



*Delivering sustainable homes for
a better tomorrow*



Vitocal Heat Pump

**A guide to using your
Vitocal heat pump...**



Operational Guide



Please Note:

While a full manual is available upon request, we highly recommend consulting with a member of our property services team before making any adjustments to your system.

Keyboard



BUTTON	DESCRIPTION
	ON/OFF BACKLIGHT Function that acts at the thermostat level, used to turn off/on the LEDs and the backlight. In OFF mode, the keyboard does not accept any command. This function has not no effect on the setting of the machine, but it enables/disables the interaction with the Thermostat. Allows you to exit the menu. If this buttons is pressed for 3 seconds, the keyboard will lockout and the padlock icon appears on the display <u>This function has not no effect on the setting of the machine, it is just used to enable/disable the interaction of the user with the thermostat keyboard.</u>
	UP This button allows you to move up to higher menus or to increase the value of a given parameter
	DOWN This button allows you to move down on lower menus or to decrease the value of a given parameter
	CHRONOTHERMOSTAT This allows you to set the operational time slot to regulate room temperature read by the probe on the i-Cr
	CHANGE SEASON BUTTON Push this button at least for 3 seconds to change the season mode or to turn the heat pump/chiller unit OFF
	ENTER BUTTON Use this button to enter the menus or to confirm a parameter.

Display

The following is the list of main icons with relative meaning.

ICON	DESCRIPTION	NOTES
	Cooling	ON: cooling mode
	Heating	ON: heating mode
	Sanitary mode	ON: DHW enabled Blinking: DHW in progress
	Water drip	ON when the machine water temperature is displayed on the main page instead of the room temperature
	Manual	When ~~chronothermostat~~ is not active but the "mode" setting is manual
	Maximum Hz	ON when the maximum Hz function is active
	~~Chronothermostat~~	ON when the ~~chronothermostat~~ is active
	Economy	ON when ~~Ecomode~~ is active (manual or chrono-program)
	Off Mode	Mode off (manual or chrono-program)
	Active Password	It indicates that you can access the menus that are protected by password The dots indicate the password level entered
	Padlock	Indicates keyboard locked
	Alarm	Indicates an alarm is triggered
	Link error	Indicates no communication with the unit
	Pump	ON when the pump is active
	Compressor	Blinking: Unit on call ON when at least 1 compressor is working
	Anti-Legionella	On: Disinfection cycle in progress Blinking: last cycle not executed
	Antifreeze	ON when the antifreeze electric heaters are active, if present
	Solar	ON when the solar pump is active, if present
	Electric heaters	ON when plant or DHW integration electric heaters are active, if present
	Boiler	ON when boiler is activated, if present
	Defrost	ON during defrosting.

Keyboard Block

AUTOMATIC: The keyboard has a handy feature called the automatic keyword block. After 60 seconds of no key being pressed (but you can adjust this to your liking), the keyboard's lights turn off, and the screen brightness lowers (but again, you can set this brightness level). When you press a button again, the lights come back on, and the keyboard wakes up. Pressing any button won't do anything else. When the lights are on, the keyboard works as usual, responding to your commands.

MANUAL: Along with the automatic keyboard block I mentioned earlier, you can also manually block the keyboard. Just hold down the ON/OFF key for 3 seconds, and you'll see a padlock symbol appear. When the keyboard is locked, every time you press a key, the padlock blinks and shows the word 'Lock'. To unlock the keyboard, simply hold down the ON/OFF key again for 3 seconds

Main Menu

Pressing Enter, you enter the first level menu described below. The following items can appear here:

- PSS: Password setting
- Sett: ECO and normal summer and winter ambient setpoint.
- ModE: Operating mode of the thermostat (room thermostat function)
- Hist: Alarm log
- PAr: Thermostat machine and rooms parameters
- Err: Current machine alarms
- Date: Date and time setting
- For: Forced manuals menu
- SYS: System status menu

Use the arrow buttons to navigate through the possible items, with the Enter-button you select the chosen menu, with the ON / OFF key you go out again.

Sett Air

AMBIENT setting (disabled in diS mode)

Set	Default
Coo	25.0 °C
HEA	20.0 °C
CooE	30.0 °C
HEAE	15.0 °C

Note; Cooling function is not enabled on your heat pump

Mode

Selecting the ModE menu you set the operation type

	dis: Disabled room thermostat function. Neither manual icon nor the chronothermostat icon appears. The water drip icon appears. The displayed temperature is that of the regulation probe of the heat pump or chiller (air is not settable)
	ComF: Room chronothermostat active. The temperature control demand will be evaluated based on the temperature read by the thermostat and on the normal ambient setpoint of the season. The displayed temperature that of the air read by the i-CR's on-board probe This mode is recognised by the presence of the manual symbol.
	Eco: Manual ECO Function. The temperature control demand will be evaluated based on the temperature read by the thermostat and on the ECO ambient setpoint of the season. This mode is recognised by the presence of the manual icon and leaf symbol.
	OFF: Ambient thermostat in manual OFF. Room temperature control always met will be sent to the machine. This mode is recognised by the presence of the manual icon and moon symbol.
	Cron: Active chronothermostat The temperature control demand follows the weekly chronothermostat programming that can be in one of the following bands: - o OFF - o Eco - o ComF. This mode is recognised by the presence of the clock symbol indicating chronothermostat active. The active time slot is identified by the presence of the moon and of the leaf. This menu is always accessible. To set the chronothermostat see par. 12.

Hist

This menu displays the machine's alarm history, starting with the most recent. Use the Up and Down buttons to navigate. New alarms show dashed lines briefly. Each entry includes:

Error code "Exxx" (by default)

Alarm time (hh:mm, 24-hour format)

Day (dOxx, 1 – 31)

Month (MOxx, 1 – 12)

Year (yOxx, 0 – 99)

If the board lacked valid time during an alarm, it shows days and hours since last power-on, without Month and Year.

Note: "Disinfection event terminates successfully" is marked as "ALOK" in the history

Err

In this menu you can see the active alarms in the chiller or heat pump. With the Up and Down KEYS you can scroll the current alarms.

If there are no alarms, "noAL" appears.



The presence of an error on the chiller or heat pump is recognised by the icon .

Manual machine alarms reset: It is carried out in automatic mode by turning the machine OFF with the MODE key (with an alarm warning on the display).

Date

Setting the date and time:

Year: Choose any year from 2018 to 2099.

Month: Select a month from 1 (January) to 12 (December).

Day: Pick any day from 1 to 31 (with some limits based on the month/year).

Hour: Set the time from 00:00 to 23:59.

The day of the week is calculated automatically, and daylight saving time (summer time) follows European Union rules.

By default, the display shows Monday as day 1 and Sunday as day 7. But if you set parameter K50 to 1, Sunday will become day 1 instead.

Note: This menu automatically appears if the unit detects that the date and time were reset during startup."

Alarms

The only alarm actually present on the thermostat is the communication malfunction with the unit which must be connected to it via serial connection.

Active bell icon.



The communication failure with the unit is indicated by the flashing acronym "Conn". The bell icon will be activated also in case of temperature probe reading error.

Whereas the danger triangle remains on steady in case of a machine alarm.

Tuath Recommendations

The Thermostat is an easy-to-use device that helps control the temperature of your heating system. Here's how it works:

Setting the Temperature:

Simply turn the dial to set your desired room temperature. We recommend setting the temperature to approximately 18 degrees which should be most cost effective. Remember the warmer your home is, the more it will cost.

Automatic Temperature Control:

When your heating system is running, the Thermostat detects the temperature in the room. Once the desired temperature is reached, it stops the heating system by opening the electrical circuit.

Temperature Adjustment:

As the room cools down, the thermostat allows a slight drop in temperature (about 1°C) before allowing the heating system to turn on again.

Preventing Overheating:

If the Thermostat is set to a temperature lower than the room temperature, it prevents the heating system from activating.

Checking Temperature: You can check the current temperature reading by rotating the dial until you hear a click. This indicates the point where the temperature is measured.

Hot Water:

The heat pump system has integrated controls for domestic hot water production which is set up during commissioning by the installer. Hot water will automatically turn on as required and will turn off when the pre-set temperature is reached.

Overall, the Thermostat offers convenient and efficient temperature control for your heating system, ensuring comfort while preventing energy waste.

Please allow 24 hours for your home to get to the desired temperature before making further adjustments.

Scan for Link to User Video's



Heat Pumps: Your Questions Answered

What is a heat pump?

A Heat Pump is a device that transfers heat from one place to another using different air or heat sources. For example, air source heat pumps move heat between the air inside and outside of your home.

Do heat pumps use a lot of electricity?

While **Heat Pumps will increase your electricity bill**, they typically reduce costs for other heating fuels.

Are heat pumps a good idea?

Yes, Heat Pumps are more energy-efficient than other heating systems because they produce more heat than the amount of electricity they consume.

What are the downsides to Heat Pumps?

Air source heat pumps may experience issues like **icing in cold temperatures**, which can damage the system. However, modern heat pumps often have automatic defrosting. They may also be less efficient and use more electricity during very cold days.

Are heat pumps noisy?

While all heating products make some noise, **heat pumps are usually quieter than fossil fuel boilers**. The noise level typically ranges from 40 to 60 decibels, depending on the type of heat pump and its installation.

Is it better to keep a heat pump at a constant temperature?

Yes, heat pumps operate more efficiently when maintained at a steady temperature. Turning the heat pump down when you're away or asleep may use more energy as it has to work harder to reach the set temperature again.

What is the best way to use a heat pump in winter?

Keep the temperature setting low (between 18°C to 21°C). Setting it higher won't heat the room any quicker but will use more energy.

What should the thermostat be set at in winter in Ireland?

Set the thermostat to 20°C in living areas and cooler (15-18°C) in hallways and bedrooms. Lowering the room temperature by just one degree can reduce heating bills by 10%.

Does it cost more to maintain a higher temperature?

Yes, maintaining a higher temperature will increase heating costs. Raising the temperature by one degree can increase the heating bill by about 10%. What that means is if you run your home one degree warmer over the course of a month, it will raise your heating bill by 10% for that month. So, if your average bill is €100 per month, if you raise it by two degrees, your bill will be about €120..

How do I maintain a heat pump?

Tuath Housing will arrange for an annual inspection and perform regular maintenance tasks.

You can do several things to maintain your heat pump, including:

- **Check on the outside of the heat pump unit during winter.** Remove any snow or ice from the outside of the unit immediately. Use caution when removing the ice and snow to prevent damaging the grille.
- **Clean the outside of the heat pump unit often.** Remove any dirt, mud, or leaves from the outdoor section with a soft-bristled brush or your garden hose.
- **Cut back foliage.** Prune any shrubs, trees, or bushes at least 18 inches back from the outdoor heat pump. This allows air to flow around the unit, which is needed for the Heat Pump to work well.

Additional Tips:

- Don't worry too much about temperature readings initially. Set a comfortable temperature and adjust over time if needed.
- Avoid changing the settings frequently. Let the heat pump find a suitable temperature and maintain it unless you'll be away for more than 24 hours.

Remember, understanding how to properly use and maintain your heat pump can lead to increased efficiency and comfort in your home.

Who do I contact with queries on my heat pump?

If there is a problem with your heating or hot water, get in touch with our team by



Telephone on 01-676 1602



Send an email to energyupgrade@tuathhousing.ie during the first 3 months following installation. If the heat pump is installed 3 months or over log a repair on our website <https://tuathhousing.ie/tenant-home/>

- Fill out the form by scanning the barcode below. The digital display on your heat pump may show a flashing error code, please report this to us so we can get you back up and running quickly.
- For complete loss of heating out-of- office hours in emergency adverse weather contact the helpline by phoning your local Tuath Housing office and dial Option 1.



Disclaimer: Tuath Housing is not responsible for any damage, loss, or injury resulting from the use of this product. Users are advised to follow all safety instructions and guidelines provided in the full manual.

Use of the product is at the user's own risk.



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