TLX1009 Digital 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 (TRVs) on individual radiators. If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, 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 TRVs.

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.

TLX1009 Room Thermostat

The TLX1009 is a digital electronic room thermostat with Economy mode (night setback) and Chronoproportional control (TPI). It has Volt-free switching with 2 wire installation (no need for a Neutral).

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. This unit must be installed by a competent person.

For fixed wiring only
Ensure that the fixed wiring connections to the mains supply (if used) is via a fuse rated at not more than 3 amps and a class 'A' switch having a contact separation of a minimum of 3mm in both poles.

Installation

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

1. Open the unit by slackening the retaining screw situated on the bottom edge and hinge carefully upwards. Disengage the unit from the wall plate and place it to one side for safe keeping.

2. Fix the thermostat base plate directly to a flat wall using plugs and No. 6 x 1" screws, or on to a flush mounting single conduit box type UA1 (BS4662) using M3.5 x 14 bolts. Ensure the cable used is double insulation rated for the application load (2 amps max.).

3. The thermostat base plate should be positioned with a minimum of 70mm clearance all around to allow adequate air flow.

4. Strip back wire insulation as required and securely fit wires to terminal block in accordance with the wiring diagram below. Note an EARTH connection is not necessary as the TLX 1009 meets the required double insulation standards.

5. Fit 2 AA 1.5V Batteries as indicated on base of battery compartment.

6. Fit the unit up to the wall plate by hinging from the top edge and carefully secure with the retaining screw.

7. Please ensure this user guide is left for the householder.

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

INTERFERENCE WITH SEALED PARTS RENDERS GUARANTEE VOID

i Always replace both (2) batteries at the same time. Only use 1.5 V alkaline batteries of the type LR06 (AA).

Safe Disposal

Do not dispose of batteries with household rubbish. They must be returned in accordance with the local statutory requirements

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

Setting

The TLX 1009 digital room thermostat is simple to use. The large Liquid Crystal Display continuously shows actual room temperature on the top line. Below that the set point temperature is shown with a larger typeface.

To display the temperature requested (the set point) press "+" or "-". Press the middle button marked 'SET' to confirm or just wait 15 seconds to confirm automatically.

Setback Control

This thermostat has two options; MOON often called "Set Back" (Economy) mode and SUN which is the normal (Comfort) mode. The MOON mode (Economy) is the SUN mode less 5°C.

To change mode: Press and hold the "SET" for 3 seconds to shift to MOON mode ( ). Press and hold the "SET" key for 3 seconds again to shift back to SUN mode (☼).

Chronoproportional control (TPI)

The Sunvic TLX 1009 electronic room thermostat is a Chronoproportional or TPI (Time Proportional Integral) control product as defined in the 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 TLX 1009 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.

	ON	OFF
J1	COOL	HEAT
J2	DELAY ON (COOL) PI ON (HEAT)	DELAY OFF (COOL) PI OFF (HEAT)
J3	4 MIN. DELAY (COOL) 6 X 10 MIN.CYC (HEAT)	2 MIN. DELAY (COOL) 3 X 20 MIN. CYC (HEAT)
J4	°F	°C

Reset

Press and hold "SET" key, then press "RESET" key once to resume factory default value.

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

Technical specification

Contact rating	6 (2) A @230V
Temperature range	5 to 35°C
Contact type	SPDT
Protection rating	IP 30
Working temperature	T40°C
Storage temperature	-10°C to 50°C
Humidity limits	20% to 80% rH
Low Power indication	( ) symbol.

HEAT ON……display "" icon ;

TIME DELAY….."" icon blinks.

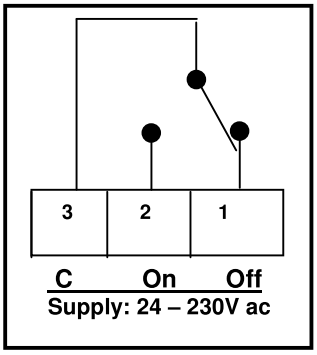
Press any key to illuminate the backlight and it will illuminate for 15 seconds.

Please note, when configured for COOL mode, i.e Jumper J 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. J 2 is in the ON 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.

Any alterations to the Jumper settings require the Reset button to be pressed for the changes to be recognised and stored.

WIRING DIAGRAM



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