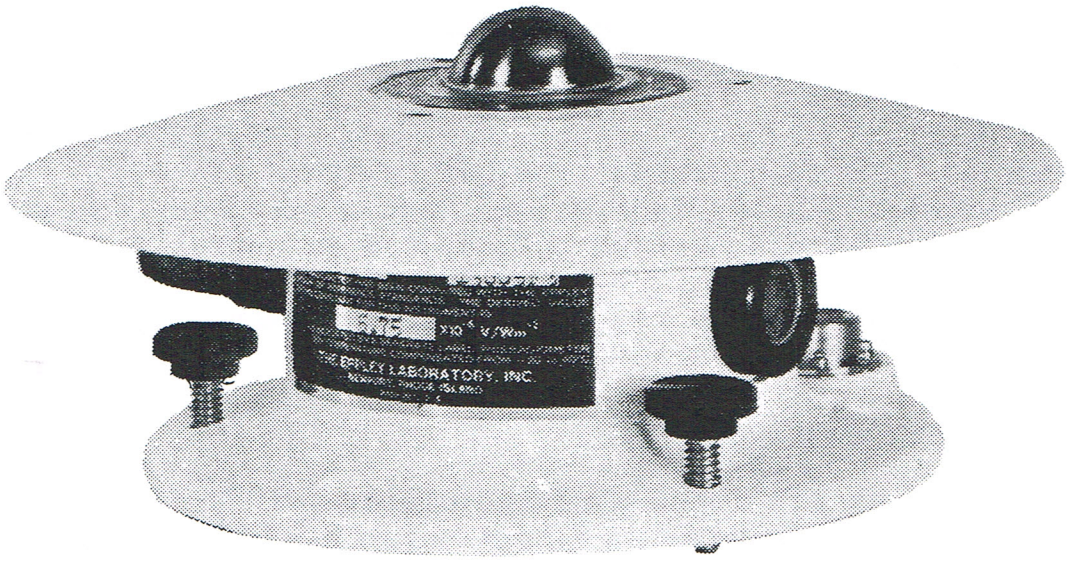
EPPLEY PRECISION INFARED
RADIOMETER (PYRGEOMETER)

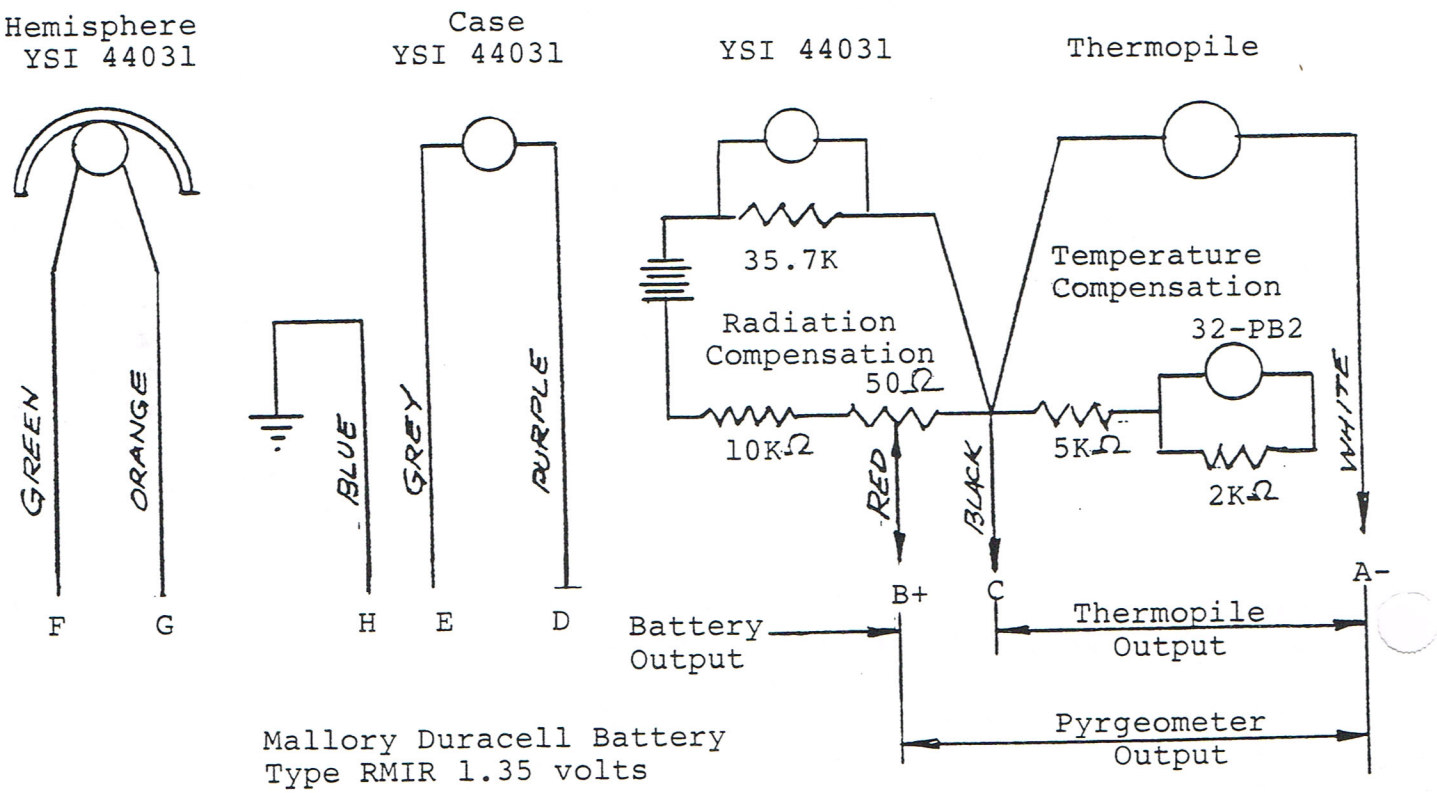
Model PIR



INSTRUMENT CHARACTERISTICS

Sensitivity	5 microvolts/watt meter^{-2} approx.
Impedance	700 ohms approx.
Temperature dependance	+ 2 per cent, -20 to 40°C (nominal)
Linearity	$\pm$ 1 per cent, 0 to 700 watts m^{-2}
Response time	2 seconds (i/e signal)
Cosine response	better than 5 per cent from normalization, insignificant for a diffuse source
Orientation	no effect on instrument performance
Mechanical vibration	capable of withstanding up to 20g's
Calibration	blackbody reference

Fig. 3



A through H are pin designations on both portions of the connector.

The precision thermistor types and the resistance values are those typically used.

Fig. 4. Schematic for elimination the effect of detector temperature on the measurement of infrared radiation fluxes (including temperature compensation circuit and connections for checking thermopile and battery outputs)