

User Guide

Digital control panel Digi II

Model 1601-12

User Guide for the following
models of contactor boxes

WE3 2005-3

WE4 2005-4

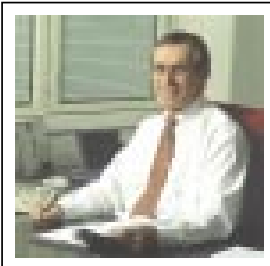
WE5 2005-5



Thank you for choosing quality products from Saunatec

We think that our products will live up to your expectations and give you many hours of enjoyment in your sauna. We want you, your family and your friends to have many comfortable sauna baths and at the same time find new ways to enjoy sauna bathing. We have taken today's demands on sauna bathing into consideration and equipped the sauna heater with many usable and unique functions. Among other things, the control panel has four memory buttons, which can be pre-programmed to your personal favorite sauna bath. Read this manual carefully. The manual is divided into two separate sections. The first is for you as a user and the second is for the installer.

Saunatec is the world-leading producer of products for saunas and steam saunas. We develop, produce and market products for saunas and steam saunas in the whole world. Saunatec has the largest factories of sauna products in the world (Finland, Germany and USA) and a well-developed net of retailers, both nationally and internationally. Our product range consists of sauna- and steam rooms, electric and wood heaters, control panels and sauna accessories.



A handwritten signature in blue ink that reads "Pentti Piisku". The signature is fluid and cursive, written in a professional style.

Pentti Piisku, President, Saunatec Group OY

Information to the user

This user guide helps you to understand and use your new sauna products. We hope that you read this manual carefully and that you respect the warning texts.

The user guide is divided into two sections: **Information to the user** and **Information to the installer**. You, as a user, receive a thorough description of the workings of a sauna heater, how to use the control panel and what you should keep in mind regarding maintenance.

If you have questions or if you need help with the products, please turn to your local retailer.

Certain portions of the user guide are more important than others. At these portions we use the following symbols:



Warning



Observe



Tips and advice

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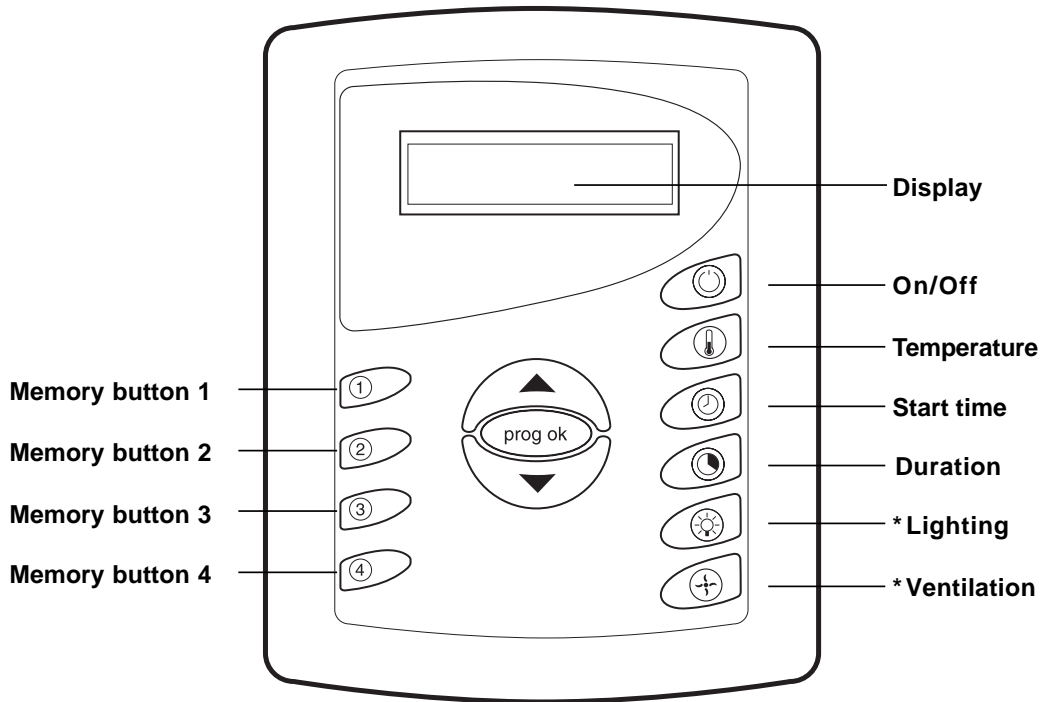
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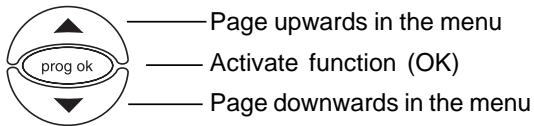
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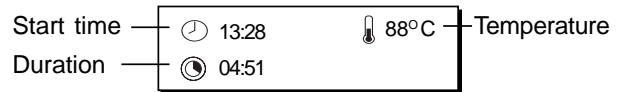
The control panel and included parts



The button prog ok



The display



Observe

* If lighting and ventilation have been connected to the control panel, you can activate them with the appropriate buttons. If they are not connected, contact your retailer or a certified electrician.

You access the settings of the control panel (clock and language) by pushing the button **prog ok** for three seconds when the panel is not on.



Tips and advice

The control panel gives you the opportunity to set four separate sauna baths. We recommend that you utilize the useful function of the memory buttons. Read more on page 9.

Functions of the control panel

With the control panel, you set the time for the heater to start, for how long it will work and the temperature in the sauna. It is also possible to program four memory buttons for special sauna baths. This means that you only need to push one button to start the heater.

To start the sauna heater, you need to adjust the following parameters:

1. *Start time – when the heater is to start.*
2. *Temperature – the temperature in the sauna.*
3. *Duration – the length of time the heater is to be on.*

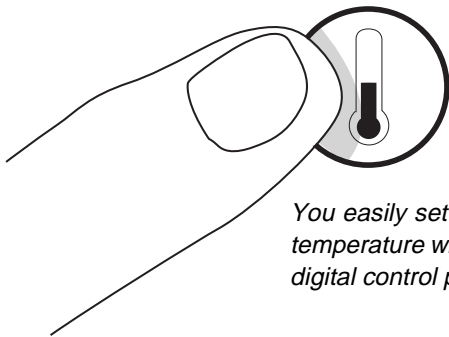


Memory buttons:

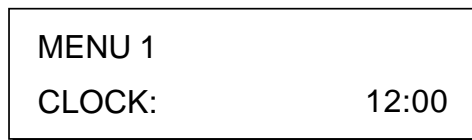
We recommend that you take advantage of the memory buttons when using your sauna. You can easily enter your preferences on separate buttons. When it is time to take a sauna bath you activate them with a single push. Each memory button has preset values when the control panel is delivered from the factory. Read more about memory buttons on page 9.

Basic settings:

Before you use the sauna, you need to set the basic settings on the control panel. These basic settings are setting the time and choosing the language. Read more about basic settings on page 6.



You easily set the temperature with the digital control panel.



You set the time by programming in the menu-mode. See more information on page 6.

Set the time and chose the language

The control panel returns automatically to the off-mode from the menu-mode if you do not push a button within three seconds. If a change is done it must be approved with the **prog ok** button before the control panel resumes off-mode, otherwise the change is not saved.

Set the time

Make sure that the control panel is in off-mode before you set the time

1. Push the button **prog ok** for three seconds



The display shows:

MENU 1	
CLOCK:	12:08

2. Set the time with the arrow buttons



3. Approve the new time with the button **prog ok**



Chose language

Make sure that the control panel is in off-mode before you chose language.

1. Push the button **prog ok** for three seconds



2. Page to Menu 2 by pushing the button **prog ok**

The display shows:

MENU 2	
LANGUAGE:	ENGLISH

3. Chose the new language with the arrow buttons



4. Approve the new language with the button **prog ok**




Observe

If there is a power failure of more than 20 minutes, the time is deleted from the control panel. Then you have to reprogram the setting.


The control panel has five languages to chose from: Finnish, English, Swedish, German and Dutch.

Set start time, temperature and duration


1

Set the start time

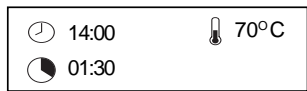
The start time is the time that the heater turns on, for example 18:30.


1. Start the panel with the **On/Off** button 

The background lighting is lighted

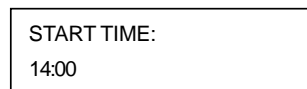
2. Push the button **prog ok** 


The display shows earlier chosen settings, for example:




3. Push the button for start time 

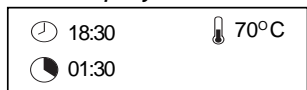
The display shows:




4. Set start time, for example 18:30, with the arrow buttons 

5. Approve the start time with the button **prog ok** 

The display shows:



6. Start the heater by pushing **prog ok** for three seconds. 




Tips and advice

By holding the arrow button depressed the values are paged up or down fast.

2


Set the temperature


The temperature is the temperature that the heater produces in the sauna, for example 80° C.

1. Push the button for the temperature 




The display shows:


TEMPERATURE:
70° C

2. Set the temperature with the arrow buttons, for example 80° C 

3. Approve the temperature with the button **prog ok** 

The display shows:


 18:30  80° C
 01:30

4. Start the heater by pushing **prog ok** for three seconds. 

3


Set the duration


Duration is the time that the heater will operate. Maximum duration is six hours.

1. Push the button for start time 




The display shows:


ON-TIME:
01:30

2. Enter duration with the arrow buttons, for example 30 minutes 

3. Approve the duration with the button **prog ok** 

The display shows:

 18:30  80° C
 01:30

4. Start the heater by pushing **prog ok** for three seconds. 


Turn on the lighting

1. Push the button for lighting 


The display shows:



Activate ventilation

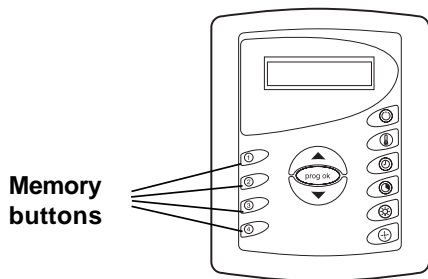
1. Push the button for ventilation 

The display shows:



Program and activate the memory buttons

The digital control panel has four memory buttons. As a user you have the opportunity to set four separate sauna bath programs. Each program has its own adjustments, and you activate them with just a push of a button.



When the control panel is delivered from the factory the memory buttons are pre-set. It is a good idea, however, to change the settings so that you get the sauna bath of your choice. Set the temperature and duration of the sauna heater according to earlier instructions (see page 10).

The preset values of the memory buttons are:

- Duration: Two hours
- Temperature:
 - Button 1: 60° C
 - Button 2: 70° C
 - Button 3: 80° C
 - Button 4: 90° C

Program a memory button

1. Enter a duration on the control panel
2. Enter a temperature on the control panel
3. Push one of the memory buttons
4. Push the button **prog ok**

Activate a memory button

1. Start the control panel with the **On/Off** button
2. Push one of the memory buttons

Check a memory button

1. Make sure that the control panel is in Off-mode. The display is not lighted.
2. Push a memory button and read the settings. The display is lighted.

Change the settings during the sauna bath

The instructions below show how to change the settings during the sauna bath. You may want to lower the temperature or shorten the duration.

Change the temperature

1. Push the button for temperature



2. Set the new temperature with the arrow buttons



3. Approve the new temperature with the button **prog ok**



Turn off the sauna

1. Push the **On/Off** button



The display shows:

14:00

Change the duration

1. Push the button for duration



2. Set the new duration with the arrow buttons



3. Approve the new duration with the button **prog ok**



Observe

To change the settings during the sauna bath does not change the values in the memory buttons.

The change only affects the ongoing sauna bath.

Calibrate the temperature

If you have a thermometer inside the sauna that does not show the same temperature as that which has been entered on the control panel, you can make a calibration (Offset). This means that you adjust the control panel and the thermometer after the same scale. That the temperatures differ is due to the fact that the warmth in the sauna is not exactly the same in all spaces.

Example:

Your thermometer inside the sauna shows 84°C and your control panel is set on 80°C. The difference is thus + 4°C. By setting OFFSET: T1 on - 4°C, the control panel will show the right temperature.

Calibrate the temperature

Make sure that the control panel is in Off-mode before you calibrate the temperature.

1. Push the button **prog ok** for three seconds
2. Page to the menu 3 with the button **prog ok**
3. Calibrate the temperature with the arrow buttons
4. Approve the temperature with the button **prog ok**



Activate Smartsauna

Smartsauna is a function that measures the temperature in the sauna and computes the length of time the heater will take to heat the sauna to the temperature that is set on the control panel. The function only works when it is activated and in conjunction with a time setting.

Example:

You have had a hard day at work and wish to relax with a sauna bath directly when you come home. When you arrive home at 16:00, you want the sauna to be ready for you. By activating the function Smartsauna the control panel computes when the heater should start, in order to warm up the sauna to the temperature you have chosen on the control panel.

Activate Smartsauna

Make sure that the control panel is in Off-mode before you activate Smartsauna.

1. Push the button **prog ok** for three seconds
2. Page to the menu 4 with the button **prog ok**
3. Chose Smartsauna ON with the arrow buttons
4. Approve the activation with the button **prog ok**



Lock the control panel

When a control panel is locked it is not possible to start the heater. This might be suitable in situations where you wish to have control of the sauna, for example when children are playing in the vicinity and you want to hinder that the heater is turned on by mistake.

Lock the control panel

Make sure that the control panel is in Off-mode before you lock the control panel.

1. Push the up arrow
2. Push the down arrow
3. Push the fan button



The display show: LOCKED

Remove the lock with the same combination.

Lock the fan or lighting

When the fan or lighting is locked, it is impossible to cut off the ventilation or turn off the light in the sauna. The light cannot be turned off and the ventilation cannot be cut off before the lock has been removed.

Lock the fan or light

Make sure that the control panel is in Off-mode before you lock the fan or lighting.

1. Push the fan button or the lighting button
2. Push the up arrow
3. Push the down arrow
4. Push the fan button



The display show: LOCKED

Remove the lock with the same combination.



Observe

Do not pause more than one second when pushing the buttons, as you are activating or deactivating the locks.

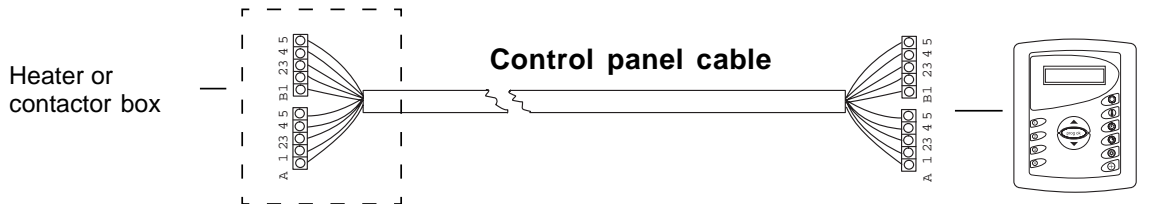
Alarm

When there is an alarm situation, the control panel stops the heating, and the cause for the alarm is shown on the display of the control panel.

Alarm	Display	What to do
The cable of the temperature sensor is broken.	ALARM T1 CABLE OFF	Check the cable to and from the sensor.
The temperature sensor is triggered.	ALARM CLEAR T1	Check the cause. Reset the sensor by pushing the reset button with a screwdriver.

Connect the electricity

Wiring diagram for control panel

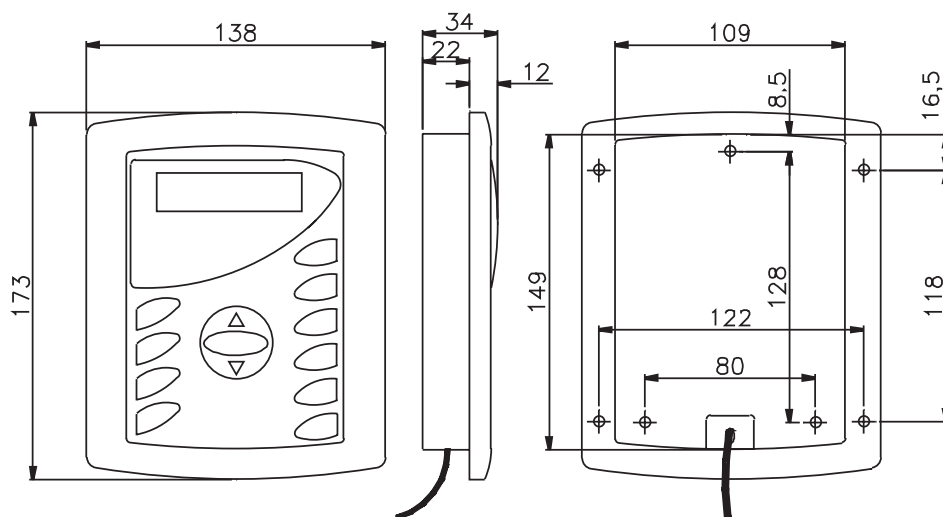


Control panel cable

A1	White	B1	Pink
A2	Brown	B2	Blue
A3	Green	B3	Red
A4	Yellow	B4	Black
A5	Grey	B5	Violet

Mount and program the control panel

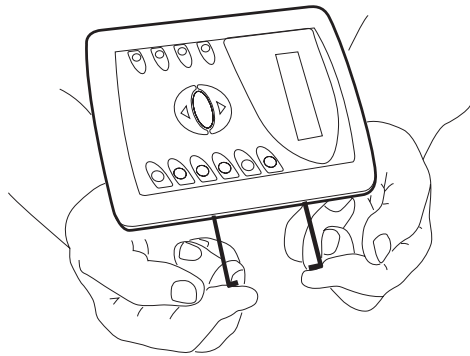
The control panel has several holes in the back. These holes are used to mount the control panel outside the sauna. In order to reach the holes, the control panel must be opened using the two keys that are included. The control panel can be mounted in or on the wall. When the control panel is installed and the lid is replaced you have to set a number of basic settings on the display. The basic settings include among other things to set the time and chose the language.



Dimensions of the control panel Digi II

Mount the control panel

1. Mark on the wall where the control panel should sit
2. Use the control panel opener to open the lid.
3. Set the sheet-metal screws, 4,2 x 13 mm, in the holes and screw the control panel in place.
4. Lead the cable through the control panel so that it is placed right before the lid is put back on.
5. Put the lid back on and set the basic settings.

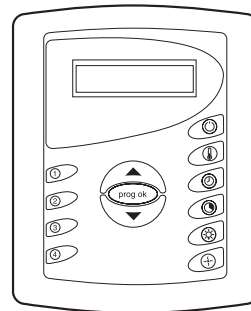


Open the lid of the control panel by inserting the control panel openers on the side.

Program the control panel

The basic settings are to be done by the installer. They include setting the clock and choosing the language. After a power failure of more than 20 minutes the basic settings are deleted. In that case the user must reset the basic settings.

Instructions to program the basic settings of the control panel are to be found on page 6.



The installer must set the basic settings. They are found at page 6.

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