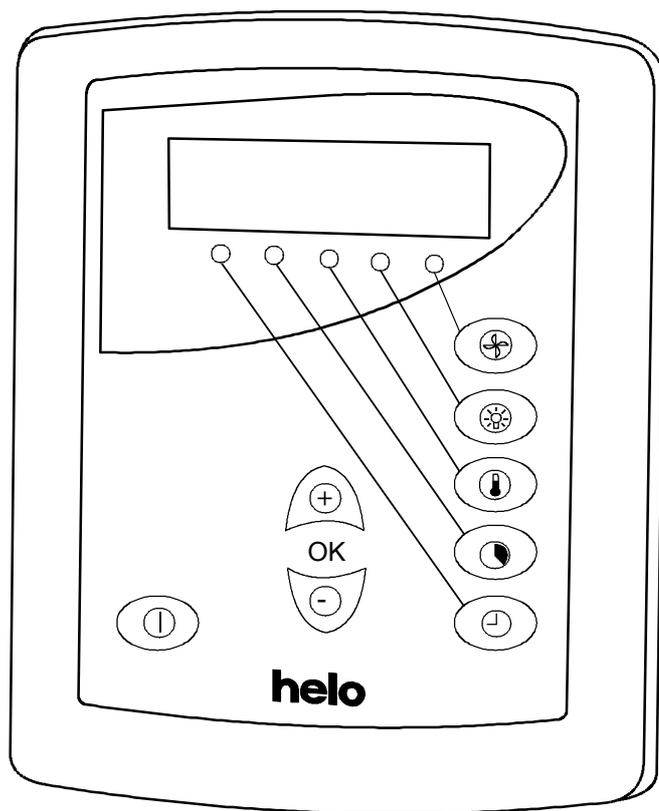


# 1601-13



## Functions of the buttons

 = ON / OFF

 = Temperature

 = Preset time / Start time

 = Heating time

 = Saunalight

 = Fan

 = "Arrow up"

 = Enter

 = "Arrow down"

## OPERATION OF DIGI 1

### GENERAL:

- Backup function** The unit has a backup time of approximately 60 minutes.  
In the event of a power outage, the unit will remain operational for 60 minutes.  
If the power outage exceeds 60 minutes, the unit will shut down all currently running functions and return to standby mode.  
All programme values and settings are stored in a permanent memory, which is not affected by power outages.
- Quick functions** Factory settings: Run time 2h and temperature 80°C.
- Temperature units** The sauna room temperature can be displayed in either Celsius (°C) or Fahrenheit (°F).  
Change of the display units is possible when the unit is in standby mode (display off):
- Press and release the Temperature button. The display will indicate the currently selected temperature unit (CELC or FAHR)
  - Within 5 seconds press either the Arrow up or Arrow down button to change the displayed temperature unit
  - Accept the change by pressing the OK button or by waiting 5 seconds. The unit will return to standby mode (display off)
- Sauna run time** The maximum sauna run time is normally 6 h. Jumper on connector J3 disconnected.  
The maximum run time is 12 h, when jumper on connector J3 is installed.
- temperature setting: 0 - 110°C
  - run time: 6h or 12h
  - preset time 0 – 24h
- Alarms** The unit will indicate when the high temperature limiter is activated.  
  
The display will show: **Err1**.  
The alarm is reset by pressing the **ON\_OFF** button.  
  
**Note!** Before the unit is reset the cause of the overheating must be checked / corrected by a qualified person.
- Temp setting** Setting 0-110°C. PID control.  
Power outputs are set in ratios of 0/0, 1/3, 2/3 and 3/3, depending on the difference between set and measured temperatures.
- Display** The display hours and minutes are divided by a colon.  
When showing temperature, the leading zeros are blanked out.  
When the timer is running, the colon will blink once every second.  
The unit counts down from the set time.  
  
Example:  
The preset time is **2:00** h, followed by a reading of **1:59,1:58**, etc.  
The display reading indicates the time remaining until heating starts.

**Indicator lights** Indicate the variable shown in the display, when lit.  
When blinking, the setting can be changed. The new setting is stored with the OK – button.  
The indicator lights are (starting from left):

1. Preset time
2. Heating time
3. Temperature setting/measurement
4. Sauna light
5. Fan

## **BUTTONS:**

**ON\_OFF** Starts and stops functions.  
When the unit is on, this button will turn off all functions currently running and the display will be turned off.  
When the unit is in standby mode (display dark), this button will activate the controller. The display will read 00:00.

**OK** Accepts changes made to settings.  
  
In standby- and running mode:  
Press and release: saves setting in memory.  
  
In standby mode:  
Press and hold for 3 seconds: starts the heater with previously stored settings.

**Arrow up (+)** Increases setting.

**Arrow down (-)** Decreases setting.

### **NOTE!**

The **arrow** buttons are used to increase or decrease the number shown in the display with each press.  
If you hold the button down for at least **1 second**, the number shown in the display will increase or decrease **rapidly**.  
If you hold the button down for at least **6 seconds**, the number shown in the display will increase or decrease **extremely rapidly**.

**Preset time** The Preset time can be changed by pressing the Preset time button. The corresponding indicator light will start blinking indicating that it is possible to change the value. The setting is changed with the Arrow up and Arrow down buttons.  
Accept the changes by pressing OK, whereupon the setting will be stored in the **operation memory**. The indicator light will remain lit.  
When the unit is on heating timer, the preset time button will be locked out.  
The initial setting is always 00:00 and maximum setting 24:00 h.

The preset time can be changed while the preset timer is running:

Press the Preset time button – the corresponding indicator light will start blinking and the setting can be made using the arrow buttons.  
The hour and minute divider will not blink while making the setting, because the timer is stopped when making changes to settings.  
If you do not accept the changes by pressing OK within 5 seconds of the last button entry, the change will not be recorded and the timer will resume from its last value. The hour and minute divider will begin blinking and the indicator light will come on.

## Heating time

The heating time can be changed by pressing the Heating time button. The corresponding indicator light will start blinking indicating that it is possible to change the value. The setting is changed with the Arrow up and Arrow down buttons.

Accept the changes by pressing OK, whereupon the setting will be stored in the operation memory and permanent **EEPROM** memory. The indicator light will remain lit.

The factory setting is 2 h, maximum setting 6 or 12 h.

The unit will recall the set time and recommend it the next time that settings are being made.

Heating time can be changed while the timer is running:

Press the Heating time button – the corresponding indicator light will start blinking and the setting can be made using the arrow buttons.

The hour and minute divider will not blink while making the setting, because the timer is stopped when making changes to settings.

If you do not accept the changes by pressing OK within 5 seconds of the last button entry, the change will not be recorded and the timer will resume from its last value.

The display will show the measured sauna temperature.

If you accept the changes by pressing OK within 5 seconds of the last button entry, the change will be recorded and the new setting will appear in the display for 5 seconds, the timer's hour/minute divider will begin to blink, and the indicator light will come on, until the sauna room temperature appears in the display.

## Temperature

The temperature can be changed by pressing the Temperature button. The corresponding indicator light will start blinking indicating that it is possible to change the value. The setting is changed with the Arrow up and Arrow down buttons.

Accept by pressing OK, whereupon the setting will be stored in the operation memory and permanent **EEPROM** memory.

The factory setting is 80°C, maximum setting 110°C.

The user setting range is 0-110°C.

The unit will recall the set temperature and recommend it the next time that settings are being made.

The temperature can be changed during the sauna run time:

Press the Temperature button – the corresponding indicator light will start blinking.

The temperature setting will appear in the display and the setting can be made using the arrow buttons.

If you do not accept the changes by pressing OK within 5 seconds of the last button entry, the change will not be recorded and the previous setting value will remain valid. The display will show the measured sauna temperature.

If you accept the changes by pressing OK within 5 seconds of the last button entry, the change will be recorded, the new setting will appear in the display for 5 seconds and the indicator light will come on, until the sauna room temperature appears in the display.

## Light and fan

Press once to start function and press again to stop.

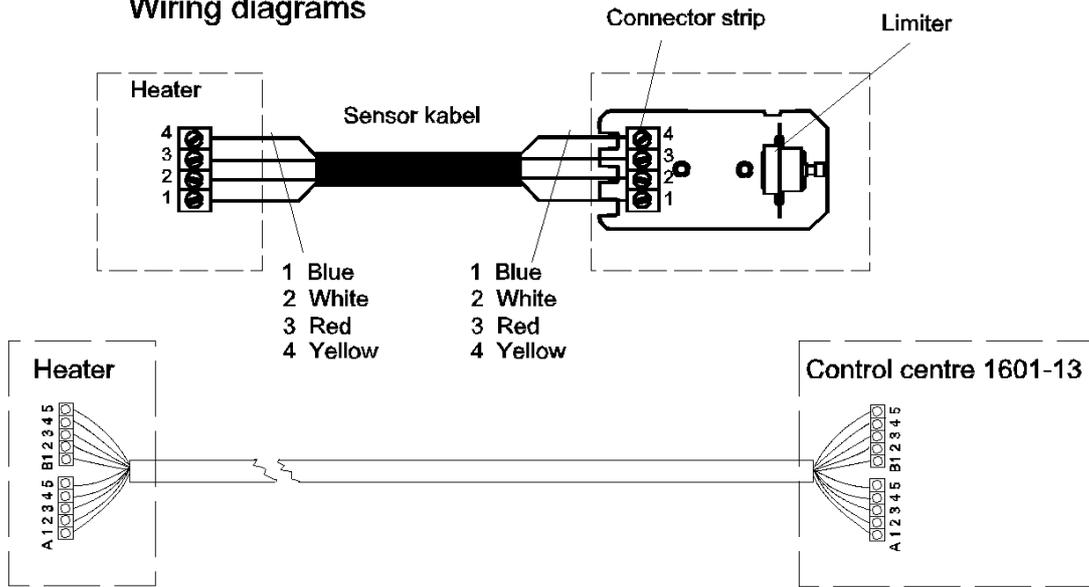
The corresponding indicator lights will come on when pressed.

These buttons are always operational when the unit is connected to the power supply (ie. both in standby and running mode).

## **FUNCTION:**

- 1. Start** Start operation by pressing **ON\_OFF**.  
The display will show **00:00**. The indicator lights will not come on.
- 2. Preset time** Press the Preset time button.  
**00:00** will appear in the display (The preset time is not stored in the permanent memory; it is selected for each sauna run time).  
The corresponding indicator light starts blinking and the setting can be made using the arrow buttons.  
Press OK to accept the setting and store it in memory.  
The indicator light will remain lit.
- 3. Heating time** Press the Heating time button.  
The last programmed time will appear in the display (factory setting 02:00).  
The corresponding indicator light will start blinking and the setting can be made using the arrow buttons.  
Press OK to accept the setting and store it in the operating and permanent **EEPROM** memory. The corresponding indicator light will remain lit.
- 4. Temperature** Press the Temperature button.  
The last programmed temperature will appear in the display (factory setting 80°C).  
The corresponding indicator light will start blinking and the setting can be made using the arrow buttons.  
Press OK to accept the setting and store it in the operating and permanent **EEPROM** memory. The corresponding indicator light will remain lit.
- NOTE** The unit will remain in program mode until OK is pressed down for 3 seconds.  
After making your desired settings, you can browse through them by pressing the setting button for each value.  
**If you want to use the settings from the previous sauna run, skip steps 3 and 4 and go directly to step 5.**
- 5. Start** Press OK for 3 seconds to start operation.  
The heating time will appear in the display for 5 seconds, after which the sauna room temperature will appear and the temperature indicator light will come on.
- Quick functions** When starting controller operation as in **step 1**, you can select the quick function by pressing **OK** for 3 seconds.  
The sauna will immediately begin heating up and the heating time will appear in the display for 5 seconds, after which the sauna room temperature will appear and the temperature indicator light will come on.  
**The factory set sauna run time is 2 h and temperature setting 80°C.**  
You can change or check settings as in previous steps.

## Wiring diagrams



A1	Valk	Vit	White	Wiss	B1	Rosa	Ljusröd	Pink	Rose
A2	Ruskea	Brun	Brown	Braun	B2	Sin	Blå	Blue	Blav
A3	Vihreä	Grön	Green	Frün	B3	Pun	Röd	Red	Rot
A4	Kelt	Gul	Yellow	Gelb	B4	Musta	Svart	Black	Schwarz
A5	Harm	Grå	Grey	Grau	B5	Violetti	Violett	Violet	Violett

## Principle picture

