

BATTERY VOLTAGE INDICATOR

MINI PROJECT

DONE BY

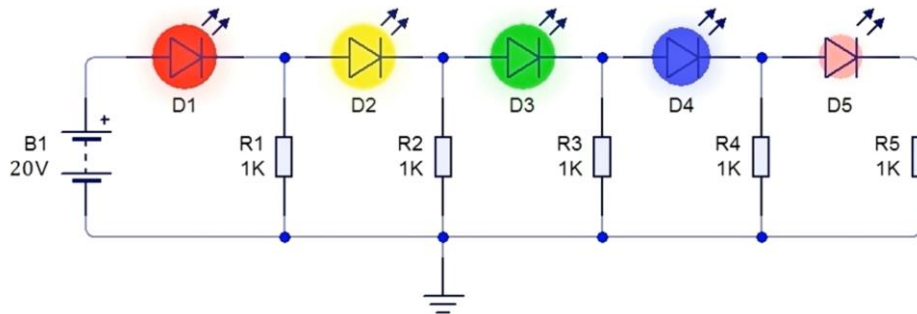
PARAMASIVAM S K – II ECE

VISHANTH S S – II ECE

AIM :

->To identify the amount of charge(in volts) present in a battery.

CIRCUIT DIAGRAM :



CONSTRUCTION & WORKING :

WORKING :

Here I shown you the complete process of making a simple battery level indicator circuit without using any ic step by step..

Sometimes we do not notice that the battery has drained out and as a result the connected equipment does not work properly.

By connecting this simple 24V/12V battery voltage level indicator circuit across the battery, you can check its voltage level any time.

The circuit can be used to check 24V and 12V batteries both. The battery level is indicated by the ten LEDs.

Each glowing LED indicates 10% of battery voltage level. So, when LED1 through LED5 are glowing, or just LED5 is glowing,

it means the battery is around 50% charged. The circuit can help in checking the batteries for a car, inverter, solar system, etc.....

CONSTRUCTION :

Step 1: Take All Parts As Shown Below

Parts required -

-> 10 pieces led bulb,

->10 pieces 1K resistors .

Step 2: Solder All Components in PCB

Solder all components in PCB according to this circuit diagram.

Step 3: Insert All LEDs in PCB

Insert all LEDs in PCB in series like circuit diagram.

Step 4: Solder All Wires

Solder all wires of LEDs as solder in picture.

Step 5: Insert All Resistors

Now insert all resistors in pcb as inserted in the picture according to circuit diagram.

Step 6: Solder All Wires of Resistors

Next solder all wires of resistors as solder in picture according to circuit diagram.

Step 7: Next Solder Input Wire

Next solder voltage input wires as solder in picture according to circuit diagram.

Black wire is -ve and brown wire is +ve input DC power supply.

Step 8: Circuit Is Ready

Now our battery level indicator circuit is ready. Now match circuit according to the circuit diagram and

Give input power supply to the circuit.

NOTE:We can give maximum 15V DC power supply to this circuit.

As in picture when I give above 13V DC input then all 10-LEDs is glowing.

COMPONENTS :

***Battery Level Indicator Components..**

-> 10 pieces led bulb,

->10 pieces 1K resistors .

ADVANTAGES :

->A battery indicator (also known as a battery gauge) is a device which gives information about a battery.

->This will usually be a visual indication of the battery's state of charge.

->It is particularly important in the case of a battery electric vehicle.

APPLICATIONS :

->It is used in electric vehicles.

->It is used to check batteries.

->Used to control voltages in industries and laboratories.