

Laboratory kit "Radio electronics"



DESCRIPTION

This kit gives children the ability to work on radio electronics hands-on experiments as a part of a supplementary education program.

This kit is designed as a modular platform and can help you teach introductory analog communications and signals transmission topics in engineering curricula.

Simple layout of an electric circuit built on interchangeable modules is easy to understand both for students and teachers.

Each topic included in the curriculum has a theoretical part and detailed instructions for the experiment.

FUNCTIONAL FEATURES

- ✓ Laboratory kit modular design
- ✓ Reliably protected electric circuit, modules, and kit elements
- ✓ Theoretical materials to each topic
- ✓ Hands-on experiments step-by-step guide

SOFTWARE

- ✓ The software is developed in NI LabVIEW graphical programming environment.
- ✓ The software is intuitive and has user-friendly interface is designed for easy adoption.
- ✓ Graphical and digital representation of results

SPECIFICATIONS

Main modules

- ✓ Main Board (modules platform) - 2 pc.
- ✓ Receiving antenna module - 1 pc.
- ✓ Transmitting antenna module - 1 pc.
- ✓ Analog FM receiver module - 1 pc.
- ✓ Analog FM transmitter module - 1 pc.
- ✓ Digital AM receiver module - 1 pc.
- ✓ Digital AM transmitter module - 1 pc.
- ✓ Loudspeaker module- 1 pc.
- ✓ Microphone module- 1 pc.

Auxiliary elements

- ✓ Set of safe connecting wires - 1 pc.
- ✓ Power supply - 1 pc.

HANDS-ON EXPERIMENTS

- ✓ Transmission Theory
- ✓ Amplitude shift keyed (ASK) modulation and demodulation
- ✓ Frequency shift keyed (FSK) modulation and demodulation
- ✓ Frequency modulation (FM) modulation and demodulation
- ✓ Signal receipt and transmission
- ✓ Sound signal receipt and transmission using frequency modulation