MITSUBISHI ELECTRIC

ecodan

# Cylinder unit Hydrobox

**EHPT series**
**ERPT series**
**EHST series**
**ERST series**
**EHSD series**
**ERSC series**
**ERSD series**
**ERPX series**
**ERSE series**
**ERSF series**

# FTC BOX

**PAC-IF08 series**

| | | |
|---|---|---|
| OPERATION MANUAL | FOR USER | English |
| BEDIENUNGSHANDBUCH | FÜR BENUTZER | Deutsch |
| MANUEL D'UTILISATION | POUR L'UTILISATEUR | Français |
| BEDIENINGSHANDLEIDING | VOOR DE GEBRUIKER | Nederlands |
| MANUAL DE INSTRUCCIONES | PARA EL USUARIO | Español |
| ISTRUZIONI DI FUNZIONAMENTO | PER L'UTENTE | Italiano |
| ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ ΧΡΗΣΕΩΣ | ΓΙΑ ΤΟΝ ΧΡΗΣΤΗ | Ελληνικά |
| MANUAL DE OPERAÇÃO | PARA O UTILIZADOR | Português |
| DRIFTSMANUAL | TIL BRUGER | Dansk |
| DRIFTSMANUAL | FÖR ANVÄNDAREN | Svenska |
| РЪКОВОДСТВО ЗА ЕКСПЛОАТАЦИЯ | ЗА ПОТРЕБИТЕЛЯ | Български |
| INSTRUKCJA OBSŁUGI | INFORMACJA DLA UŻYTKOWNIKA | Polski |
| BRUKSANVISNING | FOR BRUKER | Norsk |
| KÄYTTÖOPAS | KÄYTTÄJÄLLE | Suomi |
| PROVOZNÍ PŘÍRUČKA | PRO UŽIVATELE | Čeština |
| NÁVOD NA OBSLUHU | PRE POUŽÍVATEĽA | Slovenčina |
| HASZNÁLATI KÉZIKÖNYV | A FELHASZNÁLÓNAK | Magyar |
| NAVODILA ZA UPORABO | ZA UPORABNIKA | Slovenščina |
| MANUAL DE UTILIZARE | PENTRU UTILIZATOR | Română |
| KASUTUSJUHEND | KASUTAJALE | Eesti |
| LIETOŠANAS ROKASGRĀMATA | LIETOTĀJIEM | Latviski |
| NAUDOJIMO VADOVAS | SKIRTA NAUDOTOJUI | Lietuviškai |
| PRIRUČNIK ZA RUKOVANJE | ZA KORISNIKA | Hrvatski |
| UPUTSTVO ZA RUKOVANJE | ZA KORISNIKA | Srpski |

## Contents

For safe and correct use, please read this operation manual thoroughly before operating the cylinder unit and the hydrobox. English is the original language. The other languages versions are translations of the original.


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## Manual Download

**https://wwwl2.mitsubishielectric.com/**

Go to the above website to download manuals, select model name, then choose language.

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**Abbreviations and glossary**

| No. | Abbreviations/Word | Description |
|---|---|---|
| 1 | Weather compensation curve mode | Space heating/cooling incorporating outdoor ambient temperature compensation |
| 2 | Cooling mode | Space cooling through fan-coils or underfloor cooling |
| 3 | Cylinder unit | Indoor unvented DHW tank and component plumbing parts |
| 4 | DHW mode | Domestic Hot Water heating mode for showers, sinks, etc. |
| 5 | Flow temperature | Temperature of the water in the supply (flow) pipe |
| 6 | Freeze stat. function | Heating control routine to prevent water pipes freezing |
| 7 | FTC | Flow Temperature Controller, the circuit board in charge of controlling the system |
| 8 | Heating mode | Space heating through radiators or underfloor heating |
| 9 | Hydrobox | Indoor unit housing the component plumbing parts (NO DHW tank) |
| 10 | Legionella | Bacteria potentially found in plumbing, showers and water tanks that may cause Legionnaires disease |
| 11 | LP mode | Legionella Prevention mode – a function on systems with water tanks to prevent the growth of legionella bacteria |
| 12 | Packaged model | Plate heat exchanger (Refrigerant - Water) in the outdoor heat pump unit |
| 13 | PRV | Pressure Relief Valve |
| 14 | Return water temperature | Temperature of the water in the pipe system after heat or cool has been released |
| 15 | Split model | Plate heat exchanger (Refrigerant - Water) in the indoor unit |
| 16 | TRV | Thermostatic Radiator Valve – a valve on the entrance or exit of the radiator panel to control the heat output |

# 1 Safety Precautions

**► Before operating this unit, it is important to read the safety precautions.**

**► The following safety points are provided to prevent injury to yourself and damage to the unit please adhere to them.**

**Used in this manual**

**⚠ WARNING:**
**Precautions listed under this title should be observed to prevent injury or death to the user.**

**⚠ CAUTION:**
**Precautions listed under this title should be observed to prevent damage to the unit.**

- **Follow the instructions provided in this manual and local regulations when using this unit.**

## MEANINGS OF SYMBOLS DISPLAYED ON THE UNIT

| | | |
|---|---|---|
|  | **WARNING** (Risk of fire) | This mark is for R32 refrigerant only. Refrigerant type is written on nameplate of outdoor unit.<br>In case that refrigerant type is R32, this unit uses a flammable refrigerant.<br>If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire. |
|  | Read the OPERATION MANUAL carefully before operation. | |
|  | Service personnel are required to carefully read the OPERATION MANUAL and INSTALLATION MANUAL before operation. | |
|  | Further information is available in the OPERATION MANUAL, INSTALLATION MANUAL, and the like. | |

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### ⚠ ⚠WARNING

- **The unit should NOT be installed or serviced by the user. If installed incorrectly water leakage, electric shock and fire may result.**
- **NEVER block discharges from emergency valves.**
- **Do not operate the unit without emergency valves and thermostatic cut-outs being operational. If in doubt contact your installer.**
- **Do not stand on or lean on unit.**
- **Do not place objects on top or below the unit and observe service space requirements when placing objects next to the unit.**
- **Do not touch the unit or controller with wet hands as electric shock may result.**
- **Do not remove the panels of the unit or try to force objects inside the unit's casing.**
- **Do not touch protruding pipework as it may be very hot and cause burns to the body.**
- **Should the unit start vibrating or making abnormal noises stop operation, isolate from the power supply and contact the installer.**
- **Should the unit start to produce any burning smells stop operation, isolate from the power supply and contact the installer.**
- **Should water be visibly being discharged through the tundish stop operation, isolate from the power supply and contact the installer.**
- **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.**
- **In the case of a refrigeration leak, stop the operation of the unit, thoroughly ventilate the room and contact the installer.**
- **If power supply cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**
- **Do not place containers with liquids on top of the unit. If they leak or spill the unit may be damaged and fire could occur.**
- **When installing, relocating, or servicing the cylinder unit and the hydrobox, use only the heat pump's specified refrigerant to charge the refrigerant lines. Do not mix it with any other refrigerant and do not allow air to remain in the lines. If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards.**
  **The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.**
- **In heating mode, to avoid the heat emitters being damaged by excessively hot water, set the target flow temperature to a minimum of 2ºC below the maximum allowable temperature of all the heat emitters. For Zone2, set the target flow temperature to a minimum of 5ºC below the maximum allowable flow temperature of all the heat emitters in Zone2 circuit.**
- **This appliance is primarily intended for domestic use. For commercial applications 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.**
- **Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.**
- **The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).**
- **Do not pierce or burn.**
- **Be aware that refrigerants may not contain an odour.**

### ⚠ CAUTION

- **Do not use a sharp object to handle the touch screen of the main remote controller as this will cause damage or scratch the touch screen.**
- **If power to unit is to be turned off for a long time, the water of DHW tank should be drained.**
- **Do not drain the water in the primary circuit and do not turn off the power.**
- **Do not place a container, etc. filled with water on the top panel.**

# 1 Safety Precautions

## ■ Disposal of the Unit



<Figure 1.1>

**Note: This symbol mark is for EU countries only.**
**This symbol mark is according to the directive 2012/19/EU Article 14 Information for users and Annex IX, and/or to the directive 2006/66/EC Article 20 Information for end-users and Annex II.**
Your Mitsubishi Electric products have been manufactured with high quality materials and components which can be recycled and/or reused. The symbol in Figure 1.1 means that electrical and electronic equipment, batteries and accumulators at the end of their life, should be disposed of separately from your household waste.

If a chemical symbol is printed beneath the symbol (Figure 1.1), this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration. This is indicated as follows;
Hg: mercury (0.0005%), Cd: cadmium (0.002%), Pb: lead (0.004%)
In the European Union there are separate collection systems for used electrical and electronic products, batteries and accumulators.
Please dispose of this equipment, batteries and accumulators at your local community waste collection/recycling centre according to your local regulations.

**Contact your local Mitsubishi Electric dealer for country-specific details on disposal.**
Please, help us to conserve the environment we live in.

# 2 Introduction



The purpose of this user manual is to inform users how their air source heat pump system works, how to run the system at its most efficient and how to change settings on the main remote controller.

**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 the use of the appliance by a person responsible for their safety.**
**Children should be supervised to ensure they do not play with the appliance.**
**This user manual should be kept with the unit or in an accessible place for future reference.**

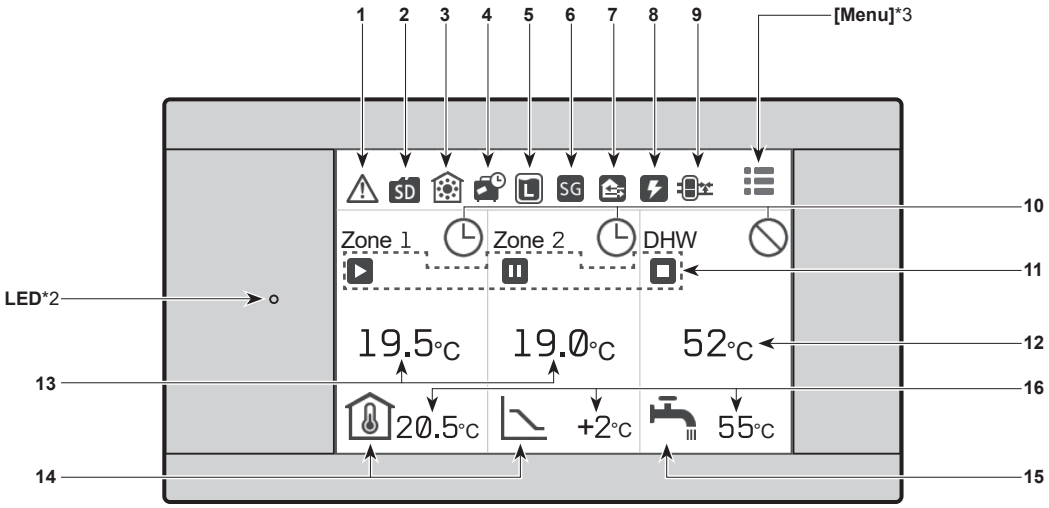
# 3 Technical information

| Model name | E**T**C/X-*M**E*<br>E**C/X-*M**E | E**T**D/F-*M**E<br>E*SD/F-*M**E | ERSE-*M*EE |
|---|---|---|---|
| Sound power level (PWL) | 40 dB(A) | 41 dB(A) | 45 dB(A) |

# 4 Customising Settings for Your Home

## ■ Main remote controller

To change the settings of your heating/cooling system, please use the main remote controller located on the wall or the front panel of the cylinder unit or hydrobox. The following is a guide to viewing the main settings. Should you require more information, please contact your installer or local Mitsubishi Electric dealer. Some functions are not available depending on the system configuration. These functions are grayed out or not shown.
Note: The terms displayed on the remote controller are enclosed in square brackets.




[Home screen] (Full screen*1)



**Home screen icons**

| No. | Icons | Description |
|---|---|---|
| 1 | ⚠ | Alert (for multiple outdoor units control)<br>Touching the menu icon displays error codes. |
| | J1 | Alert<br>Error codes are displayed. |
| 2 | SD | SD card is inserted. Normal operation |
| | SD | SD card is inserted. Abnormal operation |
| 3 | | Heating mode |
| | | Cooling mode |
| 4 | | Holiday schedule is activated. |
| 5 | L | Legionella prevention mode is running. |
| 6 | SG | Smart grid ready is running. |
| 7 | | Compressor is running. |
| | | Compressor is running and defrosting. |
| | | Compressor is running and in quiet mode.<br>The sound level is shown at left side of the icon. |
| | ⚠ | Emergency heating |
| 8 | | Electric heater is running. |

| No. | Icons | Description |
|---|---|---|
| 9 | | Boiler is running. |
| | | Buffer tank control is running. |
| 10 | | Schedule |
| | | Prohibited |
| | | Cloud control |
| 11 | | Operation |
| | | Standby |
| | | This unit is in standby whilst other indoor unit(s) is in operation by priority. |
| | | Stop |
| 12 | Actual DHW tank temperature values | |
| 13 | Actual room temperature values<br>[ -- °C] appears when the unit is not connected to the room RC (Remote Controller) and it is under control other than Auto Adaptation. | |

| No. | Icons | Description |
|---|---|---|
| 14 | | Weather compensation curve<br>When the operation stops: Black<br>During heating operation: Orange<br>During cooling operation: Blue |
| | *4 | Auto Adaptation (Target room temperature)<br>When the operation stops: Black<br>During heating operation: Orange |
| | | Flow temperature (Target flow temperature)<br>When the operation stops: Black<br>During heating operation: Orange<br>During cooling operation: Blue |
| 15 | | DHW icon is displayed when DHW is enabled.<br>When the operation stops: Black<br>During operation: Orange |
| 16 | Target temperature values<br>The settable temperature differs depending on the control logic. | |

- The screen will turn off when the main remote controller is not operated for a while. Touching any part of the screen turns it on again.
- From [Touch screen] in [Setting], the brightness can be adjusted.
- By selecting [Always on] for [Backlight time] from [Touch screen] in [Setting], the backlight stays lit for 30 seconds and after it dims down.

***1 From [Setting], the screen can be switched to the full screen or the base screen.**
**The base screen does not display the operation icons and the target temperature values.**
***2 From [Display] in [Setting], the LED lamp can be turned on/off.**
***3 Pressing and holding the menu icon for 3 seconds switches the lock menu to on/off.**
**Some functions cannot be edited when the lock menu is on.**
**(The icon changes to when the lock menu is on.)**
***4 Auto Adaptation cannot be selected during the cooling mode.**

# 4 Customising Settings for Your Home

## ■ General Operation

In general operation, the screen displayed on the main remote controller will be shown as in the figure on the right.
This screen shows the target temperature, space heating mode, DHW mode (if DHW tank is present in system), any additional heat sources being used, holiday mode, and the date and time.

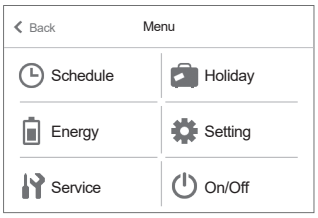
**Screen switching**
Touch each area on the home screen to access [Heating / Cooling], [DHW], or [Menu].
- [Heating / Cooling]: Touch the area surrounded by dotted lines in the left.
- [DHW]: Touch the area surrounded by double lines in the right.
- [Menu]: Touch the main menu icon ☰.

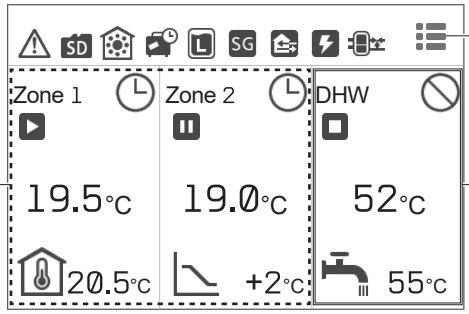
The following items can be edited in each screen.
- [Heating / Cooling]: Temperature settings for [Zone 1] and [Zone 2], editing of various settings (from the edit icon ✎), switching [Schedule] to on/off, switching [Always Off] to on/off
- [DHW]: Switching the Eco mode to on/off, temperature settings of DHW, starting/cancelling the Boost operation
- [Menu]: Various settings ([Schedule], [Holiday], [Energy], [Setting], [Service], and [On/Off])

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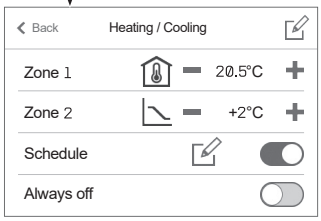
**Note:**
**State description indicated by toggle.**
**Active; ◉, Inactive; ○**

[Menu]

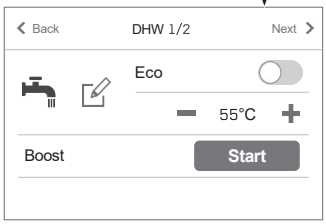



[Home screen]




[Heating / Cooling]




[DHW]

## [Heating / Cooling]

The heating/cooling menus deal with space heating/cooling using normally either a radiator, fan-coil, or underfloor heating/cooling system depending on the installation.

- Edit icon ✎ in the upper right: [Control logic], [Weather compensation curve], [Mode], and [Auto change over] can be set.
- [Zone 1] / [Zone 2]: The target temperature can be changed by +/-.
- [Schedule]: It can be activated/deactivated by the toggle (◉ / ○). Touching the edit icon ✎ switches the screen to the schedule setting.
- [Always off]: It can be activated/deactivated by the toggle (◉ / ○).
- [Auto change over]: When the toggle is on, the operation switches to heating/cooling automatically based on the outdoor temperature.

There are 3 heating modes available and 2 cooling modes.
- Heating room temperature (Auto adaptation) (🏠)
- Heating flow temperature (🌡)
- Heating weather compensation curve (📉)
- Cooling flow temperature (🌡)
- Cooling weather compensation curve (📉)

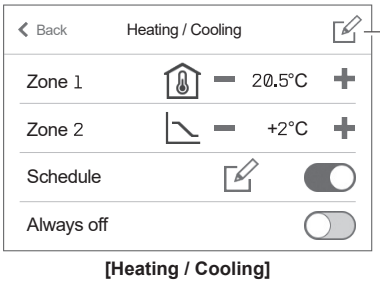
**Heating room temperature (Auto adaptation)**
Auto adaptation measures the room temperature and outside air temperature, then calculates the required heating capacity for the room. The water flow temperature is automatically controlled according to the required heating capacity.

**Flow temperature**
The temperature of the water flowing to the circuit is set by the installer to best suit the space heating/cooling system design, and user's desired requirements.

**Weather compensation curve**
As the seasons change, space heating/cooling demands typically change. To prevent the heat pump from producing excessive flow temperatures for the primary circuit, the weather compensation curve mode can be used to maximise efficiency and reduce running costs.

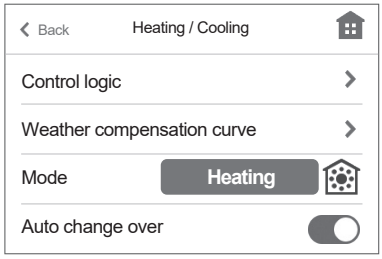
The weather compensation curve is used to restrict the flow temperature of the primary space heating circuit dependent on the outdoor temperature. The FTC uses information from both an outdoor temperature sensor and a temperature sensor on the primary circuit supply to ensure the heat pump is not producing excessive flow temperatures if the weather conditions do not require it.

Your installer will set the parameters of the graph depending on local conditions and type of space heating/cooling used in your home. It should not be necessary for you to alter these settings. If however you find that over a reasonable operating period the space heating/cooling is not heating/cooling or is overheating/too cold your home, please contact your installer so they can check your system for any problems and update these settings if necessary.

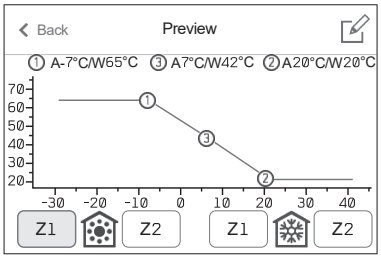



Touch

[Heating / Cooling]




[Heating / Cooling]




[Preview]

## Domestic Hot Water [DHW]

The domestic hot water and legionella prevention menus control the operation of DHW tank heat ups.

**[Eco]**

Eco mode can be activated/deactivated by the toggle ( / ). Eco mode takes a little longer to heat the water in the DHW tank but the energy used is reduced. This is because heat pump operation is restricted using signals from the FTC based on measured DHW tank temperature.

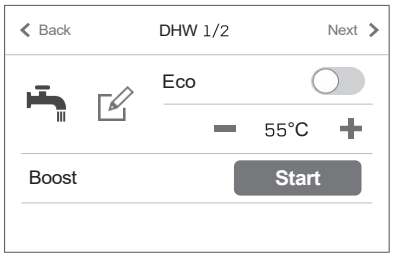
**Note:**

**The actual energy saved in Eco mode will vary according to outdoor ambient temperature.**

**[Boost]**

The boost DHW function is used to force the system to operate in DHW mode. In normal operation the water in the DHW tank will be heated either to the set temperature or for the maximum DHW time, whichever occurs first. However should there be a high demand for hot water, boost DHW function can be used to prevent the system from routinely switching to space heating/cooling and continue to provide DHW tank heating.

The boost DHW operation can be started or cancelled by the [Start]/[Cancel] button in the [DHW] screen. After the DHW operation finishes, the system will automatically return to normal operation.




**[DHW]**



## [Menu]

The following items can be set.

- [Schedule]
- [Holiday]
- [Energy]
- [Setting]
- [Service]
- [On/Off]: When the power is off (*), the icon changes to .

* When the system is switched off or the power supply is disconnected, the indoor unit protection function (e.g.freeze stat.function) will NOT operate. Please beware that without these safety functions enabled the indoor unit may potentially become exposed to damage.

**[Room sensors]**

For [Room sensors], it is important to choose the correct room sensor depending on the heating and cooling mode the system will operate in.

1. From [Setting], select [Room sensors].
2. When 2-zone temperature control is active and wireless remote controller are available, select [Zone sensor selection], and then select zone No. to assign each wireless remote controller.
3. From [Zone 1 programme] or [Zone 2 programme], select the room sensor and the schedule to be used for each zone.

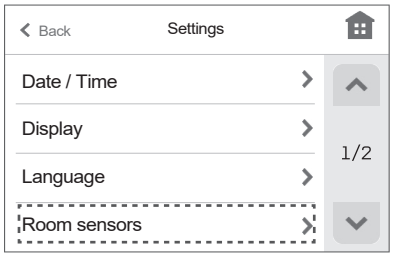
After completing the setting of each programme, touch the confirm icon to save the settings.

The schedule settings can be changed up to 4 times within 24 hours.

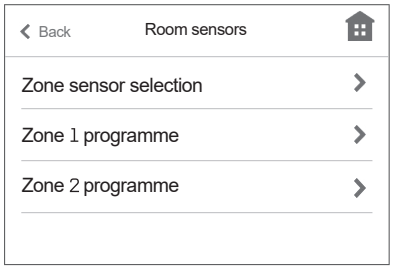
| Control option * | Corresponding settings room sensor | |
|---|---|---|
| | Zone 1 | Zone 2 |
| A<br>Zone 1; Auto Adaptation (Target room temperature)<br>Zone 2; Weather compensation curve or flow temperature control | RC 1~8 (Wireless remote controller) | *1 |
| B<br>Zone 1; Auto Adaptation (Target room temperature)<br>Zone 2; Weather compensation curve or flow temperature control | TH1 (Room temperature thermistor (option)) | *1 |
| C<br>Zone 1; Auto Adaptation (Target room temperature)<br>Zone 2; Weather compensation curve or flow temperature control | MainRC (Main remote controller) | *1 |
| D<br>Zone 1; Weather compensation curve or flow temperature control<br>Zone 2; Weather compensation curve or flow temperature control | *1 | *1 |

* Refer to the website manual for details.

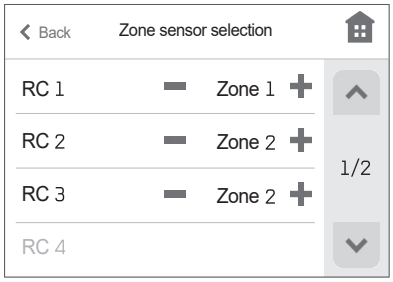
* 1 Not specified (if a locally-supplied room thermostat is used)
Room RC 1-8 (if a wireless remote controller is used as a room thermostat)



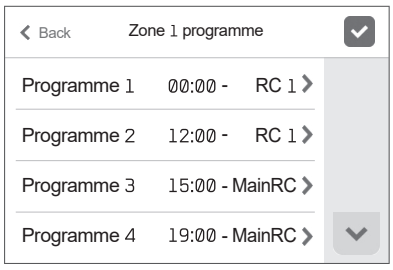

**[Settings]**




**[Room sensors]**




**[Zone sensor selection]**




**[Zone 1 programme]**

## [Schedule]

From [Menu], touch [Schedule] to access the [Schedule] menu.

**[Seasonal]**

You can categorise months into 2 seasons.
You can activate/deactivate the heating/cooling operation in each season.

1. From [Schedule], select [Seasonal].
2. Select the period of [Season 2] (in light green).
3. The period other than [Season 2] is selected as [Season 1] automatically.
4. Touch [Next] to activate/deactivate the heating/cooling operation with the toggle ( / ).




**[Schedule]**




**[Seasonal]**



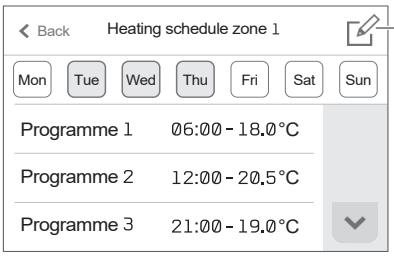
**[Heating]**

You can set 4 programmes of heating schedule in each day of the week.
It can be set during Auto Adaptation setting or when the remote controller is connected.

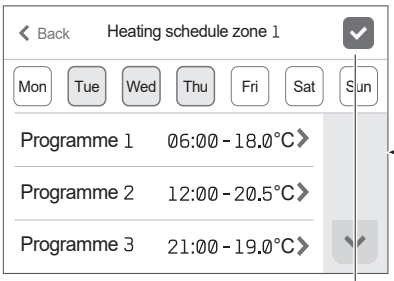
1. From [Schedule], select [Heating].
2. Touch the edit icon in the upper right of the screen to make it editable.
3. Select the day(s) of the week you want to schedule.
   * The day(s) you selected turns to light green.
4. Select the programme you want to schedule.
5. Set the starting time and the target temperature by +/-.
6. Touch the confirm icon in the upper right of the screen to save the settings.
   * You can confirm the settings of each day of the week on the [Heating schedule zone] screen.

**Note:**

- **The [Heating schedules] and the [Cooling schedules] are set in the same way. However, [Cooling schedules] can only be set when the room remote controller is connected.**
- **The [Heating schedules] and the [DHW schedule] are set in the same way.**
  **On [DHW schedule] settings, however, you will select the time you want to prohibit the operation.**
- **Touching the trash box icon on the [Programme] screen in [Heating schedules] or on the [Prohibited] screen in the [DHW schedule] deletes each setting.**
- **On the [Heating schedules] and [DHW schedule] screen, touching the confirm icon in the upper right saves the setting.**




**[Heating schedule zone 1] Preview**




**[Heating schedule zone 1] Edit**

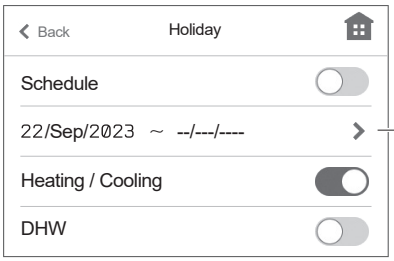
Save the settings.

## [Holiday]

Holiday mode can be used to keep the system running at lower flow temperatures and thus reduced power usage whilst the property is unoccupied. Holiday mode can run either flow temperature, room temperature, heating, weather compensation curve heating and DHW all at reduced flow temperatures to save energy if the occupier is absent.

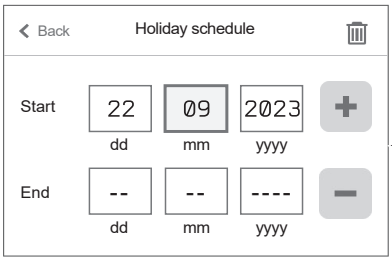
**<Editing holiday mode>**

- [Schedule]: It can be activated/deactivated by the toggle ( / ).
- The effective period of [Holiday] can be set by selecting the second line.
- [Heating / Cooling]: It can be activated/deactivated by the toggle ( / ).
- [DHW]: It can be activated/deactivated by the toggle ( / ).




**[Holiday]**

Touch



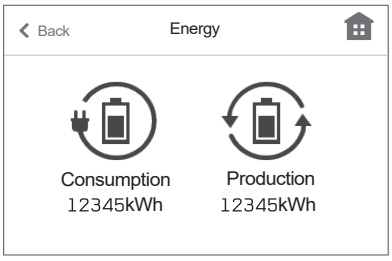

**[Holiday schedule]**

## [Energy]

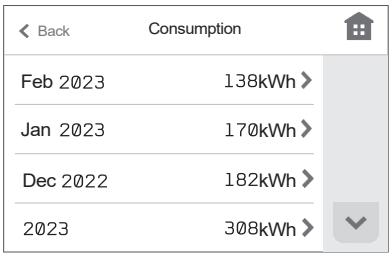
Page 1 ; Total consumption and total production energy for the current month are displayed.

Page 2 ; Year and month consumption/production values are displayed.

**Note:**
**If a certain accuracy is required for the monitoring, the method to display captured data from external energy meter(s) should be set up. Contact your installer for further details.**




**[Energy] Page 1**




**[Energy] Page 2**

## [Setting]

From [Menu], touch [Setting] to access the [Setting] menu.

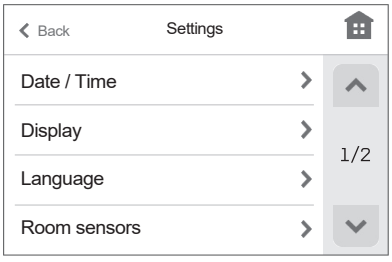
From [Setting], the following items can be edited.

- [Date/time]
- [Display] (Full screen/Base screen, LED On/Off, °C/°F)
- [Language]
- [Room sensors]
- [Contact number]
- [Touch screen] ([Calibrate screen]*1, [Clean screen]*2, [Brightness], and [Backlight time])

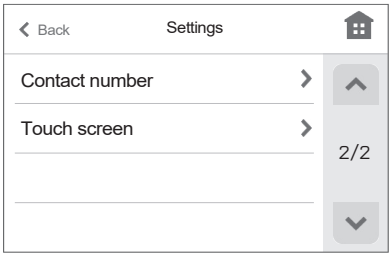
***1 Touching the 9 dots displayed on the screen starts calibration.**
**To properly calibrate the touch panel, use a pointy but not sharp object to touch the dots.**
* A sharp object may damage or scratch the touch screen.

***2 You can wipe the screen while touch operations are invalid for 30 seconds.**
**Wipe with a soft dry cloth, a cloth soaked in water with mild detergent, or a cloth dampened with ethanol. Do not use acidic, alkaline, or organic solvents.**

Touch the home icon in the upper right to return to the home screen.




**[Settings] Page 1**




**[Settings] Page 2**

## [Service]

The service menu is password protected to prevent accidental changes being made to the operation settings, by unauthorised/unqualified persons.

en

# 5 Service and Maintenance

## ■ Troubleshooting

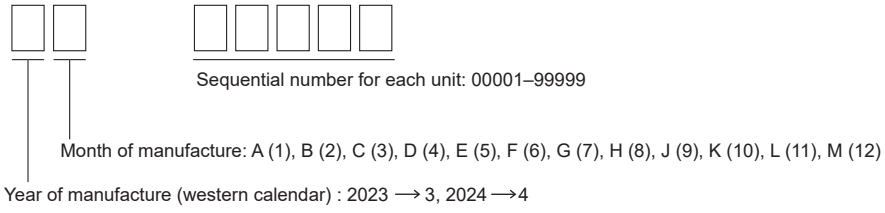
The following table is to be used as a guide to possible problems. It is not exhaustive and all problems should be investigated by the installer or another competent person. Users should not attempt to repair the system themselves.
At no time should the system be operating with the safety devices by-passed or plugged.

| Fault symptom | Possible cause | Solution |
|---|---|---|
| Cold water at taps (systems with DHW tank) | Scheduled control off period | Check schedule settings and change if necessary. |
| | All hot water from DHW tank used | Ensure DHW mode is operating and wait for DHW tank to re-heat. |
| | Heat pump or electric heaters not working | Contact installer. |
| Heating system does not get up to set temperature. | Prohibit, schedule or holiday mode selected | Check settings and change as appropriate. |
| | Incorrectly sized heat emitters | Contact installer. |
| | The room in which the temperature sensor is located is at a different temperature to the rest of the house. | Reposition the temperature sensor to a more suitable room. |
| | Battery problem wireless remote controller only | Check the battery power and replace if flat. |
| | Malfunction of pump or mixing valve | Contact installer. |
| | Valves on heating system are closed. | Open the valves. |
| The cooling system does not cool down to the set temperature. (ONLY for ER series) | When the water in the circulation circuit is unduly hot, Cooling mode starts with a delay for the protection of the outdoor unit. | Normal operation no action necessary. |
| | When the outdoor ambient temperature is significantly low, Cooling mode does not start running to avoid freezing of the water pipes. | If the freeze stat. function is not necessary, contact installer to change the settings. |
| After DHW operation room temperature rises a little. | At the end of the DHW mode operation the 3-way valve diverts hot water away from the DHW tank into space heating circuit. This is done to prevent the cylinder unit components from overheating. The amount of hot water directed into the space heating circuit is dependent on the type of system and the pipe run between the plate heat exchanger and the cylinder unit. | Normal operation no action necessary. |
| Heating emitter is hot in the DHW mode. (The room temperature rises.) | The 3-way valve may have foreign objects in it, or hot water may flow to the heating side due to malfunctions. | Contact installer. |
| Schedule function inhibits the system from operating but the outdoor unit operates. | Freeze stat. function is active. | Normal operation no action necessary. |
| Pump runs without reason for short time. | Pump jam prevention mechanism to inhibit the build up of scale. | Normal operation no action necessary. |
| Mechanical noise heard coming from indoor unit | Heaters switching on/off | Normal operation no action necessary. |
| | 3-way valve changing position between DHW and heating mode. | Normal operation no action necessary. |
| Noisy pipework | Air trapped in the system | Try bleeding radiators (if present) If the symptoms persist contact installer. |
| | Loose pipework | Contact installer. |
| Water discharges from one of the relief valves | The system has overheated or overpressurised | Switch off power to the heat pump and any immersion heaters then contact installer. |
| Small amounts of water drip from one of the relief valves. | Dirt may be preventing a tight seal in the valve | Twist the valve cap in the direction indicted until a click is heard. This will release a small amount of water flushing dirt from the valve. Be very careful the water released will be hot. Should the valve continue to drip contact installer as the rubber seal may be damaged and need replacing. |
| An error code appears in the main remote controller display. | The indoor or outdoor unit is reporting an abnormal condition | Make a note of the error code number and contact installer. |
| Heat pump is forced to turn ON and OFF. | Smart grid ready input (IN11 and IN12) is used, and switch-on and off commands are input. | Normal operation no action necessary. |

**<Power failure>**
The Date/Time will be saved for 3 days with no power.

# 6 Serial number

## ■ The serial number is indicated on the SPEC NAME PLATE.



EU DECLARATION OF CONFORMITY
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DÉCLARATION DE CONFORMITÉ UE
EU-CONFORMITEITSVERKLARING
DECLARACIÓN DE CONFORMIDAD UE
DICHIARAZIONE DI CONFORMITÀ UE
ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΕ
DECLARAÇÃO DE CONFORMIDADE UE
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EU IZJAVA O USAGLAŠENOSTI

**MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS EUROPE LTD.**
**NETTLEHILL ROAD, HOUSTOUN INDUSTRIAL ESTATE, LIVINGSTON, EH54 5EQ, SCOTLAND, UNITED KINGDOM**

hereby declares under its sole responsibility that the air conditioner(s) and heat pump(s) for use in residential, commercial, and light-industrial environments described below:
erklärt hiermit auf seine alleinige Verantwortung, dass die Klimaanlage(n) und Wärmepumpe(n) für das häusliche, kommerzielle und leichtindustrielle Umfeld wie unten beschrieben:
déclare par la présente et sous sa propre responsabilité que le(s) climatiseur(s) et la/les pompe(s) à chaleur destinés à un usage dans des environnements résidentiels, commerciaux et d'industrie légère décrits ci-dessous :
verklaart hierbij onder eigen verantwoordelijkheid dat de voor huishoudelijke, handels- en lichtindustriële omgevingen bestemde airconditioner(s) en warmtepomp(en) zoals onderstaand beschreven:
por la presente declara, bajo su exclusiva responsabilidad, que el(los) acondicionador(es) de aire y la(s) bomba(s) de calor previsto(s) para su uso en entornos residenciales, comerciales y de industria ligera que se describen a continuación:
conferma con la presente, sotto la sua esclusiva responsabilità, che i condizionatori d'aria e le pompe di calore destinati all'utilizzo in ambienti residenziali, commerciali e semi-industriali e descritti di seguito:
με το παρόν δηλώνει με αποκλειστική ευθύνη ότι το ή τα κλιματιστικά και η ή οι αντλίες θερμότητας για χρήση σε οικιακά, εμπορικά και ελαφρά βιομηχανικά περιβάλλοντα που περιγράφονται παρακάτω:
declara pela presente, e sob sua exclusiva responsabilidade, que o(s) aparelho(s) de ar condicionado e a(s) bomba(s) de calor destinados a utilização em ambientes residenciais, comerciais e de indústria ligeira descritos em seguida:
erklærer hermed under eneansvar, at det/de herunder beskrevne airconditionanlæg og varmepumpe(r) til brug i beboelses- og erhvervsmiljøer samt i miljøer med let industri:
intygar härmed att luftkonditioneringarna och värmepumparna som beskrivs nedan för användning i bostäder, kommersiella miljöer och lätta industriella miljöer:
декларира с настоящата на своя собствена отговорност, че климатикът(те) и термопомпата(ите), посочени по-долу и предназначени за употреба в жилищни, търговски и лекопромишлени среди:
niniejszym oświadcza na swoją wyłączną odpowiedzialność, że klimatyzatory i pompy ciepła do zastosowań w środowisku mieszkalnym, handlowym i lekko uprzemysłowionym opisane poniżej:
erklærer et fullstendig ansvar for undernevnte klimaanlegg og varmepumper ved bruk i boliger, samt kommersielle og lettindustrielle miljøer:
vakuuttaa täten yksinomaisella vastuullaan, että jäljempänä kuvatut asuinrakennuksiin, pienteollisuuskäyttöön ja kaupalliseen käyttöön tarkoitetut ilmastointilaitteet ja lämpöpumput:
tímto na vlastní odpovědnost prohlašuje, že níže popsané klimatizační jednotky a tepelná čerpadla pro použití v obytných prostředích, komerčních prostředích a prostředích lehkého průmyslu:
týmto na svoju výlučnú zodpovednosť vyhlasuje, že nasledovné klimatizačné jednotky a tepelné čerpadlá určené na používanie v obytných a obchodných priestoroch a v prostredí ľahkého priemyslu:
alulírott kizárólagos felelősségére nyilatkozik, hogy az alábbi lakossági, kereskedelmi és kisipari környezetben való használatra szánt klímaberendezés(ek) és hőszivattyú(k):
na lastno odgovornost izjavlja, da so spodaj opisane klimatske naprave in toplotne črpalke, namenjene za uporabo v stanovanjskih, poslovnih in lahkoindustrijskih okoljih:
declară prin prezenta, pe proprie răspundere, faptul că aparatele de climatizare şi pompele de căldură descrise mai jos şi destinate utilizării în medii rezidenţiale, comerciale şi din industria uşoară:
kinnitab oma ainuvastutusel, et allpool toodud elu-, äri- ja kergtööstuskeskkondades kasutamiseks mõeldud kliimaseadmed ja soojuspumbad:
ar šo, vienpersoniski uzņemoties atbildību, paziņo, ka tālāk aprakstītais(-ītie) gaisa kondicionētājs(-i) un siltumsūknis(-i) ir paredzēti lietošanai dzīvojamajās, komercdarbības un vieglās rūpniecības telpās, kas aprakstītas tālāk:
šiuo vien tik savo atsakomybe pareiškia, kad toliau apibūdintas (-i) oro kondicionierius (-iai) ir šilumos siurblys (-iai), skirtas (-i) naudoti toliau apibūdintose gyvenamosiose, komercinėse ir lengvosios pramonės aplinkose:
ovime izjavljuje pod isključivom odgovornošću da je/su klimatizacijski uređaj(i) i toplinska dizalica(e) opisan(i) u nastavku namijenjen(i) za upotrebu u stambenim i poslovnim okruženjima te okruženjima lake industrije:
ovim izjavljuje na svoju isključivu odgovornost da su klima-uređaji i toplotne pumpe za upotrebu u stambenim, komercijalnim okruženjima i okruženjima lake industrije opisani u nastavku:

**MITSUBISHI ELECTRIC, EHST17D-VM2E, EHST17D-YM9E, EHST20D-VM2E, EHST20D-VM6E, EHST20D-YM9E, EHST20D-TM9E, EHST30D-MEE, EHST30D-VM6EE, EHST30D-YM9EE, EHST30D-TM9EE, ERST17D-VM2E, ERST17D-VM6E, ERST20D-VM2E, ERST20D-VM6E, ERST20D-YM9E, ERST30D-VM2EE, ERST30D-VM6EE, ERST30D-YM9EE, ERST20C-VM2E, ERST30C-VM2EE, ERST20F-VM2E, ERST20F-VM6E, ERST20F-YM9E, ERST20F-TM9E, ERST30F-VM2EE, ERST30F-VM6EE, ERST30F-YM9EE, ERST30F-TM9EE, EHPT17X-VM2E, EHPT17X-VM6E, EHPT17X-YM9E, EHPT20X-YM9E, EHPT20X-TM9E, EHPT20X-MEHEW, EHPT30X-YM9EE, ERPT17X-VM2E, ERPT20X-VM2E, ERPT20X-VM6E, ERPT20X-YM9E, ERPT30X-VM2EE, ERPT30X-VM6EE, ERPT30X-YM9EE, ERST17D-VM2BE, ERST17D-VM6BE, ERST17D-YM9BE, EHSD-MEE, EHSD-VM2E, EHSD-VM6E, EHSD-YM9E, EHSD-TM9E, ERSD-VM2E, ERSD-VM6E, ERSD-YM9E, ERSC-MEE, ERSC-VM2E, ERSC-VM6E, ERSC-YM9E, ERSF-MEE, ERSF-VM2E, ERSF-VM6E, ERSF-YM9E, ERSF-TM9E, ERSE-MEE, ERSE-YM9EE, ERPX-ME, ERPX-VM2E, ERPX-VM6E, ERPX-YM9E**

is/are in conformity with provisions of the following Union harmonisation legislation.
die Bestimmungen der folgenden Harmonisierungsrechtsvorschriften der Union erfüllt/erfüllen.
est/sont conforme(s) aux dispositions de la législation d'harmonisation de l'Union suivante.
voldoet/voldoen aan bepalingen van de volgende harmonisatiewetgeving van de Unie.
cumple(n) con las disposiciones de la siguiente legislación de armonización de la Unión.
sono in conformità con le disposizioni della seguente normativa dell'Unione sull'armonizzazione.
συμμορφώνονται με τις διατάξεις της ακόλουθης νομοθεσίας εναρμόνισης της Ένωσης.
está/estão em conformidade com as disposições da seguinte legislação de harmonização da União.
er i overensstemmelse med bestemmelserne i følgende harmoniserede EU-lovgivning.
uppfyller villkoren i följande harmoniserade föreskrifter inom unionen.
е/са в съответствие с разпоредбите на следното законодателство на Съюза за хармонизация.
są zgodne z przepisami następującego unijnego prawodawstwa harmonizacyjnego.
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ovat seuraavan unionin yhdenmukaistamislainsäädännön säännösten mukaisia.
jsou v souladu s ustanoveními následujících harmonizačních právních předpisů Unie.
spĺňajú ustanovenia nasledujúcich harmonizovaných noriem EÚ.
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taip pat atitinka kitų toliau išvardytų suderintųjų Sąjungos direktyvų nuostatas.
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u skladu sa odredbama sledećeg usklađivanja zakonodavstva Unije.

**2014/35/EU: Low Voltage**
**2006/42/EC: Machinery**
**2014/30/EU: Electromagnetic Compatibility**
**2009/125/EC: Energy-related Products Directive and Regulation (EU) No 813/2013**
**2011/65/EU, (EU) 2015/863 and (EU) 2017/2102: RoHS Directive**

| | | |
|---|---|---|
| **Issued** | **30 April 2023** | **Kengo Takahashi** |
| **UNITED KINGDOM** | | **Manager, Quality Assurance Department** |

UK DECLARATION OF CONFORMITY

**MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS EUROPE LTD.**
**NETTLEHILL ROAD, HOUSTOUN INDUSTRIAL ESTATE, LIVINGSTON, EH54 5EQ, SCOTLAND, UNITED KINGDOM**

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is/are in conformity with provisions of the following UK legislation

**The Electrical Equipment (Safety) Regulations 2016**
**The Supply of Machinery (Safety) Regulations 2008**
**The Electromagnetic Compatibility Regulations 2016**
**The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012**
**The Ecodesign for Energy-Related Products Regulations 2010**

| | | |
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| **Issued:** | **30 April 2023** | **Kengo Takahashi** |
| **UNITED KINGDOM** | | **Manager, Quality Assurance Department** |

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This product is designed and intended for use in the residential, commercial and light-industrial environment.

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Scandinavian Branch
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Polish Branch
Krakowska 50, PL-32-083 Balice, Poland

ООО «Мицубиси Электрик (РУС)»
115114, Российская Федерация, г. Москва, ул. Летниковская, д. 2, стр. 1, 5 этаж

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

**MITSUBISHI ELECTRIC CORPORATION**

HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

DG79T729W01