

# Model: 2029T

<b>Sensor:</b>	K, T, J, N, R, S Thermocouple plug
<b>Connector Type:</b>	2 pin mini plug
<b>Units:</b>	°C/°F
<b>Operating Temperature:</b>	-10°C to +50°C
<b>Operating Range:</b>	-200°C to +1600°C (Dependent on Thermocouple input)
<b>Accuracy of Unit Only:</b>	± 1 Digit ( 0.1°C Low scale; 1°C High scale ) 0.1% of reading ±0.2°C above -100°C 0.5% of reading ±0.2°C below -100°C


## Before Use

Please ensure this unit is suitable to application.

Check temperature range and thermocouple type to ensure suitability for application.

## Power


The instrument requires two AA or equivalent cells. These are not supplied with the unit.

When the batteries require changing the following symbol will be displayed: 


Please ensure the screws holding the battery compartment are firmly tightened when inserting or replacing batteries to ensure the IP65 rating is maintained.

Press ON key to turn unit ON. Press OFF key to turn unit OFF.

The unit will switch OFF automatically after 12 minutes, unless any key is activated.






To disable automatic switch off, hold  Key when the unit is being switched on. This will disable the automatic switch-off function until the unit is switched off.

## Hold Function


To enable the Hold Function, press the "Hold"  button

## Speedread

This is a function that gives an indicative reading within 14 seconds for poor thermal conductivity items. The use of this function will reduce the accuracy to ±2°C. For correct Speedread measurements the probe must be in good thermal contact with medium under test prior to activating the function. A steep temperature gradient or wide temperature and item under test are required. Speedread is suitable for core frozen food measurements and hot/cold liquids. Good thermal contact is unlikely when a general purpose or between pack probe is used on the surface of food produce. (Not suitable for use with between pack probe).

Insert probe and press  key. The  symbol will appear and the display will flash fast until the correct reading appears and the  symbol will be displayed. This reading will automatically be held. Press  key to return to normal mode. If it is not possible to obtain a faster reading due to the similarity of probe tip temperature and the temperature of item to be measured, then the  symbol will be cancelled and the instrument will return to normal mode.

## C/°F Selection

Select the desired temperature scale by pressing  key. The selected scale is confirmed by °C or °F symbol on the display, and is retained when the instrument is switch off.

## Range lock

All instruments have a 0.1° resolution from -199.9°C to +199.9°C and a 1° resolution outside this range. To fix the display to a 1° resolution, press the **A/R** key. To cancel the mode, press the **A/R** key again and A/R will be shown on the display.






## Thermocouple selection

Ensure thermocouple is connected.

Press **KTJNRS** key to select the available type as shown by K, T, J, N, or S on the display.

This selection is retained.

### **MAX/MIN Recorder**

Press  key to start. The instrument will display alternating   symbols and current reading. Press again to display the maximum temperature reading and  symbol will be displayed. Press again to display the minimum temperature &  symbol will be displayed. Press again to return to the actual temperature display.

NOTE: To reset MAX/MIN recorder function, switch instrument off.

NOTE: Some functions maybe inhibited while information is stored in MAX/MIN mode. This is to prevent inadvertent parameter mixing whilst in any of the above modes.

### **Probe Connection**

The Probe is connected into the socket at the top of the unit, please ensure correct polarity.

**Warning:** Do not bring the probe into contact with any item connected to a hazardous voltage. A voltage exceeding 30V RMS or 42.4V peak with respect to earth or ground would be considered hazardous.

### **Sensor open circuit or over-range/under-range indication**

If the sensor is open circuit, the display will show O-C as long as condition exists.

NOTE: If **MAX/MIN** mode is selected, **O-C** will not be cleared even after the open circuit has been cleared. If over range or under range occurs the instrument will display **OUT**.

### **WARRANTY**

This instrument has been tested following completion, and is warranted against faulty workmanship and materials for one year from the date of purchase.

During the warranty period any defective instrument will be repaired or replaced at the discretion of the manufacturer.

This warranty does not cover damage or failure resulting from misuse, accident, modification, adjustment or any alteration with the internal arrangement of the instrument shall absolve the manufacturer from any liability in respect of the instrument.