



Member of the Danfoss Group





#### **Congratulations!**

You have purchased a Devireg<sup>™</sup> 550 thermostat, which forms an integrated part of a DEVI<sup>™</sup> system.

DEVI<sup>™</sup> has developed the Devireg<sup>™</sup> 550 to make your floor heating system and the heating of your home environmentally correct.

Devireg<sup>™</sup> 550 will work dynamically with both the room and floor temperature in order to give you the highest possible comfort in the most economical way.

Furthermore, Devireg<sup>™</sup> 550 will take a few days to optimise the use of the heating system. It does not stop there, though; the Devireg<sup>™</sup> 550 will continue to learn from the room and thus constantly improve its performance and consequently your comfort and economy. We wish you many years of comfort with your new DEVI<sup>™</sup> system.

#### Warning

▲ Do not cover the thermostat, for intance by hanging towels etc. directly in front of it.



## About the thermostat

#### Introduction

Devireg<sup>™</sup> 550 is an adaptive temperature controller, specially designed for floor heating systems. It can, however, also be used for other heating systems (e.g. with power heating units).

The Devireg<sup>™</sup> 550 will measure the radiant comfort from the floor combined with the comfort from the air temperature in the room to offset the outside weather condition. This means that as soon as you have set your Devireg<sup>™</sup> 550 at your desired comfort temperature, you do not have to do anything else. Devireg<sup>™</sup> 550 will automatically adjust the heating to meet your requirements for comfort, no matter how the weather is changing outside.

Devireg<sup>™</sup> 550 is also capable of detecting a sudden temperature drop in the room. Instead of switching the heating on to immediately compensate, the Devireg<sup>™</sup> 550 uses the information stored and then checks if this sudden drop of temperature may be caused by for instance a window that has been opened for 10 minutes.

Even the programming of economy temperatures (i.e. lowering of temperature during the night and when you are at work) is very simple. You do not have to calculate how much earlier the heating should start in order to reach a specific temperature at a specific time. Just tell the Devireg<sup>™</sup> 550 when you want the comfort temperature, and the Devireg<sup>™</sup> 550 will take care of the rest. By learning the rate of heat loss from the room, the Devireg<sup>™</sup> 550 knows when to start heating in order to achieve the selected temperature at exactly the right time.

Devireg<sup>™</sup> 550 - the thermostat that thinks!



# User's Guide - Devireg™550 Thermostat

2

3

#### **Thermostat button**

You can use the button on the thermostat in three different ways:

- You can turn it.
- You can press it.
- You can press and hold it for a certain number of seconds.







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#### Switch thermostat on/off

Before you can switch the thermostat off, the timer function (indicated by timer symbol on the thermostat display) must be deactivated. Press the button to switch the timer function off.

To switch the thermostat **off**, turn the button counter-clockwise <sup>•</sup> to lower the temperature below +5°C (1 by scale). Then OFF will be shown on the display.

To switch the thermostat **on** again, raise the temperature above  $+5^{\circ}$ C (1 by scale). This is done by turning the button clockwise  $\bigcirc$ .

If the Devireg<sup>™</sup> 550 only uses a floor sensor, the display will not show the wanted temperature (5° to 35°), but a scale from 1 to 10 (in steps of about 5°).





## User's Guide - Devireg™550 Thermostat

# 2

#### Switch timer function on/off

The timer function is used for automatic switching between periods with normal (comfort) temperature and periods with lowering of temperature (e.g. at night). When switched on, a timer symbol (clock) is shown at the top of display.

- To switch the timer function **off**, press button.

- To switch the timer function **on**, press button again.

Read more about how to set periods with lowering of temperature (e.g. at night) on page 12.

#### **Clock ring**

The markings on the clock ring indicates periods with normal (comfort) temperature \_\_\_\_\_\_ and periods with lowering of the temperature \_\_\_\_\_\_ (e.g. at night). The flashing point indicates \_\_\_\_\_\_ the actual time of day (every half hour).



# Network set-up with a controlling master thermostat

If more Devireg 550<sup>™</sup> thermostats have been installed in the house, the electrician may have chosen to link them together in a network with one thermostat serving as master unit controlling various settings on the other thermostats in the network (also called slaves). In that case the following settings are controlled by the thermostat that has been configured as master:

- Time
- Weekday
- Timer program

If the thermostats are linked in a network, any changes of time, weekday and/or periods with lowering of temperature must be made on the thermostat configured as master. The changes will then take effect on all slave thermostats. Please contact the electrician to find out if the thermostats in the house are linked in a network, and in case they are, which thermostat has been configured as Master.

## Set weekday and clock

#### Set weekday

- 1 Hold the button for 3 seconds. Then the symbol for setting of clock and the number of the weekday will be shown on the display.
- 2 Turn the button to the right or left, until the time passes 0:00. Every time the time passes 0:00, the weekday number will go 1 up/down depending on which way you turn the button. The number you choose will be the weekday of the current day of the week. The numbers 1-7 do not correspond to any specific days, so you can choose which day of the week should be number 1, etc. Example: If today is Tuesday and you select 2 on the display, Tuesday will be weekday number 2.
- **3** Set the clock correctly by turning the button to the right or left.
- **4** Press the button to save the settings.



#### Set the clock

• The clock is not set from the factory.

- 1 Hold the button for 3 seconds. Then the symbol for setting of clock will be shown on the display.
- **2** Set the clock by turning the button to the right or left.
- **3** Press the button to save the setting.



#### **Constant temperature**

By switching off the timer function you can set the thermostat so it will maintain a constant temperature (see how to switch timer on/off on page 6). The setting with constant temperature can for instance be used as 'Party mode' or for constantly lowering the temperature when going on holiday. An unbroken clock ring indicates constant temperature.



#### Fixed periods with lowering of temperature

By means of the built-in timer you can set up fixed periods for each day of the week where the temperature is lowered (e.g. at night and when you are at work). This means automatic switching between economy and comfort temperature. Read more about how to set periods with lowering of temperature on page 12.

When the timer is on, it is indicated by a timer symbol in the form of a clock (and a clock ring if periods with lowering of temperature have been selected).



• The display shows wanted temperature. In periods with lowering of temperature, however, the temperature will be lowered according to the set-back level (e.g. 5°C) that has been defined in connection with installation of the thermostat.

#### Switch timer function on/off

To switch the timer function on/off, press the button. A timer symbol on the display indicates that the timer function is on.



If the Devireg<sup>™</sup> 550 only uses a floor sensor, the display will not show the wanted temperature (5° to 35°), but a scale from 1 to 10 (in steps of about 5°).

#### **Raise temperature**

Turn the button clockwise  $\bigcirc$  to raise the temperature.

#### Lower temperature

Turn the button counter-clockwise  $^{\circ}$  to lower the temperature.

#### **Frost protection**

To obtain frost protection, lower the temperature to a minimum of +5°C. Then a frost symbol will appear on the display.



# User's Guide - Devireg™550 Thermostat

# Set periods with lowering of temperature (timer)



- The timer is not set from the factory.
- 1 Hold the button for 6 seconds. Then the symbol for timer programming and the weekday numbers are shown.
- 2 Select the weekday that you want to begin with by turning the button until the wanted weekday is shown. You can read more about setting weekday on page 8.
- **3** Press the button to choose weekday. Now you are ready to begin defining periods.



12

1

- **4** Turn the button forward to the first time when you want normal temperature (comfort), e.g. 06:00. The clock uses 30-minutes intervals.
- 5 Press the button.
- 6 Turn the button until the temperature must be lowered again, e.g. at 07:30 hours.
  ① The number of degrees (e.g. 5°C), which the temperature is lowered with during an economy period, is defined in connection with the installation of the thermostat. You may refer to *Installation Guide to WEB*•HOME for info about basic settings.
- 7 Press the button.
- **8** Turn forward to the next period, where you want to have normal temperature again, e.g. 15:30.
- 9 Press the button.



- **10** Turn forward once again to the next time where you want a period with lowering of temperature to begin, e.g. 22:30.
- 11 Press the button.
- 12 Turn forward to make settings for the following weekday, and continue until you have made period settings for all seven weekdays.
  ① Every time the clock passes midnight (00.00), it changes over to the next weekday.
- **13** Finally, hold the button for 3 seconds to save your settings and finish. The display will automatically return to normal display.

With Devireg<sup>™</sup> 550 you only have to programme the time when you want comfort temperature and the time you want economy temperature. The thermostat will do the rest. You do not have to calculate when the heating should start; Devireg<sup>™</sup> 550 will do this for you.



#### **Error messages**

Devireg<sup>™</sup> 550 has a built-in system that constantly checks the heating system, the thermostat itself and a possible network for any malfunctions. If an error occurs, the display will flash together with a code for the detected fault, which will be shown as a number from 1 to 7. You can read more in *Installation Guide to WEB*•*HOME*.

A fault on the floor sensor/sensor cable or thermostat overheating will result in the heating being switched off.

No	Error	What to do?
2	Configured as Master, but another Master unit detected.	Call an electrician (Only one unit may be configured as a Master).
3	Configured as a Slave, but cannot find any Master unit.	Call an electrician (One unit must be configured as Master).
4	The thermostat is switched off because of overheating.	Call an electrician (Let the thermostat cool for a period. Then enter basic set-up to leave error mode).
5	Sensor fault. Floor sensor short-circuit.	Call an electrician (Floor sensor must be changed).
6	Sensor fault. Floor sensor open circuit.	Call an electrician (Floor sensor must be changed).
7	Clock is not set.	Set the clock.

## Your notes

Weekday 1 has been set to:	
The temperature will be lowered the fol- lowing number of degrees at night:	
The thermostats in the house are linked together in a network with one thermostat serving as master (Yes/No):	
If the thermostats have been set up in a network, the following thermostat has been defined as master thermostat:	

## The DEVI Warranty

## Warranty Certificate

You have purchased Devireg 550<sup>°°</sup>, which forms an integrated part of a DEVI<sup>°°</sup> system, which we are certain will improve your home comfort and economy. A DEVI<sup>°°</sup> system provides complete heating solutions with Deviflex<sup>°°</sup> heating cables or devimat<sup>°°</sup> heating mats, Devireg<sup>°°</sup> thermostats and devifast<sup>°°</sup> fitting bands.

If, however, contrary to all expectations, a problem should occur with your Devireg<sup>™</sup> heating system, we at DEVI<sup>™</sup>, with manufacturing units in Denmark, are, as European Union suppliers, subject to general product liability rules, as stated in Directive 85/374/CEE, and all relevant national laws which implies that:

DEVI<sup>®</sup> provides a warranty for deviflex<sup>®</sup> heating cables and devimat<sup>®</sup> heating mats for a 10 year period and all other DEVI<sup>®</sup> products for a 2 year period against defects in material and production. The guarantee is granted on the condition that the Warranty Certificate on the overleaf is filled out properly in accordance to instructions and that the defect is inspected by, or presented to, DEVI<sup>®</sup> or authorised DEVI<sup>®</sup> distributor.

Please note that the wording of the Warranty Certificate must be provided in English or local language with the ISO code for your country in the upper left corner of the front page of the installation instructions in order to release the warranty.

The obligation of DEVI<sup>™</sup> will be to repair or supply a new unit, free of charge to the customer, without secondary charges linked to repairing the unit. In case of defective devireg<sup>™</sup> thermostats, DEVI<sup>™</sup> reserves the right to repair the unit free of charge and without unreasonable delay to the customer.

The DEVI<sup>™</sup> warranty does not cover installations made by unauthorised electricians, or faults caused by incorrect designs supplied by others, misuse, damage caused by others, or incorrect installation or any subsequent damage that may occur. If DEVI<sup>™</sup> is required to inspect or repair any defects caused by any of the above, then all work will be fully chargeable.

The DEVI<sup>™</sup> warranty is void, if payment of the equipment is in default. At all times, we at DEVI<sup>™</sup> will respond honestly, efficiently and promptly to all queries and reasonable requests from our customers. The above mentioned warranty concerns product liability whereas matters in relation to legislation on sale of goods shall be referred to national law.

Name:
Address:
Postal code:
Phone:
<b>Please note</b> : In order to obtain the DEVI Warranty, the following must be carefully filled in! << See other conditions to the left.
Electrical installation by:
Installation date:
Type of thermostat:
Production code:



Varenummer: 08090681 Version: 01.01

www.devi.com