

Laboratory kit "Digital electronics"



DESCRIPTION

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

This kit is designed as a modular platform for building various electric circuits based on digital electronics components.

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) - 1 pc.
- ✓ AND logic element module (2 elements per module) - 1 pc.
- ✓ OR logic element module (2 elements per module) - 1 pc.
- ✓ NOT logic element module (2 elements per module) - 1 pc.
- ✓ Buffer module (2 elements per module) - 1 pc.
- ✓ Logic Load module - 1 pc.
- ✓ RS-trigger module - 1 pc.
- ✓ JK-trigger module - 1 pc.
- ✓ Eight-position switch module - 1 pc.
- ✓ Seven segment indicator module - 1 pc.

Auxiliary elements

- ✓ Set of safe connecting wires - 1 pc.

HANDS-ON EXPERIMENTS

- ✓ AND logic element
- ✓ OR logic element
- ✓ NOT logic element
- ✓ NAND logic element
- ✓ NOR logic element
- ✓ Signal blocking and bypassing based on AND and OR logic elements
- ✓ Digital buffer
- ✓ RS триггер
- ✓ JK -trigger
- ✓ 8-bit switch
- ✓ 7-segment indicator