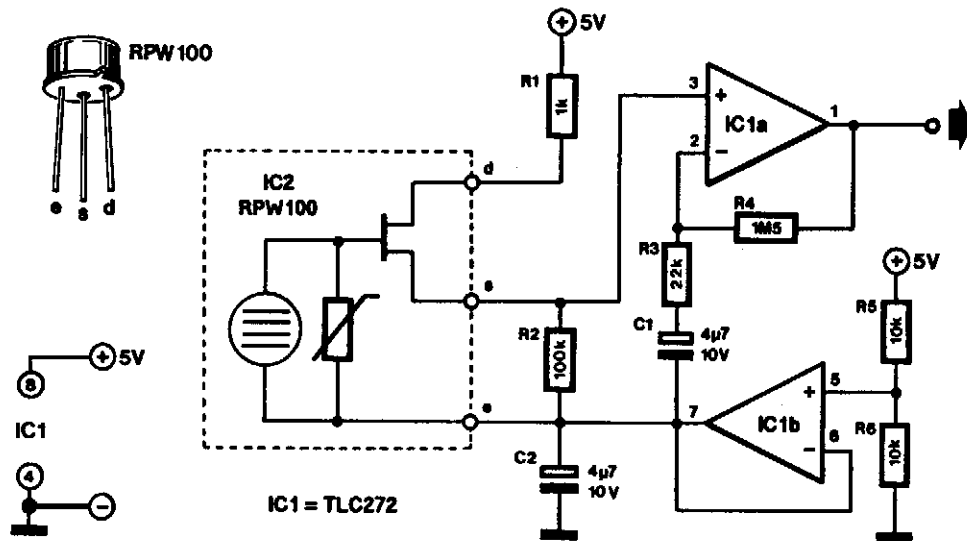


THERMALLY OPERATED DIRECTION DETECTOR



ELEKTOR ELECTRONICS

Fig. 24-1

A heat-sensitive sensor can be used to construct a direction detector. Such a sensor reacts to all animal heat. The one used in this design has a sensitive surface that has been divided into two. It, therefore, makes a difference, whether the heat approaches from the left or the right. The indication for cold objects is, of course, exactly the opposite.

Circuit IC1B forms a symmetric supply. Terminal s of the sensor is its output. The signal at s is amplified in IC1A by a factor of about 70 before it is available at the output of the detector.

To obtain good directivity, it is best to place the sensor behind a single narrow slit, rather than behind the usual raster of a multifaceted mirror. The circuit draws a current of only a few mA from a 5-V supply.