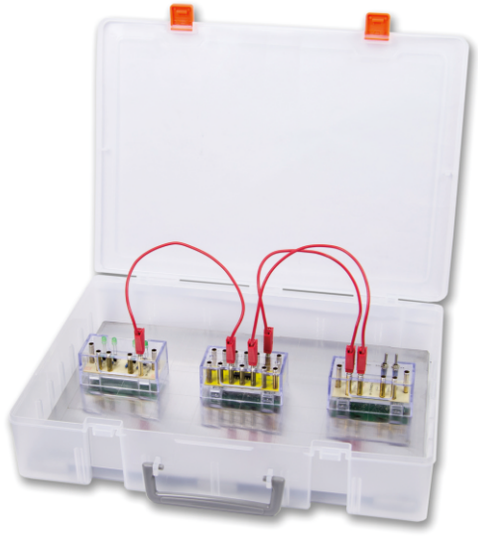
BASIC LOGIC GATE TRAINING SYSTEM F1-2

Features

The training system is used in the digital electronic circuits, it can be completed according to the F1-2 experiment manual. Totally 16 recommend basic logic gate experiments are contained in this system with the corresponding components and more experiments can be designed to do by yourself.



System contain:

1. Gird panel and plastic box	1 pcs
2. Components	15 pcs
3. Leads	20 pcs
4. Experiment manual	1 pcs

EXPERIMENTS CONTENT

I Basic Logic Function

1 OR logic gate
2 INVERT logic gate
3 OR + INVERT = NOR logic gate
4 NOR logic gate
5 2-input NAND logic gate
6 4-input NAND logic gate
7 AND - OR - INVERT logic gate

II Boolean Algebra

1 $A=\overline{\overline{A}}$

2 $A+1=1$, $A+0=A$, $A+A=A$, $A+\overline{A}=1$

3 $A \cdot 1=A$, $A \cdot 0=0$, $A \cdot A=A$, $A \cdot \overline{A}=0$

4 Logic equation

III De Morgan's Theorem

$A+B=\overline{\overline{A} \cdot \overline{B}}$, $\overline{A}+\overline{B}=\overline{A \cdot B}$, $A \cdot B=\overline{\overline{A}+\overline{B}}$, $\overline{A}+\overline{B}+\overline{C}=\overline{A \cdot B \cdot C}$,
$\overline{\overline{A} \cdot \overline{B} \cdot \overline{C}}=A+B+C$, $A \cdot C+B \cdot C=(A+B) \cdot C$

IV Exclusive-OR and Its Applications

1 Exclusive-OR
2 Half-Adder, Half-Subtractor
3 Binary Comparator
4 Parity Generator