Honeywell Home Room Thermostat

DT4/DT4R/DT4M

Room Thermostat

APPLICATION

The DT4 room thermostats provide control of heating systems for homes and apartments and bring together the slim, modern design with simple functionality, a large and clear LED segment display with an easy-to-use wake up button. The range has features that are easy to love, it offers everything you and your customers want and need.

The DT4 is compatible with both hybrid and greener energy systems and energy-efficient solutions including heat pumps, zoning and underfloor heating and cooling devices and also works with zone valve applications (note, not with electric heating /240 V).

The range:

- DT4, DT4R and DT4M are compatible with 24–230 V On/Off appliances such as gas boilers, combi-boilers, and heat pumps
- DT4 and DT4M are for wired on the wall installations and the DT4R for wireless installations
- DT4R is a thermostat and receiver box that is also designed to be backwards compatible with existing Honeywell Home RF products. The DT4R is designed with the installers in mind and includes a received module with mounting options for directly on the wall or on the wall box
- DT4M and DT4R versions support OpenTherm® appliances, with versions available for both standard OpenTherm® and OpenTherm® Smart Power

SPECIAL FEATURES

- Slim and modern design and three colourways blends into any décor
- Table stand or wall mounted thermostat options to fit new and replacement installations
- Modern and clear LED display with adjustable brightness for easier viewing in all light conditions
- Clear coloured icon indicating product state
- Adjustable parameter functions to allow optimum control of connected appliance
- 'Off' position has an integral frost protection setting at minimum 5 °C to prevent pipes freezing
- Eco Offset - allowing a timed offset temperature for Eco mode during heating and cooling
- Backwards compatibility with existing Honeywell Home wireless products
- Receiver box with clear LED indication and override button

- On/Off or OpenTherm® (DT4R/DT4M) compatible control
- A flip up wiring platform for easy wiring
- User menu allows extra functions to be set at the discretion of the user:
  - Heating, Cooling or Heating and Cooling
  - On/Off
  - Eco Offset duration
- Installer menu allows extra functions to be set at the discretion of the installer to match the homeowner's applications and needs
  - LED display brightness
  - Cycle rate
  - Heating and cooling changeover
  - Upper/Lower set point limit adjustment
  - Minimum ON time
  - Minimum OFF time
  - Temperature Eco Offset
  - Factory reset
  - Binding (DT4R only)

TECHNICAL DATA

DT4/DT4M/DT4R Room Thermostat

Operating temperatures	
Room temperature display range:	0 °C to 40 °C
Temperature setting range:	
Program:	5 °C to 35 °C
OFF (Heating Mode):	5 °C

Specifications	
Control form:	Fuzzy Logic
Heating system mode:	Heating and Cooling
Switching capacity:	3A (Resistive), 1A (Inductive)
Switching type:	SPDT
Sensing element:	10k (@25 °C) NTC thermistor
Power:	Powered by 2 X AA Batteries (Alkaline) OpenTherm® Smart Power batteries not required
Wiring:	DT4 (wired) & DT4M (OpenTherm®) terminal block capable of accepting wired up to 2.5 mm^2

RF communication

Specifications	
RF operation band:	ISM 868.0-868.6 MHz
Maximum power:	25 mW
Protocol:	Encrypted
Communication range:	30 m in residential building environment
Receiver class: R.E.D.	RX Cat 2

Receiver box

Specifications	
Power:	230 V AC mains supply
Electrical rating:	5A (Resistive), 3A (Inductive)
Cycle rate:	Selectable by application
Wiring:	Terminal block capable of accepting wired up to 2.5 mm^2
Wire access:	From bottom with cable clamps. Left Terminals - Mains wiring Right Terminals - Relay Terminals
IP class:	IP30

Environmental and standards

Specifications	
EMC:	2014/30/EU
LVD:	2014/35/EU
R&TTE:	1995/5/EC
Wire access:	From back via large wall box opening.
ErP: DT40, YT42 DTS42, DT41SPM, YT43M, DT41M	Class IV (+2 %) Class V (+3 %)

METHOD OF OPERATION

OpenTherm®

By connecting the DT4M to an OpenTherm® appliance, additional OpenTherm® Parameters within the DT4R/DT4M.

Heat Range

The normal lower temperature limit of 5 °C can be increased up to 21 °C to protect from cold.

Useful if the users include the elderly, children or disabled. The normal upper temperature limit of 37 °C can be reduced down to 21 °C to save the users energy.

Cooling Range

The normal lower temperature limit of 15 °C can be increased up to 27 °C, useful if the users include the elderly, children or disabled. The normal upper temperature limit of 40 °C can be reduced down to 27 °C to save the users energy.

Application Coverage

DT4 room thermostat is designed to work with OpenTherm® wired and wireless, boilers, heat pumps and zoning applications such as evohome/HCC100. DT4R also communicates to existing Honeywell Home wireless devices such as ST9000 (UK Timers) and BDR91A (Boiler Relay) allowing easy upgrades to existing systems.

Eco Offset

The DT4 has an Eco Offset function that can be used to boost the system for a period of time. Eco Offset state operates in 0.5 °C varying from –3 °C to + 3 °C.

- –3 °C in Heating mode will reduce the temperature by 3 °C
- –3 °C in Cooling mode will increase the temperature by 3 °C
- +3 °C in Heating mode will increase the temperature by 3 °C
- +3 °C in Cooling mode will reduce the temperature by 3 °C

Providing both a boost function when operating in + °C and providing an economy temperature reduction in - °C.

The period of time for the Eco Offset is set by the user in the user menu of the product, this can be set from 1-24 hours, with 0 cancelling the Eco setting.

Failsafe

When the temperature sensor fails (DT4, DT4M) or the radio communication between the thermostat and the receiver box is lost the device will cycle the demand 20 % On/80 % Off.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Min. ambient temperature:	0 °C
Max. ambient temperature:	40 °C
Shipping and storage temperature:	–20 °C to 55 °C

Parameter	Value
Min. ambient relative humidity:	10 % *
Max. ambient relative humidity:	90 % *

*non condensing

TECHNICAL CHARACTERISTICS

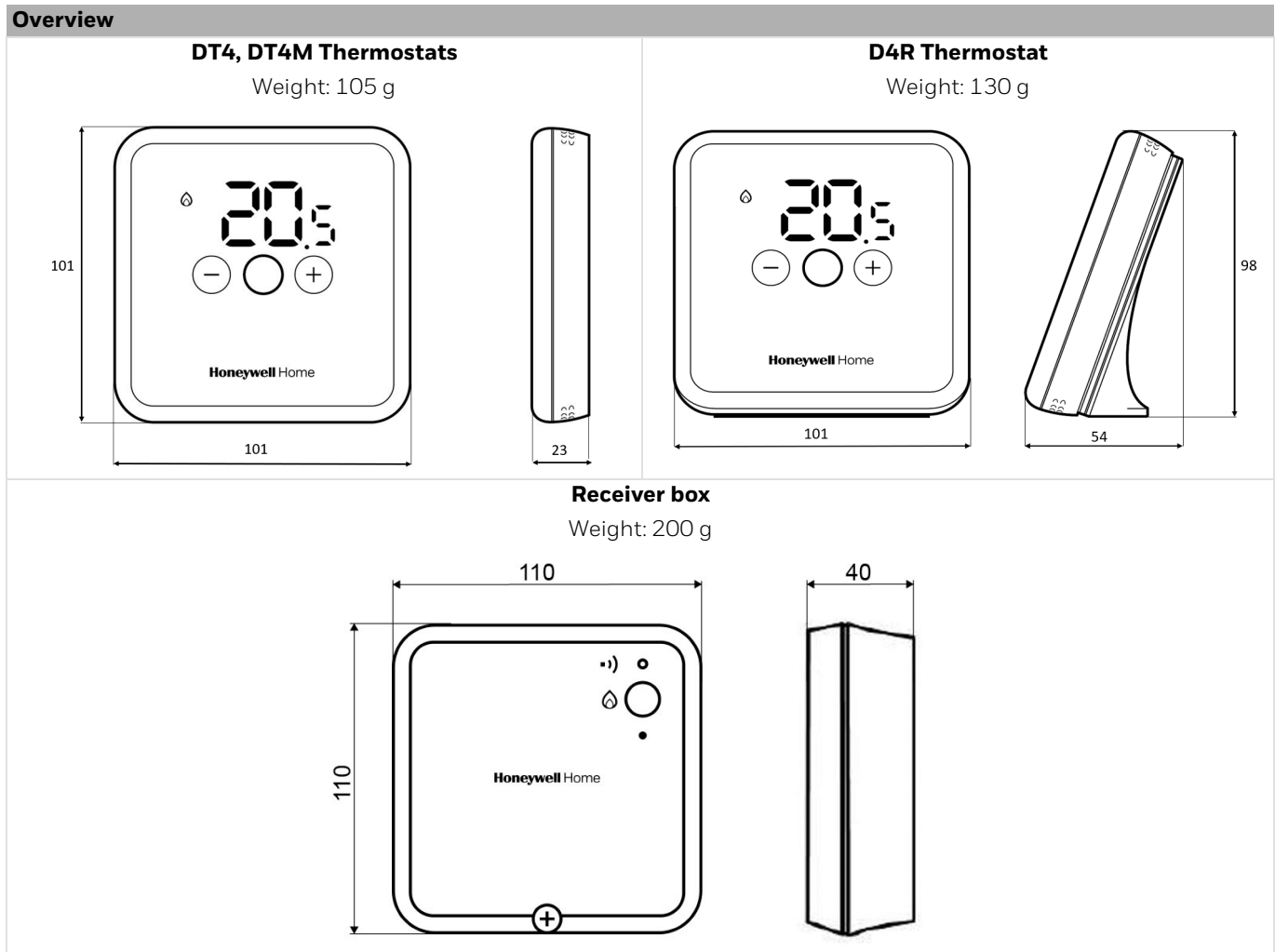**Thermostat display/Button layout**

Reference to the icons:

⬡ **Heat Demand:** Room temperature is below set-point - indicating there is a demand for heating (boiler activity might occur).

❄ **Cooling Demand:** Room temperature is above set-point - indicating there is a demand for chiller or cooling appliance demand.

•)) **Wireless Signal:** Thermostat (DT4R only) is connected to the Receiver Box.

⊘ **Eco:** Temporary adjustment of set point.

⏻ **Off:** Indicating the thermostat is currently off.

⚠ **Warning:** Alerting you there is an issue with communication or battery level.

▭ **Low Battery:** Power has reached approximately 10 % - flashes when critically low (see changing the batteries).

Receiver box interface
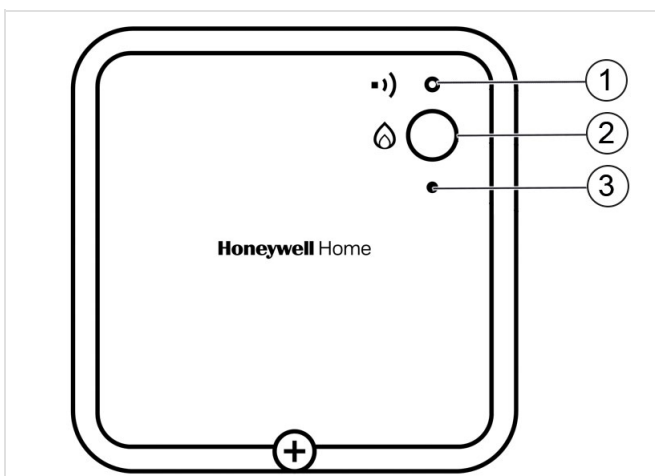
1 Status LED
- Communication with thermostat
- Binding mode

2 Manual override

3 Reset
- Delete binding

Dimensions

Overview

DT4, DT4M Thermostats	D4R Thermostat
Weight: 105 g	Weight: 130 g

101 · 101 · 23

98 · 101 · 54

Receiver box

Weight: 200 g

110 · 110 · 40

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

Options

Series	Colour	Wired	Wireless	On/Off	OpenTherm®	OpenTherm® Smart Power	EAN Code	Item No.
DT4	white	•		•			5059085002619	DT40WT20
	grey	•		•			5059085002626	DT40GT21
	black	•		•			5059085002633	DT40BT22
DT4	white	•			•		5059085002732	DT41MWT30
	grey	•			•		5059085002749	DT41MGT31
	black	•			•		5059085002756	DT41MBT32
DT4M	white	•				•	5059085002763	DT41SPMWT30
	grey	•				•	5059085002770	DT41SPMGT31
	black	•				•	5059085002787	DT41SPMBT32
DT4R	white		•				5059085002671	DTS42WRFST20
	grey		•				5059085002688	DTS42GRFST21
	black		•				5059085002695	DTS42BRFST22
DT4R	white		•	•			5059085002640	YT42WRFT20
	grey		•	•			5059085002657	YT42GRFT21
	black		•	•			5059085002664	YT42BRFT22
DT4R	white		•		•		5059085002701	YT43MRFWT30
	grey		•		•		5059085002718	YT43MRFGT31
	black		•		•		5059085002725	YT43MRFBT32

Note: Every package includes 14 languages: English, Dutch, French, German, Italian, Spanish, Portuguese, Bulgarian, Czech, Hungarian, Polish, Romanian, Slovak, Turkish.

For more information

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