

Y-0020 - 01
BASIC LEVEL DIGITAL ELECTRONIC TRAINING SET



The Basic Level Digital Electronics Training Set is designed for basic digital electronics applications. The set consists of basic logic gates, power supply, oscillator and logic level indicators.

2 mm sockets and 2 mm connection leads in different colors are used in the set.

The set is placed with cover in a shock proof separable case. It is designed for using horizontally and is suitable for storing vertically.

The theory, application areas, the definition of the components and their figures in practice are given detailed in introduction of every subject in the Experiment Book. The Book contains the chapters of "Preparation information" supported with circuit diagrams and graphics, "how to do the experiment" where the real pictures are used and "conclusion" where the results and the questions regarding the experiment are included.

TECHNICAL SPECIFICATIONS

Supply Voltage	:	220V AC / 50Hz ±10%
DC Fixed TTL Power Supply	:	+5V DC / 1.2A / Electronics controlled
TTL Pulse Generator	:	1Hz - 20KHz, variable
Pulse Switch	:	Positive and Negative



APPLICATION COMPONENTS ON THE SET

Binary Switch (with LED Indicator, 12 Bit, TTL)	1 Pcs
8 Bit Logic indicator	1 Pcs

SYSTEM PRESENTATION

Main Unit	:	1 Pcs, (Dimensions 400mm x 45 - 120mm x 420mm), Metal Case
2mm Connection Leads	:	24 Pcs, in 4 different colors
Power Cable	:	1 Pcs, IEC, 2m
Experiment Book	:	1 Pcs



Y-0020 - 01
BASIC LEVEL DIGITAL ELECTRONIC TRAINING SET



PRACTICAL EXPERIMENTS ON BASIC LEVEL DIGITAL ELECTRONICS TRAINING SET

- Obtaining the truth table of 3 - input AND Gate
- Obtaining the truth table of OR Gate
- Obtaining the truth table of 3 - input OR Gate
- Obtaining the truth table of INVERTER Gate
- Converting AND Gate to OR Gate by using INVERTER
- Converting OR Gate to AND Gate by using INVERTER
- Obtaining the truth table of NAND Gate
- Using NAND Gate as an INVERTER
- Obtaining the truth table of 3 - input NAND Gate
- Obtaining the truth table of NOR Gate
- Using NOR Gate as an INVERTER
- Obtaining 3- input NOR Gate using 2 - input NOR Gates
- Obtaining the truth table of EXCLUSIVE-OR Gate
- Generating EXCLUSIVE-OR Gate using NAND Gates
- Obtaining the truth table of EXCLUSIVE-NOR Gate
- Examination of THREE - STATE Buffer)
- Generating RS Flip-Flop using NOR Gates
- Generating RS Flip-Flop with NAND Gates
- Examination of R-S Flip Flop with timer
- Examination of J-K Flip-Flop
- Examination of D Flip-Flop
- Examination of RS Flip-Flop
- Examination of 4016 (4066) Analog switch integrated circuit
- Full adder design with KARNAUGH Maps
- Squaring design with KARNAUGH maps
- Circuit Design with KARNAUGH maps