



*Therm*Save **CELECT**

DRT 2

Digital Programmable Thermostat
for
Weekday / Weekend Setting

Instruction Manual

ThermSave Select Programmable Room Thermostat

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A. Installation and Mounting:

Caution:

Turn off DRT 2 and the electrical devices, (e.g. heater, cooler), which will be connected before installation. It is highly recommended that the installation procedure is processed by trained personnel.

1. Installation Location:

The thermostat should be mounted on an inner wall 1.5m above the floor in a position where it is readily affected by changes in the general room temperature with freely circulating air.

Avoid direct exposure to sunlight, dripping or splashing.

The location should be away from any direct heat/cool generating source.

Do not place the thermostat at a location where the air circulation is low or where it will be subjected to excessive temperature changes, (e.g. near a door).

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2. Wiring:

There are 3 wiring terminals at the bottom of the DRT 2, labelled as “**COM**”, (common), “**NO**”, (normal open) and “**NC**”, (normal close).

Connect the heater or cooler to the “**NO**” and “**COM**” terminals leaving the unused terminal empty.

Wire the correct cables to the terminal block according to the circuit diagram which is on the inside of the thermostat top cover.

Push all the cables back into the wall prior to fixing so as to avoid trapping any of the wires.

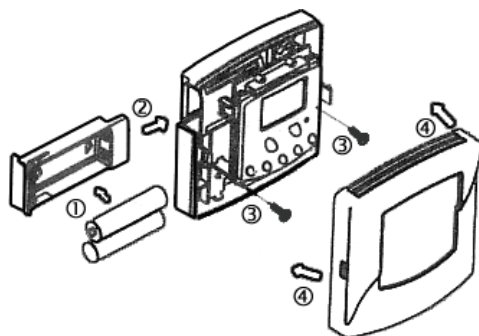
The fitting of a 5A fuse is recommended, (please refer to wiring diagram on the last page).

3. Mounting:

Using the accessory screws and wall anchors provided mount the DRT 2 with the key-hole at the back.

The thermostat should be mounted as shown in step 3.

Replace the cover as shown in step 4.



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Install or Replace the Batteries:

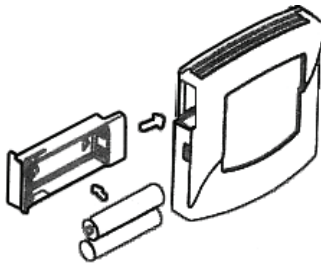
Caution:

Turn off the electrical devices and disconnect the supply to the appliances before replacing the batteries.

Replace only with the same or equivalent type of batteries.

Do not dispose of batteries with household waste. Refer to local requirements for correct disposal procedure.



1. Pull out the battery drawer.
2. Place the new batteries according to the polarities marked on the battery drawer.
3. Dispose of the old batteries properly.
4. Slide the battery drawer back into the thermostat casing.
5. Check the thermostat is working correctly. Press “RST”, (reset), if necessary.





B. Start/Reset:

1. After completing the wiring and mounting, switch off all the connected devices. Place 2 new AAA 1.5V alkaline batteries according to the polarities marked on the battery drawer.

The LCD screen will switch on.


2. Press “RST” to reset. The DRT 2 is now ready to control the heater / cooler.
3. Switch ON the heater / cooler. The heater / cooler will remain OFF until the DRT 2 activates the output ON with  /  displayed on the LCD.

C. Normal Time Mode:

1. Temperature detection starts and the LCD displays the room temperature.
2. If the battery is low, the  will be flashing. If  has been flashing for 48 hours without new batteries being installed then the thermostat will stop measuring and displaying the temperature.

The DRT 2 will also turn off the heater / cooler irrespective of the current control temperature setting.

The old batteries must be replaced with new batteries immediately.



3. The defrost function is activated with  displayed when the temperature is 5°C or below. Output will be forced ON @ Heat and OFF @ Cool.
4. Below 0°C the DRT 2 will display **LO**.
5. Above 40°C the DRT 2 will display **HI**.

D. Normal Time Setting Mode:

1. Press “🕒”, the Day of the Week, (1 - 7), will flash, press “▲” or “▼” to select the current Day of the Week.
2. Press “🕒”, the Hour will flash, press “▲” or “▼” to select the Hour.
3. Press “🕒”, the Minutes will flash, press “▲” or “▼” to select the Minutes.
4. Press “🕒” again to return to step 1.
5. Press “↵” to confirm the setting and return to Normal Mode.

The thermostat will auto-return to Normal Mode after 10 seconds.

E. Factory Defined Programs:

The heater / cooler turns on according to the activated program and the control temperature setting. When the heater / cooler is ON, the Program Number and the  /  icons are displayed.

The pre-defined programmes are shown below:

HEATER MODE	ON	OFF	TEMP	ON	OFF	TEMP
MONDAY	06.00	08.00	21°C	18.00	22.00	16°C
TUESDAY	06.00	08.00	21°C	18.00	22.00	16°C
WEDNESDAY	06.00	08.00	21°C	18.00	22.00	16°C
THURSDAY	06.00	08.00	21°C	18.00	22.00	16°C
FRIDAY	06.00	08.00	21°C	18.00	22.00	16°C
SATURDAY	08.00	10.00	21°C	18.00	23.00	16°C
SUNDAY	08.00	10.00	21°C	18.00	23.00	16°C

COOLER MODE	ON	OFF	TEMP	ON	OFF	TEMP
MONDAY	06.00	08.00	24°C	18.00	22.00	26°C
TUESDAY	06.00	08.00	24°C	18.00	22.00	26°C
WEDNESDAY	06.00	08.00	24°C	18.00	22.00	26°C
THURSDAY	06.00	08.00	24°C	18.00	22.00	26°C
FRIDAY	06.00	08.00	24°C	18.00	22.00	26°C
SATURDAY	08.00	10.00	24°C	18.00	23.00	26°C
SUNDAY	08.00	10.00	24°C	18.00	23.00	26°C

F. Set Program:

1. Press “PRG”, the hour will flash, press “▲” or “▼” to change the hour setting.
2. Press “PRG”, the minutes will flash, press “▲” or “▼” to change the minute setting.
3. Press “PRG”, the temperature will flash, press “▲” or “▼” to change the temperature setting.
4. Press “PRG” to set the next program.
5. The program is shown below.

Mon - Fri (P1 ⇔ P2 ⇔ P3 ⇔ P4) ⇔

Sat (P1 ⇔ P2 ⇔ P3 ⇔ P4) ⇔


Sun (P1 ⇔ P2 ⇔ P3 ⇔ P4) ⇔.....

6. Press “↵” to exit the Program Setting Mode and return to the Normal Mode.

The thermostat will auto-return to Normal Mode after 10 seconds.




G. Temporary / Permanent Override Mode:

There are 2 modes in the Override Mode, (Temporary Override Mode and Permanent Override Mode).

Press “” to select the Override Mode. The sequence is shown below:

Normal Mode ⇨ Temporary Override ⇨ Permanent Override
⇨ Normal Mode.

Selecting the Temporary / Permanent Override Mode:

1. Press “” to change the mode from Normal to Temporary Override. The **T** icon will be displayed.
2. Press “” again. The mode changes from Temporary Override to Permanent Override Mode. The **P** icon will be displayed.
3. Press “” once, the mode changes from Permanent Override to Normal Mode.

Review and adjust the Override temperature:

1. Press “▲” or “▼”, the Override temperature is displayed.
2. Hold the “▲” or “▼” for 2 seconds and the Override temperature will flash.
3. Press “▲” or “▼” to adjust the Override temperature.
4. Press “↵” to exit the Override temperature setting.

The thermostat will auto-return to Normal Mode after 10 seconds.

Temporary Override Mode:


The Temporary Override Mode maintains the temporary setting until the next program time is reached.

Permanent Override Mode:

The room temperature will be maintained at the Permanent Override temperature setting until the Permanent Override Mode is terminated.

Press “PRG” to release the Permanent Override Mode.


H. Control Off / Sleep Mode:

1. Press the  icon to select the Sleep Mode and Control Mode. The sequence is shown below:

Normal Mode ⇒ Sleep Mode ⇒ Control Off Mode ⇒
Normal Mode ⇒.....

2. Press any other keys to exit the Control Off / Sleep Mode and return to Normal Mode.

Sleep Mode:

In Sleep Mode the  icon is displayed. The thermostat stops measuring and displaying the temperature.

Only the time is shown.

The heater / cooler is turned off, irrespective of the current temperature setting.

Control Off Mode:

The LCD is fully turned off.

The heater / cooler is turned off, irrespective of the current control temperature setting.

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I. Jumper Settings:

Delay / No Delay jumper:

	HEATER	COOLER
No Delay	10 seconds	4 minutes
Delay	4 minutes	4 minutes

Choose the “Delay” option if compressor heat is connected.

12 hours / 24 hours Mode jumper:

When the 12 hours option is selected the time is shown in 12 hour Mode.

Otherwise the time is displayed in 24 hour Mode.

Heater / Cooler jumper:

Select the “Heater” option when a heater is connected to the thermostat.

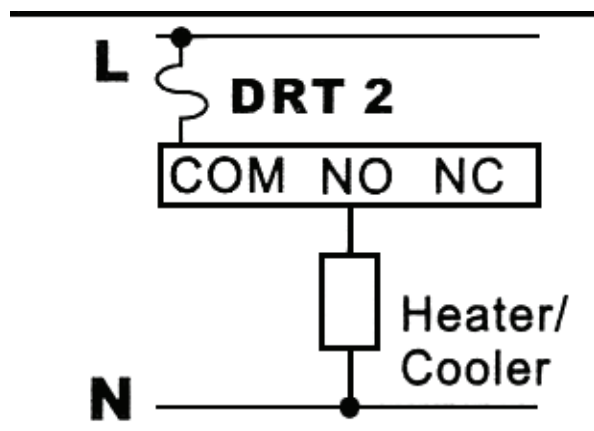
Select the “Cooler” option when a cooler is connected to the DRT 2.

J. Specifications:

1. Temperature measurement: 0.0 - 40°C
(0.1°C / step)
2. Accuracy: ± 0.5°C
3. Temperature control range: 5 - 35 °C
(0.5°C / step)
4. Switching: 24...250v AC
50 / 60 Hz
5(3.5)A max
5. Terminals: 2.5mm² cable
6. Electronic control: Type 2. B action
7. Battery: 2 x 1.5v Alkaline batteries
8. Operating temperature: 0 - 50 °C
9. Storage temperature: -10 - 60 °C
10. Sensing element: NTC thermister

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TERMINAL BLOCK CONNECTING LABEL



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