

Infra-Red Probe IPC-4566-W



Introduction

The Infra-Red Probe consists of a phototransistor sensor with a 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 0.001VDC (e.g. 2VDC Voltmeter IPC-1904-M). When connected to the voltmeter the probe will produce a reading proportional to the amount of infra-red radiation on its sensitive face.

Suggested Experiment

Using a prism, split the light from a light source into its spectrum. Scan the infra-red sensitive area of the wand across the full spectrum of light, noting the reading on the voltmeter. The reading on the voltmeter will be low and fairly constant while scanning the visible light. Now scan past the red end of the spectrum and it will be found that the voltmeter reading increases when the wand is positioned several millimeters away from the visible red light, therefore showing that infra-red radiation, which is invisible to the human eye, is present.

User Instructions

IPC ELECTRONICS LTD.

**INFRA-RED PROBE
IPC-4566-W**

IMPORTANT

Please read these instructions carefully
before using apparatus.

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