T70-7

Electric floor heating thermostat



#### Introduction

T70 series thermsotat is designed for heating systems especially floor heating. Producted accordance with EN60730-1 and En60730-2-9. The thermostat equiped with matrix dot display .And it will be very easy to understand the setting and operation .

## First time settings

The first time you switch the on the thermostat, time, control mode and date must be set. You just need to follow the menu direction.

- Choose your time with the Up and Down buttons and confirm with OK.
- Set the actual hour and press the OK button. Then set the minutes. Press OK.
- Set the actual date: day. Confirm the settings with the OK button.

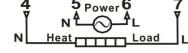
The next menu allows you to select the application you want the thermostat to control. If the thermostat is in the room to be heated, select Room/limit. If the thermostat is outside of the room to be heated, select Floor. Once you have chosen the required setting, press OK. You now need to select the actual floor covering so that the thermostat can take this into account during operation. Select the actual floor covering and press OK.

You now need to enter the system load, i.e. the kW output of the heating system powered by the thermostat. Select the appropriate load and press OK.

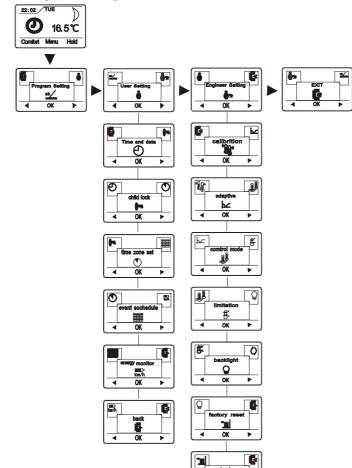
The thermostat is now ready for use and your underfloor heating will operate in accordance with the pre-programmed Event schedule. See Factory Settings for full details of this. (Figture 1)

Wiring diagram

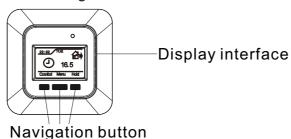




# Programming table 1



# Surface images



## **Gerneral Operation**

When the thermostat power on , the version no. will display , and hold the menu button for 3 sec . The thermostat will turn off , all the settings , including time and ate witll be remembered .

# Back

In various parts of the menus and submenus you will find the **Back**menu item . Use **Back** to return to the previous step .

#### Exit

Return to initial display

# Operation modeack

The thermostat featuresthree different modes of of temperature control: Room Mode, Floor Mode, Room mode with floor limits.

#### Auto mode

(1), Select Auto if you want the temperature

to be controlled automatically via the 4 or 6-event schedule Room mode with floor limits .

#### Hold mode

Nelect Manual to cancel the programmed Event schedule (e.g. during holidays) and to set the required temperature manually. you may, for example, want to adjust the temperature to 5C for frost protection while you are away. Press Manual, confirm with OK and choose the required Temperature, and it will override the auto operation.

#### Comfort mode

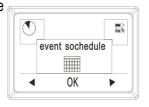
Select comfort to set a temporary comfort temperature to override the auto setting ( so called party mode ) for a single event . Press comfor, confirm with OK and choose the required temperature then enter the required time of comfort Mode. After set time has elapsed, the thermostat will automatically revert to Auto mode. Please note: Comfort mode is a temporary manual setting that will be automatically cancelled by the next event in the programmed Event schedule.

## Thermostat setup menus

The menu allows you to select the following options;

# **Event srttings:**

Allows you to have the temperature Controlled automatically in accordance with a program of your own chice, You can select temperature settings for 4 or 6 different events during the day.



OK

The thermostat is pre-programmed with a Event schedule for easy and economic heating control, see Preset schedule under Factory settings. The schedule can be easily

- 1. Press the OK button to activate the Event settings display.
- 2. Choose the days for which you want to change the Settings,Mon-Fri or Sat-Sun using the up or down Button. Press OK.
- 3. Now select the time and temperature for each daily event in the program. Press OK and set the start time for the event concerned. Confirm with OK. Set the temperature for this event and confirm with OK.
- 4. After setting the required events, select Exit in the menu to return to the initial display.

#### User settings

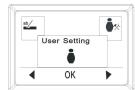
In the user settings menu you can change the following items:

- Time and date
- Child lock
- Time zone set
- Event schedule
- Energy monitor

#### Time and date

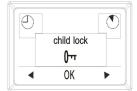
Press OK and set the actual time in hours and minutes.

The date will then be displayed. Set the date and confirm with OK.



#### Child lock

Allows you to lock the thermostat settings, e.g. in public or other places where you do not want the settings changed.

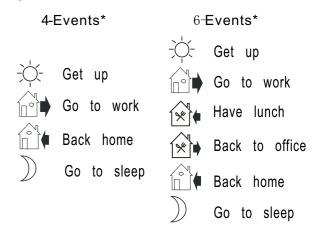


Press OK and set the child lock to On using the down button. Confirm with OK.
The child lock can be unlocked by pressing both the Comfort and Manual buttons simultaneously for 5 seconds

#### Time zone set

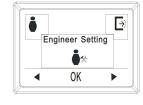
Event srttings:

Allows you to have the temperature controlled automatically in accordance with a program of your own chice You can select temperature settings for 4 or 6 different events during the day.



## **Event schedule**

3: Monday to Friday with the same events setting and Saturday and Sunday with seperately events setting.



Typically used if you workfrom Monday to Friday. 7: Allows you to choose individual programs for each of the 7days of week.

2 : Monday to Friday with the same events setting and Saturday and Sunday with the same setting . Typically used if you work from Monday to Friday

# **Energy Monitor**

Monday to Sunday: If the inquiry time is still in the date you inquiry, the data will be the last week data, i.e. If you inquiry Monday power

comsuption at 16:00 pm, the 60 Kwh, it will be the last Monday energy consuption. If you inquiry on Tuesday, it will indicate the power comsution of the former day ( Monday ) Week: last week power consuption Load: You could adjust the powerload you connected.

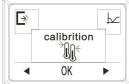
# **Engineer settings**

The Engineer settings menu contains the followin options:

- Temperature calibration
- Adaptive function
- Control mode
- Backlight
- Language
- Factory reset

Temperature calibration

If the actual measured temperature does not corresponding to the thermostat value, you can adjust the thermostat



Engineer Setting

OK

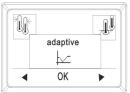
**→** 

by offsetting the temperature.

Press OK and enter the value of the measured temperature. Confirm with OK.

### Adaptive function

Ensures that the required temperature has already been reached when you get up in the morning or come



comtrol mode

ΙĮ

OK

home from work. After just a few days, the adaptive function will have automatically calculated when the heating must be turned on. Press OK and set the function to On. Confirm with OK.

#### Control mode

Set the type of regulation used. There are 3 options:

◀ Floor reg.: The thermostat regulates floor temperature only. A floor sensor must be connected.

Room reg.: The thermostat regulates room temperature only.

Room/limit: The thermostat regulates room temperature with min.

and max. limits for floor temperature. A floor sensor must be connected.

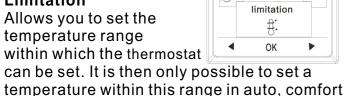
Press OK and select the required application.

Confirm with OK.

and manual mode.

# Limitation

temperature range within which the thermostat



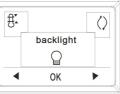
Press OK to highlight Min temperature. Use the up or down button to select the minimum permissible temperature.

Press OK and select the maximum permissible temperature. Confirm the settings with OK.

## Backlight

There are three settings for the display backlighting:

Auto: Backlighting is activated whenever a key is pressed and goes out automatically 30 seconds



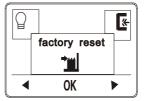
after the last key press. On: Backlighting continuously on.

OFF: No Backlighting

Select the desired backlighting setting and confirm with OK.

# **Factory Reset**

Allows factory settings to be reset. Your personal settings will be lost, see Factory settings.



Press YES and choose Reset in the menu. Press NO and cancel the factory reset

### Back

In various parts of the menus and submenus you will find the Back menu item. Use Back to return to the last step.

### Exit

Returns to initial dispay.

### **Error messages**

If a fault or error occurs, the thermostat will display an error code as follows:





E1: Internal sensor defective or shortcircuited.

E2: External sensor defective or shortcircuited.

# Factory settings Preset schedule

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