The TEK500 is a microwave leakage detector with an audible warning device and a self test feature. It is designed and developed to comply with the specification and requirements of BS5175:1976, Safety of Commercial Electrical Appliances using Microwave Energy for Heating Foodstuffs.

Power density is indicated at 1, 5 and 10mW.cm⁻² and is suitable for detecting exposure levels specified in NRPB-GS11, Guidance as to the Restrictions on exposures to Time Varying Electromagnetic Fields and the 1988 Recommendations of the International Non-Ionizing Radiation Committee. Calibrated over a wide, adjustment free operating temperature range.

The unit is supplied in an outer case which also contains a beaker and a thermometer. This allows measurement of the microwave power output by measuring the temperature rise in a known volume of water after a fixed period of time.

As with many test instruments visual inspection of the integrity of the microwave casing and in particular, the door seals, is required prior to use. Direct exposure to microwave radiation will damage both the instrument and the operator.

Technical Specification
Supply: 9V alkaline battery, MN1604 or equivalent (not included).
Frequency of Operation: 2450±25MHz.
Power Density Range: ±1dB for plane wave of all polarisations.
Cardinal Points: 1, 5, 10mW.cm⁻²
Response of Step Output: 2-3 seconds.
Overload Capacity: 50mW.cm⁻²
Indicators: LED (green) - battery OK
LED (yellow) - 1mW.cm⁻²
LED (red) and audible tone (3kHz) - microwave leakage above permitted safety level.
Spacer: 50mm including cone.
Operating Temperature: -5 to 40°C.
Case: Yellow ABS.
Dimensions: 150 x 64 x 30mm.