

## **Infra-Red Probe**

### **Introduction**

The Infra-Red Probe consists of a phototransistor sensor with maximum response in the infra-red region of the spectrum at around 940nm. This is near to the visible region of the spectrum.

The phototransistor is mounted on a fibre glass wand which enables it to be scanned across the area to be investigated. The part of the sensor which is sensitive to infra-red is the square black device mounted on the end of the wand.

The probe should be used in conjunction with a suitable digital voltmeter with a resolution of 0.001V d.c. When connected to the voltmeter the probe will produce a reading proportional to the amount of infrared radiation incident on its sensitive face.

into its spectrum. Scan the infra-red sensitive area of the wand across the spectrum noting the reading on the digital meter. The reading on the meter will be low and fairly constant. Now scan off the red end of the spectrum and it will be found that the meter reading peaks several millimetres away from the visible light showing that infra-red radiation, which is invisible to the human eye, is present.