

# ecodan

# Cylinder unit Hydrobox

Гидромодуль с накопитель ным баком ГВС Гидромодуль без накопительного бака ГВС

**FTC BOX** 

**FTC BOX** 

**FOR USER** 

EHPT series ERPT series

ERPT series EHST series ERST series EHPX series EHSC series EHSD series

**EHSE** series

ERPX series ERSC series ERSD series ERSE series **PAC-IF07** series

**English** 

Lietuviškai

Hrvatski

**Srpski** 

BEDIENUNGSHANDBUCH
MANUEL D'UTILISATION
BEDIENINGSHANDLEIDING
MANUAL DE INSTRUCCIONES
ISTRUZIONI DI FUNZIONAMENTO

**OPERATION MANUAL** 

ΕΓΧΕΙΡΙΔΙΟ ΟΔΗΓΙΩΝ ΧΡΗΣΕΩΣ MANUAL DE OPERAÇÃO

DRIFTSMANUAL

**DRIFTSMANUAL** 

РЪКОВОДСТВО ЗА ЕКСПЛОАТАЦИЯ

INSTRUKCJA OBSŁUGI

BRUKSANVISNING

**KÄYTTÖOPAS** 

PROVOZNÍ PŘÍRUČKA

**NÁVOD NA OBSLUHU** 

HASZNÁLATI KÉZIKÖNYV

**NAVODILA ZA UPORABO** 

MANUAL DE UTILIZARE

**KASUTUSJUHEND** 

LIETOŠANAS ROKASGRĀMATA

**NAUDOJIMO VADOVAS** 

PRIRUČNIK ZA RUKOVANJE

**UPUTSTVO ZA RUKOVANJE** 

	<u> </u>
FÜR BENUTZER	Deutsch
POUR L'UTILISATEUR	Français
VOOR DE GEBRUIKER	Nederlands
PARA EL USUARIO	Español
PER L'UTENTE	Italiano
ΓΙΑ ΤΟΝ ΧΡΗΣΤΗ	Ελληνικά
PARA O UTILIZADOR	Português
TIL BRUGER	Dansk
FÖR ANVÄNDAREN	Svenska
ЗА ПОТРЕБИТЕЛЯ	Български
INFORMACJA DLA UŻYTKOWNIKA	Polski
INFORMACJA DLA UŻYTKOWNIKA  FOR BRUKER	Polski Norsk
FOR BRUKER	Norsk
FOR BRUKER KÄYTTÄJÄLLE	Norsk Suomi
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FOR BRUKER  KÄYTTÄJÄLLE  PRO UŽIVATELE  PRE POUŽÍVATEĽA  A FELHASZNÁLÓNAK	Norsk Suomi Čeština Slovenčina Magyar
FOR BRUKER  KÄYTTÄJÄLLE  PRO UŽIVATELE  PRE POUŽÍVATEĽA  A FELHASZNÁLÓNAK  ZA UPORABNIKA	Norsk Suomi Čeština Slovenčina Magyar Slovenščina
FOR BRUKER  KÄYTTÄJÄLLE  PRO UŽIVATELE  PRE POUŽÍVATEĽA  A FELHASZNÁLÓNAK  ZA UPORABNIKA  PENTRU UTILIZATOR	Norsk Suomi Čeština Slovenčina Magyar Slovenščina Română

SKIRTA NAUDOTOJUI

**ZA KORISNIKA** 

ZA KORISNIKA

2. Introduction	3
3. Technical information	3

1. Safety Precautions ......2

- 4. Customising Settings for Your Home......4
- 5. Service and Maintenance.....10
- 6. Serial number......10

### Abbreviations and glossary

ADD	Appreviations and glossary		
No.	Abbreviations/Word	Description	
1	Compensation curve mode	Space heating incorporating outdoor ambient temperature compensation	
2	COP	Coefficient of Performance the efficiency of the heat pump	
3	Cooling mode	Space cooling through fan-coils or underfloor cooling	
4	Cylinder unit	Indoor unvented DHW tank and component plumbing parts	
5	DHW mode	Domestic hot water heating mode for showers, sinks, etc.	
6	Flow temperature	Temperature at which water is delivered to the primary circuit	
7	Freeze stat. function	Heating control routine to prevent water pipes freezing	
8	FTC	Flow temperature controller, the circuit board in charge of controlling the system	
9	Heating mode	Space heating through radiators or Underfloor heating	
10	Hydrobox	Indoor unit housing the component plumbing parts (NO DHW tank)	
11	Legionella	Bacteria potentially found in plumbing, showers and water tanks that may cause Legionnaires disease	
12	LP mode	Legionella prevention mode – a function on systems with water tanks to prevent the growth of legionella bacteria	
13	Packaged model	Plate heat exchanger (Refrigerant - Water) in the outdoor heat pump unit	
14	PRV	Pressure relief valve	
15	Return temperature	Temperature at which water is delivered from the primary circuit	
16	Split model	Plate heat exchanger (Refrigerant - Water) in the indoor unit	
17	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. In case that refrigerant type is R32, this unit uses a flammable refrigerant. 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.	
i	Further information is available in the OPERATION MANUAL, INSTALLATION MANUAL, and the like.	

### **⚠ &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 2°C below the
  maximum allowable temperature of all the heat emitters. For Zone2, set the target flow temperature to a minimum of 5°C 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.

### **A** CAUTION

- · Do not use sharp objects to press the buttons of the main remote controller as this will cause damage to the buttons.
- · If power to unit is to be turned off for a long time, the water should be drained.
- Do not place a container etc. filled with water on the top panel.

# 1 Safety Precautions

### ■ Disposal of the Unit



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 Appendix, and/or to the

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.

<Figure 1.1>

Your Mitsubishi Electric heating system 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 correctly at your local community waste collection/recycling centre.

Contact your local Mitsubishi Electric dealer for country-specific details on disposal.

Please, help us to conserve the environment we live in.

# 2 Introduction

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The purpose of this user manual is to inform users how their air source heat pump heating 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

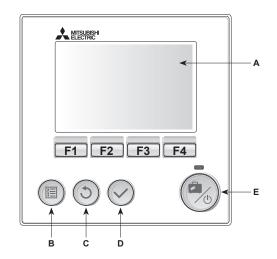
Model name	E**T**C/X-*M**D* E**C/X-*M**D	E**T**D-*M**D E**D-*M**D
Sound power level (PWL)	40 dB(A)	41 dB(A)

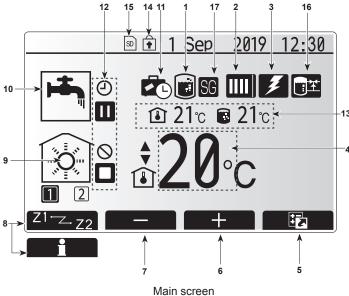
### 4

### ■ Main remote controller

To change the settings of your heating/cooling system please use the main remote controller. The following is a guide to viewing the main settings. Should you require more information please contact your installer or local Mitsubishi Electric dealer.

Cooling mode is available for ER series only.





#### <Main remote controller parts>

Letter	Name	Function
Α	Screen	Screen in which all information is displayed.
В	Menu	Access to system settings for initial set up and modifications.
С	Back	Return to previous menu.
D	Confirm	Used to select or save. (Enter key)
E	Power/Holiday	If system is switched off pressing once will turn system on. Pressing again when system is switched on will enable Holiday Mode. Holding the button down for 3 secs will turn the system off. (*1)
F1-4	Function keys	Used to scroll through menu and adjust settings. Function is determined by the menu screen visible on screen A.

\*1

When the system is switched off or the power supply is disconnected, the indoor unit protection functions (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.

#### <Main screen icons>

П		Loren	Description	
		Icon	Description	
	1	Legionella	When this icon is displayed 'Legionella preventi	
ŀ	2	prevention	mode' is active.	
	2	Heat pump		'Heat pump' is running.
				Defrosting
			1	Emergency heating
				'Quiet mode' is activated.
	3	Electric heater	When the	his icon is displayed the 'Electric heaters'
L			(booster	or immersion heater) are in use.
	4	Target	46	Target flow temperature
		temperature	<b>(</b>	Target room temperature
				Compensation curve
	5	OPTION	Pressin	g the function button below this icon will dis-
L				option screen.
3	6	+		e desired temperature.
L	7	-		se desired temperature.
	8	Z1 <sup>←</sup> Z→Z2		g the function button below this icon switch-
4		Information		een Zone1 and Zone2.  If the function button below this icon displays
		IIIIOIIIIatioii		mation screen.
Ī	9	Space heating (cooling) mode	<b>1</b>	Heating mode
			348.	Zone1 or Zone2
			<b>*</b>	Cooling mode Zone1 or Zone2
ŀ	10	DHW mode	Normal	or ECO mode
ŀ	11	Holiday mode		is icon is displayed 'Holiday mode' activated.
r	12	(-)	Timer	
ı		0	Prohibite	ed
		<b>③</b>	Server o	control
İ			Stand-b	у
		II	Stand-b	y (* <b>2</b> )
			Stop	
			Operatir	ng
ſ	13	Current temperature	1	Current room temperature
			<u>-</u>	Current water temperature of DHW tank
f	14		The Me	nu button is locked or the switching of the
		ı î	operatio	n modes between DHW and Heating opera-
			tions are disabled in the Option screen. (*3)	
ľ	15	න න	SD memory card (NOT for the user) is inserted.	
	16	Buffer tank control	When th active.	nis icon is displayed 'Buffer tank control' is
H	17	Smart grid ready		
	17	Smart grid ready	active.	iis icon is displayed, Smart grid ready is
	to This world is in Oternal by while to the original and a second (a) is in a constitution by			

- \*2 This unit is in Stand-by whilst other indoor unit(s) is in operation by priority.
- \*3 To lock or unlock the Menu, press the BACK and CONFIRM keys simultaneously for 3 seconds.

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# ■ 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.

You should use the function buttons to access more information. When this screen is displayed pressing F1 will display the current status and pressing F4 will take the user to the option menu screen.

#### <Option screen>

This screen shows the main operating modes of the system.

Use function buttons to switch between Operating ( $\blacktriangleright$ ), Prohibited ( $\bigcirc$ ) and Timer ( $\bigcirc$ ) for DHW and space heating/cooling, or detailed information on energy or capacity.

The option screen allows quick setting of the following;

- Forced DHW (if DHW tank present) to turn ON/OFF press F1
- DHW operating mode (if DHW tank present) to change mode press F2
- Space heating/cooling operating mode to change mode press F3
- · Energy monitor

Following accumulated energy values are displayed.

- ① : Consumed electrical energy in total (month-to-date)
- Delivered heat energy in total (month-to-date)

To monitor the energy values in each operation mode for [month-to-date/ last month/ the month before last/ year-to-date/ last year], press F4 to access to the Energy monitor menu.

#### 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.

### ■ Main Settings Menu

To access the main settings menu press button B 'MENU'

The following menus will be displayed;

- IDHW
  - (Cylinder unit or hydrobox (or FTC BOX) plus locally supplied DHW tank)
- [Heating/Cooling]
- [Schedule timer]
- [Holiday mode]
- [Initial settings]
- [Service] (Password protected)

### [Initial Settings]

- From the main settings menu use F2 and F3 buttons to highlight 'Initial settings' icon and select by pressing CONFIRM.
- Use F1 and F2 buttons to scroll through the menu list. When the required title is highlighted then press CONFIRM to edit.
- Use the relevant function buttons to edit each initial setting then press CON-FIRM to save the setting.

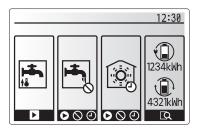
Initial settings that can be edited are

- [Date/Time] \*Be sure to set it to the local standard time.
- [Language]
- [Summer time]
- [Temp. display]
- [Contact number]
- [Time display]
- [°C/°F]
- [Room sensor settings]

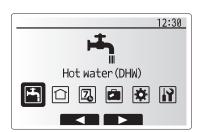
To return to the main settings menu press the BACK button.



Home screen



Option screen



Main settings menu screen

Icon	Description
1	[Hot water (DHW)]
	[Heating/Cooling]
7	[Schedule timer]
	[Holiday mode]
<b>☆</b>	[Initial settings]
N	[Service]

# 4 Customising Settings for Your Home

#### <[Room sensor settings]>

For room sensor settings it is important to choose the correct room sensor depending on the heating mode the system will operate in.

1. From the Initial settings menu select Room sensor settings.

When 2-zone temperature control is active and wireless remote controllers are available, from Room RC zone select screen, select zone No. to assign to each remote controller.

From Sensor setting screen, select a room sensor to be used for monitoring the room temperature from Zone1 and Zone2 separately.

Control option	Corresponding initial setting	Corresponding initial settings room sensor	
(Website manual)	Zone1	Zone2	
А	Room RC1-8 (one each for Zone1 and Zone2)	*	
В	TH1	*	
С	Main remote controller	*	
D	*	*	

\* Not specified (if a field-supplied room thermostat is used)
Room RC1-8 (one each for Zone1 and Zone2) (if a wireless remote controller is used as a room thermostat)

4. From Sensor setting screen, select Time/Zone to make it possible to use different room sensors according to the time schedule set in the Select Time/Zone menu. The room sensors can be switched up to 4 times within 24 hours.

# Domestic Hot Water (DHW)/Legionella Prevention

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

### <Eco mode>

DHW mode can run in either 'Normal' or 'Eco' mode. Normal mode will heat the water in the DHW tank more quickly using the full power of the heat pump. 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.

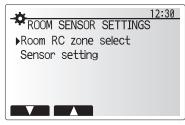
Note: The actual energy saved in Eco mode will vary according to outdoor ambient temperature.

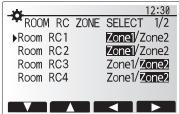
Return to the DHW/legionella prevention menu.

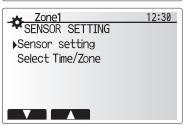
### **Forced DHW**

The forced 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 'Forced DHW' function can be used to prevent the system from routinely switching to space heating/cooling and continue to provide DHW tank heating.

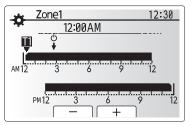
Forced DHW operation is activated by pressing button F1 and Back button in the 'Option Screen'. After DHW operation finishes, the system will automatically return to normal operation. To cancel forced DHW operation hold down button F1 in the 'Option Screen'.



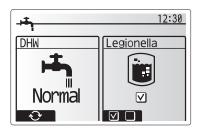








Time/Zone schedule setting screen



# 4

### **Customising Settings for Your Home**

### [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.

There are 3 heating modes

- Heating room temp. (Auto adaptation) (1)
- Heating flow temp. (♣♠)
- Heating compensation curve (
- Cooling flow temp. (♣♠)

#### <Room temp. (Auto adaptation) mode>

This mode is explained in detail in 'Overview of Controls' Section (page 4).

#### <Flow temp. mode>

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

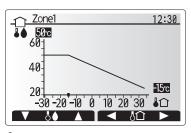
#### Explanation of compensation curve

During late spring and summer usually the demand for space heating is reduced. To prevent the heat pump from producing excessive flow temperatures for the primary circuit the compensation curve mode can be used to maximise efficiency and reduce running costs.

The 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 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 is not heating or is overheating your home, please contact your installer so they can check your system for any problems and update these settings if necessary.

### 



: Flow temp.

♣☐: Outdoor ambient temp.

### [Holiday mode]

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 temp., room temp., heating, compensation curve heating and DHW all at reduced flow temperatures to save energy if the occupier is absent.

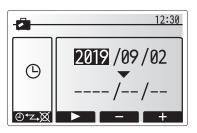
From the main menu screen press button E should be pressed. Be careful not to hold down button E for too long as this will turn off the controller and system.

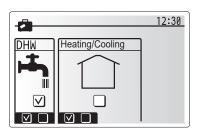
Once the holiday mode activation screen is displayed you can activate/deactivate and select the duration that you would like holiday mode to run for.

- Press button F1 to activate or deactivate holiday mode.
- Use buttons F2, F3 and F4 to input the date which you would like holiday mode to activate or deactivate holiday mode for space heating.

### <Editing holiday mode>

Refer to the menu tree in "Main remote controller" of Installation Manual. Should you require the Holiday mode settings e.g. the flow temp., room temp. to be altered you should contact your installer.





# 4 Customising Settings for Your Home

### [Schedule timer]

Scheduled timer can be set in two ways, for example; one for summer and the other for winter. (Refer to as "Schedule 1" and "Schedule 2" respectively.) Once the term (months) for the Schedule 2 is specified, rest of the term will be specified as Schedule 1. In each Schedule, an operational pattern of modes (Heating/Cooling/DHW) can be set. If no operational pattern is set for Schedule 2, only the pattern for Schedule 1 will be valid. If Schedule 2 is set to full-year (i.e. March to Feb.), only the operational pattern for Schedule 2 will be valid.

The schedule timer is activated or deactivated in the option screen. (See 'General Operation' section)

#### <Setting the Schedule period>

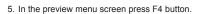
- From the main settings menu use F2 and F3 to highlight the schedule icon then press CONFIRM.
- 2. The Schedule period preview screen is displayed.
- 3. To change the Schedule period, press F4. button.
- 4. The time bar edit screen is displayed.
- Use F2/F3 button to point at a starting month of the Schedule 2, then press CONFIRM.
- Use F2/F3 button to point at an ending month of the Schedule 2, then press CONFIRM.
- 7. Press F4 to save settings.

#### <Setting the Schedule timer>

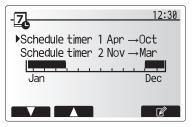
- From the main settings menu use F2 and F3 to highlight the schedule icon then press CONFIRM.
- From the Schedule 2 period preview screen use F1 and F2 to scroll through the selecting each subtitle in turn by pressing CONFIRM.
- The schedule timer sub menu will be displayed. The icons show the following modes;
  - [Heating]
  - [Cooling]
- [DHW]
- Use F2 and F3 buttons to move between mode icons press CONFIRM to be shown the PREVIEW screen for each mode.

The preview screen allows you to view the current settings. In 2-zone heating/cooling operation, press F1 to switch between Zone1 and Zone2. Days of the week are displayed across the top of the screen. Where day appears underlined the settings are the same for all those days underlined.

Hours of the day and night are represented as a bar across the main part of the screen. Where the bar is solid black, space heating/cooling and DHW (whichever is selected) is allowed.



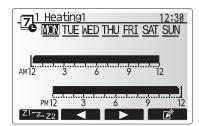
- 6. First select the days of the week you wish to schedule.
- Press F2/F3 buttons to move between days and F1 to check or uncheck the box.
- 8. When you have selected the days press CONFIRM.



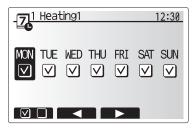
Schedule 2 period preview screen



Schedule 1 mode select screen



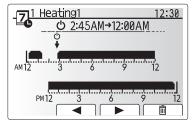
Preview screen



Day of week select screen

# 4 Customising Settings for Your Home

- 9. The time bar edit screen will be displayed.
- 10.Use buttons F2/F3 to move to the point at which you do not want the selected mode to be active press CONFIRM to start.
- 11. Use F3 button to set the required time of inactivity then press CONFIRM.
- 12. You can add up to 4 periods of inactivity within a 24 hour interval.



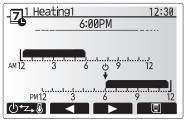
Time of period setting screen 1

13.Press F4 to save settings.

When scheduling heating, button F1 changes the scheduled variable between time and temperature. This enables a lower temperature to be set for a number of hours e.g. a lower temperature may be required at night when the occupants are sleeping.

### en Notes:

- The schedule timer for space heating/cooling and DHW are set in the same way. However for DHW only time can be used as scheduling variable.
- A small rubbish bin character is also displayed choosing this icon will delete the last unsaved action.
- It is necessary to use the SAVE function F4 button to save settings. CON-FIRM does NOT act as SAVE for this menu.



Time of period setting screen 2

### [Service] Menu

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

# 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.

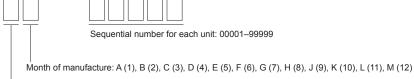
Fault symptom	Possible cause	Solution
Cold water at taps	Scheduled control off period	Check schedule settings and change if necessary.
(systems with DHW tank)	All hot water from DHW tank used	Ensure DHW mode is operating and wait for DHW tank to re-heat.
	Heat pump or electric heaters not working	Contact installer.
Heating system does not get up to	Prohibit, schedule or holiday mode selected	Check settings and change as appropriate.
set temperature.	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 control 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.	
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	Heaters switching on/off	Normal operation no action necessary.
indoor unit	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>

All setting will be saved for 1 week with no power, after 1 week Date/Time ONLY will be saved.

# 6 Serial number

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



Year of manufacture (western calendar) : 2020 → 0, 2021 → 1

EC DECLARATION OF CONFORMITY FG-KONFORMITÄTSERKI ÄRLING DÉCLARATION DE CONFORMITÉ CE EG-CONFORMITEITSVERKLARING DECLARACIÓN DE CONFORMIDAD CE DICHIARAZIONE DI CONFORMITÀ CE

ΔΗΛΩΣΗ ΠΙΣΤΟΤΗΤΑΣ ΕΚ DECLARAÇÃO DE CONFORMIDADE CE EU-OVERENSSTEMMELSESERKLÆRING EG-DEKLARATION OM ÖVERENSSTÄMMELSE EC ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ
DEKLARACJA ZGODNOŚCI WE

CE-ERKLÆRING OM SAMSVAR EY-VAATIMUSTENMUKAISUUSVAKUUTUS ES PROHLÁŠENÍ O SHODĚ VYHLÁSENIE O ZHODE ES EK MEGFELELŐSÉGI NYILATKOZAT IZJAVA O SKI ADNOSTI ES

DECLARAȚIE DE CONFORMITATE CE FÜ VASTAVUSDEKI ARATSIOON EK ATBILSTĪBAS DEKLARĀCIJA EB ATITIKTIES DEKLARACIJA EC IZJAVA O SUKLADNOSTI EZ 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 heating system components described below for use in residential, commercial and light-industrial environments: erklärt hiermit auf seine alleinige Verantwortung, dass die unten beschriebenen Zubehörteile für das Heizungs-System zur Benutzung im häuslichen, kommerziellen und leicht-industriellen Umfeld: déclare par la présente et sous son entière responsabilité que les composants du système de chauffage décrits ci-dessous pour l'utilisation dans des environnements résidentiels, commerciaux et d'industrie légère:

verklaart hierbij als enige verantwoordelijke dat de componenten van het verwarmingssteem die hieronder worden beschreven, bedoeld zijn voor gebruik in woonomgevingen en in commerciële en licht industriële omgevingen:
declara por la presente bajo su responsabilidad exclusiva que los componentes del sistema de calefacción descritos a continuación para su uso en zonas residenciales, comerciales y para la industria

-go.c. con la presente dichiara, sotto la sua esclusiva responsabilità, che i componenti dell'impianto di riscaldamento descritto di seguito, destinato all'uso in ambienti residenziali, commerciali e industriali: διά του παρόντος δηλώνει υπό αποκλειστική ευθύνη της ότι τα εξαρτήματα του συστήματος θέρμανσης που περιγράφονται παρακάτω για χρήση σε κατοικημένες, εμπορικές και ελαφριές βιομηχανικές

através da presente declara sob sua única responsabilidade que os componentes do sistema de aquecimento abaixo descritos para uso residencial, comercial e de indústria ligeira erklærer hermed under eneansvar, at de herunder beskrevne komponenter til opvarmning til brug i privat boligbyggeri, erhvervsområder og inden for let industri intygar härmed att uppvärmningssystemkomponenterna som beskrivs nedan är för användning i bostäder, kommersiella miljöer och lätt industri:

с настоящото декларира на своя отговорност, че описаните по-долу компоненти за отоплителна система са годни за експлоатация в жилищна, търговска и лекопромишлена среда: niniejszym oświadcza na swoją wyłączną odpowiedzialność, że klimatyzatory i pompy ciepła opisane poniżej, są przeznaczone do zastosowań w środowisku mieszkalnym, handlowym i lekko uprzemysłowionym:

riekav dp.Zemyslowichym.
reklærer hermed som sitt ansvar, ene og alene, at komponentene i varmesystemet som beskrives nedenfor og som er beregnet for bruk i bolig-, forretnings- og lettindustrimiljøer:
vakuuttaa täten asiasta yksin vastuussa, että alla kuvatut lämmitysjärjestelmän osat, jotka on tarkoitettu käytettäviksi asuin-, toimisto- ja kevyen teollisuuden ympäristöissä:
tímto na vlastní odpovědnost prohlašuje, že níže popsané klimatizační jednotky a tepelná čerpadla pro použití v obytných prostředích, komerčních prostředích a prostředích lehkého

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 vyhlasuje na vlastnú zodpovednosť, že komponenty vykurovacieho systému opísané nižšie pre použitie v obytných, komerčných a ľahkých priemyselných oblastiach:
ezennel kizárólagos felelősséggel kijelenti, hogy az alábbiakban leírt, lakó-, kereskedelmí és könnytípari környezetben használható fűtőrendszer alkatrészei:
s tem izrecno izjavljamo, da so spodaj opisane komponente ogrevalnega sistema za uporabo v stanovanjskih, poslovnih in lahkoindustrijskih okoljih:
Prin prezentul document, compania declará pe propria răspundere că piesele sistemului de încálzire descrise mai jos sunt potrivite pentru utilizarea în medii rezidențiale, comerciale şi uşor industriale: kinnitab oma ainuvastutusel, et allipool kirjeldatud küttesüsteemi komponendid on mõeldud kasutamiseks elu-, kaubandus- ja kergetőoštuskeskkonnas:
ar šo pilnibă a tibild par to, ka tālāka parakstītie apsialdes sistémas komponendii, kas izmantomia Zivojamia Zivojamias, komerciálās un vieglās industriālās vidēs:
prisimdamas visą atsakomybę pareiškia, kad žemiau aprašyti šildymo sistemos komponentai skirti naudoti gyvenamojoje, komercinėje ir lengvosios pramonės aplinkose:
ovime izjavljuje pod iskljūčivo svojom odgovornošću da dolje opisane komponente sustava za grijanje za upotrebu u stambenim, komercijalnim i lakoindustrijskim okruženjima:
ovim izjavlijuje pod skljūčivo svojom odgovornošću da su poisane komponente sistava za grijanje za upotrebu u stambenim, poslovnim i lakinim dustrijskim okruženjima:

ovim izjavljujemo pod svojom isključivom odgovornošću da su opisane komponente sistema grejanja za upotrebu u stambenim, poslovnim i lakim industrijskim okruženjima

MITSUBISHI ELECTRIC, EHST17D-VM2D, EHST17D-YM9D, ERST17D-VM2D, ERST17D-VM6D, EHST20D-MED, EHST20D-VM2D, EHST20D-VM6D, EHST20D-YM9D, EHST20D-YM9ED, EHST20D-TM9D, ERST20D-VM2D, ERST20D-VM6D, ERST20D-YM9D, EHST30D-MED, EHST30D-VM6ED, EHST30D-YM9ED, EHST30D-TM9ED, ERST30D-VM2ED, ERST30D-VM6ED, ERST30D-VM6ED, EHST20C-VM9D, EHST20C-VM9 ERST20C-VM6D, ERST20C-YM9D, EHST30C-MED, EHST30C-VM6ED, EHST30C-YM9ED, EHST30C-TM9ED, ERST30C-VM2ED, ERST30C-VM6ED, ERST30C-YM9ED, EHPT17X-VM2D, EHPT17X-VM2D, EHPT17X-VM2D, EHPT17X-VM2D, EHPT20X-VM6D, EHPT20X-VM6D, EHPT20X-VM9D, EHPT20X-VM9 EHPT20X-MHEDW, EHPT20X-MHDW, ERPT20X-MD, ERPT20X-VM2D, ERPT20X-VM6D, EHPT30X-MED, EHPT30X-YM9ED, ERPT30X-VM2ED, ERPT30X-VM6ED EHSD-MED, EHSD-VM2D, EHSD-VM6D, EHSD-YM9D, EHSD-YM9D, EHSD-YM9D, EHSD-YM9D, EHSD-YM9D, EHSD-WED, EHSD-WED, ERSD-WM6D, ERSD-VM6D, ERSD-YM9D, EHSC-WED, EHSC-VM2D, EHSC-VM6D, EHSC-VM9D, EHSC-VM9ED, EHSC-TM9D, ERSC-MED, ERSC-VM6D, ERSC-VM6D, ERSC-VM9D, ERSC-VM9D, ERSC-M9ED, EHSC-M9ED, EHSC-VM9ED, ERSC-VM9ED, ERSC-

Note: Its serial number is on the nameplate of the product. Hinweis: Die Seriennummer befindet sich auf dem Kennschild des Produkts. Remarque : Le numéro de série de l'appareil se trouve sur la plaque du produit. Retriaque : Le trailleto de serie de l'appareir se trovve sui la piaque du produit.

Opmerking: het serienummer staat op het naamplaatje van het product.

Nota: El número de serie se encuentra en la placa que contiene el nombre del producto.

Nota: il numero di serie si trova sulla targhetta del prodotto.

Σημείωση: Ο σειριακός του αριθμός βρίσκεται στην πινακίδα ονόματος του προϊόντος.

Nota: ο número de série encontra-se na placa que contém o nome do produto.

Bemærk: Serienummeret stár på produktets fabriksskilt. Obs: Serienumret finns på produktens namnplåt. Забележка: Серийният му номер е на табелката на продукта. Uwaga: Numer seryjny znajduje się na tabliczce znamionowej produktu.

Directives Richtlinien Οδηγίες Directivas Directives Direktiver Richtlijnen Direktiv Директиви Directivas Direttive

Dvrektvwv

Merk: Serienummeret befinner seg på navneplaten til produktet. Huomautus: Sarjanumero on merkitty laitteen arvokilpeen. Poznámka: Příslušné sériové číslo se nachází na štítku produktu. Poznámka: Výrobně číslo sa nachádza na typovom štítku výrobku.

Megjegyzés: A sorozatszám a termék adattábláján található.

Opomba: serijska števlika je zapisana na tipski ploščici enote.

Notă: Numărul de serie este specificat pe plăcuţa indicatoare a produsului.

Mărkus. Seerianumber asub toote andmesildil.

Piezīme. Sērijas numurs ir norādīts uz ierīces datu plāksnītes. Pastaba. Serijos numeris nurodytas gaminio vardinių duomenų lentelėje. Napomena: serijski broj nalazi se na natpisnoj pločici proizvoda. Napomena: Serijski broj nalazi se na nazivnoj pločici proizvoda.

Direktiver Direktiivit Směrnice Smernice Irányelvek Direktive

Directive Direktiivid Direktīvas Direktyvos Direktive Direktive

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

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 conditioners and heat pumps described below for use in residential, commercial and light-industrial environments:

MITSUBISHI ELECTRIC, EHPT17X-VM2D, EHPT20X-MHEDW, EHST17D-VM2D, EHST20C-VM2D, EHST20D-VM2D, EHST30C-VM6ED, EHST30D-VM6ED, ERPT30X-VM2ED, EHSD-MED, EHSD-VM2D, EHSC-VM2D, EHSC-VM2D, EHSC-VM2D, EHSC-VM2D, EHSC-VM2D, EHSC-VM9ED, EHSC-VM9ED, EHSC-VM9ED, EHSC-VM2D, EHSC-VM9D, EHSC-VM9D, EHSC-VM9D, EHSC-VM9D, EHSC-VM9D, EHSC-VM9D

Note: Its serial number is on the nameplate of the product.

Legislation

Electrical Equipment (Safety) Regulations 2016
Supply of Machinery (Safety) Regulations 2008
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 and Energy Information (Amendment) (EU Exit) Regulations 2019

Issued: 1 September 2021

UNITED KINGDOM

Atsushi EDAYOSHI

Manager, Quality Assurance Department

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

Importer:

Mitsubishi Electric Europe B.V. Capronilaan 46, 1119 NS, Schiphol Rijk, The Netherlands
French Branch 2, Rue De L'Union, 92565 RUEIL MAISON Cedex
German Branch Mitsubishi-Electric-Platz 1 40882 Ratingen North Rhine-Westphalia Germany
Belgian Branch 8210 Loppem, Autobaan 2, Belgium
Irish Branch Westgate Business Park, Ballymount Road, Upper Ballymount, Dublin 24, Ireland
Italian Branch Palazzo Sirio Ingresso 1, Via Colleoni, 7, 20864 Agrate Brianza (MI), Italy
Norwegian Branch Gneisveien 2D, 1914 Ytre Enebakk, Norway
Portuguese Branch Avda. do Forte 10, 2794-019 Carnaxide, Lisbon, Portugal
Spanish Branch Av. Castilla, 2 Parque Empresarial San Fernando - Ed. Europa, 28830 San Fernando de Henares (Madrid), Spain
Scandinavian Branch Hammarbacken 14, P.O. Box 750 SE-19127, Sollentuna, Sweden
UK Branch Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, United Kingdom
Polish Branch Krakowska 48, 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