# Installation and user manual for Devireg<sup>™</sup> 535

This is the first installation & user manual intended for acceptance test of the PC prototype of Devireg<sup>™</sup> 535

# Install & configure thermostat

Install Devireg<sup>™</sup> 535 thermostat

- 1 Remove the front cover by gently pressing the release tab in the top (center hole).
- 2 Lift off the cover.
- 3 Gently pull off the cover.
- 4 Remove the frame from the thermostat
- 5 Connect the thermostat.

When installing the Devireg<sup>™</sup> 550 you need to choose the type of heating and thus which sensors should be used. You have three options:

**Comfort heating:** Constant temperature on the floor in bathrooms and other rooms that are often used with bare feet.

Install the Floor sensor and choose only the Floor sensor.

**Total room heating:** Control of room temperature in living rooms etc. Install the Floor sensor and choose both Floor sensor and Room sensor.

**No floor sensor:** A floor sensor is not present, and cannot be installed. Choose Room sensor

Be aware that temperature control is less accurate without the floor sensor. DEVI™ recommend that a floor sensor is always installed.

Do not use Devireg<sup>™</sup> 535 without a floor sensor when the heating element is installed on or beneath wooden surfaces and other surfaces sensitive to temperature!







Select the sensors to be used for the heating system:

Devireg<sup>™</sup> 535 is able to use two sensors:

- a built-in room sensor
- an external sensor to be placed in the floor.

This gives 3 options:

- floor sensor D Bottom bar blinks.
- room sensor 🗊 Top bar blinks.
- both room and floor sensors +++
  Top and bottom bars blink.

# The default is +

Use the arrow buttons  $\checkmark \blacktriangle$  to select your choice. Press • to accept your choice.

If you select Devireg<sup>™</sup> 535 to only uses a floor sensor, mode , you have to select the display type. The choice is either numerical scale 1-6 or Celcius scale 5° to 45°. Default is Celcius scale. When selecting Celcius, the display will show the actual temperature.

Always use a floor sensor when the heating element is installed on or beneath wooden surfaces!



### Maximum floor temperature.

When selecting for both floor and room sensors, next screen is maximum floor temperature.

50.0° blinks.

Now use the arrow buttons ▼ to set your maximum depending on floor type, (here 29°).

Press • to accept

Installation is complete.

Notice:

The floor temperature is measured where the sensor is placed. The temperature of the bottom of a wooden floor can be up to 10 degrees higher than the top. Floor manufactures often specify the max. temperature on the top surface of the floor.

Please contact your floor supplier for maximum surface temperature.



Press the installation button to exit installation mode.

# User's guide to the Devireg<sup>™</sup> 535 thermostat

Generel description insert...



When exiting installation mode, this is what you see.

This is the standard display. The currently measured temperature is shown.

The LED is green when standing by, and red when the system is heating.

The thermostat has a built-in timer function. The status bar in the bottom of the display gives an overview of timer status.

is shown to symbolize that current temperature is displayed, i.e. unit working as a thermometer.



The day is divided into 4 time periods analogous to the typical day programming pattern:

- Morning
- Day
- Evening
- Night

These are indicated by the **L** as shown in the picture to the left. The duration of each of these can be configured, but they must sum up to 24 hours.

When all bars are full the thermostat is doing the same in all day periods, meaning it is manual mode.



## Increase/decrease preferred temperature.

Use the arrow buttons  $\checkmark \blacktriangle$  to either increase or decrease the temperature. The temperature is changed in increments of 0.1°C.

When the preferred temperature is found (here 22.4°), you can save the setting in two ways

- either by pressing to accept, or
- by leaving it blinking for 10 seconds.



## Using the timer function

To change from manual mode to timer mode, you press • (The four will now blink)

In timer mode you can choose between 3 different preset timer programs.

You now use the arrow buttons  $\checkmark \blacktriangle$  to step through the different programs.



Timer program 1

is a day program for working days where the temperature is decreased during the middle of the day and at night. In the morning and evening comfort temperature is preferred.

## Timer program 2

is a program for days off where comfort temperature is preferred during the day and a savings temperature at night.

### Timer program 3

is a week program with Monday-Friday as workdays and Saturday-Sunday as days off.

The top 7 bars indicate Monday through Sunday. On week days timer program 1 is used and in weekends timer program 2.

You accept the mode by

- Either pressing or
- by leaving it blinking for 10 seconds.

The change to timer mode is indicated by the current day period marker blinking. And if in week program, the current day is also displayed.





Using the arrow buttons  $\mathbf{\nabla} \mathbf{A}$  in timer mode, is somewhat different from manual mode.

If you increase/decrease the temperature in a savings period —— this change only applies to this current period, not any future savings periods. You might use this if you are sick one day in timer program 1

If you increase/decrease the temperature in a comfort period **Left** this change applies to all future comfort periods, until changed again. From the perspective that you are fine tuning the comfort temperature.



#### Frost protection mode

To set the thermostat in frost protection mode, you hold down  $\checkmark$  until you reach 5.0°. Now press  $\checkmark$  again to verify that you are not just changing the comfort or economy temperature, depending on the mode or timer period the thermostat is in.

The frost icon now appear and 5.0° blinks.

You accept the mode by

- Either pressing or
- by leaving it blinking for 10 seconds.



The thermostat is now in frost protected mode. Actual temperature is shown.

You leave frost protection mode by pressing ▲ (0.5sec).

#### Settings

All settings are under the settings menu . Here you set the following:

- Time •
- Weekday •
- Comfort temperature
- Savings temperature
- Timer periods configuration



You enter the settings by pressing the clock symbol with a small screw driver, pencil, or needle, the display now changes from temperature to time display.

By using the arrow buttons **▼** ▲ you move up and down in the menu, changing

#### Setting the time

By pressing the  $\bullet$  the hours start blinking, indicating you can change them with the arrow buttons  $\checkmark \blacktriangle$ 

Press the • again to change the minutes.

#### Setting the weekday

By pressing the  $\bullet$  the set weekday starts blinking, indicating you can change it with the arrow buttons  $\checkmark \blacktriangle$ 

Press the • to accept

#### Setting the comfort temperature



Ō

By pressing the • the preset comfort temperature starts blinking, along with all the upper period bars \_\_\_\_\_\_ to symbolise the upper temperature.

You change it with the arrow buttons ▼▲

Press the • to accept

#### Setting the savings temperature



By pressing the • the preset savings temperature starts blinking, along with all the lower period bars to symbolise the lower temperature.

You change it with the arrow buttons  $\mathbf{\nabla} \mathbf{A}$ 

Press the • to accept

#### Setting the timer periods

When programming the starting times of the 4 periods keep in mind that the thermostat isn't adaptive (i.e. that heating will start at the given time and not be at the desired level at that time.) Therefore som periods should start and end before, to compensate for the time it takes to heat up or down.

The first period bar blinks indicating this is the morning period.



By pressing the  $\bullet$  the start time of the period starts blinking. You change it with the arrow buttons  $\mathbf{\nabla} \mathbf{A}$  in increments of 15 minutes.

Press the • to accept



The second period bar blinks indicating this is the day period.

Set it in the same way.





The third period bar blinks indicating this is the day period.

Set it in the same way.

The fourth period bar blinks indicating this is the day period.

Set it in the same way.

Note. When setting the time periods you cannot step backward to the previous time period, until the last one is set. This is to ensure that the periods does not overlap.

You leave the settings menu by pressing the O or by leaving it idle for 2 minutes.

# ?? The timer factory presets are as follows

## Timer program 1

| Event    | Time        | Temperature | w/ floor sensor | w/ air sensor |
|----------|-------------|-------------|-----------------|---------------|
| 1        | 06:00-08:00 | Comfort     | °C              | °C            |
| 2        | 08:00-16:00 | Savings     | °C              | °C            |
| 3        | 16:00-22:30 | Comfort     | °C              | °C            |
| 4        | 22:30-06:00 | Savings     | °C              | °C            |
| Timer pr | ogram 2     |             |                 |               |
| Event    | Time        | Temperature | w/ floor sensor | w/ air sensor |
| 1        | 08:00-23:00 | Comfort     | S°              | °C            |
| 4        | 23:00-08:00 | Savings     | °C              | °C            |

