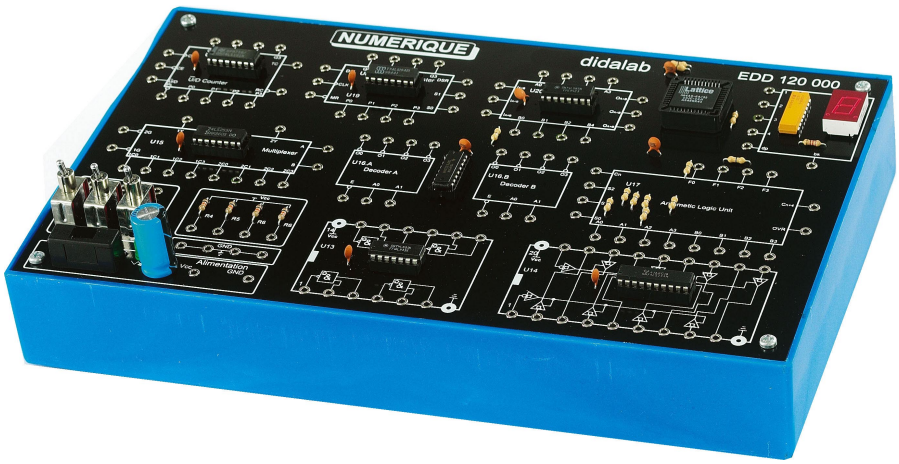


EDD – 120

DIGITAL LOGIC TRAINER

MAIN CHARACTERISTICS :

The **EDD - 120** Trainer is constituted of the **EDD120001** Board with accesssories. Linked to the **EDD - 100** Range, it enables the study of the basic digital circuits : Counters, comparators, registers, multiplexers et demultiplexers, Arithmetic and Logic Units, such as :

Multiplexing Functions :

♦ 4 * NAND with 2 open collector inputs,
♦ 2 * 4 buffers (3 states),
♦ 1 * 2 x 4/1 multiplexer
♦ 1 * 2 x 2/4 demultiplexer ,
♦ 1 * 7 segments display with encoder and carry circuit.

Digital Functions :

♦ 1 * 4 bits // serial register , ♦ 1 * 4 bits programmable counter/ decounter ♦ 1* 4 bits adder ♦ 1* 4 bits comparator ♦ 1* 4 bits Aritmethic and Logic Unit.

Ancillaries Functions :

♦ This simulator is designed to be used in conjunction with the **EDD-100** Combinatory Logic Trainer, it has 3 logic state inverters, 4 pull-up resistors and 4 ground sockets.

AREAS OF APPLICATION :

Basic and continuous training :
Fast and technical up-to-date training to logic and digital basic functions in :

♦ **Professional Training Schools,**
♦ **Technical Colleges and Higher Levels Schools**,
♦ **Universities.**

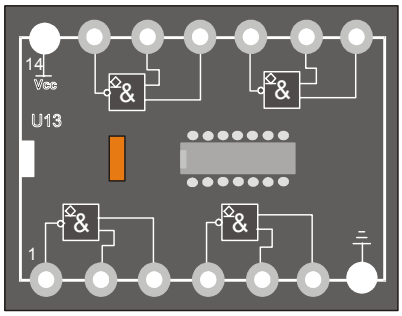
Safety Devices :

♦ Overvoltage electronic protection circuit.
♦ Safety fuse.
♦ For easier maintenance, all active components are plugged on sockets.
♦ *Optional* : All active components are hold on the socket by a stirrup.

SPECIFIC DESIGN :

The Trainer front-panel is following as closely as possible the Manufacturer's technical Documents, in order to ensure a quick and efficient training. The connectors have the same plugging as given in the « DATA-SHEET ».

Example of open collector NAND fonction, Ref. 7401.



Packing

Weight : 4 Kg
Dimensions : 284 x 168 x 42 mm

EDD120001, Digital Logic Board : Technical Specifications

1 * programmable counter / decounter.

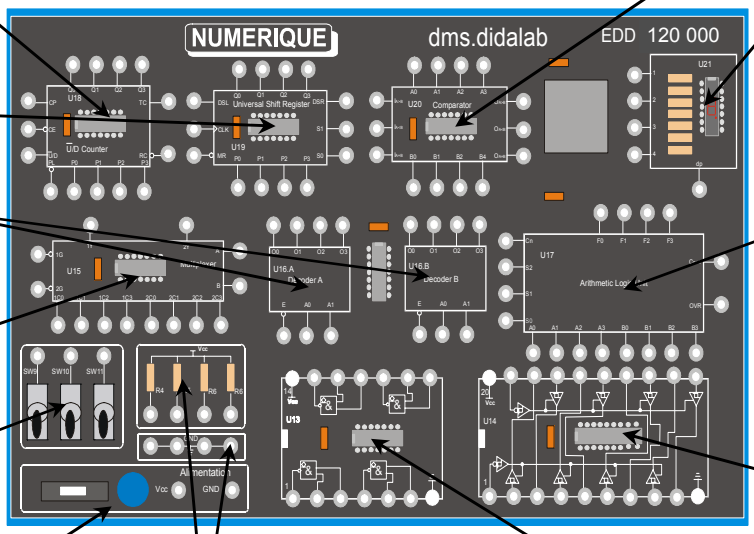
1 * serial to // register.

2 * 2 to 4 demultiplexers .

2 * 4 to 1 multiplexers.

3 * level generation keys.

5VDC external Power Supply (from EDD 038 150).



1 * 4 bits. comparator.

7 Segments display with carry and decoder.

1 ALU circuit, 8 opérations : Set, Reset, addition, subtraction, OR, AND, XOR.

2 * 4 buffers (1 bit), 3 * common control state inverters.

4 * PULL-UP resistors and 4 * ground sockets.

4 * 2 inputs open collector NAND circuits.

Experimental Work :

EDD 120 040 : Trainer's Manual,
EDD 120 050 : Student's Manual, topics:

study of multiplexing/demultiplexing :
- 2 inputs open collector NAND function,
- 3 states buffers,
- 2 bits > 4 channels demultiplexer ,
- 4 to 1 multiplexer,
- 7 segments binary decoder.

Carrying out of :

- 4 inputs NAND from 2 inputs open collector NAND,
- 4 bits multiplex Bus

Study of digital functions :

- Serial to // and // to serial inputs register,
- 4 bits programmable counter / decounter ,
- 4 bits binary comparator,
- Aritmethic and Logic Unit,

Carrying out of :
- 8 bits programmable counter ,
- 4 bits multiplex bus to register downloading,

Accessories :

PEM 061 190 : set of 10 * 2 mm red patching leads , 10cm length,
PEM 061 440 : set of 10 * 2 mm red patching leads , 25cm length,
PEM 061 600 : set of 10 * 2 mm red patching leads , 50cm length.

didalab ENSEIGNEMENT SUPERIEUR

Z.A. La Clef St Pierre - 5, rue du Groupe Manoukian 78990 ELANCOURT France
Tél. : 33 (0)1 30 66 08 88 - Télécopieur : 33 (0)1 30 66 72 20
e-mail : ge@didalab.fr - Web : www.didalab.fr