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FINALREPORT: ACID BATTERY TESTER

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ABSTRACT

In this battery tester project I am innovate on how to measure voltages of the battery by using a simple device. Secondly I am planning to study and analyse a fast battery test without the need of power supply or expensive moving-coil voltmeters. Then, this project will use integrated circuit (IC), capacitors and resistors as the main components. The function of the (IC) actually to replace many separate electronic components which have been used to build a particular electronic circuit.

The result will be getting by measuring voltages of the battery through the components. The methodology of doing this project by setting SW1 as shown in the circuit diagram, the device can test 3V to 15V batteries. When SW1 is switched to the other position, only 1.5V cells can be tested. When P1 is open, a very light load is applied to the battery under test and Q3 base is biased in order to maintain LED D7 in the off state. Finally when testing 1.5V batteries, the circuit formed does not work well at this supply voltage, so a 150mA load current is applied to the BUT by means of the 10 Ohm resistor R3 after switching SW1A. Q3 bias is also changed via SW1B.

As the conclusion, this battery tester project is applicable for those who are desire to measure their battery. This battery is made to easier the consumer to bring it anywhere as it is portable. In addition, the price at the market also is very cheap and affordable to buy by people. Life is much easier if every people could have one of it at home as it is made to measure small electrical equipment.

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