

Nvis 6563 Arithmetic and Logic Unit Trainer is a compact, ready to use digital electronics experiment board. This product is useful for students to get a practical insight into the working of an ALU and understand the concept behind its operation.
An arithmetic and logic unit (ALU) is the core of a CPU in a computer. It is a multi-operational, combinational-logic function $n$ that performs 2 logic and arithmetic operations each, on a pair of $n$-bit operands.
The specific operation that is performed by an ALU is determined by a specific binary code applied to its Function Select inputs. These combinations of binary codes are interpreted within the ALU and the final output of the operation is obtained at output of the ALU.
Nvis 6563 has logic high-low input facility and LEDs for visual indication of the input-output states. This product also features the selection of Arithmetic or Logical mode of operation along with the facility of selection of different functions. $\mathrm{A}+5 \mathrm{~V}$ adaptor is also provided for power supply.

## Features

- Stand alone system
- Easy switching between arithmetic and logic mode operations
- 16 arithmetic operations
- 16 logic operations
- Easy illustration of ALU operation
- LEDs for visual indication of input and output logic states
- Online product tutorial


## The setup performed following experiments

- To study ALU for performing different logic operations
- To study ALU for performing different arithmetic operations
- To study ALU for performing comparison of two 4-bit binary numbers

Technical Specifications

| Input | +5V DC |
| :---: | :---: |
| Logic levels |  |
| +5V | HIGH(Logic 1) |
| OV | LOW (Logic 0) |
| Dimensions (mm) | W $240 \times$ D $345 \times \mathrm{H} 110$ |
| Weight | 1 kg (approximate) |
| LED Indication | LED will be 'on' for logic high state and will be 'off' for logic low state |

