TLX1012 RF 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 (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.

TLX1012 RF ROOM THERMOSTAT

The TLX1012 is a radio-frequency electronic room thermostat and receiver with TPI control (or Chronoproportional control).

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 the Receiver, or removing it from its wall box. 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

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

1. Choose a suitable position for the Receiver unit and route the wires, if possible, behind the wall to the Receiver wall box.

2. Connect the wires to the Receiver in accordance with the wiring diagram shown on page 2 and the current Wiring Regulations.

3. Position the Receiver into the wall box and tighten the screws.

4. 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 Receiver must not be removed from its wall box unless it has been isolated from the electrical supply.

INTERFERENCE WITH SEALED PARTS RENDERS GUARANTEE VOID

Setting

The TLX1012 electronic room thermostat is simple to use. The large Liquid Crystal Display continuously shows actual room temperature on the top line. The set point temperature is shown below the room temperature in a larger typeface.

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

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

TPI Control (Chronoproportional Control)

The Sunvic TLX1012 RF electronic room thermostat is a TPI (Time Proportional & Integral) control product as defined in Building Regulations, which makes boilers operate more efficiently and provide close accurate control.

TPI room thermostats provide more accurate temperature control than traditional room thermostats and also match boiler firing to the load on the system, hence the boiler operates much more efficiently. 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, hence the Sunvic TLX1012 thermostat can make a significant contribution to cutting home energy bills.

Jumper Switch Positions

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

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

|	ON	OFF
K1	COOL	HEAT
K2	DELAY ON (COOL) P1 ON (HEAT)	DELAY OFF (COOL) P1 OFF (HEAT)
K3	4min DELAY (COOL 6 X 10min CYC (HEAT)	2min DELAY (COOL) 3 X 20min CYC (HEAT)
K4	°F	°C

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.

WIRING DIAGRAM
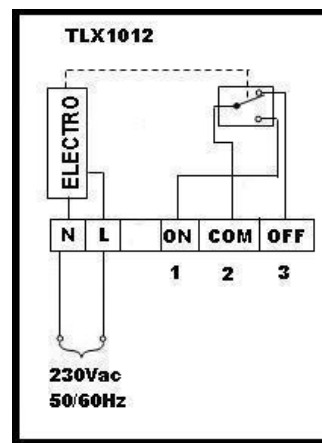
Linking the thermostat to the Receiver

On initial power up the green and red LEDs, on the Receiver, will come on for 3 seconds and then both will go out.
To Link, press the M/A button on Receiver for 10 secs. The green LED should flash. Next, hold down SET button on Thermostat for 3 secs. The •))) symbol should flash 3 times. The green LED on the Receiver should go off. The Receiver is now connected via RF to the Thermostat.

Raising the SET temperature above the room ambient temperature will cause the Thermostat to demand heat and the red LED, on the Receiver, should come on. Lowering the SET temperature below room ambient will cause the thermostat to be satisfied and the red LED, on the Receiver, to go off.

To operate manually, press the MANUAL button on the receiver (the green LED comes on) then press the M/A button (the red LED comes on) and the relay switches to demand heat. To switch off manually, press the MANUAL button, press the M/A button and then press the MANUAL button again to return to the automatic state.

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 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.

N.B. If the mains power is lost the RF link will automatically be restablished after a few minutes