

## **Abstract**

This diploma project consists of 63 pages, 23 illustrations, 30 formulas, 21 literary sources.

**Key words:** ultrasonic control, noise meter

In the diploma project, the study of the principles of operation of various types of devices for measuring noise.

Structural and functional diagrams are made. A schematic diagram and printed circuit board based on shredders were developed. On the basis of the performed calculations an experimental installation was developed.

As a **result of the study**, a type of instrument was used to measure noise, or rather a noise meter.

**The purpose of the work** is to study existing instruments for measuring noise and selecting a specific type. Its development and drawing up of documentation for it.

**The object of the study** is the process of noise formation with ultrasound non-destructive control

**Subject of research** - devices for measuring noise

**Scientific novelty** - The device is designed so that the overall error of the noise meter is very small