The Renewable Solutions Provider

Making a World of Difference

Homeowner Quick Start Guide

Version 2

MITSUBISHI ELECTRIC

LIVING ENVIRONMENTAL SYSTEMS

Air Conditioning | Heating

Ventilation | Controls

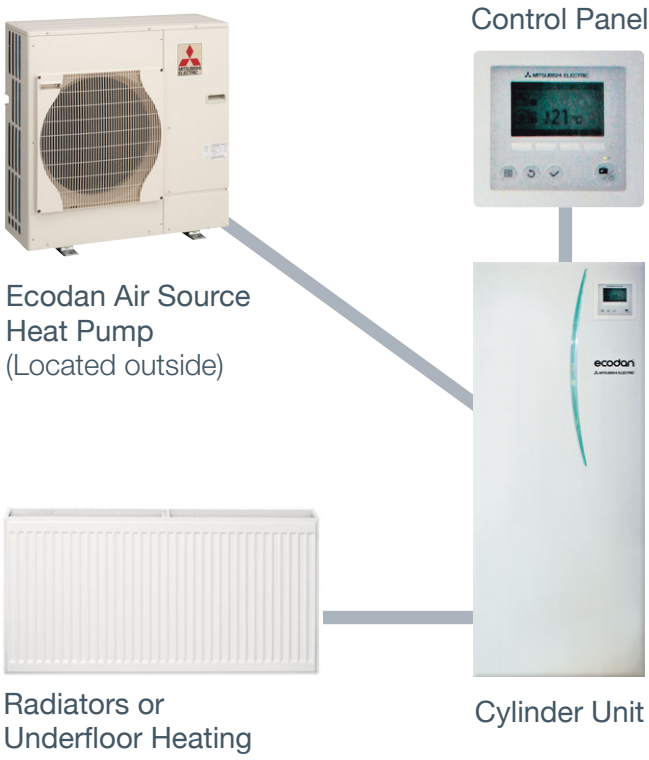
ecodan®

Renewable Heating Technology

Introduction to Your New Mitsubishi Electric Ecodan Heating System

This booklet has been created to enable you to quickly personalise the Heating System controls to provide the best operation conditions for your home. **If you require more in depth information and system settings please refer to the instruction booklet provided with the cylinder unit.**

Your heating system consists of:



Ecodan Air Source Heat Pump

Heat energy from the outside air and mains electricity are used by the Air Source Heat Pump to heat refrigerant to a high temperature. This heat is then transferred to water which flows into your home for central heating and also for domestic hot water. The way the heat pump works is similar to a refrigerator in reverse.

Ecodan Cylinder Unit

The cylinder unit is used to store your hot water as well as containing various heating parts essential to operating your heating system, such as water pumps and safety valves.

Controls
Your hot water and central heating system is operated by the control panel, which will either be attached to the front of the cylinder unit or attached to a wall in your home. The control panel allows you to customise the settings to your requirements.

Heating System

This is the method used to transfer heat from the Ecodan to the home. Most often large radiators, but sometimes under floor heating.

TRV's
Your radiators may be fitted with Thermostatic Radiator Valves (TRV's). These will adjust the amount of heat emitted from the radiator, dependent on the demand. Each valve can be adjusted by turning the top of the valve. The higher the number displayed on the valve, the warmer your room will become and the more energy you will use. Check your TRV's to make sure they are not set too high.

Save Energy, Save Money

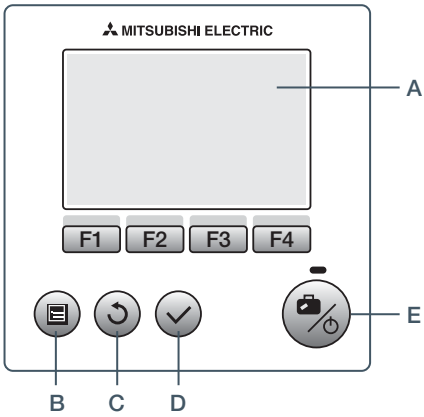
How to operate your system efficiently
The Ecodan provides water at a lower temperature than the gas or oil fired boiler you may be used to. This means that you may notice some differences between this system and ones you have used before. Below is a list of the main differences and how these will affect you.

Difference to Oil/Gas boiler	Implication	Action Needed
Low flow temperatures	Radiators will not feel hot to the touch.	This is not a problem for heating. It is advisable not to hang clothes over the radiators as it prevents the heat from passing to the air in the room.
	Central heating may be slower to respond when you change the set temperature.	Reaction times differ between systems of different sizes. Please ensure you wait sufficient time before adjusting the controls again.
Central heating will not run whilst the hot water tank is being heated.	Room temperature may decrease a little during water tank heat up.	Use the schedule function to heat water up overnight or during a time when the home is unoccupied.
Advanced Controls	Self learning controls mean that the system runs more efficiently.	It is nearly always more efficient to run the system in “Room Auto Adaptation” mode for heating.

To optimise running costs it is advisable the homeowner seeks the most cost effective electricity tariff. An internet search facility like **www.uswitch.com** will be able to help.

Customising Settings For Your Home

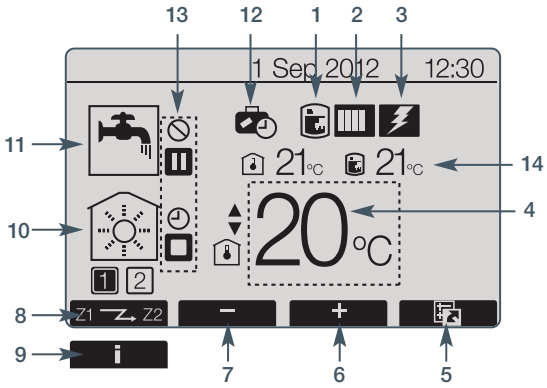
To change the settings of your heating system please use the main controller located on the front panel of the cylinder unit or on a wall. The following is a quick guide to viewing the main settings. Should you require more information please refer to the instruction booklet included with the cylinder.



Main controller parts

Letter	Name	Function
A	Screen	Screen in which all information is displayed.
B	Menu	Access to system settings for initial set up and modifications.
C	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 the system is switched on will enable Holiday Mode. Holding the button down for 3 secs will turn the system off.
F1-4	Function keys	Used to scroll through menu and adjust settings. Function is determined by the menu screen visible on screen A.

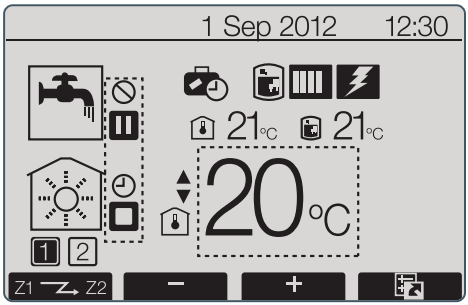
Controller Display Settings



No	Icon	Description
1	Legionella prevention	When this icon is displayed Legionella prevention mode is active.
2	Heat pump	‘Heat Pump’ is running Defrosting Emergency heating
3	Electric heater	When this icon is displayed the electric heaters are in use.
4	Target temperature	Target flow temperature Target room temperature Compensation curve
5	OPTION	Pressing the function button below this icon will display the option screen.
6	+	Increase desired temperature.
7	-	Decrease desired temperature.
8	Z1 Z2	Pressing the function button below this icon switches between Zone 1 and Zone 2.
9	Information	Pressing and holding the function button below this icon displays the information screen.
10	Space heating mode	Heating mode. Zone 1 or Zone 2.
11	Domestic hot water mode	Normal or ECO mode.
12	Holiday mode	When this icon is displayed ‘Holiday mode’ activated.
13		Timer Prohibited Stand-by Stop Operating
14	Current temperature	Current room temperature Current water temperature of DHW tank

General Operation

This screen shows the target temperature, space heating mode, domestic hot water mode, any additional heat sources being used, holiday mode and the date and time.



Home Screen

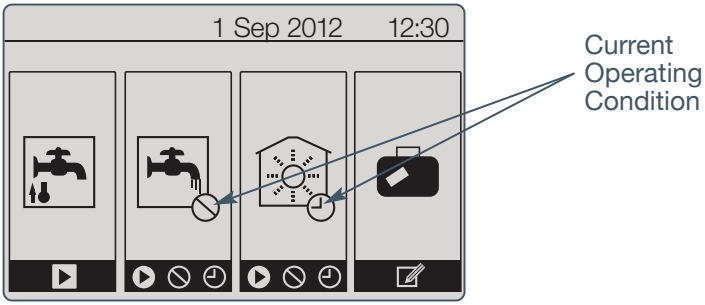
Use the function buttons to access further information.

When this screen is displayed pressing F1* will display the current status whilst pressing F4* will transfer the user to the option menu screen.

*Function Key

Option Screen

This screen shows if the heating and/or hot water are ON (▸), Prohibited (⦸) or Scheduled (◴). You can also edit/activate the holiday setting.



Turning on Priority Hot Water / Hot Water / Heating

Forced domestic hot water: To activate press F1

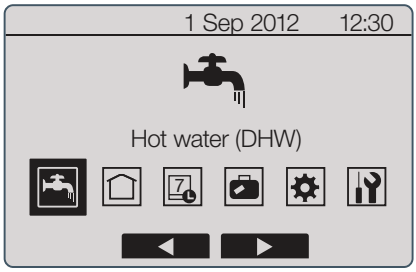
Domestic hot water operating mode: To change mode press F2

Space heating operating mode: To change mode press F3

Holiday mode: To access Holiday screen press F4

Viewing System Settings

To access the main settings menu, press button B ‘MENU’.



The following menus will be displayed:

- DHW (Domestic Hot Water)
- Heating
- Schedule
- Holiday
- Initial setting
- Service (Password protected)

Changing Date and Time

From main settings menu use F2 and F3 Function Keys to highlight ‘Initial Settings’ icon and select by pressing CONFIRM.

Use F1 and F2 Function Keys to scroll through the menu list. When ‘Date/Time’ is highlighted then press CONFIRM to edit.

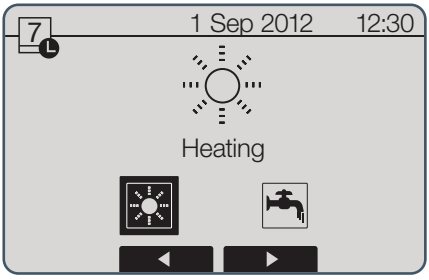
Use the relevant function keys to edit each initial setting then press CONFIRM to save the setting.

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

Schedule

When setting up the system your installer should discuss with you your heating and domestic hot water requirements so that the optimum schedule can be created. Activation or deactivation of the schedule is set up in the option screen. (See page 8). Detailed setting instructions are available in the instruction booklet provided with the cylinder unit.

From the main settings menu (see page 6) use F2 and F3 Function Keys to highlight the schedule icon then press CONFIRM.



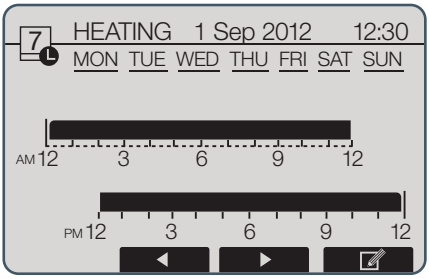
The schedule sub menu will be displayed.
The icons show the following modes;

- Heating
- Domestic hot water

Use F2 and F3 Function Keys 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.

Where a day or days appear underlined, the settings are the same for all those days underlined.



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

Troubleshooting

The following is to be used as a guide to possible problems. It is not exhaustive and all serious 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 blocked up.

Cold water at taps

Hot water may be scheduled off:
Please check schedule settings and alter if necessary.

All the hot water from tank may be used:
Ensure DHW mode is operating and wait for tank to re-heat.

Heat pump or electric heaters not working:
Contact installer.

Water discharges from one of the relief valves

The system has overheated/over pressurised:
Please 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:
Please twist the valve cap in the direction indicated 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.

Noisy pipework

Air may be trapped in the system:
Try bleeding radiators (if present) using a radiator key, if the symptoms persist 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 radiators:
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.

An error code appears in the main controller display

The indoor or outdoor unit is reporting an abnormal condition:
Make a note of the error code number and contact installer.

Pump runs without reason for short time

Pump jam prevention mechanism to inhibit the build up of scale is working. Normal operation, no action necessary.

Mechanical noise heard coming from cylinder unit

Heaters switching on/off:
Normal operation, no action required.

3-way valve changing position between DHW and heating mode:
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.

‘Smoke’ is blown from the front of the Ecodan in cold weather

This is warm air being blown from the Ecodan to ensure the internal parts don’t freeze. It is known as the defrost cycle:
Normal operation, no action necessary.

Power failure

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

Installer/Housing Association Contact

Telephone: 01707 278666

email: heating@meuk.mee.com
www.heating.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environmental Systems Division
Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England
General Enquiries Telephone: 01707 282880

IRELAND Mitsubishi Electric Europe Westgate Business Park, Ballymount, Dublin 24, Ireland
Telephone: Dublin (01) 419 8800 Fax: Dublin (01) 419 8890 International code: (003531)

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