

OPTIC POSITION SENSOR**ABSTRACT**

The present invention involves an apparatus and a method for optically detecting and determining the angular position of a target. The apparatus comprises a pair of optic sensors arranged so that at least a portion of their sensing areas overlap. Their overlapping areas define the total sensing, or active sensing, area for the apparatus. Each of the optic sensors in the apparatus senses light, or other optically sensible transmission, either projected or reflected from a target positioned within the total sensing area and produces a signal relative to the amount of light sensed. The signals are then interpreted to determine the angular position of the target based on the relative signals from the optic sensors. The method of the present invention determines the angular position of a target within an area, defined by the overlapping sensing areas of a pair of optic sensors, by interpreting the relative signal intensities from the pair of optic sensors. Once the angular position is determined, the distance of the target from a line either perpendicular to or parallel to the center line of the sensor array can be calculated if the other quantity is known.

Figure 1

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