



RES EDUCATIONAL KIT

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ABSTRACT

This Reseducational Kit stand from Resistor and Educational kit. It is design to teach and learn about the resistor from the lower age students in the electrical students for example secondary students that has no knowledge about the simple basic in electrical course. With this educational kit they will know about the electrical circuit because from the lesson in studies of the electrical coursework resistor and voltage is the first thing should know to the next step in electrical course.

The calculation that has calculated in manually has been optimized by the Arduino Uno. For make the Arduino Uno calculate the calculation, the coding of the calculation is been create as a formula that has learnt. The calculation that has we create are based on the Voltage Divider Rule (VDR). We cannot use the basic of the formula to find the voltage using Ohm's Law. To make the circuit are equivalent to our calculation we use the fit value of R_2 and user only find the R_1 based on the circuit that has we create to them or the circuit that they want to find.

With some of the components and materials such as keypad 4x4, LCD Display 16x2, buzzer, some resistors and the LED light connect to the Arduino Uno that act as brain to make this project are more like as a electronic game board that will be used for the fun learning and teaching with using the educational kit. This educational kit can make it calculate the value of the circuit resistor that has learnt in the circuit class theory.

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