

TLX1005 Electronic Room Thermostat

What is a room thermostat?

A room thermostat simply switches the heating system on and off as necessary. 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 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 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 by one degree each day until you are comfortable with the temperature. 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 you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRV's) on individual radiators. If you don't have TRV's, you should choose a temperature that is reasonable for the whole house. If you do have TRV's, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRV's.

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.

TLX1005 Room Thermostat

The TLX1005 is an electronic room thermostat with Economy mode (night setback) and Chrono-proportional control (TPI).

Thermostat position: To be placed at a height of 1.5m from the floor. Do not position on an outside wall, above a radiator, next to a door, or in direct sunlight.

For fixed wiring only

Disconnect mains supply before fitting unit, or removing cover. A switch having a contact separation of at least 3mm in all poles must be incorporated in the fixed wiring as a means of fully disconnecting the mains supply.

Installation

N.B. All installations should be carried out by a competent person and in line with current wiring regulations

1. Loosen screw on the base of the unit and separate the cover from the backplate.
2. Route wires through the back of the thermostat. Connect wires in accordance with the wiring diagram shown overleaf (Fig 1) and to current IEE regulations.
3. Fix the device to the wall with screws, 3mm max.
4. Replace cover and tighten screw.
5. Before re-connecting to the mains supply, ensure that an appropriate fuse is fitted to the circuit.

In line with a policy of continuous product development, SUNVIC CONTROLS Ltd. reserves the right to change the specification, design and materials of products without prior notice.

WARNING

The cover must not be removed unless the thermostat is isolated from the electrical supply.

**INTERFERENCE WITH SEALED PARTS
RENDERS GUARANTEE VOID**

Setting

To set the required temperature, turn the knob until the temperature on the knob aligns with the line indicator on the cover. The set temperature will be confirmed by the digital display flashing for (approx.) 5 seconds before reverting to a constant reading of the ambient temperature.


Setback Control

This thermostat has two options; MOON often called 'Set back' (Economy) mode and SUN which is the normal (Comfort) mode. When the I Terminal is activated, usually by a timer connecting the I Terminal to the Neutral of the 230V supply, the thermostat runs in MOON mode (Economy) which is SUN mode less 5°C. If there is no feed to the I Terminal, the thermostat runs in normal SUN (Comfort) mode.

Technical specification.

Contact rating	6(2)A @230V
Temperature range	5 to 35°C
Contact type	SPDT
Protection rating	IP30
Working temperature	T40°C
Storage temperature	-10°C to 50°C
Humidity limits	20% to 80% rH

HEAT ON.....display “” icon.

TIME DELAY.....“” icon blinks.

Chronoproportional control (TPI)

The Sunvic TLX 1005 electronic room thermostat is a Chronoproportional or TPI (Time Proportional Integral) control product as defined in Building Regulations, which make boilers operate more efficiently and provide close accurate control.

Chronoproportional (TPI) room thermostats provide more accurate temperature control than traditional room thermostats and uniquely also match boiler firing to the load on the system, so the boiler operates much more efficiently. These are due to their TPI (Time Proportional and Integral) advanced energy saving control. TPI increases boiler efficiency by adjusting firing duration with demand and maintains room temperatures around the set point – an advantage over all other domestic room thermostats using simple on/off control.

This product can be used on any boiler, with radiator and underfloor systems, electric heating and zoned heating systems. Heating and hot water accounts for over 80% of total household energy usage so the Sunvic TLX1005 room thermostat can make a great contribution to cutting home energy bills.

Jumper Switch Positions

The jumper switches inside this thermostat are used to control the Chronoproportional (TPI) function.

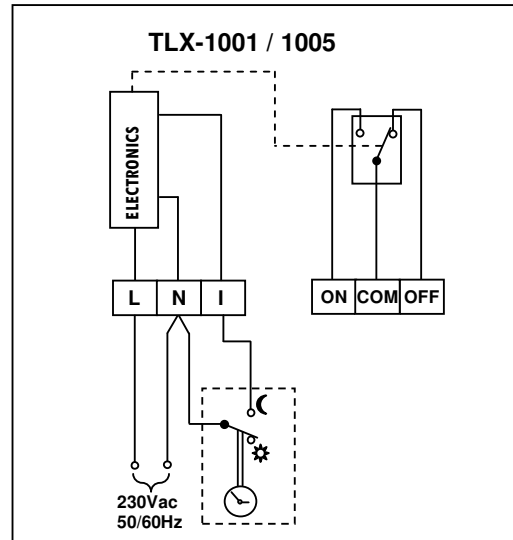
Always ensure the mains supply is disconnected before removing the thermostat cover from the backplate.

	ON	OFF
K1	COOL	HEAT
K2	DELAY OFF (COOL) PI OFF (HEAT)	DELAY ON (COOL) PI ON (HEAT)
K3	4 MIN. DELAY (COOL) 6 X 10 MIN. CYC (HEAT)	2 MIN. DELAY (COOL) 3 X 20 MIN. CYC (HEAT)

Please note, when configured for COOL mode, i.e. Jumper K 1 in the ON position, the fan, air-conditioning unit etc, is connected to the ON terminal (and not to the OFF terminal as it would be if the unit were configured for Heat).

When configured for COOL and the time delay is selected i.e. K 2 is in the OFF position, the time delay icon blinks only when the thermostat has been set previously to demand heat, then turned back to the lower temperature setting.

Fig 1



User Instruction Leaflet: LE/0222/1005/Feb.2011/Rev2

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