procedures

1. Drill a hole in the wall.
2. Thread the remote controller cable through it.

**(2) Seal the cable access hole with putty.**

■ Installation using a double switch box

Procedures

1. Seal the remote controller cable access hole at the connection of double switch box and conduit tube with putty.

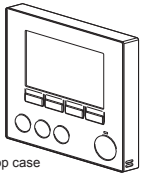
## ⚠ CAUTION

**To reduce the risk of electric shock, malfunctions, or fire, seal the gap between the cables and cable access holes with putty.**

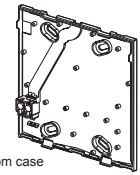
**(3) Prepare the remote controller.**

Procedures

1. Remove the bottom case of the remote controller.



Front cover and top case

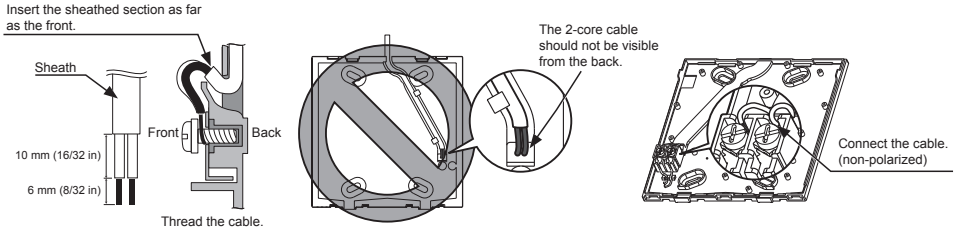


Bottom case

**(4) Connect the remote controller cable to the terminal block on the bottom case.**

Procedures

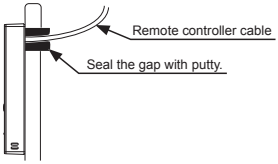
1. Strip the sheath of the remote controller cable as shown in the figure below and thread it from the rear of the bottom case.
2. Insert the remote controller cable towards the front of the bottom case until the section with the sheath stripped off is no longer visible from the back.
3. Connect the remote controller cable to the terminal block, ensuring that the sheath is not pinched.




■ Direct wall installation

Procedures

1. Seal the hole through which the cable is threaded with putty.




Route the cable behind the remote controller.

## ⚠ CAUTION

**To reduce the risk of electric shock, shorting, or malfunctions, keep wire pieces and sheath shavings out of the terminal block.**

## CAUTION

**Do not use solderless terminals to connect cables to the terminal block.**
**Solderless terminals may come in contact with the circuit board and cause malfunctions or damage the controller cover.**

**(5) Install the bottom case.**

■ Installation using a double switch box

Procedures

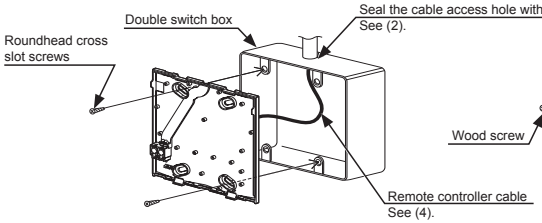
1. Secure at least two corners of the bottom case with screws.

■ Direct wall installation

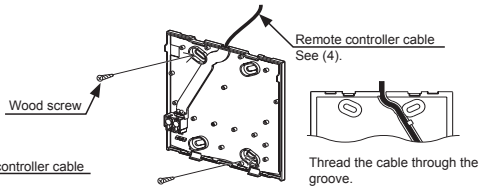
Procedures

1. Thread the cable through the groove.
2. Secure at least two corners of the bottom case with screws.
3. Be sure to secure top-left and bottom-right corners of the remote controller (viewed from the front) to prevent it from lifting (Use molly anchor etc.)

Installation using a double switch box




Direct wall installation



## CAUTION

**To avoid damage to the controller, do not overtighten the screws.**

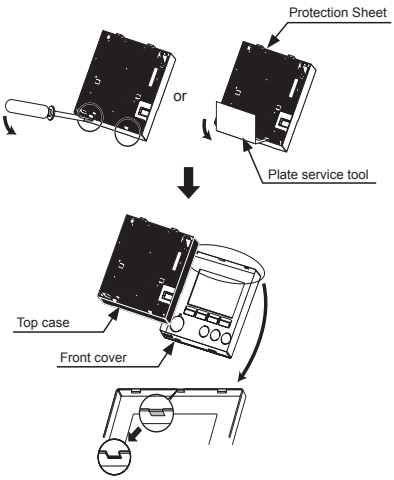
**To avoid damage to the controller, do not make holes on the controller cover.**

**(6) Drill a cable hole.**

■ Direct wall installation (when running the cable along the wall)

Procedures

1. Press the flat-tip screwdriver with a 4-7 mm (5/32-9/32 in) wide blade onto one of the two mounting tabs in the bottom of the remote controller, or push the plate service tool onto both of the tabs in the bottom of the remote controller, and then move it in the direction indicated by the arrows. This frees the top case from the front cover slightly so pull the top case upwards and towards you to remove it.
2. Cut out the thin section on the inner side of the front cover (the darkened section in the figure at right) with a pair of nippers. (Pull out the remote controller cable that was threaded through the cable groove in the back of the bottom case through this section.)
3. Fit the top case onto the front cover.



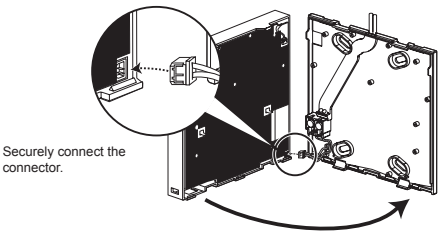

## CAUTION

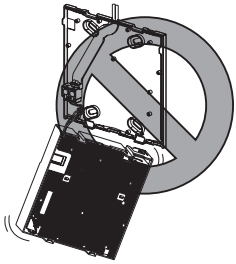
**When drilling a hole, remove the front cover from the top case to prevent damage to the circuit board.**

**(7) Route the wire to the top case.**

Procedures

1. Connect the connector on the bottom case to the connector on the top case.



## CAUTION

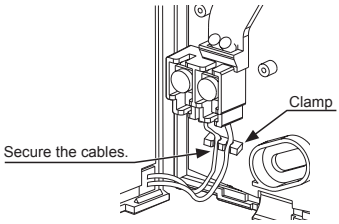
**To prevent malfunctions, do not remove the protective film or the circuit board from the case.**

**To prevent cable breakage and malfunctions, do not hang the top controller case hang by the cable.**

**(8) Secure the cables in the clamps.**

## CAUTION

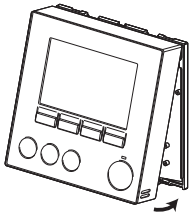
**Hold the cables in place with clamps to prevent undue force from being applied to the terminal block and causing cable breakage.**

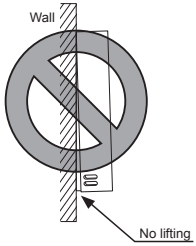



**(9) Attach the remote controller front cover and top case.**

Procedures

1. Two mounting tabs are at the top of the top case. (A cover is already installed on the case at the time of factory shipment.) Hook those two tabs onto the bottom case, and click the top case into place.
2. Check that the case is securely installed and not lifted.





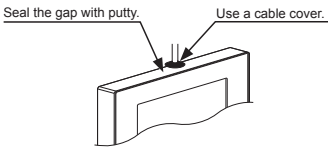

## ⚠ CAUTION

**When attaching the cover and the top case to the bottom case, push it until it they click into place. If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.**

■ Direct wall installation (when running the cable along the wall)

Procedures

1. Thread the remote controller cable through the access hole at the top of the remote controller.
2. Seal the cut-out part of the cover with putty.
3. Use a cable cover.




Thread the cable through the top of the remote controller.

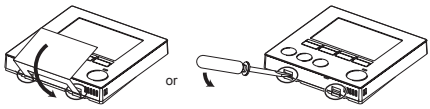
This completes the installation work. To remove the installed components, follow the procedure below.

### [2] Removing the remote controller front cover and top case

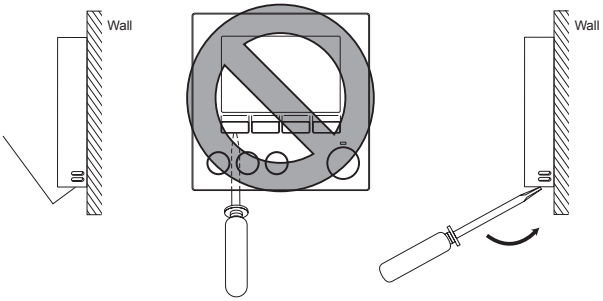
**(1) Remove the front cover.**

Procedures

1. Press the flat-tip screwdriver with a 4-7 mm (5/32-9/32 in) wide blade onto one of the two mounting tabs in the bottom of the remote controller, or push the plate service tool onto both of the tabs in the bottom of the remote controller, and then move it in the direction indicated by the arrows.
   This will unhook the mounting tabs.



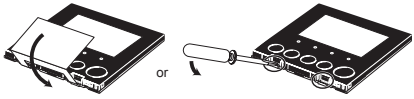

2. Pull the front cover upwards and towards you to remove it.
   Inserting the screwdriver blade deep into the slot will remove the front cover and top case together.




**(2) Remove the top case.**

Procedures

1. Press the flat-tip screwdriver with a 4-7 mm (5/32-9/32 in) wide blade onto one of the two mounting tabs in the bottom of the remote controller and remove the front cover in the same way.
   Inserting the screwdriver blade deep into the slot will remove the front cover and top case together.




## CAUTION

**To prevent damage to the control board, do not insert the driver into the slot strongly.**

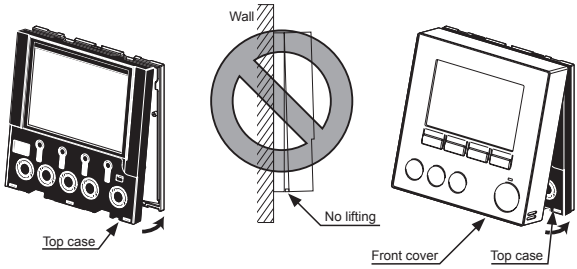
**To prevent damage to the controller case, do not force the driver to turn with its tip inserted in the slot.**

**(3) Attach the front cover and top case.**

Two mounting tabs are at the top of the top case.

Procedures

1. Hook the mounting tabs onto the bottom case and click the top case into place.
2. Hook the front cover onto the top case in the same way.
   Check that the case is securely installed and not lifted.




## ⚠ WARNING

**Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and water can cause electric shock, smoke, or fire.**

## ⚠ CAUTION

**When attaching the cover and the top case to the bottom case, push it until it they click into place. If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.**

## 4-4. Service

Refer to the procedure above whenever you remove the front cover and top case.

# 5. Check after installation work

When you have completed the installation work, inspect the work again by referring to the table below.
Be sure to correct any problems found during the inspection. (Failing to correct problems could not only impair functioning but could also pose a safety hazard.)

## 5-1. Installation work check list

| Item to check | | Check result |
|---|---|---|
| Installation environment | Required space are provided around the installation | |
| Remote controller | No scrapings or similar debris from the remote controller cable gets into the terminal block | |
| | Remote controller cable access hole has been sealed with putty or equivalent material | |
| | Front cover and top case are securely installed without any looseness | |

## 5-2. Making the settings for the hot water sensor

Refer to the Installation Manual and Instruction Book for the connected units for how to make the settings for the hot water sensor.

## 5-3. Removing the protective film

A protective film is applied over the front cover controls at the time of factory shipment.
Before use, remove the protective film.

# 6. Trial run

## 6-1. Trial run procedure

- With the customer, conduct a trial run as outlined in the Installation Manual and Instruction Book for the connected units.

## 6-2. Items to check during the trial run

- Check that the water supply temperature on the remote controller screen is rising.

# 7. Explanations to customers

- Provide the user with an explanation of how to use the remote controller correctly, as stated in the Instruction Book.
- Inform the user of the information provided in the “Safety Precautions” and that those precautions must be followed at all times.
- After the installation, hand over this Installation Manual to the user together with the accompanying Instruction Book.
- If another person takes over as the user, hand over this Installation Manual to the new user.

# 8. For the safe and long-term use of the remote controller

## 8-1. Daily maintenance

### 8-1-1. Cleaning the cover

First wipe with a soft cloth moistened with mild detergent and then wipe with a dry cloth to remove all traces of detergent. Do not use benzene, thinners or scouring powder.

## 8-2. Parts replacement during inspections and their holding periods

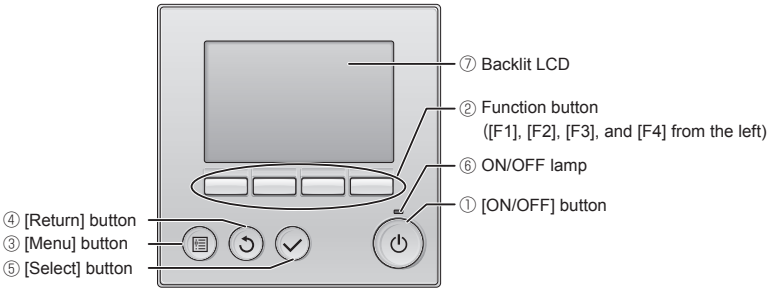
<Reference> Replacement intervals for major components

| Major component | Approx. replacement interval |
|---|---|
| Remote controller | 10 years |

* This table lists the major components. Check the maintenance agreement for details.
* Replacement intervals are different from the periods of guarantee.
* This maintenance cycle indicates the approximate period for maintenance activity that will promote the safe, long-term use of the product. As such, it should be used to schedule appropriate maintenance (budgeting for maintenance and inspection costs).

# 9. Parts names

## 9-1. Explanation of each button on the remote controller



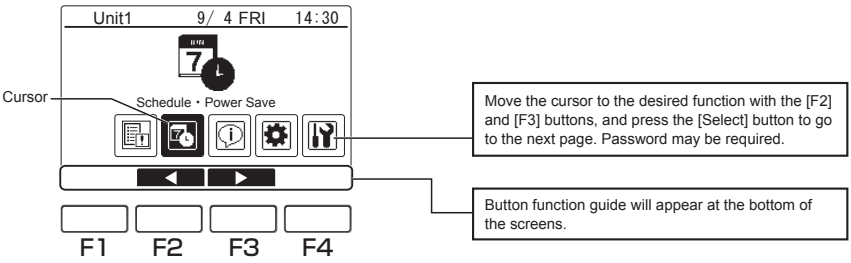

| Item | Details |
|---|---|
| ① [ON/OFF] button | Press to turn on or off the heat source system. |
| ② Function button | Press to monitor the status of connected units on the Main display and to make settings. Press these buttons also to select menu options and settings on each screen. |
| ③ [Menu] button | Press to bring up the Main menu. |
| ④ [Return] button | Press to return to the previous screen. (depending on the screen) |
| ⑤ [Select] button | Press to jump to the settings screen or to save the settings. |
| ⑥ ON/OFF lamp | Stays lit in green during normal operation. Blinks during startup and when an error occurs. |
| ⑦ Backlit LCD | Dot display.<br>Pressing any of the buttons turns on the backlight, which turns off after a certain period of time. The backlighting time varies depending on the screen.<br>Pressing another button while the backlight is on extends the backlighting time. |

Note

- When the backlight is off, the first button-push simply turns backlighting on and does not trigger the actual button action. (This does not apply to pressing the [ON/OFF] button when the controller is OFF.)

## 9-2. Using the function buttons

**<Example of use on the Main menu screen>**




Pressing the [Menu] button on the Main display (See section 11-1 “Turning the power on”.) will bring up the Main menu as shown below.

| Icon | Details |
|---|---|
| | Error information *1*3 |
| | Schedule•Power Save *1*3 |
| | Running information *1*3 |
| | Initial settings *2*3 |
| | Service *2 |

*1 Refer to the Instruction Book for details.

*2 Explained in this manual.

*3 If no buttons are pressed for 10 minutes on each screen, the screen will automatically return to the Main display. Any settings that have not been saved will be lost.

The available menu items depend on the connected unit model.
For items not described in the manuals that are enclosed with this remote controller, refer to the manuals that came with the connected units.

# 10. Preparations

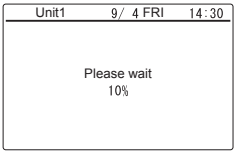
Check that the remote controller installation work is completed in accordance with this manual, and that the installation work for connected units has been completed.

# 11. Operations

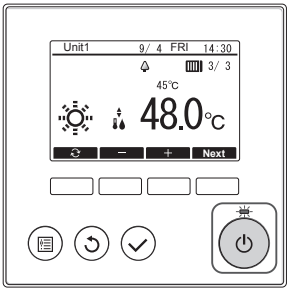
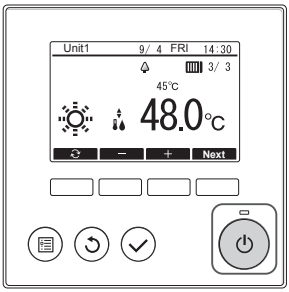
## 11-1. Turning the power on

Procedures

1. Turn the connected units on.
   When the connected units are turned on, the screen shown on the right appears.
   If it starts up normally, the Main display appears.




Normal (shows startup progress as a percentage)

| | | |
|---|---|---|
| During operation |  | The ON/OFF lamp (green) lights and operation starts. |
| During stoppage |  | The ON/OFF lamp turns off and operation stops. |



Note

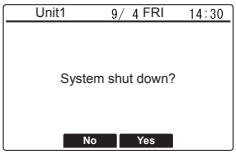
- When you are using two remote controllers, set one of the two remote controllers as the sub remote controller. Refer to section 11-3 “Initial settings” for how to make the Main/Sub setting.
- Refer to the Instruction Book for the meanings of the icons shown.

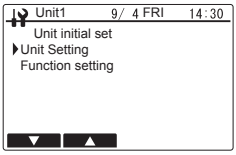
## 11-2. Unit initial set (Initial settings for the connected units)

Make the initial settings for each of the connected units using “Main menu” > “Service” > “Unit initial set”. Change the settings as necessary.

**Procedures**

1. Select “Unit initial set” in the Service menu and press the [Select] button.
2. If the connected unit is running, a message requesting a system shutdown appears. Press the [F3] button to shut down the system.
   The Unit initial set menu will be displayed.



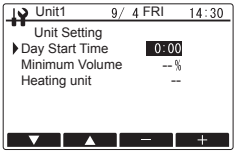

### [1] Unit Setting (Detail settings for the connected units)

Determine the initial values for the connected unit control parameters based on the installation locations and set the values.

| | Item | Description |
|---|---|---|
| ① | Day Start Time | Sets the times at which graph data is collected for each day (12:00/22:00/0:00). |
| ② | Minimum Volume | Sets the minimum amount of hot water to be retained when the storage level is declining. |
| ③ | Heating unit | Sets the number of heat source units running concurrently during heating operation. |

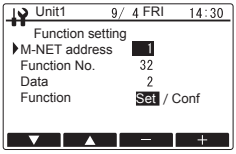
**Procedures**

1. Select “Unit setting” in the Unit initial set menu and press the [Select] button.
   Once data acquisition is completed, the current settings will be shown.
2. Press the [F1] or [F2] button to select the item to be changed and then use the [F3] or [F4] button to change the setting to the desired value.
3. After setting the value, press the [Select] button.
   * This function may not function depending on the unit model.



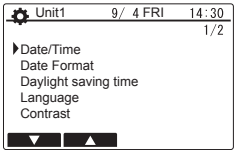

### [2] Function setting

Sets the functions for each connected unit as necessary from the remote controller.
Refer to the Instruction Book for information on the procedure.



## 11-3. Initial settings

From the Main display, select “Main menu” > “Initial settings” to make the settings for the remote controller.



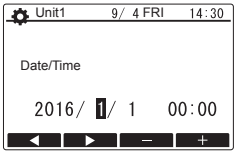

Initial settings menu (1/2)
- Date/Time
- Date Format
- Daylight saving time
- Language
- Contrast

Initial settings menu (2/2)
- RC name
- Main/Sub

If a system controller is connected, the following settings cannot be made:
- Date/Time
- Daylight saving time

### [1] Date/Time

Procedures



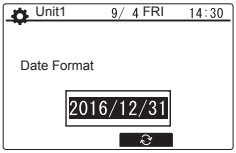

1. Use the [F1] or [F2] button to move to the item you want to change.
2. Use the [F3] or [F4] button to change the year (4 digits), month, day, hour and minute and then press the [Select] button to update the settings.
   The updated settings data will be applied to the date/time display on the Main display.
3. After the settings are completed, use the [Menu] button to return to the Main display.

Note

- The date and time should always be set when you first use the system or after the system has been left unused for a long period, as the setting is required for date/time display, the scheduling function and for the history files for errors, etc.

### [2] Date Format

Procedures



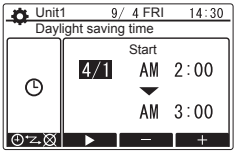

1. The display format changes as shown below each time you press [F3].
2. Use the [Select] button to change the setting.
   The Main display, etc. will be displayed in the newly selected date format.

| | |
|---|---|
| Display | 2016/12/31 → 12/31/2016 → 31/12/2016 ↑ |

3. After the settings are completed, use the [Menu] button to return to the Main display.

## [3] Daylight saving time

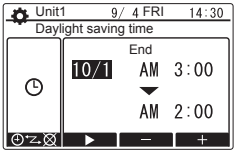
Procedures

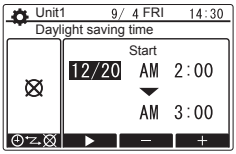



1. To set daylight saving time, press the [F1] button to enable daylight saving time.
2. The display format changes as shown below each time you press [F2]. Select the item to be changed and then use the [F3] or [F4] button to change the setting.

| Display | Month/day <Start> → Start time → Changed time → Month/day <End> → End time → Changed time ↑ |
|---|---|

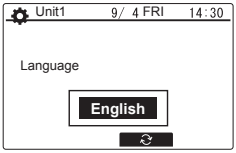
3. Use the [Select] button to update the setting.
4. After the settings are completed, use the [Menu] button to return to the Main display.




## [4] Language

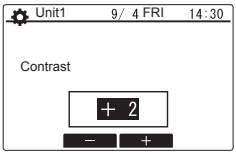
Procedures




1. Press the [F3] button to select the display language.
2. Use the [Select] button to update the setting.
3. After the settings are completed, use the [Menu] button to return to the Main display.
   The following languages can be selected:
   (1) English (2) French (3) German (4) Swedish (5) Spanish (6) Italian
   (7) Danish (8) Dutch (9) Finnish (10) Norwegian (11) Portuguese

## [5] Contrast

Procedures



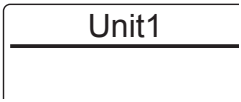

1. Use the [F2] or [F3] button to adjust the contrast on the remote controller LCD to a setting ranging from -10 to +10.
   The higher the setting, the darker the display.
2. After the settings are completed, use the [Menu] button to return to the Main display.

Note

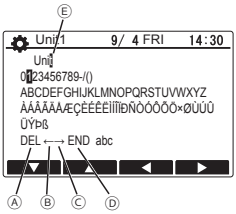
- If the display is difficult to see due to the installation position or the ambient lighting, you can improve the display visibility by adjusting the contrast. The contrast adjustment cannot make the display visible from all directions.

## [6] RC name

Sets the remote controller name displayed on the Main display.
You can select and enter up to 10 characters for the remote controller name.




**Procedures**

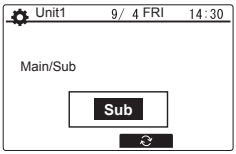



1. Use the [F1] to [F4] buttons to select a character and the [Select] button to confirm characters one at a time.
2. To delete a confirmed character, position the cursor over the character to be deleted, select “DEL” Ⓐ and press the [Select] button.
3. Select “←” Ⓑ or “→” Ⓒ .
   You can delete or change a character being entered in the RC name using the text input cursor Ⓔ .
4. When you have finished entering the name, select “END” Ⓓ .
5. Press the [Select] button to confirm the name.
6. After the settings are completed, use the [Menu] button to return to the Main display.

## [7] Main/Sub

This setting is required when you are using two remote controllers. Set one of the two remote controllers as the sub remote controller.

**Procedures**



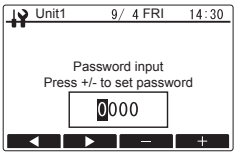

1. Press the [F3] button to switch between Main and Sub.
2. Use the [Select] button to update the setting.
3. After the settings are completed, use the [Menu] button to return to the Main display.

## 11-4. Service menu

**<Maintenance password is required.>**

From the Main display, select “Main menu” > “Service” to set and use the Service menu options.

Procedures



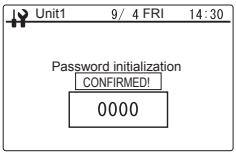

1. Select the Service menu.
   A maintenance password input screen appears.
2. Enter the current maintenance password (a 4-digit number).
3. Use the [F1] or [F2] button to select a digit, and the [F3] or [F4] button to set a number from 0 to 9.
4. After entering the 4-digit password, press the [Select] button.
   If the password is correct, the Service menu will be displayed.

Note

- The default maintenance password is “0000”. Where necessary, change the password to ensure that only the building manager can change the settings.
- Manage the password appropriately so that it is known by persons who need it.

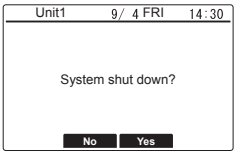
Note

- If you forget your maintenance password, you can initialize the password to the default password “0000” by pressing and holding the [F3] and [F4] buttons simultaneously for 3 seconds on the maintenance password input screen.




Note

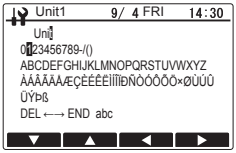
- Some Service menu options require the connected unit to be stopped.




### [1] Contact name and contact number settings

#### (1) Contact name

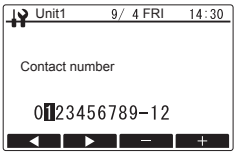
Procedures




1. Select “Contact name” in the Service menu.
   Refer to [6] “RC name” under the section 11-3 “Initial settings” for detailed information on using this option.

#### (2) Contact number

Procedures




1. Select “Contact number” in the Service menu and press the [Select] button.
   The Contact number screen appears.
2. Use the [F1] or [F2] button to move the input cursor left and right, and the [F3] or [F4] button to select the number.
3. Use the [Select] button to update the setting.

Note

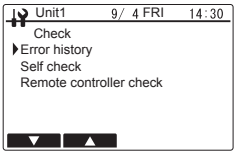
- The registered contact name and contact number will be displayed in the Error information screen. You can enter up to 10 characters as the contact name and up to 16 characters as the contact number.

## [2] Check

### Error history

Procedures

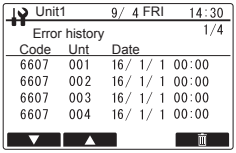
1. Select “Check” in the Service menu and press the [Select] button.
   The Check menu screen appears.




#### (1) Displaying the error history

Procedures

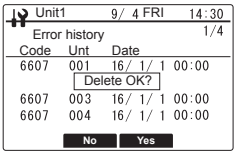
1. Select “Error history” in the Check menu.
2. Press the [Select] button to view up to 16 error history records.
   Four records are shown per page, and the top record on the first page indicates the latest error record.



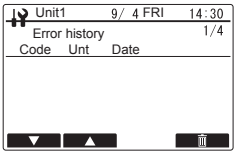

#### (2) Deleting error history

Procedures

1. In the screen showing the error history, press the [F4] (Delete) button.
   An error history deletion confirmation screen appears.
2. Press the [F3] (Yes) button to delete the error history.
   A screen appears with the error history been deleted.




3. Press the [Return] button to go back to the Check menu screen.



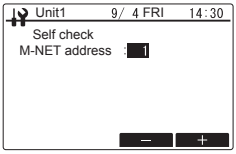

## [3] Self check

#### (1) Searching the error history

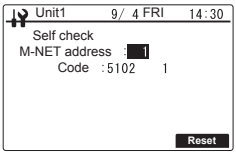
Searches the error history of each connected unit using the remote controller.

Procedures

1. Select “Self check” in the Check menu and press the [Select] button.
   The Self check screen appears.



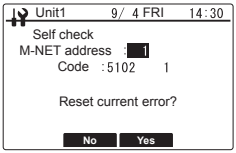

2. Use the [F3] or [F4] button to set the M-NET address.
3. Press the [Select] button.
   The code will be displayed.
   If there is no error history, “-” will be displayed.



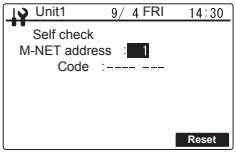
### (2) Resetting the error history

Procedures

1. Press the [F4] (Reset) button while the error history is displayed.
   A confirmation screen appears.



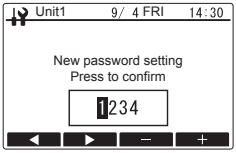

2. In the confirmation screen, press the [F3] (Yes) button.
   This deletes the error history for the connected unit. If deletion fails or there is no response from the connected unit, “ERROR!” flashes for 3 seconds and the error history will be redisplayed.



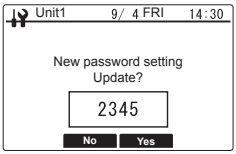

## [4] Registering the maintenance password

Changes the password for using the Service menu.

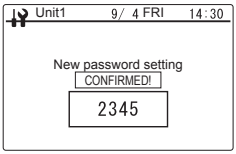
Procedures




1. Select “Password protection” in the Service menu and press the [Select] button.
   The new password setting screen appears.
2. Use the [F1] or [F2] button to select a digit.
3. Use the [F3] or [F4] button to set a number from 0 to 9.
4. After entering the 4-digit password, press the [Select] button.




5. The password update confirmation screen appears.
   To update the password, press the [F3] (Yes) button.
   To cancel, press the [F2] (No) button.
   If you updated the password, the update completion screen appears.




6. Use the [Menu] button to return to the Service menu or press the [Return] button to return to the previous screen.

# 12. Before requesting repairs

## 12-1. Remote controller check

If the remote controller fails to work, use this function to carry out a remote controller check.
Check whether the remote controller LCD is working.

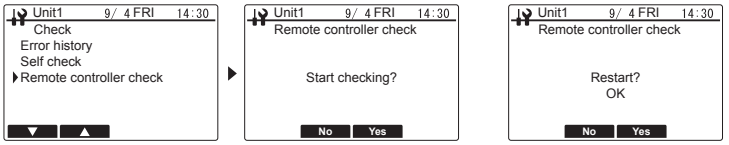
**(1) Nothing is displayed on the remote controller LCD**

If the correct voltage (8.5-12 V DC) is not applied to the remote controller, nothing will be displayed on the remote controller LCD.
In this event, check the remote controller wiring and the connected units.

**(2) Information is displayed on the remote controller LCD**

Procedures

1. Select “Remote controller check” in the Check menu.
2. Press the [F3] (Yes) button.
   The Remote controller check starts and the results will be displayed.
3. To cancel the Remote controller check, press the [F2] (No) button.
   This allows you to exit the Remote controller check menu. When you exit, the remote controller will not restart.
4. After the Remote controller check results are displayed, press the [F2] (No) button.
   Remote controller check ends and the remote controller automatically restarts.




Remote controller check selection screen

Remote controller check results screen

| | | |
|---|---|---|
| OK | : | There are no problems with the remote controller. Investigate other possible causes. |
| 6832 | : | There may be noise in the transmission cables, or there may be a fault in the connected units or in another remote controller. Investigate the transmission path and the other controller. |
| NG (data error count) | : | The data error count refers to the difference between the bit count for the remote controller transmission data and the bit count for the data actually sent to the transmission path. In this situation, the transmission data is corrupted due to the impacts of noise, etc. Investigate the transmission path. |
| ALL0, ALL1 | : | Remote controller send/receive circuit fault. The remote controller must be replaced. |

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