

Installation Guide

DEVIreg™ Touch

Electronic Intelligent Timer Thermostat

www.DEVI.com

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Table of Contents

1 Introduction 3
1.1 Technical Specifications 4
1.2 Safety Instructions 7

2 Mounting Instructions 8

3 Settings 12
3.1 Initial Settings 12
3.2 Forecast 16
3.3 Window Open 18
3.4 Maximum Floor Temperature . 19

4 Symbols 23

5 Warranty 24

6 Disposal Instruction 24

1 Introduction

DEVIreg™ Touch is an electronic programmable timer thermostat used for controlling electrical floor heating elements. The thermostat is designed for fixed installation only and can be used for both direct heating of the entire room and for comfort heating of the floor. Among others, the thermostat has the following features:

- A touchscreen display with backlight.
- An easy-to-follow menu-driven programming and operation.

- An installation wizard with room/floor type-specific setup.
- Support for multiple frame systems.
- Compatible with several 3rd party NTC sensors.
- Thermostat settings can be specified before installation and imported to the thermostat using a web-generated code, or copied from a thermostat in a similar installation.
- Smart access to thermostat settings after installation by using a web code interface for easy setup or remote troubleshooting.

More information on this product can also be found at: touch.devi.com

1.1 Technical Specifications

Operation voltage	220-240 V~, 50/60 Hz
Standby power consumption	Max. 0.40 W
Relay: Resistive load Inductive load	 Max. 16 A / 3680 W @ 230 V cos φ= 0.3 Max. 1 A

Sensing units	NTC 6.8 kOhm at 25°C NTC 10 kOhm at 25°C NTC 12 kOhm at 25°C NTC 15 kOhm at 25°C (Default) NTC 33 kOhm at 25°C NTC 47 kOhm at 25°C
Sensing values: (Default NTC 15 K) 0°C 20°C 50°C	 42 kOhm 18 kOhm 6 kOhm
Control	PWM (Pulse Wide Modulation)
Ambient temperature	0° to +30°C
Frost protection temperature	5°C to +9°C (default 5°C)
Temperature range	Room temperature: 5-35°C. Floor temperature: 5-45°C. Max. floor: 20-35°C (if unrecoverable seal is broken then up to 45°C). Min. floor: 10-35°C, only with combination of room and floor sensor.

Sensor failure monitoring	The thermostat has a built-in monitoring circuit, which will switch off the heating if the sensor is disconnected or short-circuited
Cable specification max.	1x4 mm^2 or 2x2,5 mm^2
Ball pressure test temperature	75°C
Pollution degree	2 (domestic use)
Controller type	1C
Software class	A
Storage temperature	-20°C to +65°C
IP class	21
Protection class	Class II - ⧈
Dimensions	85 x 85 x 20-24 mm (in-wall depth: 22 mm)
Weight	103 g

Electrical safety and Electro-Magnetic Compatibility for this product is covered by the compliance with the EN/IEC Standard “Automatic electrical controls for household and similar use”:

- EN/IEC 60730-1 (general)
- EN/IEC 60730-2-9 (thermostat)

1.2 Safety Instructions

Make sure the mains supply to the thermostat is turned off before installation.

IMPORTANT: When the thermostat is used to control a floor heating element in connection with a wooden floor or similar material, always use a floor sensor and never set the maximum floor temperature to more than 35°C.

Please also note the following:

- The installation of the thermostat must be done by an authorized and qualified installer according to local regulations.
- The thermostat must be connected to a power supply via an all-pole disconnection switch.
- Always connect the thermostat to continuous power supply.
- Do not expose the thermostat to moisture, water, dust, and excessive heat.

2 Mounting Instructions

Please observe the following placement guidelines:



Place the thermostat at a suitable height on the wall (typically 80-170cm.).



The thermostat should not be placed in wet rooms. Place it in an adjacent room. Always place the thermostat according to local regulation on IP classes.



Do not place the thermostat on the inner side of an exterior wall.



Always install the thermostat at least 50 cm. from windows and doors.



Do not place the thermostat in a way that it will be exposed to direct sunlight.



Note: A floor sensor enables a more accurate temperature control and is recommended in all floor heating applications and **mandatory** under wooden floors to reduce the risk of over-heating the floor.

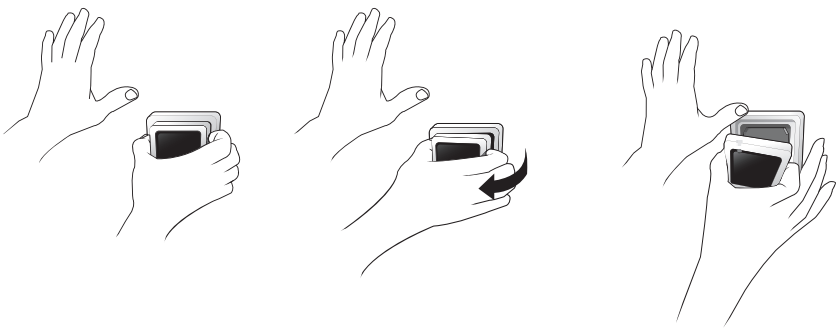
- Place the floor sensor in a conduit in an appropriate place where it is not exposed to sunlight or draft from door openings.
- Equally distant and >2cm from two heating cables.
- The conduit should be flush with the floor surface - countersink the conduit if necessary.
- Route the conduit to the connection box.
- The bending radius of the conduit must be min 50mm.

Follow the steps below to mount the thermostat:

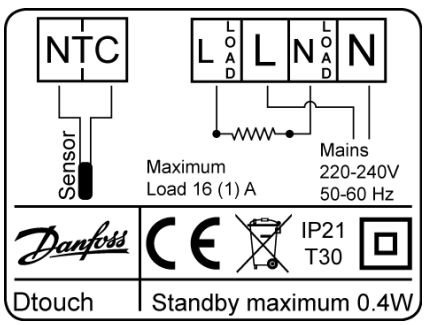
1. Open the thermostat:

   Important: Do NOT press on the display screen when removing the front part.

   Press your fingers under the side of the front part and pull toward you:



2. Connect the thermostat according to the connection diagram.



The screen of the heating cable must be connected to the earth conductor of the power supply cable by using a separate connector.

Note: Always install the floor sensor in a conduit in the floor.

3. Mount and reassemble the thermostat.



- Fasten the thermostat to a socket or an exterior wall box by driving the screws through the holes in each side of the thermostat.
- Put the frame on.
- Click the display module back in place

Important: Do NOT press on the display screen when clicking the display module back in place.

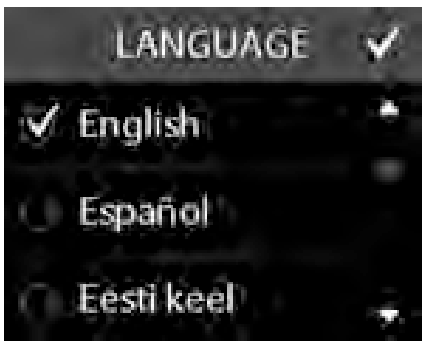
Initially main supply the thermostat for 15 hours to fully charge the battery. The current time and day is then kept for 24 hours if mains supply is off. All other settings are stored permanently.

3 Settings

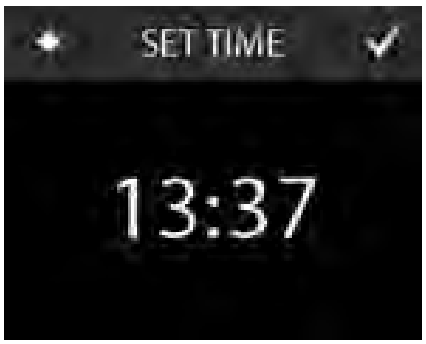
3.1 Initial Settings

Initial settings must be specified when the unit is activated for the first time:

1. Use the arrows in the right side of the screen to go to your language, and press to select it. Then press ✓ in the upper right corner to confirm.



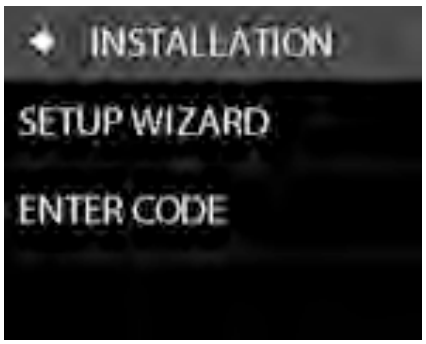
2. Press the hour numbers and use the < and > arrows to set the hour. Press ✓ to confirm.
3. Press the minutes numbers and use the < and > arrows to set the minutes. Press ✓ to confirm. Press ✓ again to go to the **SET DATE** screen.



4. Press the day, month and year respectively and set the date using the < and > arrows and pressing ✓ to confirm. When the date is correct, press ✓ to confirm on the **SET DATE** screen.



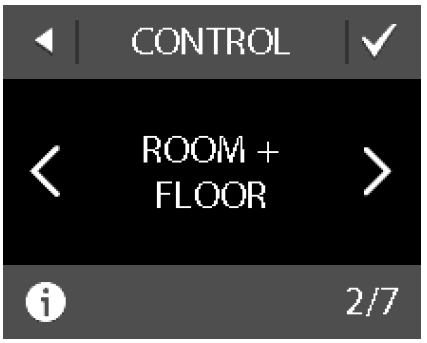
5. If you have already made the installation setup online, press **ENTER CODE** and go directly to Step 13 now. Otherwise press **SETUP WIZARD** and go to Step 6.



6. On the **SETUP** information screen, press ✓ to start.



7. Use the < and > arrows to select whether only a floor sensor or a combination of room and floor sensors should be used. Press ✓ to confirm.



Note: A "room only" option may also be available. For details, see the "Maximum Floor Temperature" section.

8. Use the < and > arrows to select the installed floor sensor type. (Measured resistance and corresponding temperature are shown in brackets). Press ✓ to confirm.



9. Use the < and > arrows to select the flooring type. Press ✓ to confirm.



10. Use the < and > arrows to select the room type. Press ✓ to confirm.



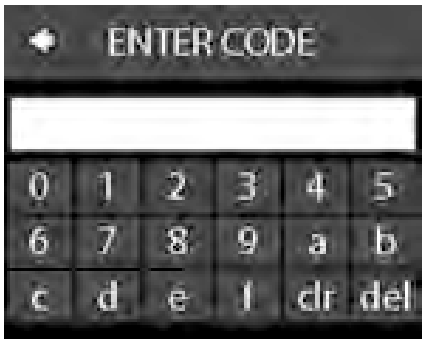
11. Use the < and > arrows to select the approximate load of the heating element. If an external relay is used or the installed output is unknown, select the "– –" option. Press ✓ to confirm.



12. Use the < and > arrows to select whether the timer should be activated or not. Press ✓ to confirm and end the initial thermostat setup. Skip Step 13.



13. Enter your web-generated code. Then press ✓ to end the initial thermostat setup. If no check mark (✓) appears, the hexacode is incorrect.



3.2 Forecast

The forecast feature is used when you switch between economy temperature and comfort temperature. If forecast is turned on, heating will start so that the requested temperature is reached at the specified time.
For example, if your comfort temperature is set to 22°C and the comfort period starts at 6.00 o'clock am, heating will start before 6 o'clock so that your room temperature will be 22°C at 6 o'clock. If forecast is turned off, heating will not start until 6 o'clock and it will take a while to reach a room temperature of 22°C.

The forecast feature also optimises heating stop when switching from comfort temperature to economy temperature.

How to turn the forecast feature on and off.

1. Touch the thermostat display to activate it, then press **menu**.



2. Press **SETTINGS** in the bottom right corner of the menu. Then press **OPTIONS**.



3. Press **FORECAST**. Then press **ON** to optimise heating start/stop or **OFF** to simply let the heating start/stop at the specified time. Press ✓ to confirm.



To return to the normal temperature display, press the back arrow in the upper left corner of the screen until you get to the main menu, then press ⌂.

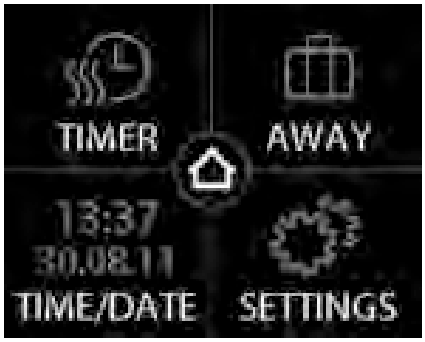
3.3 Window Open

How to turn "window open detection" on or off

1. Touch the thermostat display to activate it, then press **menu**.



2. Press **SETTINGS** in the bottom right corner of the menu. Then press **OPTIONS**.



3. Press **WINDOW OPEN**. Then press **ON** to temporarily turn off heating in case of a sudden temperature drop in the room or **OFF** to let the thermostat heat during sudden temperature drops in the room. Press ✓ to confirm.



To return to the normal temperature display, press the back arrow in the upper left corner of the screen until you get to the main menu, then press ⌂.

3.4 Maximum Floor Temperature

How to set the maximum floor temperature

1. Touch the thermostat display to activate it, then press **menu**.



2. Press **SETTINGS** in the bottom right corner of the menu. Then press **INSTALLATION** and **MANUAL SETUP**.

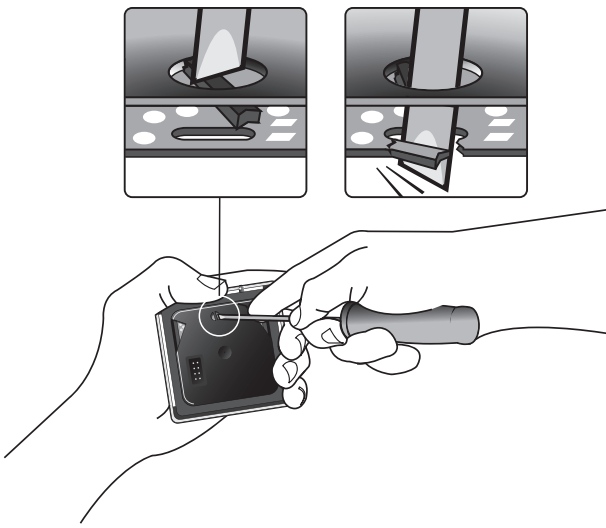


3. Press **MAX. FLOOR**. Then use the < and > arrows to set the allowed maximum floor temperature. Press ✓ to confirm.



To return to the normal temperature display, press the back arrow in the upper left corner of the screen until you get to the main menu, then press ⌂.

If you break the small plastic seal on the back of the display module, e.g. using a screwdriver, it will be possible to set the maximum floor temperature up to 45°. Furthermore, it will be possible to use only a room sensor. However, this option is not recommendable due to an increased risk of overheating the floor.



IMPORTANT: When the thermostat is used to control a floor heating element in connection with a wooden floor or similar material, always use a floor sensor and never set the maximum floor temperature to more than 35°C.

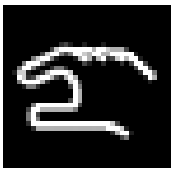
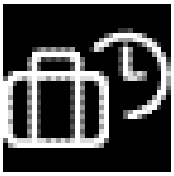
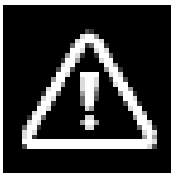
Note: Please contact the floor supplier before changing the maximum floor temperature and be aware of the following:

- 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.

Thermal resistance [m2K/W]	Examples of flooring	Details	Approximate setting for 25˚C floor temperature
0.05	8 mm HDF based laminate	> 800 kg/m^3	28˚C
0.10	14 mm beech parquet	650 - 800 kg/m^3	31˚C
0.13	22 mm solid oak plank	> 800 kg/m^3	32˚C
< 0.17	Max. carpet thickness suitable for floor heating	acc. to EN 1307	34˚C
0.18	22 mm solid fir planks	450 - 650 kg/m^3	35°C

4 Symbols

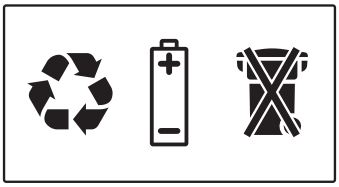
The following symbols may appear in the upper left corner of the temperature display:

Sym-bol	What it means
	The thermostat is in manual mode, i.e. the timer function is off. The timer lets you automatically switch between economy and comfort temperatures according to a predefined schedule.
	An away period has been planned. On the date of departure, the away period starts at 00:00 and the specified away temperature will be maintained 24 hours a day until the date of return at 00:00. At this time the normal temperature settings will resume.
	An error has occurred. If you press the warning symbol, more information on the error will appear.

5 Warranty



6 Disposal Instruction



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DEVIreg Touch Design Frame

140F1064

Intelligent Timer
Thermostat
Floor / Room Sensor
220-240V~
50-60Hz~
0 to +30°C
16A/3680W@230V~
IP 21



Product Documentation

DK EL 7224215603
NO EL 5402666
FI SSTL 2600100

Designed in Denmark for Danfoss A/S

5 703466 215135