

ESRTD5 & ESRTD5VF

# Digital Room Thermostat with TPI & Delayed Start

## Installation Instructions

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## Thank you for choosing ESi Controls.

To take advantage of our 3 year extended warranty, you must register your product within **30 days** of purchase via [www.esicontrols.co.uk](http://www.esicontrols.co.uk)

Products which have **not** been registered within **30 days** of purchase will only qualify for 1 year warranty. Interference with sealed parts renders the guarantee void. In the interests of continuous product improvement, we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

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# **Installation Instructions**

# Technical data

Thermostat Features	Battery Models	Mains Models
	Hard-wired	Hard-wired
Hard-wired, built-in sensor	ESRTD5VF	ESRTD5
Wireless, built-in sensor complete with receiver		
Temperature Control Class	ErP Class 4 (2%)	
Energy Efficiency Technology	TPI (Chrono Proportional) Control, Delayed Start, Optimum Start, Delayed Stop	
Temperature range	5-35°C	
Control output derived from PI algorithm	On/Off Chrono-proportional, 3 or 6 cycles per hour	
Switching differential in On/Off mode	+/-1°C	
Power supply	2 x AA alkaline cells	230 VAC, 50-60Hz
Switching action of output relay	SPDT (voltage free)	SPDT
Switch rating of output relay	3(1)A 230VAC	3(1)A 10-230VAC
Transmission frequency (RF models)	N/A	N/A
Transmission range (RF models)	N/A	N/A
Dimensions mm	127 long x 81 wide x 28 deep	
Design Standard	EN60730-1, EN60730-2-7, EN301489, EN60950, EN300328, EN62479, EMC Directive 2014/30/EU, LVD Directive 2014/35/EU, RED Directive 2014/53/EU	

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# Installation

## **Installation Safety Instructions**

The unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate mains supply before commencing installation. Please read all instructions before proceeding.

Ensure that the fixed wiring connections to the mains supply is via a fuse rated at not more than 3 Amps and Class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sq or 1.5mm sq. No earth connection is required as the product is double insulated but ensure continuity of earth throughout the system.

### **1.1 General Safety Instructions**

This product complies with the essential requirements of the following EC Directives:

- Electro-Magnetic Compatibility Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- EC Marking Directive 2014/30/EU

Please leave the user instructions with the end user where they should be kept in a safe place for future reference.

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## Warning Notice

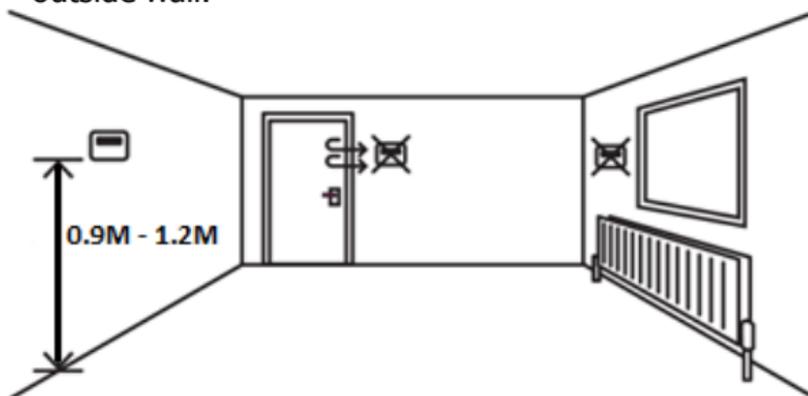
**WARNING:** Always isolate the AC mains supply before installing. This product must be fitted by a competent person, and installation must comply with the guidance provided in the current editions of BS767 (IEE wiring regulations) and part "P" of the building regulations.

## Maintenance

Always isolate the mains supply before commencing any work, servicing or maintenance on the system. And please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be carried out by a qualified person on every part of the heating and hot water system to automatically return to home screen.

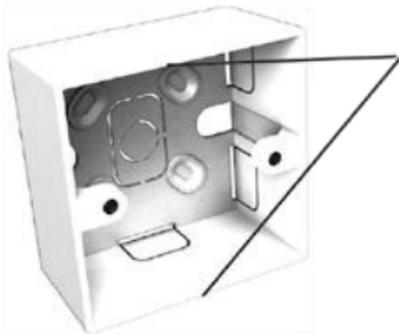
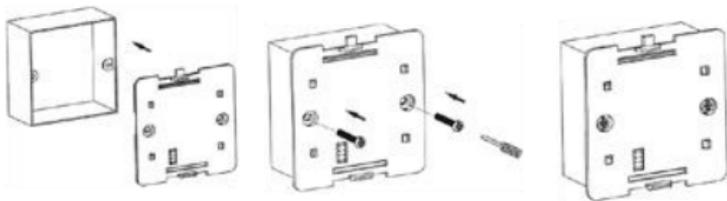
The latest government guidelines state the ideal position to locate your Room Thermostat is between 0.9M & 1.2M above floor level, in a location where the thermostat is accessible, reasonably lit and free from extremes of temperature and draughts. Do not position the thermostat near sources of heat, such as radiators, lights, TV, direct sunlight or on an outside wall.



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## Installing the Room Thermostat

1. Use a flat bladed screwdriver to press the fastener at the top of the unit, then gently loosen from the unit, unhooking from top to bottom.
2. Fix the 35mm back box, terminals at the top, onto a 2-flange metal back box with 2 BM3.5x23 screws. If installing on a 4-flange metal back box, simply push down the flanges on the top and bottom to leave the flanges on the left and right hand side.

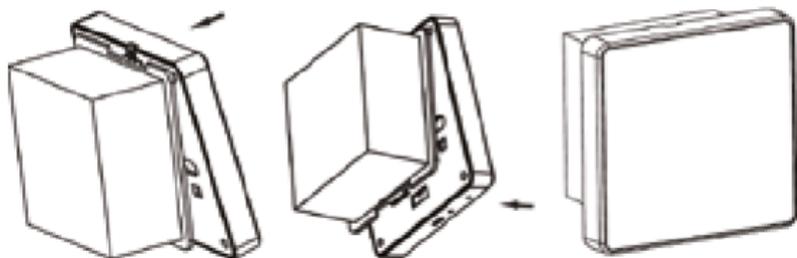


If there are 4 flanges, push down the top and bottom flanges to leave just 1 on either side.

Use a 35mm back box with 2 screw flanges.

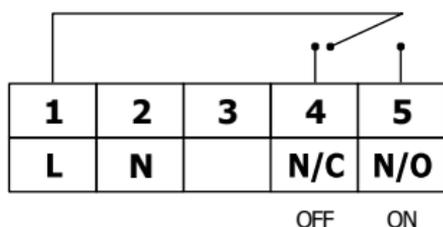
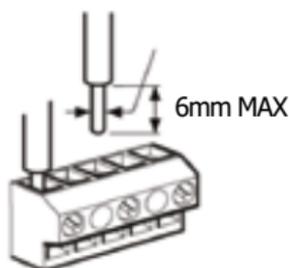
3. Route the wires through the back of the wall plate. Fit the wires to the wall-plate in accordance with the relevant diagram and in accordance with IEE regulations.
4. Select personal options by referring to DIP switch menu

5. Fit the unit onto back-plate securing from bottom to top.



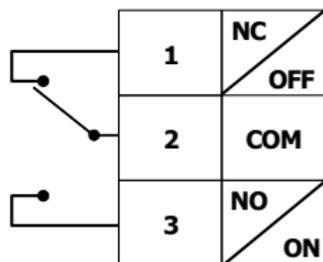
6. Ensure an appropriate fuse is fitted to the circuit before reconnecting to the mains supply.

### Wiring Diagram



**ESRTD5**

- 1 L : Live  
 2 N : Neutral  
 4 NC (OFF): Normally Closed  
 5 NO (ON): Normally Open



**N.B.** Shown in OFF position

**ESRTD5VF**

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## DIP Switch Settings - Heating

		<b>HEAT</b>
<b>COMP DELAY (TPI) OFF</b>		<b>COMP DELAY (TPI) ON</b>
<b>6 CYCLES</b>		<b>3 CYCLES</b>
<b>DELAYED START OFF</b>		<b>DELAYED START ON</b>

Option to switch to:

1. Chronoproportional (Chrono)
2. 3 or 6 Cycles (Chrono on, only)
3. Delayed Start

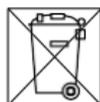
In the interests of continuous product improvement, we reserve the right to alter designs, specifications and materials without prior notice and cannot accept liability for errors.

We are continuously developing our products to bring you the very latest in energy-saving technology and simplicity. However, should you have any questions setting up your controls please email us at **sales@esicontrols.co.uk**.

**WARNING: Interference with sealed parts renders the guarantee void.**



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