

Annotation

The task of bachelor project is to develop a device to measure distance. This device is an optical rangefinder.

Today the question of distance measurement with high accuracy in a short period of time is very important. Especially when it comes to construction. Also, the project examined the theoretical basis of modern methods of laser rangefinding.

The project was developed by optical phase modulation with rangefinder stream at a frequency of 5 MHz, which allows you to measure the distance to the object in the range 0 ... 15 m with accuracy of ± 2 cm. In this rangefinder was developed and designed optical system, designed electric circuit, select the best design materials, designed and introduced error correction factors.