ESRTD3

Digital Room Thermostat

User Instructions

Thank you for choosing ESi Controls.

All our products are tested in the UK so we are confident this product will reach you in perfect condition and give you many years of service. However, for additional peace of mind, we recommend you register your product online at **www.esicontrols.co.uk/warranty** for your extended warranty.

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What is a Digital Room Thermostat?

An explanation for householders
A room thermostat simply switches the heating system on and off based on room temperature. It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting and switching it off once this set temperature has been reached.

Turning a room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of the boiler and radiators. Neither does the setting affect how quickly the room cools down. Turning a room thermostat to a lower setting will result in the room being controlled at a lower temperature, and saves energy. The heating system will not work if a time switch or programmer has switched it off. The house insulation quality is a key factor in heating control.

The way to set and use your room thermostat is to find the lowest temperature setting that you are comfortable with, and then leave it alone to do its job. The best way to do this is to set the room thermostat to a low temperature – say 18˚C and then turn it up until you are comfortable with the temperature (20˚C is the usual preferred set point). You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one room thermostat to control the whole house (but building regulations Part L require houses above a certain size to have more than 1 heating zone).

Room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent the thermostat from working properly. Also keep out of direct sunlight

N.B. *This thermostat has the option of standard setting or TPI.*

Thermostat Display
This product has an internal non-replaceable rechargeable battery to power the display when the system is between heating cycles. To conserve power this will run for up to eight hours and if the heating intervals are more than eight hours apart, the display will "go to sleep" – although the thermostat is still active. When mains power is restored, the battery automatically recharges. This is a design feature to ensure the delayed start thermostat clears its memory at the end of every heating cycle.

What is Chronoproportional Control (TPI)?
A chronoproportional (or TPI) room thermostat makes boilers operate more efficiently and provide close accurate control. Chronoproportional control is a load compensator as it ensures that the boiler 'ON' time is reduced to a minimum and matches the boiler heat output with the heat loss. This reduces the net temperature of the return water to the boiler. This is due to the TPI (Time Proportional and Integral) advanced energy saving feature.

Rather than just a simple ON/OFF control, like other domestic room thermostats, room thermostats with TPI increases boiler efficiency by firing the boiler at regular intervals, adjusting firing duration with demand, to maintain set room temperatures, giving them a great advantage over other domestic room thermostats and achieving a constant

ambient environment for the user e.g. if a property only has a simple mechanical thermostat installed, then the energy saving benefits of a replacement high efficiency condensing boiler will not be realised as the boiler will rarely be running in condensing mode.

Heating and hot water can account for over 80% of total household energy usage. Chronoproportional (TPI) thermostats can provide great cost savings. It can be used on any boiler, with underfloor and radiator systems, zoned heating and electric heating systems. The use of an electronic thermostat with chronoproportional capability provides closer temperature control plus possible reductions of 10% in both fuel cost and carbon emissions. This thermostat has the option of standard setting or TPI.

What is Delayed Start?
The ESi Delayed Start function offers real energy savings. Save as much as 10% on your heating costs. This feature delays the start-up of the heating, depending on how warm the room temperature is at the time when the central heating is due to come on.

The heating start can be delayed for up to an hour if the room is already relatively warm, when the weather is milder for example. This often reduces how long the heating is on per day, with no comfort loss, saving you energy and money! The delayed start feature can be fully automated and needs no extra programming.

Setting the Temperature
To set the temperature, turn the dial until the desired temperature is shown in the LCD display. The LCD display will flash the desired temperature for (approximately) 5 seconds before returning to display the current room temperature.

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.

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.

Energy Saving Innovative Controls Limited

www.esicontrols.co.uk

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