

**TRAINER SISTEM AUDIO DENGAN *TROUBLESHOOTING* PADA MATA
KULIAH SISTEM AUDIO PROGRAM STUDI PENDIDIKAN TEKNIK
ELEKTRONIKA UNIVERSITAS NEGERI YOGYAKARTA**

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ABSTRAK

Tujuan dari penelitian yaitu mengembangkan media pembelajaran trainer kit Sistem Audio, mengetahui unjuk kerja dan tingkat kelayakan penggunaan trainer kit Sistem Audio pada mata kuliah Sistem Audio.

Metode penelitian yang digunakan adalah *Research and Development (R&D)* dengan menggunakan model ADDIE yang meliputi *Analyze, Design, Develop, Implement, Evaluate*. Objek penelitian berupa trainer kit beserta panduan praktik Sistem Audio. Pada tahap implementasi dilakukakan uji coba penggunaan trainer kit Sistem Audio yang melibatkan 20 mahasiswa Program Studi Pendidikan Teknik Elektronika FT UNY.

Hasil penelitian adalah (1) pengembangan trainer kit Sistem Audio yang tersusun dari rangkaian preamp mic, tone control, mixer audio, amplifier OCL, dan protektor speaker dengan titik pengukuran dan simulasi kerusakan (*troubleshooting*). Trainer kit Sistem Audio juga dilengkapi dengan buku panduan penggunaan dan panduan praktikum. (2) Hasil pengujian kinerja trainer kit Sistem Audio diperoleh penguatan tegangan preamp mic, sebesar 24,51 dB, mixer audio sebesar 23,92 dB dan amplifier OCL sebesar 38,84 dB. (3) Tingkat kelayakan media pembelajaran trainer kit Sistem Audio menurut ahli media sebesar 87,5% dan ahli media sebesar 82,5%. Sedangkan uji kelayakan pengguna oleh mahasiswa sebesar 83,6%. Hal ini menunjukkan bahwa trainer kit Sistem Audio yang dikembangkan sangat layak digunakan pada mata kuliah Sistem Audio.

Kata kunci : trainer kit, sistem audio, *troubleshooting*

**AUDIO SYSTEM TRAINER WITH TROUBLESHOOTING IN THE SYSTEM AUDIO
COURSE PROGRAM STUDY FOR ELECTRONIC ENGINEERING EDUCATION IN
YOGYAKARTA STATE UNIVERSITY**

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ABSTRACT

The purpose of this research is to develop the Audio System trainer kit learning media, find out the performance and feasibility of using the Audio System trainer kit in the Audio System course.

The research method used is Research and Development (R&D) using ADDIE models which include Analyze, Design, Develop, Implement, Evaluate. The object of research is a trainer kit along with an audio system practice guide. At the implementation stage, a trial was carried out using an Audio System trainer kit involving 20 students of the Electronic Engineering Education Study Program, Faculty of Engineering, Yogyakarta State University.

The results of this research are (1) the development of an Audio System trainer kit composed of a series of mic preamp, tone control, audio mixer, OCL amplifier, and speaker protector with measurement points and fault simulation (troubleshooting). The Audio System trainer kit is also equipped with a user manual and a practicum guide. (2) The results of the performance testing of the Audio System trainer kit obtained the strengthening of the preamp mic voltage, by 24.51 dB, the audio mixer by 23.92 dB and the OCL amplifier by 38.84 dB. (3) The feasibility level of learning media for Audio System trainer kits according to media experts is 87.5% and media experts is 82.5%. While the user feasibility test by students amounted to 83.6%. This shows that the Audio System trainer kit developed is very suitable for use in Audio System courses.

Keywords: *trainer kit, audio system, troubleshooting*