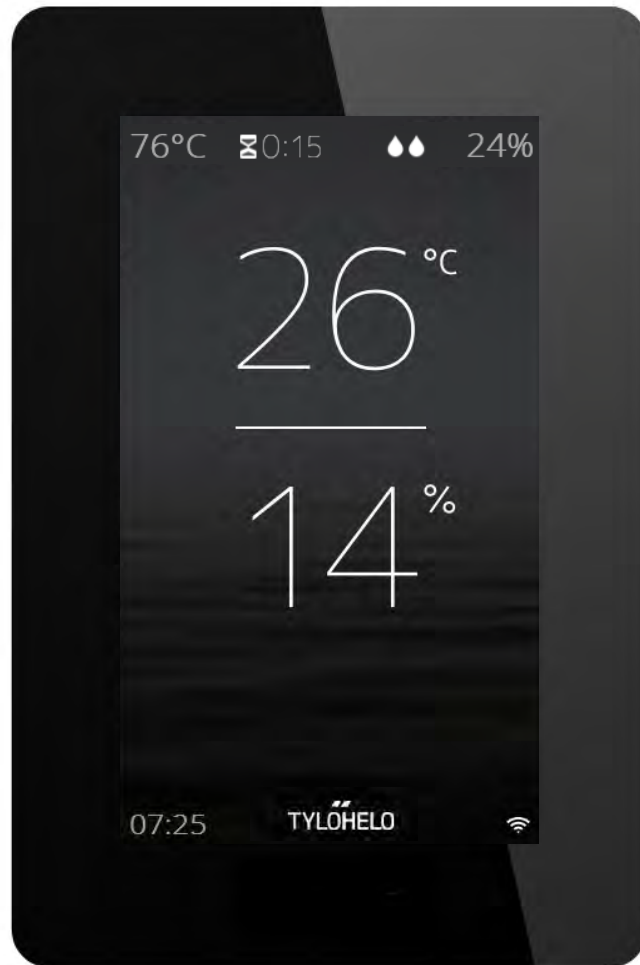


Elite



Installation Guide

The operating panel must be installed in a frost-free environment.

The control panel can be installed inside or outside the sauna/steam room. If installing inside the sauna cabin, the upper edge must not be more than 80 cm above the floor, and must be at least 30 cm from the heater. The ambient temperature around the Pure control panel should never exceed 80 °C.

The unit can be mounted on the wall using the bracket or double-sided adhesive supplied. If using the bracket, mount the control panel on the bracket using adhesive.

A 30 mm hole through the wall is required if mounting the control panel directly on the wall.

When installing the panel inside the steam room/sauna, installation must be directly to the wall, using the accompanying adhesive or a Tylö embedding frame (item no. 90001056). The wall must be smooth and perfectly clean after hole drilling (30 mm) before installation. The bracket must not be used.

If you have purchased an Elite check the coverage of your wireless network **before** you finally install the control panel (see also Configuring: System settings in this guide).

Installation with bracket

Use the bracket as a template to mark up screw holes on the wall. Tighten the screws a little until the bracket is loosely secured.

Secure the adhesive to the bracket (see Figure 1).

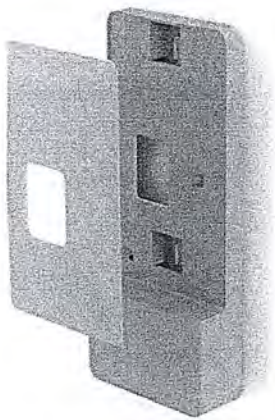


Fig. 1

Remove the protection from the adhesive and secure the panel to the bracket (see Figure 2).



Fig. 2

Attach the cable and switch to the bracket (see Figures 3 and 4). Remember to position the switch in accordance with the illustration (the locking tongue should be at the left side when seen from below). Install the panel on the wall. Use the supplied control panel cable to connect the panel to the heater. If the cable is too long, it can be shortened, then use the extra switch supplied. NB: special pliers are required (crimp pliers for RJ10).

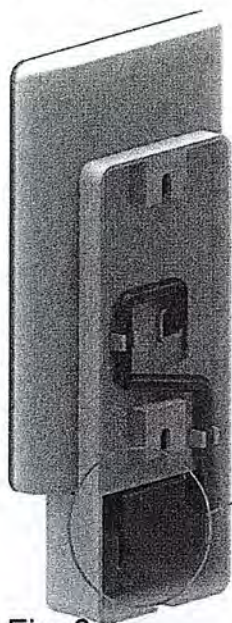


Fig. 3

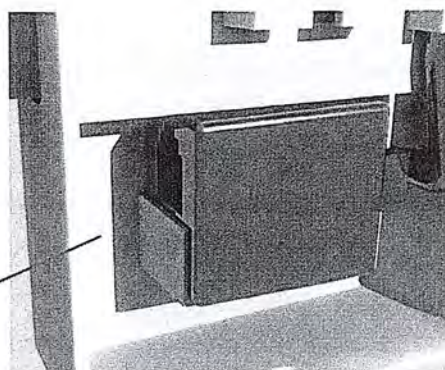


Fig. 4



Fig. 5

Installation without bracket

Attach the double-sided adhesive to the control panel. Before attaching the panel to the wall, connect it to the heater to check that everything works. Remove the protective backing from the adhesive. Connect the panel wire, pass the contact through the hole in the wall and press the panel firmly against the wall.

If fitting the panel without the bracket but it is necessary to run the cable outside the wall, the following solution can be used (see Figure 6). This only applies to installation inside the sauna cabin. Remember that the hole through which the contact will pass must be min. 30 mm.

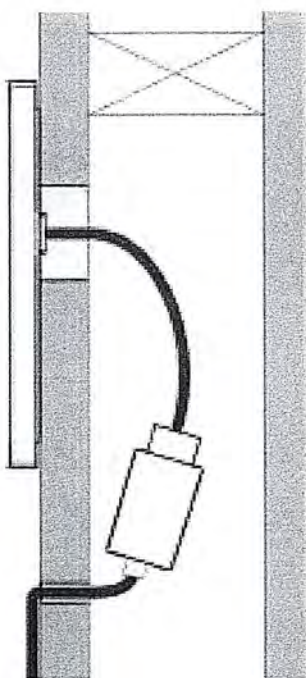
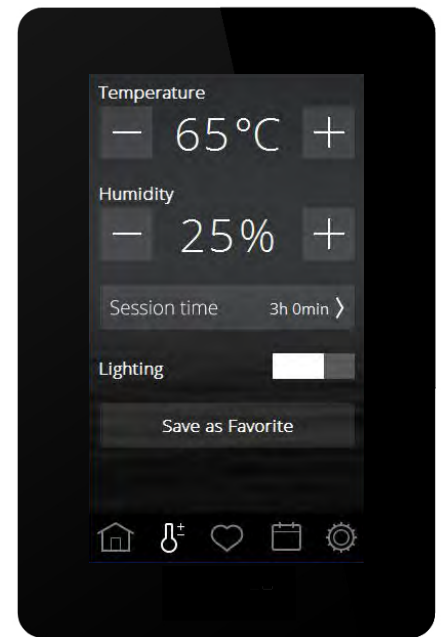
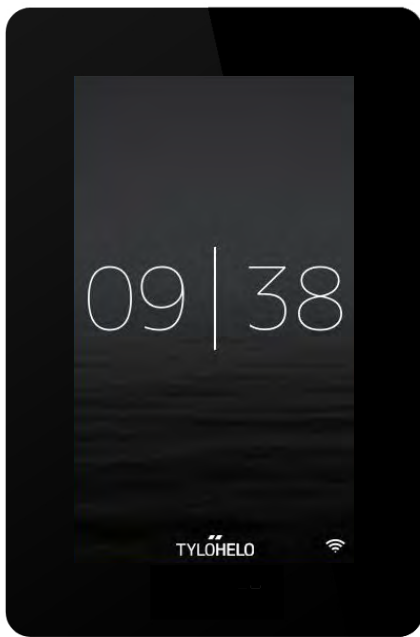


Fig. 6

User Guide

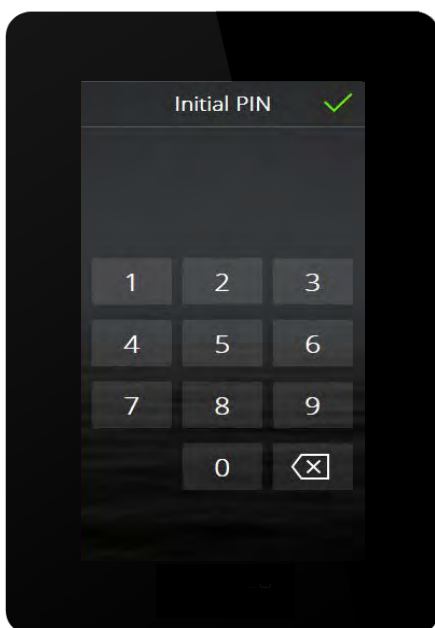


Introduction

Your new Tylo Elite control panel is used to control your sauna, steam generator, Combi heater or Tylarium. The screen on the control panel is a touchscreen, meaning that you press the screen to select functions or define various parameters. The screen's appearance depends on the status of your device. Picture 1 shows the screen when the device is switched off, picture 2 when the device is switched off but you have touched the screen, and picture 3 when you have changed something, e.g. the temperature or session time. At the bottom of the screen in pictures 2 and 3 you will see a row of icons. Press these to access a number of functions and settings.

Grey text boxes appear in certain sections. These provide a more in-depth explanation of settings and functions, which you can skip over the first time you read this manual. If you want to define more advanced settings or know more about how something works, you can go back and read these later.

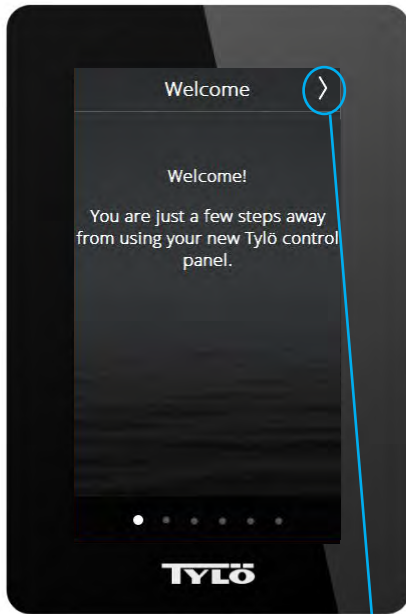
Initial PIN



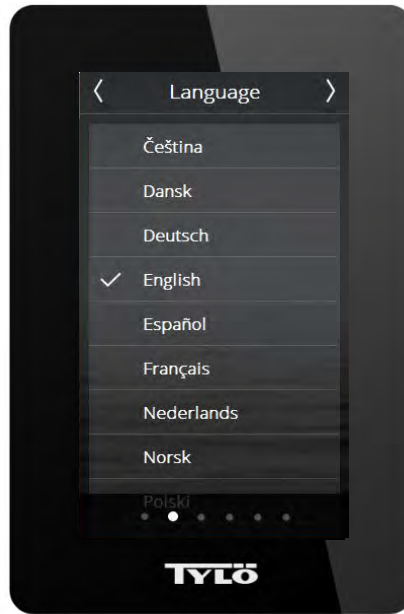
The first time the control panel is switched on, you will need to enter a PIN. The PIN for this panel is 8956.

Initial-set-up process

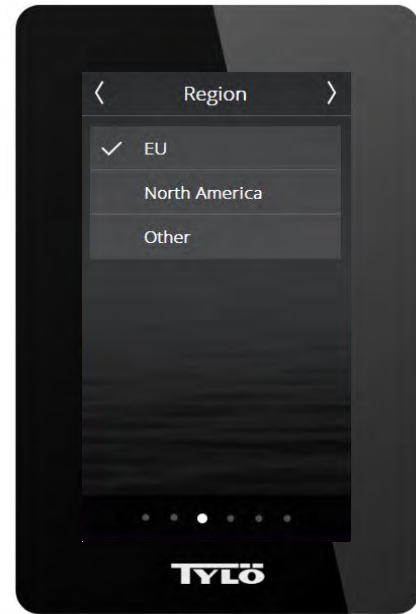
Set heater switch to ON. The control panel automatically detects what kind of device it is connected to (sauna, Combi, steam generator). You then follow a six-step start-up sequence. Follow the instructions on the control panel.



1. Welcome screen. Press >



2. Select language. To see all languages, drag your finger upward from the bottom of the screen. To select one, press the desired language. Press >



3. Select region. Press >

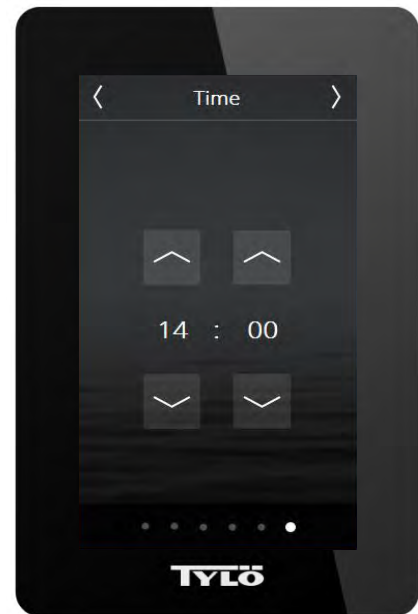
The Region will automatically define other values such as the maximum session time and maximum session temperature. These can be modified later.



4. Select the date format. Press >



5. Enter today's date using the Up and Down arrows. Press >

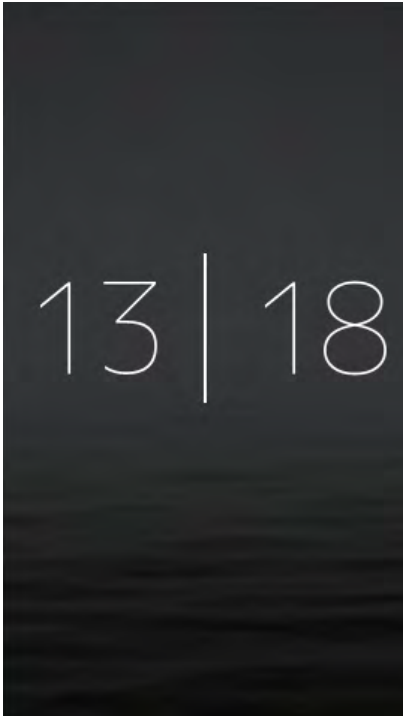


6. Set the clock. Press >

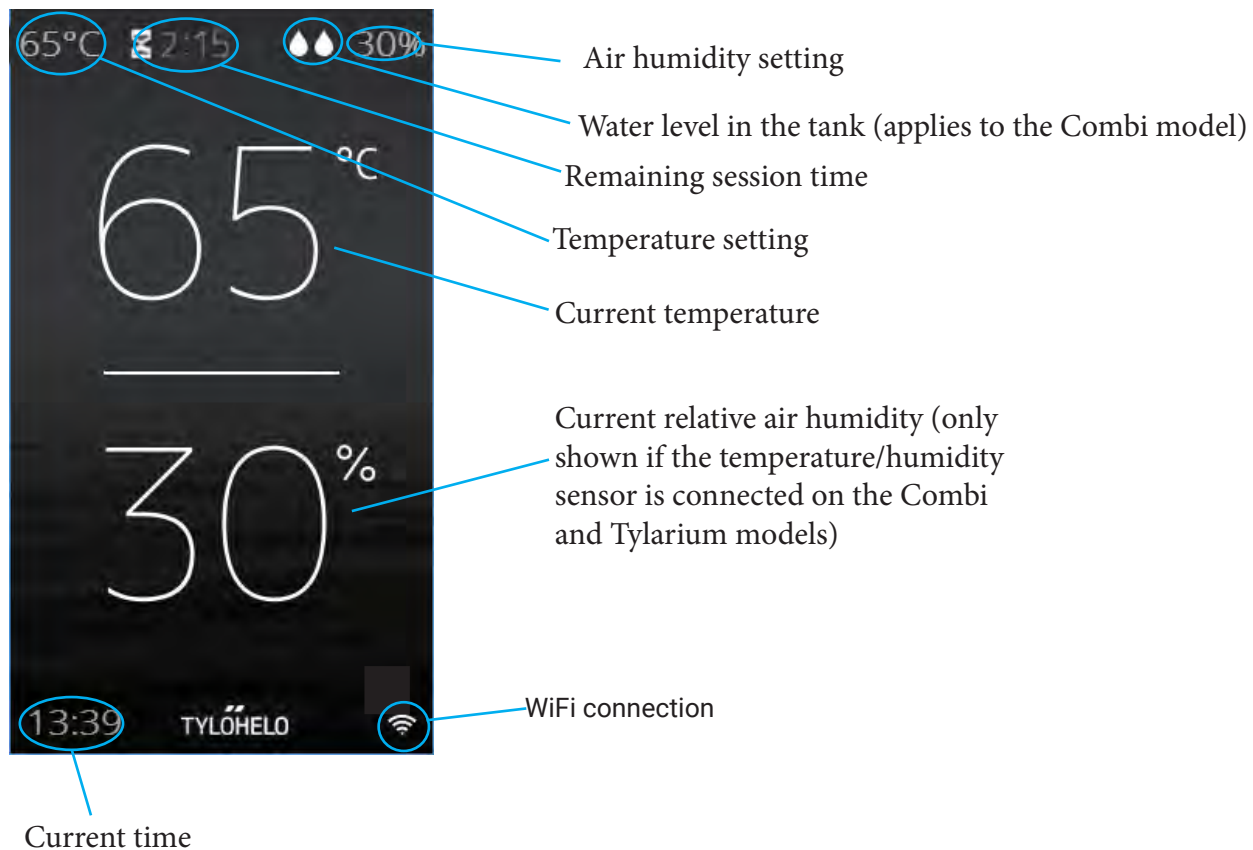
If several Elite panels are connected to the same system, all panels must go through initial setup but certain steps will be skipped. The parameters to be set are language and date format.

Overview

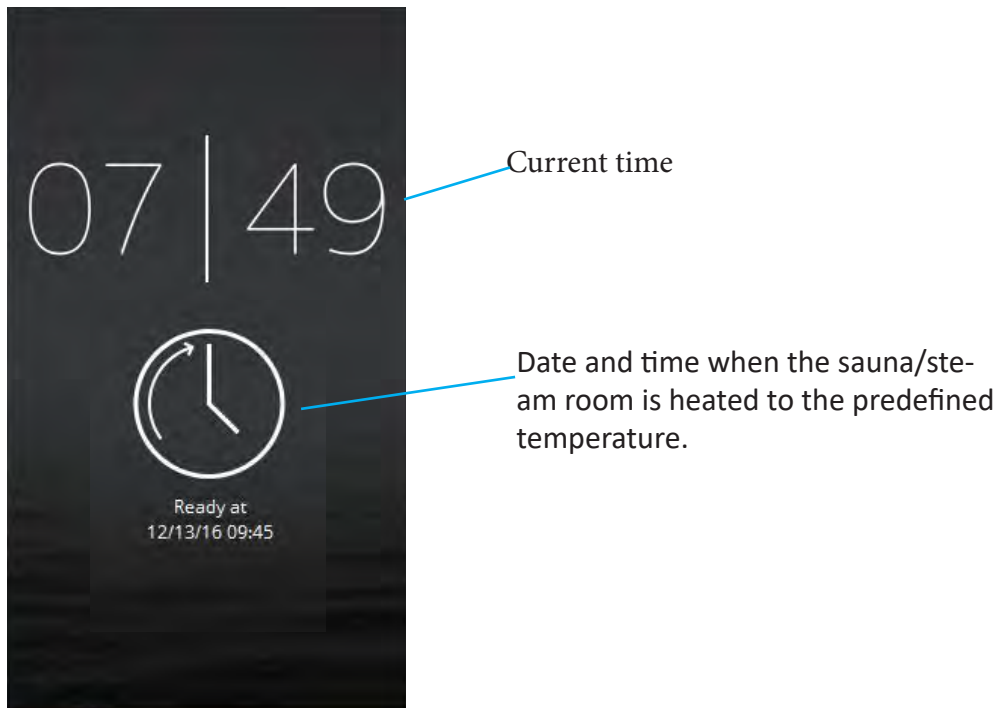
Your screen displays the Overview when you do not touch the control panel for around 15 seconds. The Overview screen that is displayed when your device is switched off shows the current time.



If the device is currently operating, the Overview screen looks as follows:

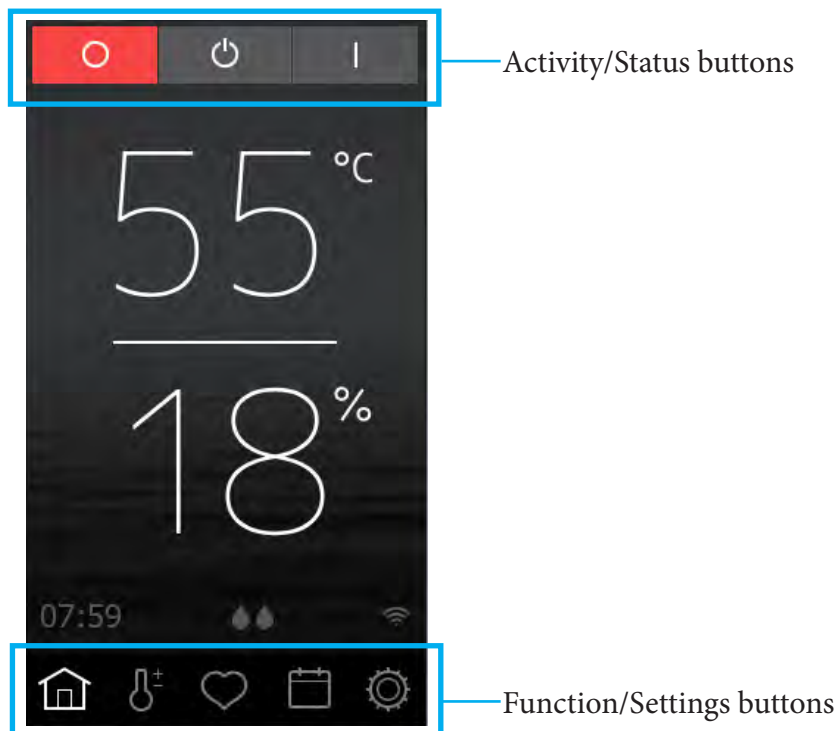


If a calendar program or weekly program is about to start, the screen will switch on about one hour before this and the following Overview screen will be displayed:



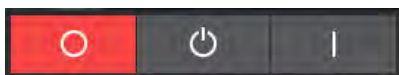
Home

You can access the Home screen by touching the screen in the Overview mode or by pressing the Home button. This screen includes Off, Standby and On buttons (activity/status buttons) and function/setting buttons that take you to various setting options.



Activity/Status buttons

These buttons are used to start an activity. The button that is in colour indicates the current status.



The device is switched off.



The device is in Standby mode.

In Standby mode the sauna temperature is reduced. When guests enter the sauna, they press the start button or external switch to quickly heat the sauna to the desired temperature (see picture). You can define the extent to which the temperature is reduced under Configure. The Standby function can be started manually (by pressing the button) and via the calendar/weekly program. The temperature is not reduced for steam generators. The water in the tank is kept at a temperature of 95 °C instead (can be modified under Configure). Pressing On or Start (see below) will cause steam production to start immediately.

The Standby function can be switched off under Configure. The button will then not appear on the Home screen.



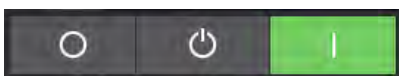
Start



Renew Bathtime

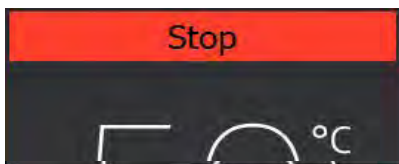
Appearance when the device is in Standby mode and the panel is locked using a PIN. If you press Start, the device will switch to standard operating mode for the time defined under Session Time External Switch. The button changes its appearance and name (see picture below) to Restart session time. The operating time restarts whenever Restart session time is pressed.

Example: The device is in Standby mode and Session time external switch is set to 30 minutes. If you press Start, the button changes to Restart session time and the device switches to standard operating mode. After 15 minutes, if you press Restart session time again, the device will run in standard operating mode for a further 30 minutes. If there is time remaining on the Standby session time when these 30 minutes are up, Standby mode will resume. Otherwise the device will switch off.



The device is operating.

There are more Activity and Status button screens, particularly when the panel is locked. These will be explained under the Code lock function.



Stop

The device is in Drying mode.

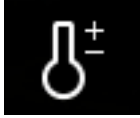
Combi heaters, steam generators and Tylarium devices have a Drying mode. Once you are finished after the steam generator has been operating (Combi and Tylarium), the sauna will be heated to 80 °C for 20 minutes to dry out any remaining moisture. If you have a steam room with a fan, the fan will start once you are finished and will operate for 20 minutes (this time can be configured under Configure/Fan). To switch off Drying mode, press the Stop button.

Function/Settings buttons

These will be explained in more detail in the relevant sections. The buttons that appear on the Home screen are:



Home: Shows information concerning temperature and humidity, along with activity/status buttons and Function/Settings buttons.



Set-up: Setting the temperature, session time, humidity, etc.



Favourites: Saved favourite settings.

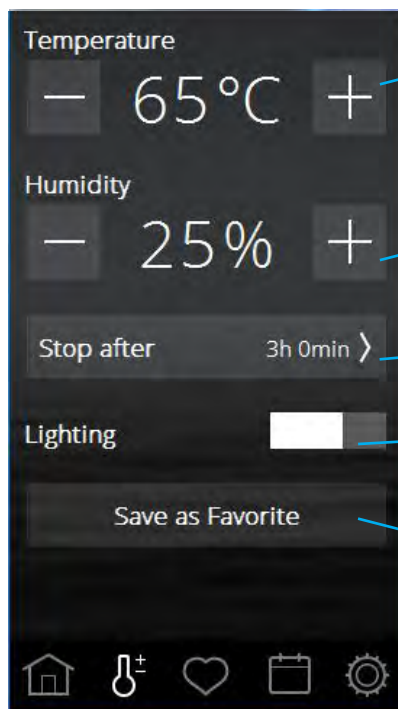
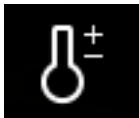


Calendar: Create a calendar and/or weekly program.



Configure: System settings.

Settings



Setting the desired session temperature

Setting the desired air humidity. Only on the Combi and Tylarium models.

Setting the desired session time.

Lighting Off/On

Save the settings as a favourite.

Under settings you can define all the parameters for the session. Adjust the temperature and humidity using the – and + buttons. If a temperature/humidity sensor is connected, humidity is expressed in %RH (relative humidity); otherwise humidity is expressed on a scale of 0 to 10.

If no humidity sensor is connected, a scale of 0 to 10 is used, where 0 means that the steam function on the Combi heater is switched off, and 10 means that it is operating continuously at full power. The numbers between 0 and 10 on the scale indicate that the steam function will operate for a certain amount of time before switching off for a certain amount of time. The total cycle time is about 4 minutes and 20 seconds. Approximate times for the various scale steps:

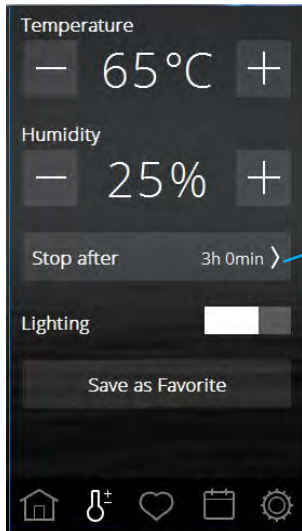
RH	On	Off
0	0	4 mins 20 secs
1	1 min 52 secs	2 mins 28 secs
2	2 mins 09 secs	2 mins 11 secs
3	2 mins 25 secs	1 min 55 secs
4	2 mins 41 secs	1 min 39 secs
5	2 mins 57 secs	1 min 23 secs
6	3 mins 14 secs	1 min 06 secs
7	3 mins 29 secs	0 mins 51 secs
8	3 mins 45 secs	0 mins 35 secs
9	4 mins 01 sec	0 mins 19 secs
10	4 mins 20 secs	0

Due to international regulations, when a temperature or humidity sensor is connected certain temperature/humidity combinations cannot be used. For example, if the temperature is 80 °C it is not possible to set the %RH to greater than 21%. The control panel handles this automatically. Regardless of how you adjust the temperature and humidity, the control panel will ensure that the maximum values are not exceeded.

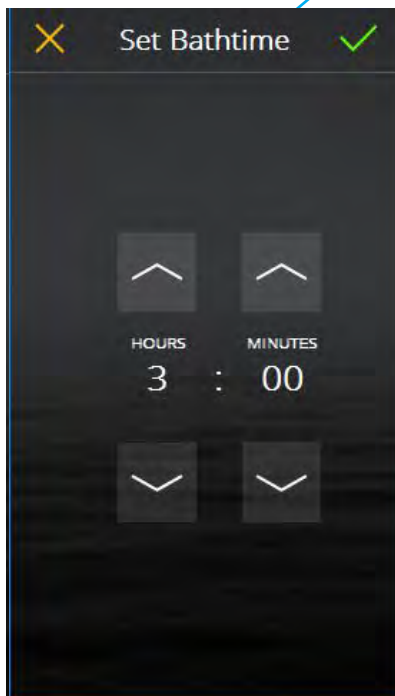
The maximum air humidity setting is 70 RH%.

When the Tylarium is in use, the steam produced on certain settings can cause the temperature to rise above the set temperature. If this happens, the steam production is paused and a message is displayed on the control panel.

Settings (continued)



Press the session time button to configure the desired session time in a new window.



Use the Up and Down arrows to change this to the desired session time and confirm by pressing ✓. To cancel press X.

The maximum session time is determined by international rules. The maximum session time for private saunas is six hours. After this time, the sauna must be inspected before it is started via a program or external switch.

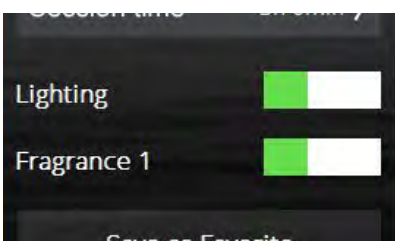
For public devices that are not monitored, a six-hour break is required over the course of 18 hours. These hours may be split up into smaller periods. For example, four hours on, two-hour break, four hours on, two-hour break, four hours on, two-hour break – resulting in a total of twelve hours in operation and six hours of breaks.

No restrictions apply to operating times for public devices when no calendar program or delayed start is used and when the sauna is monitored.

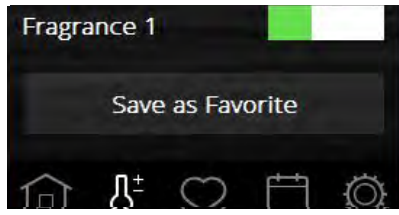
The device is set to Private by default. This can be changed under Configure.

If the lighting is connected to the device it starts automatically along with the sauna heater, but it can also be switched on or off manually. Press the button quickly to activate or deactivate, or drag the slider/button to the On/Off position. When the session is finished the lighting stays on for a further 10 minutes. It then switches off automatically. You can also switch the lighting off manually.

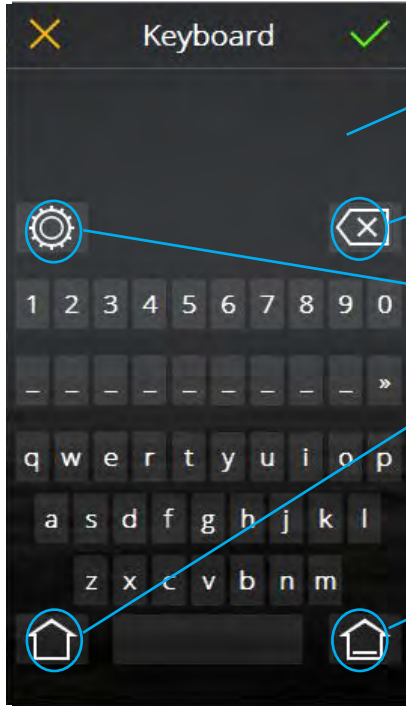
If other accessories are connected, these will be shown under the Lighting button. For more information on accessories, see Configure.



Settings (continued)



Press the "Save as favourite" button to save all settings as Favourites. Use this option to start a new session with the same settings or when creating a program. Pressing this button opens a keyboard so you can give your Favourite a name.



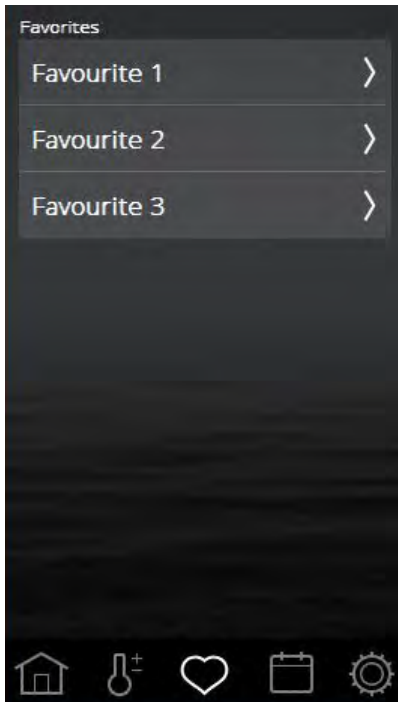
Delete key

Symbol keys

Shift key

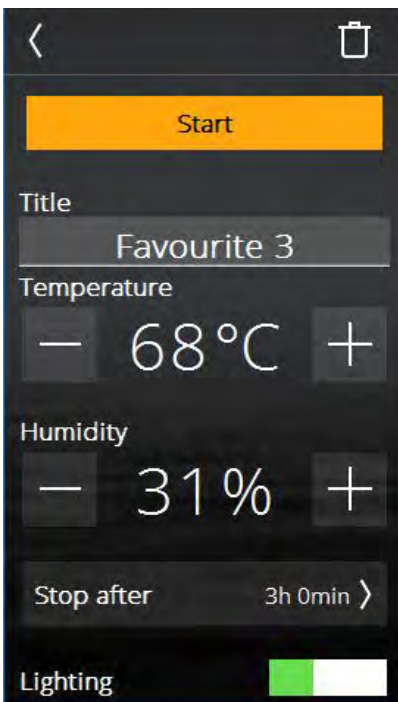
Caps lock key

Favourites



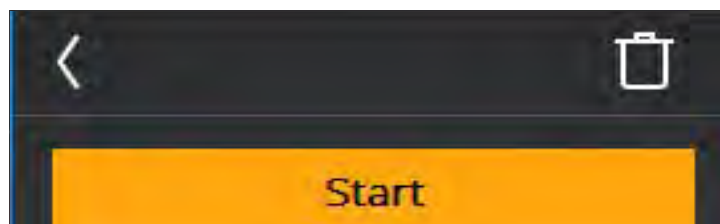
The Favourites that were saved during setting up are found under Favourites. Any of the parameters can be saved and modified later. In order to start, delete or edit a Favourite, press the field with the name of the Favourite.

You can store up to a maximum of 8 Favourites.



Opening a Favourite displays its settings. To delete a Favourite, press the rubbish bin. If you change any settings, the rubbish bin changes to a green tick. Press this to save the new settings. To edit a name, press on the field containing the name to open up the keyboard. If this Favourite is used in a calendar program, you will see a warning notice when it is edited. The calendar program will apply the new settings.

Remember that if the session time is changed, you need to confirm the change twice by pressing the green tick, first when setting the time and then for the Favourite.



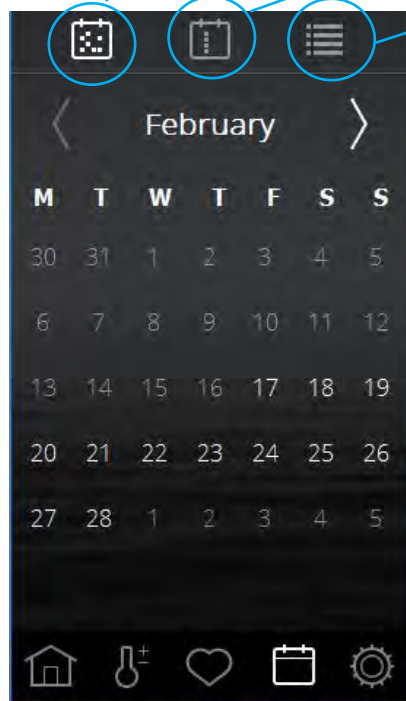
Activate the Favourite by pressing the Start button. When the Favourite starts, the screen switches to the Overview.



Date and calendar program

Day-based programs

Program overview



A magnetic contact must be connected to the door (Tylö part no. 90908035) in order to use the calendar functions for the Sauna and Combi heaters, and also the Tylarium system.

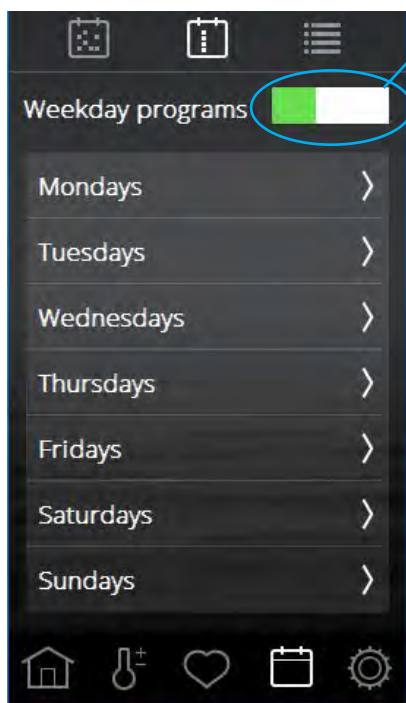
In the calendar function you can create programs for specific dates or programs that repeat every week. Day programs can be deactivated using the slider (see below).

When the door switch is connected this adds an additional layer of safety to the system. The function means that:

1. If you create a program which is due to start later and someone opens the door before the program starts, it will not start.
2. If the door is opened for more than five minutes during operation, the heater will be switched off.

Steam generators do not require a door switch, but if one is connected, the safety feature in point 2, above, will also work.

A maximum of 6 programs a day can be created. If the date programs overlap, a warning will pop up and you will be unable to save the program. The same happens if two day-based programs collide.



Activate/deactivate day-based programs

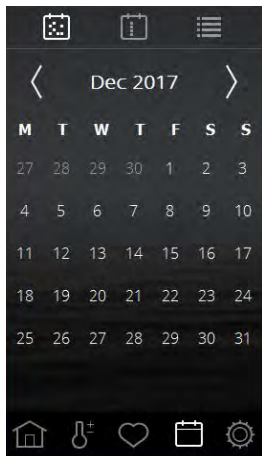
Day-based programs repeat every week. On the days with active programs, you will see a number after the day name indicating the number of programs. If day-based programs are deactivated, the number appears in brackets. A day program is created in the same way as a calendar program. Start by choosing a day and then follow the steps under Date and Calendar Program on the next page.

Date calendar programs and day-based programs may overlap. If this happens, the system prioritises programs as follows:

1. Manual start (via panel, external switch or app)
2. Date calendar or delayed start (created in app)
3. Day-based programs

The Programs overview shows all calendar items in the system.

Calendar (contin



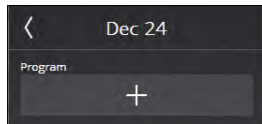
Set up a date and calendar program
Go into the calendar and select the desired date.
Add a program by pressing +.

Start by defining when you want the sauna/steam room to be ready for a session.
The system will calculate when the device needs to start in order to reach the desired session temperature.

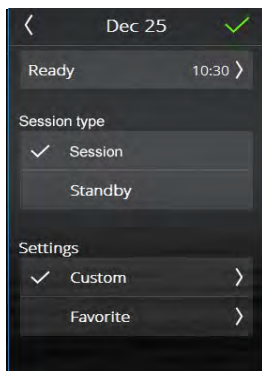
Now choose whether this will be a regular session or Standby mode.

Choose whether to define the temperature, humidity and session time or use a Favourite setting.

Confirm by pressing ✓. The program is indicated by a circle around the date in the calendar overview.



The procedure for creating a day-based program is identical.



"Ready" means that the system learns how long it takes to heat the room to the desired temperature. It does this by calculating the number of degrees by which the temperature increased per minute the last five times it ran. During the first five times the system runs a default value is used for temperature increase, but after this the calculated value for the relevant room is used.

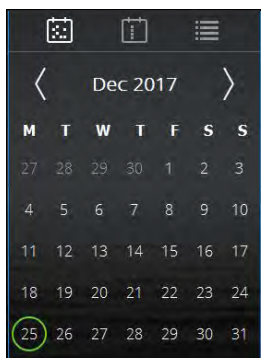
If the Standby function is deactivated under Configure, this option is now shown when you create a program.

If you select Standby for a steam room, the system will start at the time defined as "ready". This is because in Standby mode it is not the temperature in the steam room that is measured, but rather the water temperature in the steam generator.

If the desired "ready" time is not sufficient to heat the room, you will see a notification about this, and will be asked if you still want to use this time. If you answer Yes, the system starts immediately.

Up to 21 calendar programs can be saved.

If a program is in progress and the power cuts out, a weekly program will continue when the power comes back on (if there is time remaining on the program). A date program will be deleted.

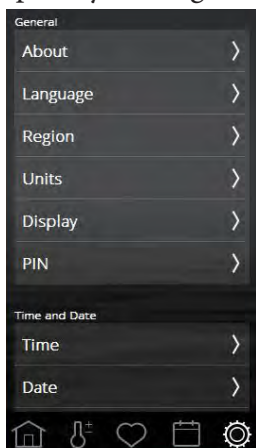




Configure: System settings.

Under Configure you will find both information about the system and options for adapting and defining various functions and parameters. It is also possible to configure accessories (such as for example fragrance pumps or extra lighting).

When you press Configure the screen shows a menu with a number of separate sections. In order to see more rows, place your finger on the screen and drag it up or down.



Configure is divided into:

General (About, Language, Region, Units, Display, PIN)

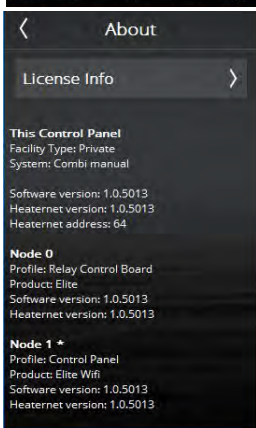
Date and time (Time, Date, Week starts, Clear calendar)

Limits (Session temperature, Start not permitted, Water filling time*, Overheating)

Advanced settings (Standby, External switch, Fan*)

System (Connections, Wi-Fi*, Cleaning notification*, Auto-empty*, Priority session type*, Break timer*, Filter, Relay control, Status, Error list, System type, Software update, Factory reset)

*Applies to certain systems only

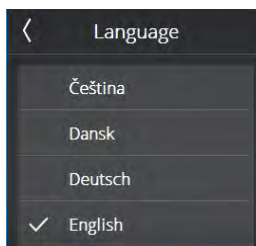


About

This section contains information about licences for software components that are used. Press Licensing Information to view more information about Linux and Qt. This information is only available in English.

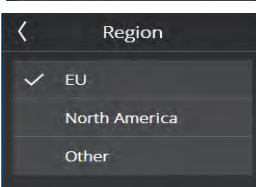
Other information on this screen concerns the system. It shows what is connected (nodes), whether it is for private or public use, which type of system it is and which versions of the software are installed.

In the event of problems with the system, you should write down this information before contacting your dealer or Tylö.



Language

The language is defined the first time the system is started, but can obviously be changed afterward. Press the desired language to change it. The control panel will then restart. When you change the language, it may be 15–20 seconds before it takes effect.



Region

The region is set the first time the system starts. To change it: Press the desired region.

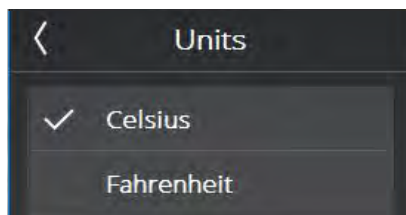
Region affects parameters such as the maximum session temperature, maximum operating time and specific regional requirements.



Configure: System settings.

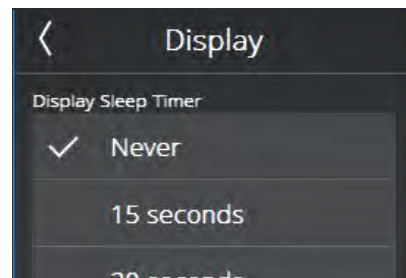
If multiple panels are connected, certain settings are specific to each panel. For example, you can have different language settings, different PIN locks and displays on locked screens, temperature and humidity filtering, different times before the screen switches off and different date and time formats. This is set individually on each panel.

If multiple systems are linked (e.g. Tylarium or multi-steam) information on these is displayed under About.



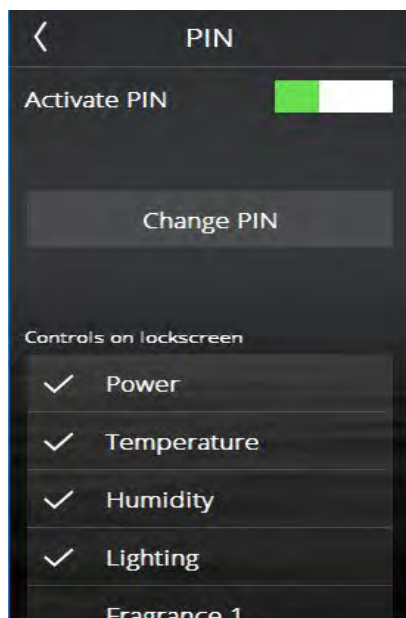
Unit

Select the unit of temperature that will be displayed.



Display

You can set the screen to switch off after a certain time. This can be set to anything from 15 seconds to 15 minutes. There is also an option for the screen never to switch off.



PIN

The control panel can be locked so that others cannot modify settings, temperature, etc. You can set certain functions to be available even when the panel is locked.

Activate the code lock via the slider labelled "Activate PIN". The default code is 0000. To change the code, press "Change PIN". You will need to enter the current code followed by the new code, and then confirm the new code.

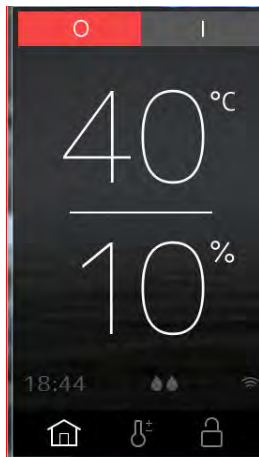
You can allow certain functions to be visible even when the panel is locked. Tick the functions that should be available even when the panel is locked.

The PIN code lock will activate 1 minute after the screen was last touched, if the PIN code lock is enabled.

If several Elite panels are connected to the same system, the PIN is panel-specific. Each panel has a separate PIN, and the PIN does not have to be activated on all the panels.



Configure: System settings (continued).



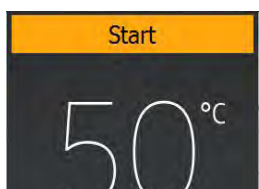
PIN

With the above settings (access to On/Off, Temperature, Humidity and Lighting, but not to Fragrance 1), the Home and Settings screens will look like the pictures on the left. Note that the Favourites, Calendar programs and Configure buttons have disappeared and are replaced by the padlock button.

To unlock the panel, press the padlock and enter your PIN.

If you forget your pin, the universal reset code is 1995. If this is used, the PIN is restored to the original default of 0000.

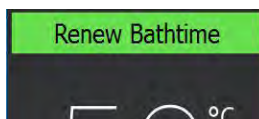
The PIN is also used when connecting to the control panel from a phone app or a PC app.



Standby with locked panel

When the panel is locked via PIN and is started in Standby (manually or via a calendar program), a "Start" button appears at the top of the screen. If "Start" is pressed, the button changes to "Restart Bathtime" and the sauna quickly heats up to the defined temperature.

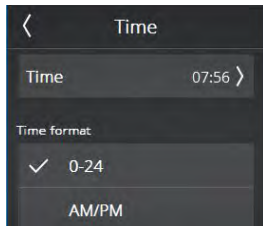
Pressing the Start button starts a session with the bath time defined in "Configure/External switch/bath time". If the session time runs out before the Standby session is finished it is resumed. If it ends after the Standby session, the device switches off.



Pressing the "Restart Bathtime" button starts a new session with the operating time defined in "Bath-time external switch".

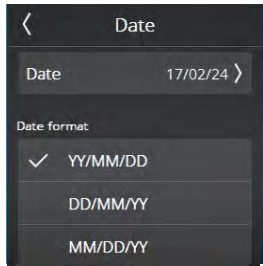


Configure: System settings.



Time

Setting the time and selecting the time format.



Date

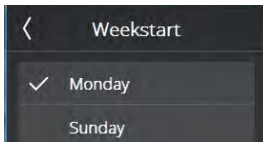
Setting the date and date format.

There are several date formats to choose from:

YY/MM/DD – Swedish format. Also used in some parts of Asia.

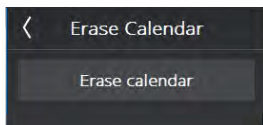
DD/MM/YY – Format used in most parts of the world.

MM/DD/YY – Usual format in the USA.



Week starts

Enter the day to be used as the first day of the week. This is defined so that the calendar is displayed correctly.



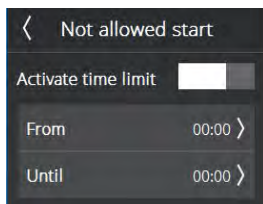
Erase calendar

Pressing Erase calendar will delete all calendar items and day-based programs.



Bath temperature

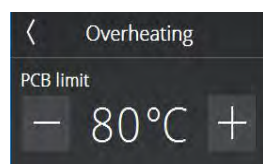
Define the maximum temperature that can be entered under settings or in calendar programs and Favourites.



Not allowed start

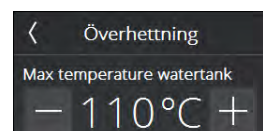
This setting allows you to lock the system so it cannot start. Set the times between which the system should be locked. The time lock applies to all days of the week.

When the time lock is active, all current programs and manually initiated sessions are shut down. If you try to create a program that starts or finishes at a time when the system is locked, you will see a warning notification about this.

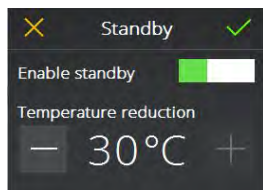


Overheating

Circuit boards in sauna devices can overheat in certain situations. When the temperature of the circuit board reaches the PCB limit, the sauna switches off automatically. Overheating may be due to various causes, e.g. poor ventilation. It is possible to change the temperature when the sauna is switched off. If the device overheats, contact a service engineer to investigate the problem. Increasing the limit as to when the sauna is switched off risks substantially shortening the life cycle of the device. We recommend that this setting only be changed by a qualified Tylö engineer.



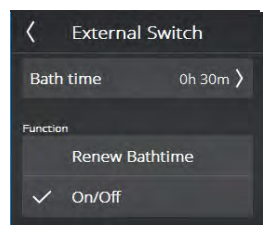
In steam generators, the maximum temperature setting in the water tank applies. If the temperature is exceeded, the water tank will be emptied. If the water temperature reaches this temperature, it is probably because the water quality has deteriorated to the point where the water is foaming. In this situation the heating element is at risk of damage.



Standby

The Standby function is activated and deactivated under Standby. This energy-saving feature is primarily intended for use in public systems. Enter the number of degrees by which the defined temperature should be reduced during Standby sessions.

For steam generators enter the desired water temperature. The default is 95 °C. Steam is quickly produced by pressing Start or external switch.



External switch

External switch is a separate Start/Stop button (Tylö part number 90908047) which can be purchased as an accessory. In order to use external switches, a door switch must be connected in the sauna (Tylö part number 90908035). The external switch can be configured for two functions: Restart session time and On/Off. This means that each press on the external switch produces an extension according to the session time that is defined for the external switch, without the machine stopping. The machine stops operating when the session time defined for the external switch ends or when you press Off on the Elite. The On/Off function means that the session time is started by pressing the external switch but stops operating completely if it is pressed again.

The Tylö external switch also features an LED status indicator. A continuous light indicates that the device is on. A slow flashing light indicates that the device is programmed to start later, and a fast flashing light indicates that an error has occurred (e.g. the door has been opened when a program was about to start).

Connections

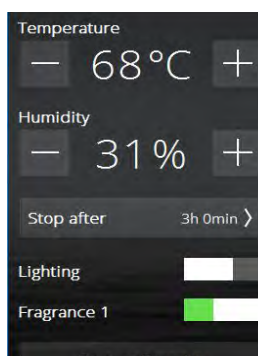
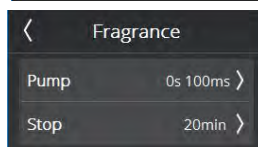
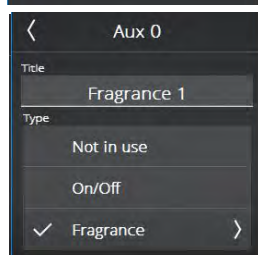
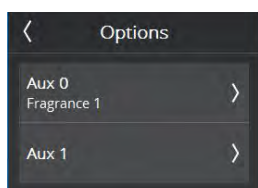
Connections are used to configure any accessories connected to your device. There are two different kinds of connections. On/Off, which provides continuous control of the connected product; and Fragrance, which is there to control Tylö's fragrance pumps. Whichever connection is selected, you must provide a name for it. The fragrance pump is defined by indicating how long you want fragrance fluid to be pumped in and the interval between pumping processes.

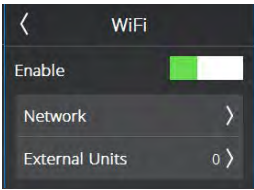
As soon as a connection is activated, it will appear as a slider under Settings. It can be started and stopped manually, but can also be started automatically via Favourites. If a connection is activated via Favourites, you can always switch it off manually via Settings.

Connections that are started during operation are automatically switched off when the session time ends or if you switch off manually via the Elite panel.

In Standby mode, any Connections must be started manually. But the connection starts automatically if you press On or external switch.

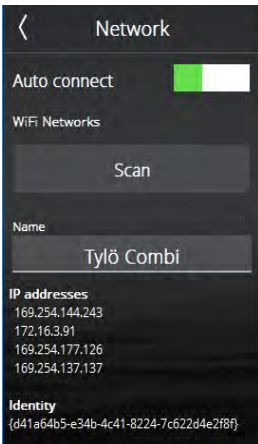
All connections have a maximum current of 10A and are potential-free. They must be safeguarded via the distribution board fuse and the cable dimension is determined by said fuse.





Wi-Fi

With the Tylö Elite Wi-Fi control panel, you can connect the control panel to your local Wi-Fi network (i.e. not from the Internet). You can then use an app (iOS or Android) or a program on your computer to enter settings, control and monitor your sauna or steam room. The TylöHelo control app is available free from the App Store and Google Play. The PC app is available from TylöHelo's website (<https://www.tylohelo.com/en/control-panel-tylo-elite>).



Bear in mind that the position where the control panel is located affects how well it can communicate with the wireless network. Many kinds of material disturb the Wi-Fi signal. stem and go into Network. Available networks will be displayed with a relative signal strength indicated in % after each name. The signal strength must be at least 60% or you risk losing the connection. If the signal strength is less than 60%, a new access point or repeater must be installed near the Elite panel. .

The system supports WPA/WPA2 personal SSID+Password. If your router uses WPA Enterprise (user + password), you will need to configure it to support WPA/WPA2 personal as well. The password can contain a maximum of 20 characters.

In order to use Wi-Fi with a sauna device or Combi device, a door switch must be connected (Tylö part no. 90908035). No door switch is required for steam rooms, but its use is strongly recommended. When the door switch is connected to the steam room, this enables the steam generator to switch off automatically if the door is left open for more than five minutes while the device is operating, thus preventing unwanted damp.

In order to connect to your local network, first activate Wi-Fi and press Network. Now press Scan which searches for available networks. In order to connect, press on the desired network; if a password is required press Password, enter the password and then press Connect. In order to connect mobile or computer applications, refer to the app instructions on the Tylö website (www.tylo.com/elite).

Under Name you can name your system. A default name is present to begin with, and this depends on the system you have. Press the name to change or alter it. A keyboard will appear for editing.

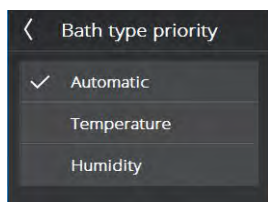
Press External units to see what is connected to the control panel.

If you activate Auto connect the Elite Wi-Fi will automatically connect you to the selected network after a power cut.

When the Elite is connected to a network, the WiFi symbol will appear on the Home screen. However, the symbol does not show the signal strength. This can only be seen in the network menu.

In order for iPhones, Android phones and computer applications to connect to the Elite, UDP broadcast for ports 54377 and 54378 must be open in the router to which they are connected. The primary port is port 54377, but if it is busy unexpectedly, port 54378 is used instead.

The local network must be set on the 2.4 GHz band. The 5 GHz band is not supported by the system.



Bath type priority (Combi only)

Priority type is used to indicate what should be prioritised during the heating phase in the sauna. The Combi heater has three heating elements that are used to heat the room and one heating element that is used to produce steam in the water tank. Only three elements may operate at one time.

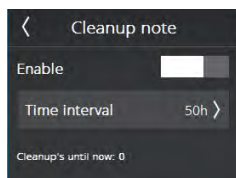
The default setting is Automatic. If the set temperature is below 70 °C, steam production will be prioritised. This means that two elements will be used to heat the room and the element in the tank will be used. If there is no water in the tank or the humidity setting (%Rh) has been reached, all three elements will be used to heat the room. If the temperature setting is above 70 °C, the tank element will not be used until the room temperature is reached.

Temperature

The heating element in the device is used to heat the room to the set temperature, regardless of what temperature is defined. The element in the water tank is then activated.

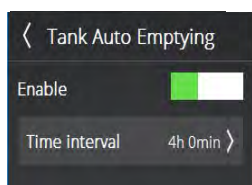
Humidity

The element in the water tank is activated regardless of the temperature setting. If a temperature/humidity sensor is fitted the element in the tank will operate until the defined humidity level is reached. If no temperature/humidity sensor is connected, the element in the tank will run for 10 minutes initially and then according to the setting.



Cleaning notification (steam products only)

Set the interval that should elapse between reminders to clean the steam generator. This is not activated by default. This value can be set to between 10 and 3000 operating hours. When the operating time reaches the defined value, a cleaning reminder notification will be displayed every time the steam generator starts. If you answer Yes to the question, the operating time is reset. The number of cleanings is displayed.

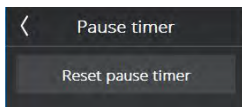


Auto-empty tank (steam products only)

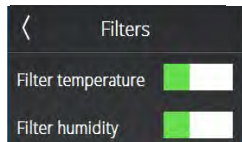
This setting is used to define how long the system should go before the tank automatically empties and then refills with clean water. Various intervals may be required depending on water quality. Intervals of between one and eight hours may be defined. A notification is displayed on the control panel when the tank auto-empties. When there are multiple steam generators connected ("multi-steam"), the steam generators empty sequentially one at a time, to minimise any time without steam.

This function is primarily aimed at systems with longer operating times.

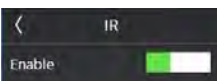
For systems with long operating times, it is recommended that this function is always activated to prevent a high concentration of salts and minerals, which may damage level measurements and correct in-flow of water.



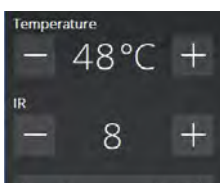
Break timer (only for sauna systems in the EU region and timer-controlled systems)
Regulatory requirements permit a maximum operating period of twelve hours. After this the system may not operate for the next six hours. In certain cases the system may need to be started for service purposes during this time. The Break timer can then be reset here. This should only be used by authorised personnel.



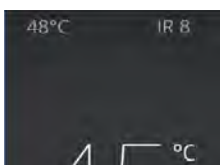
Filter
Used by Tylö service personnel. Must be activated to prevent the temperature display in the Elite control panel reacting too quickly if the door is opened frequently. When a temperature/humidity sensor is connected to a Combi or Tylarium model, humidity filtration is also available.



IR
When an infrared heater is connected to the sauna heater, the IR function should be activated using the slider. When it is activated, the IR scale is displayed in Settings.
The infrared heaters are timer-controlled. However, they cannot be active if the room temperature is too high, or if the temperature is set to over 60 °C. The IR setting is displayed on the home screen when IR is active. When a new sauna session is initiated and IR is active, the infrared heaters will run continuously for 20 minutes.

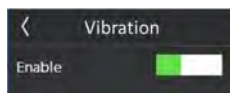


When the set temperature is 40 °C, the sauna heater will not heat the sauna and only the infrared heaters will be active. The infrared heaters remain active for different lengths of time depending on the IR scale step (see table). If the temperature is set to between 41 and 60 °C and the set temperature has not been reached, two of the heating elements will heat up when the infrared elements are active.



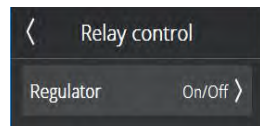
IR is never active in Standby mode.

IR	På	Av
0	0	4 min 20 sek
1	1 min 52 sek	2 min 28 sek
2	2 min 09 sek	2 min 11 sek
3	2 min 25 sek	1 min 55 sek
4	2 min 41 sek	1 min 39 sek
5	2 min 57 sek	1 min 23 sek
6	3 min 14 sek	1 min 06 sek
7	3 min 29 sek	0 min 51 sek
8	3 min 45 sek	0 min 35 sek
9	4 min 01 sek	0 min 19 sek
10	4 min 20 sek	0



Vibration

The vibration that can be felt when the heater is switched on and off can be disabled using the slider.



Relay control

Used by Tylö service personnel. A PIN must be entered. When the relay control is accessed, all operation ceases.

The sauna system features a menu for controlling the adjustment mode. It is set to Automatic by default, meaning that the system detects which sensor is connected and adapts to that.

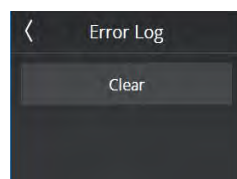
On/Off – all power relays switch on and off at the same time. In a device containing a lot of stone, this may be preferable.

Split – power relays are switched off one by one. The first switches off at 2 °C below the defined temperature, the second switches off at the defined temperature, and the third at 2 °C above the defined temperature. This means no more power than that necessary to maintain the heat in the sauna is used.



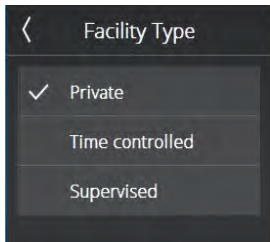
Status

Primarily used by Tylö service personnel. The Status screen displays information about the system. The information differs depending on the system involved. Total operating time, room temperature, whether a door switch is fitted and the status of all relays are always displayed. The water level is also shown for steam and Combi products. The water temperature and number of cleanings are also shown for steam products. If multiple steam generators are connected, or for Tylarium models, information about all products is displayed.



Error list

This list shows any errors that have occurred in the system. It can be deleted using the Clear button. Press the error code to view the full error code notification.



System type

The system type settings control the maximum session times and temperatures. These are determined by various rules that apply to sauna and steam in the various regions. For saunas in the EU and Other regions, the options are Private, Timer-controlled and Monitored. For both saunas and steam in North America, the options are Private and Public.

For saunas in the EU and Other regions, the following rules apply:

Private: Maximum session time 6 hours and maximum temperature 110 °C. A door switch is required in order to use calendar programs, external switches, phone apps and PC applications in the EU region.

Timer-controlled: Maximum session time 12 hours and maximum temperature 110 °C. After twelve hours of operation, six hours of breaks are required. A door switch is required in order to use calendar programs, external switches, phone apps and PC applications in the EU region.

Monitored: Maximum session time 24 hours and maximum temperature 110 °C. The sauna must be monitored. Use of calendar programs, external switches, phone apps and PC applications is not permitted in the EU region.

For saunas in the USA region, the following rules apply:

Private: Maximum session time 1 hour and maximum temperature 90 °C. No requirement regarding door switch.

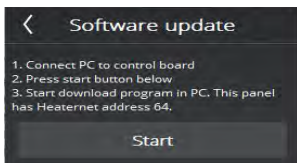
Public: Maximum session time 24 hours and maximum temperature 90 °C. No requirement regarding door switch.

For steam in the USA region, the following rules apply:

Private: Maximum session time 1 hour and maximum temperature 125 °F. No requirement regarding door switch.

Public: Maximum session time 24 hours and maximum temperature 125 °F. No requirement regarding door switch.

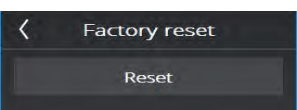
There is no setting for system type in EU and Other regions. In these areas the maximum session time is 24 hours and the maximum temperature is 55 °C.



Software update

This should only be used by Tylö service personnel. Protected by PIN.

To perform an update, special equipment and a special program are needed.



Factory reset

You can reset the control panel and device to the settings that applied before first installation via this menu. This option is protected by a PIN, and confirmation of the reset is required. All changes to settings, favourites, calendar programs, etc. will be deleted.

If the circuit board or operating panel are replaced, a factory reset should be performed.

Error codes

Should an error occur in a device or associated equipment (control panel, temperature sensor, etc.) an error message will be displayed (see Error list).

The following error codes are used:

No.	Error	Comments/Troubleshooting
1	Temperature sensor in the room not connected or faulty.	Is the sensor at the input intact/interrupted? Is it indicating an incorrect value or loose?
2	Temperature sensor in steam tank not connected or faulty.	Is the sensor at the entrance intact/interrupted? Is it indicating an incorrect value or loose? The sensor value is displayed under the water temperature status under Configure. On operation is not interrupted if an error occurs. Standby operation not permitted.
3	The relay board has overheated.	Wait until the temperature drops to 20 °C; it should be possible to start it after that. If the temperature remains too high the error will recur.
4	The level electrodes in the steam tank are short-circuited.	Check that the electrode pins are touching the electrode tube or alternatively the cables. Clean the water tank and level pins.
5	The steam tank overfull level electrodes are not working.	The top electrode (high) has not detected the water level within the maximum filling time, or the maximum filling time for the water tank in Configure is too short due to low flow. Default value is 6 minutes. Is the incoming water switched on? Is there a loose contact in the electrode wire connection? Coating on electrode pins (level electrodes)? Check the value in Configure/Status at start-up to ensure that the level has changed from low to mid/high during filling. If the level has not changed then both level pins (mid/high) are faulty. If the level has only changed from low to mid, the high pin is faulty.
6	Contact lost with the control panel..	Are the control panel's RJ10 connections loose? Poor connection?
7	Contact lost with temperature/humidity sensor.	Are the temperature/humidity sensor's RJ10 connections loose? Poor connection?
8	The steam tank has overheated.	Temperature in water tank is too high. Check the steam pipe along its length, and its dimensions. Check whether NTC in the tank is intact and showing the correct value: at room temperature/25 °C, this is about: 10 kilo ohm.
9	Real-time clock (RTC) communication error.	Has the system lost power for a long period? Set the time and date.

Error codes (continued)

No.	Error	Comments/Troubleshooting
10	Contact with the add-on board has been lost.	Check the RJ45 cable between the circuit board and the add-on board. Is the green LED lit on the add-on board? Try to start ON operation again to try and restore the contact. Try replacing the RJ45 cable or add-on board.
11	There is a fault in the emptying of water from the steam tank. Switch off the power and perform service.	Check whether the water tank drain is blocked. Is the draining valve intact? This error may also be caused by High detecting water when Mid does not.
12	Steam tank level electrodes are not working, mid failure.	Check the cable connections between the circuit board and the mid electrode. Check if the mid electrode pin is coated with surface coating; if so, clean the electrode pin.
13	Humidity sensor is not working.	Try restarting the system or replacing the temperature/humidity sensor that is connected to the RS485 input.
14	Temperature sensor not working.	Try restarting the system or replacing the temperature/humidity sensor that is connected to the RS485 input.
15	Contact lost with the relay board.	Appears when the primary unit has lost contact with the connected secondary unit. The system will fix itself. Check synchronisation cables and voltage to secondary units. After the error is rectified, the system reboots to include all secondary units in system operation.
16	Temperature cut-out activated and must be reset manually.	Combined temperature cut-out/temperature sensor in sauna is reset via a push button on the sensor.
17	Room overheated.	The room temperature exceeds the maximum permitted value.
18	Too many secondary units connected.	Only two secondary units may be used.
19	Door has been open for longer than the permitted time. Current session ends.	Close the door and start a new session. If the error recurs immediately, check the door switch. If the error is repeated despite the door being closed, check the function/installation of the door switch. You can see whether the door switch is connected under Configure/Status.
20	Door switch has been open for longer than 60 seconds since the previous session.	Check that nothing is lying on the sauna device, close the door and start session. If the error is repeated despite the door being closed, check the function/installation of the door switch. You can see whether the door switch is connected under Configure/Status.

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