

® ROOM THERMOSTAT  
**I•WARM 730**



**USER AND INSTALLATION  
MANUAL**

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**Important:**

*Manufacturer's guarantee does not cover malfunctions caused by mechanical damage, improper installation, or exploitation for purposes, or under conditions, not provided by the User- and Installation Manual. Please keep in mind that Installation Manual and Connection Diagram are no replacement for the professional skill of the device installer. We recommend that you apply for professional service for the thermostat and heating system installation. Only qualified electricians should perform the connections and power networking of the device. Switch off power before connecting wiring to the thermostat or disconnecting the device for testing.*

## INTRODUCTION

Congratulations! You have purchased the new **I•WARM** heat management system.

The inherent features of the **I•WARM 730** thermostat are high reliability, easy adjustment, simple display and modern design.

The **I•WARM 730** will make the heating in your home more efficient, most comfortable, easy and convenient to use.

**Before you start the installation, please read this manual carefully!**

## BASIC FUNCTIONS

The **I•WARM 730** thermostat is designed to manage heating mats or cable sections electrical heating systems for two separate areas. The device automatically maintains the comfortable temperature set by you, using the readings of the floor temperature sensors (included); these sensors are located in two various heating zones (in two areas).

The floor temperature (actual and set by you) is indicated on the display.

The **I•WARM 730** performs self-diagnosis. In the event the floor temperature sensor has a malfunction, it will display a warning message (see page 11 for details). In this case the device may work in the so called «service mode» (see page 12 for details).

## START-UP OF THE HEATING SYSTEM CONTROL

### Switching thermostat on/off (Automatic Mode)

To switch the thermostat on/off you should press and hold the central key (ZONE/⏻) for not less than 3 sec. The device goes into the main display mode (fig. 2).

#### **Important:**

*Don't turn the newly built heating system on before the tile fixing mixture or cement -sand mortar layer are hardened. You can get the different hardening times from the manufacturer of your chosen building material.*

*Turning on the heating system prematurely can lead to damage of the floor decorative cover and heating mats, or sections outage. In case of doubt contact your dealer or heating system manufacturer.*

### **Controls and display (fig.1)**

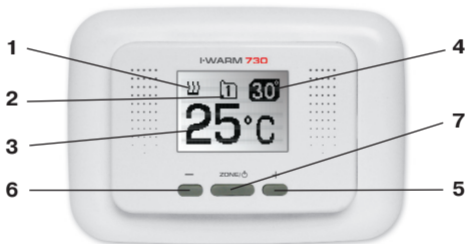
- 1. Symbol for heating system is powered on.*
- 2. Indication of the chosen heating zone No.*
- 3. Current floor temperature in the chosen zone (°C).*
- 4. Preset temperature (°C) in the chosen zone.*
- 5. «+» button for maintaining temperature increase.*
- 6. «-» button for maintaining temperature decrease.*
- 7. Key to alternate the heating zones.*

When the heating system is powered, the appropriate sign indicating the heating system is ON is displayed. When the thermostat turns the heating off the sign disappears.

The capital figures show the actual current floor temperature of the chosen zone (position 3); the figures in the top right corner show the preset floor temperature in this zone (position 4).

The set temperature may be changed by pressing the «+» key to increase (position 5), and the «-» key to decrease (position 6).

In order to set the temperature, in each zone, press the **ZONE/** key (position 7) once, to alternate between the heating zones.



**Fig.1** Controls and display

## Blocking and Deblocking


The device is equipped with a key lock to protect it from children and accidental pressing. The blocking switches on automatically 40 seconds after pressing any key; the display highlight dims.

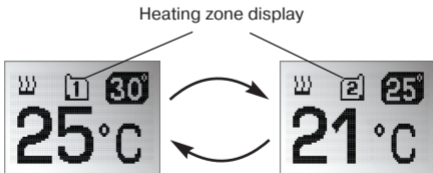


**Fig. 2** *Main display*

In order to deblock the device, you should press and hold simultaneously the «+» and the «-» keys for not less than 3 seconds. Then the blocking mode is switched off, and the display lights up.


### Alternating the heating zones (Fig. 3)

In order to alternate between the heating zones (heated areas) you should press the central key (**ZONE/**). At this time the zone symbol will change (fig. 3). The capital figures show the actual current floor temperature in the chosen zone (area) and the small figures at the top right corner show the set temperature in this zone.



**Fig. 3** *Shifting the heating zones*

## Temperature adjustment

Choose an area by pressing **ZONE**/. Enter the required temperature using the «+»/«-» keys.

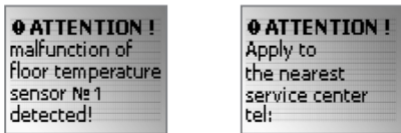
Now the system will maintain the set temperature automatically by heating up the floor and switching off when the set temperature is reached. In this way the energy saving is performed.

### Switching one of the heating zones off

In order to switch off the heating in one of the areas you should set the minimum temperature in this area to, i.e. +5°C.

## Self-diagnostics

The thermostat controls constantly the working capacity of the temperature sensors. In case of a malfunction (cut-off or short-circuiting of connecting wires) during which normal operation of the heating system is impossible, the thermostat turns the heating off and displays a warning message. (fig. 4). You should contact the manufacturer or your local dealer to repair or replace the temperature sensor.



**Fig. 4** *Self-diagnostics warning messages*

## Heating management mode without floor temperature sensor («service mode») (Fig. 5)

In case of a floor temperature sensor failure in one of the zones the thermostat switches off the heating in this zone. If it is still required to heat the areas (e.g. it is the main source of heating in winter period), it is possible to manage the heating without a sensor until the working capacity of the sensor is restored (so called «service mode»).

In order to switch to this mode you should press and hold the «+» and the «-» keys for not less than 15 sec. while in the emergency indication mode.

In the emergency mode, indicated by the hour glass symbol, the large figures indicate the average percentage of the



**Fig. 5** *Display in heating management mode without floor temperature sensor*

power output based on one full hour of heating (=100%).e.g. 10 % = 6 minutes heating is on and 54 minutes heating is off. The percentage may be adjusted by pressing the «+» or the «-» button.

### **ATTENTION!**

*To avoid damage of the heating cable by overheating, we do not recommend using the service mode for more than 7 days.*

### **Using various heating management modes simultaneously**

The **I•WARM 730** allows to use both the automatic and the service modes simultaneously (one mode for each controlled area).

In this case the «service mode» zone will be displayed on the screen (fig. 5) even though two separate modes are running simultaneously. At the same time it will be possible to use the automatic mode in the other zone (fig. 2).

## APPENDIX

### Delivery set

1. **I•WARM 730** thermostat ..... 1 pc.
2. Floor mounting temperature sensor  
with connection cable 2 m long ..... 2 pcs.
3. External terminal block for grounding  
line connection ..... 1 pc.
4. User and installation manual ..... 1 pc.
5. Packing box ..... 1 pc.

## Installation and connection

### **IMPORTANT!**

*Switch off power before connecting or disconnecting wiring to the thermostat. A qualified electrician trained to current Indoor Electrical Equipment regulations must install all wiring. Failure to do so may invalidate the warranty. We strongly recommend that you NOT install the thermostat in premises with high air humidity. It is prohibited to install the device in bathrooms, saunas, shower cubicles or pools. The thermostat controlling heating in these premises must be installed in a neighbouring «dry room». Please study this manual carefully before starting the installation.*

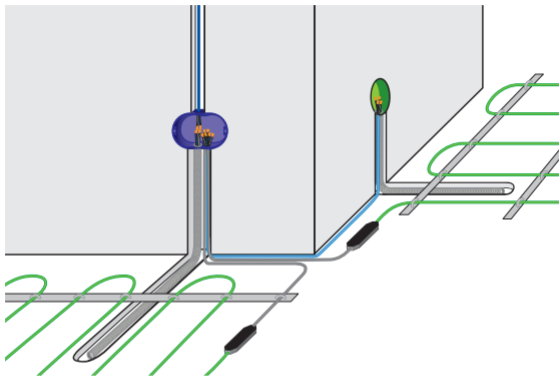
#### Tools and materials required for thermostat installation:

1. Corrugated plastic tube 12–16 mm in diameter; the length depends on distance between the thermostat and the both sensors of temperature
2. Double size junction box for wall mounting units
3. Flat head screwdriver
4. Cross head screwdriver

## Installation of floor-mounted temperature sensor

The floor temperature sensor is installed when you install your heating elements (mat or cable section). In each area its own temperature sensor is installed. The sensors installation is performed via a junction box.

Place the sensors in their respective corrugated plastic tubes near their ends, and seal this end of the tube to prevent penetration of water, tile fixing mixture or cement mortar during the installation of the heating system. The tube containing the temperature sensor must be located at the same level as the heating cable approx. 50 cm away from the wall centered between two heating loops. Place the tube in a prepared groove in the floor and lead its other end to the place chosen for thermostat or junction box location. It is possible to use a sensor cable up to 25 m. Cut off the excess tube length.



**Fig. 6** *Installation of floor temperature sensor*

### Preparation of electrical connections

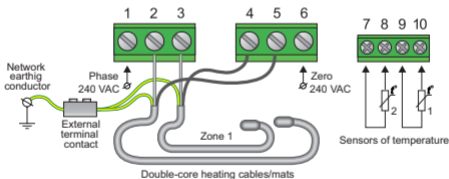
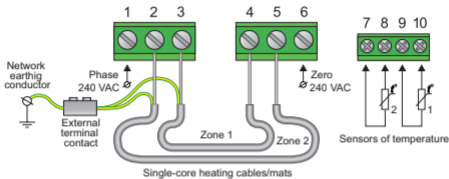
Install the plastic junction box into the wall where the location of the thermostat is planned. Lead the power supply cable, the cold leads of the heating mat or section, and the temperature sensor cable, into the box. Turn on the power to the supply cable and find the phase wire using the phase indicator; mark this wire.

Turn the power to the cable off.

All thermostat connection work must be performed only when the power network is completely disconnected.

Connect all required wires to the thermostat using its terminals with screw fastening.

(See figure 7 for wiring connections).

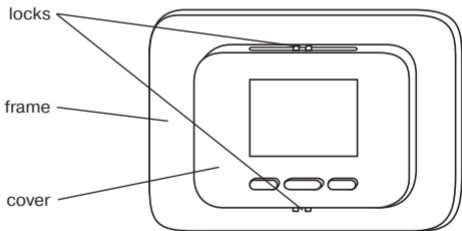


**Fig. 7** Scheme of connection to the triple\_wire electric network

## Installation of the thermostat

First of all disassemble the thermostat. Take off the front cover, using a thin screwdriver, carefully press in the

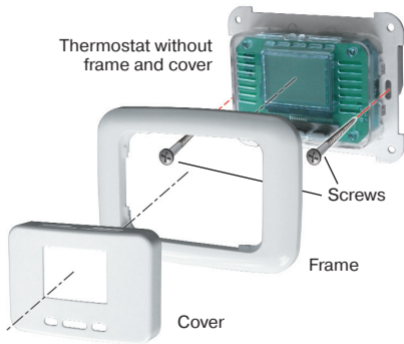
locks located on the upper and lower sides of the front cover, pulling it out slightly (fig. 8). Remove the cover (fig. 9). Remove the frame. Place the device into the junction box and fasten it by means of at least two screws (preferably located at the same horizontal level).



**Fig. 8** *Taking off the device cover*

**CAUTION!**

*Never exert pressure on the LED Screen during the installation!*



**Fig. 9** *Installation of thermostat*

Assemble the thermostat in reverse order. Install the frame carefully ensuring that it closely fits to the device's case. Then return the front cover to its place and press it ensuring that both locks are fixed.

Make sure that the front cover is properly affixed.

### **Technical specification**

Power supply voltage .....	240 VAC
Maximum load current .....	2x8 A
Watt consumption .....	1350 mW
Weight .....	200 gr
Dimensions .....	116x82x54 mm
Data stored (with battery back up) .....	12 months
Protection index .....	IP20
Remote floor-mounting	
temperature sensor .....	NTC 6,8 kOhm
Length of sensor connection cable .....	2 m
Maintaining temperature range from .....	+5 to +35 °C
Factory preset .....	+25 °C

