COLD BUSTER®
GREEN FLOOR HEATING

PROGRAMMABLE RF-THERMOSTAT

Programmable RF Thermostat

This Programmable RF Room thermostat consists of a Transmitter unit (TX) and a Receiver unit (RX) (voltage free contacts).

The installation requires no wiring, but the receiver and transmitter must be fitted within a range of 30 metres from each other.

A unique **address code is** set up as part of the commissioning procedure to ensure that your RF Receiver only responds to instructions from it's corresponding Transmitter (16 Channels).

Blue-backlight & translucent soft keys allow easy operation in dim

Technical Data

Transmitter

1. Power Supply: 1.5V AAA Battery (2 for power, 2 for lighting)
2. Battery Life : 1 year typical
3. Temperature format: °C/°F selectable
4. Clock format : 24/12 Hour selectable.
5. Temperature Sampling Rate: 1/min.
6. Switching Differential: 0.5 - 1.0 °C
7. Temperature Control Range: 5 - 35 °C
8. Temperature display Range: 0- 50 °C
9. RF Frequency: (preset at factory) T868:   868.35 MHz
10. Control Distance: 30m
11. Dimensions : 110.8 (W) x 104 (H) x 21.5 (D) mm
12. Blue LED (System On) indicates if the Heating is On or Off.
13. Red LED indicates RF communication.

Fixing the Plug-in stand.

1. Insert flat head screwdriver into position as shown.

2. Push upward.

Fixing the Plug-in stand (cont).

3. Pull stand out off back plastic housing.

4. Push the stand horizontally into the grooves which stored the stand.
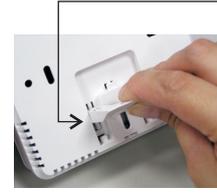
Make sure the stand faces in correct direction.

5. Slide the stand down.

6. The stand is now fixed.
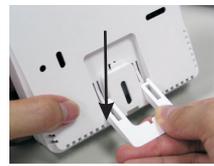
By pressing the stand down, as shown in the picture, it can be taken off again.

RF Address Code Setting

If you have more than one RF thermostat installed in the same house, or there is a house nearby where the same unit is installed, your receiver may be inadvertently triggered by the other unit.
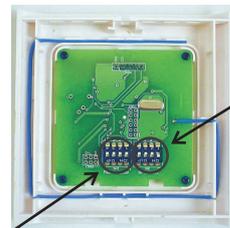
In that case, select a different RF address code to prevent this. (The receiver only responds if the code setting of the TX is identical).

Unless fixed to the wall: Mark the Thermostat with the name of the room and do not move them from one room to another!

- Set Receiver and Transmitter DIP switches to the same settings!

Floor temperature limit setting

ON 1 2 3 4 **0 0 0 0** limitation ineffective	ON 1 2 3 4 **1 0 0 0** 26°C	ON 1 2 3 4 **0 1 0 0** 27°C	ON 1 2 3 4 **1 1 0 0** 28°C
ON 1 2 3 4 **0 0 1 0** 29°C	ON 1 2 3 4 **1 0 1 0** 30°C	ON 1 2 3 4 **0 1 1 0** 31°C	ON 1 2 3 4 **1 1 1 0** 32°C
ON 1 2 3 4 **0 0 0 1** 33°C	ON 1 2 3 4 **1 0 0 1** 34°C	ON 1 2 3 4 **0 1 0 1** 35°C	ON 1 2 3 4 **1 1 0 1** 36°C
ON 1 2 3 4 **0 0 1 1** 37°C	ON 1 2 3 4 **1 0 1 1** 38°C	ON 1 2 3 4 **0 1 1 0** 39°C	ON 1 2 3 4 **1 1 1 1** 40°C

The Green and Red LED will both stay lit if the Dip Switch has been set incorrectly. No probe: all switches must be set to off.

Installing / Replacing the batteries
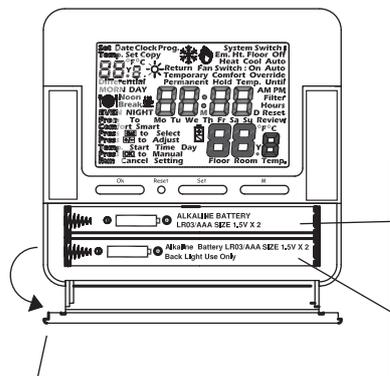
Pull the flap on the front plastic housing forward.

Upper compartment:
2 x 1.5V AAA for powering the transmitter.

Lower compartment:
2 x 1.5V AAA for backlight.

Configuration settings

Before starting to program the thermostat, it's necessary to select these 6 settings:

Press and hold ⌷Set⌷ for 6 seconds to enter setting selection mode. Follow the flashing digits or symbols on the display in order to complete following settings:

1. **C/F:** Press ∧ or ∨ to choose °F or °C setting.

2. Press ⌷Ok⌷ to enter next setting (24 Hour / 12 Hour Clock). Continue using ∧ or ∨ buttons to make your selection.

3. Press ⌷Ok⌷ for next setting and then press ∧ or ∨ buttons to complete the rest of the configuration settings:
   Date -- Year, Month, Day
   Clock -- Hour and Minute
   Switching differential (Hysteresis)
   Filter (Service interval)-- Counts the hours that the transmitter has been in use. (Smallest time counting unit: 100 hours).

4. Press ⌷Ok⌷ after all settings have been completed.

Programming

> ### Note:
> In programming-mode, if users want to stop programming the thermostat, either wait for 30 seconds and the thermostat will automatically go into run mode, or press the SET key twice and then press the OK key to set thermostat into run mode.
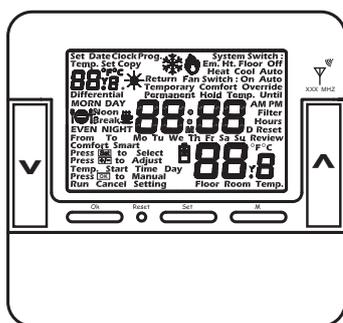> **Let yourself be guided by the flashing display.**
>
> ### Important
> Note: Each day's ending time is at 11:50 PM in12H-Format and at 23:50 in 24H-Format.
> Therefore : you cannot set 12:00 PM (24:00) for NIGHT.
>
> The starting time of the new time-period is automatically the ending time of the previous time period.

Button Descriptions

∧ ∨ : Up / Down keys.

M : Override functions.

Set : Programming functions

Reset : Reset Thermostat

Ok : Memorize setting and enter next setting mode.

Programming 7-d Models

Each of the 7 days of the week can be programmed separately.

Follow the flashing display in order to complete the programming.

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1. Press ⌷Set⌷ to enter program setting (Temperature Setpoint will start flashing).

2. Press ∧ or ∨ to set the temperature-setpoint for the 1st program-period.

3. Press ⌷Ok⌷ to start setting the start time for the1st program-period. (The time digits and "Start Time" will flash.)

4. Press ∧ or ∨ to set the start time for the1st program-period.

5. Press ⌷Ok⌷ to enter the temperature- setpoint for the **2nd** program-period (You will see the Temperature Setpoint flashing Again.)

6. Repeat same programming procedure by pressing:

   ⌷Ok⌷ ➡ ∧ or ∨ ➡ ⌷Ok⌷
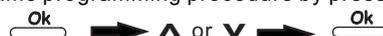
   to complete all the Temperature Setpoints and Starting Times for each program-period (and all days of the week or use the copy function!)

7. When programming is completed, press ⌷Set⌷ **twice** and then press ⌷Ok⌷ to enter run mode.

Copy function (Only available on 7-d Models)

First program one particular day (i.e. complete all Temperature / Times for each program-period of that day. (Follow the procedure as described in **Programming 7-d**).

Using the selected day as source day for te **'Copy'** function ,you proceed as follows:

1. Press ⌷Set⌷ twice to enter **Copy** mode. '**From**' will flash.

2. Press ∧ a few times to select the source day.

3. Press ⌷Ok⌷. '**To**' will start flashing.

4. Press ∧ to select the day to copy the program to.

5. Press ⌷Ok⌷ after the target day is selected.

6. Repeat from 4. to select more target days or press **-** to delete a target day.

Finally press ⌷Ok⌷ twice. The program will now be copied from the source day to the target day(s).

Mode 7-d P4/P6   factory preset

Mon ~ Fri	Time	Temperature
MORN(**P1**)	6:00	21 °C
DAY(P2)	8:30	15.5 °C
NOON(P3)	*12:00pm*	*21 °C*
BREAK(P4)	*2:00pm*	*15.5 °C*
EVEN(P5)	4:30pm	21 °C
NIGHT(P6)	10:30pm	18.5 °C

Saturday	Time	Temperature
MORN(P1)	7:00	21 °C
DAY(P2)	8:30	21 °C
NOON(P3)	*12:00pm*	*21 °C*
BREAK(P4)	*2:00pm*	*21 °C*
EVEN(P5)	4:30pm	21 °C
NIGHT(P6)	10:30pm	18.5 °C

Sunday	Time	Temperature
MORN(P1)	7:00	21 °C
DAY(P2)	8:30	21 °C
NOON(P3)	*12:00*	*21°C*
BREAK(P4)	*2:00pm*	*21°C*
EVEN(P5)	4:30pm	21 °C
NIGHT(P6)	10:30pm	18.5 °C

NOON and BREAK will not appear in P4 mode.

Advance Ramping / Comfort Smart Mode

When the temperature has to get to a certain level at a particular time e.g. 20 °C at 08:00, the thermostat must be programmed at an earlier time e.g. 07:00 to allow the heating / cooling to get the room to this temperature. This thermostat has a mode which can calculate when to switch the heating on in order to reach the given setpoint at the start of the programmed time period.

This Mode is called **"Comfort Smart"**.

Comfort Smart can be activated / deactivated by pressing OK and M simultaneously for 3 seconds. The display will show "Comfort Smart".

Override Function
---operation guide to each of **4 Override modes.**

A. Temporary Override - Change the current temperature setting until next program time period.

1. Press **+** or **-** to adjust the temperature setpoint. ("Temp. Set" Temperature will flash.)

2. Wait for 10 seconds. The thermostat will automatically run this temporary override setpoint or press <u>Ok</u> to immediately run This override mode)

3. Whilst **Temporary Override** is active, pressing <u>Ok</u> wil cancel this mode.

B. Comfort Override -Change current temperature setpoint for a number of hours.

The thermostat will resume its normal operation after Comfort Override execution has stopped**.**

1. Press <u>M</u> .

2. Press ∧ or ∨ to adjust the temperature setpoint (Temp. Set. temperature flashes.)

3. Press <u>Ok</u> to select the number of hours for Comfort-Override execution.

4. Press ∧ or ∨ to set the hours (minimum 1 hour).

5. Press <u>Ok</u> to run **Comfort Override mode**.

6. Pressing <u>Ok</u> again will cancel the Comfort Override mode.

C. Permanent Hold Temperature - Holds the temperature permanently at the setpoint until canceled.

1. Press <u>M</u>

2. Press <u>M</u> again (Disp: "Permanent Hold Temp.")

3. Press ∧ or ∨ to set desired temperature. (Temp. Setpoint is flashing)

4. Press <u>Ok</u> to run **Permanent Hold Temperature** (Display shows above mode)

5. Press <u>Ok</u> again to leave the **Permanent Hold Temperature** mode.

D. Temperature Until (Vacation Hold)---Hold the setpoint up till a specified date.

1. Press <u>M</u> 3 times. Display "Hold Temp. Until"

2. Press ∧ or ∨ to set desired temperature setpoint. (Setpoint temperature flashes.)

3. Press <u>Ok</u> to select the end date of the Vacation Hold function.

4. Press ∧ or ∨ to select **Month** followed by <u>Ok</u> .

Press ∧ or ∨ again to select **Day,** again followed by <u>Ok</u> .

5. Press **'OK'** to run **Vacation Hold** Mode.

6. Whilst **Vacation Hold** is active, pressing <u>Ok</u> immediately cancels this override.

REMINDER
Whilst in Override setup mode, the thermostat will automatically resume it's normal program after 30 seconds of no input, unless the setup sequence is completed!

Pressing the **M** key will show the three Override Modes in the display in sequence.

Let yourself be guided by the flashing display functions to set up the override mode.

TO ERASE THE MEMORY (EEPROM)

Press <u>Ok</u> and ∨ simultaneously for 6 seconds, "**Reset**" appears in the display.

Now press **"Reset"** button with a pointy object.

All previous settings will be deleted, and the thermostat resumes back to its factory default settings.

WIRING
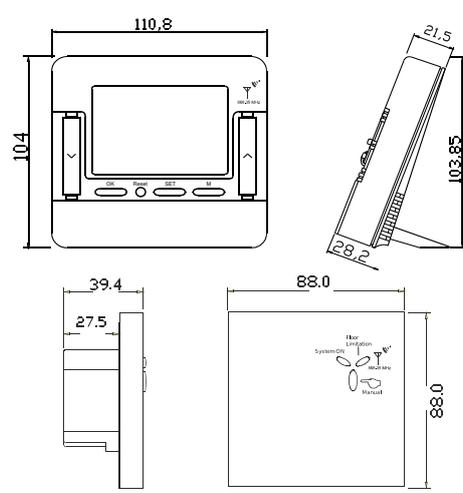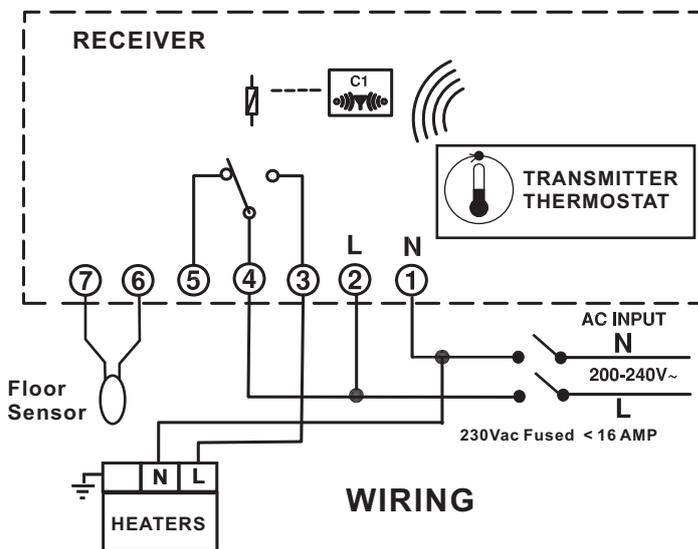
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