

SUMMARY

Single-channel laser rangefinder with aspherical concentrating mirror

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Annotation

The paper deals with the design of laser rangefinders. It is proposed to be used aspherical mirror with hole in single-channel laser rangefinders. A hole made in an aspherical mirror conducts the laser beam to the lens and at the same time without losses the reflection of the lens focused on the light is directed towards the photodetector with minor losses. In addition, a mirror with an aspherical surface, unlike flat, it focuses on light and the surface of the camera allows for smaller focal varnish. Mirror focus by changing the distance, it is possible to get the distance to the photo detector adjust so as not to change the focal length of the lens.