

## Answer on Question #73442, Physics / Electromagnetism |

How photoelectric effect used for switching purpose?

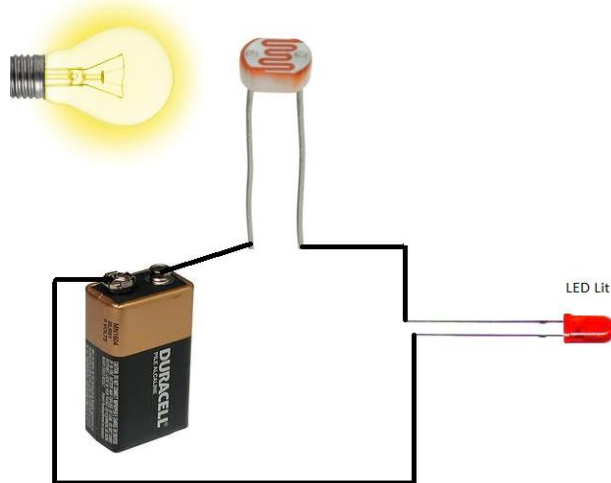
**Answer:**

**Photoswitch** uses **photoresistor** and is based on **internal photoelectric effect**.

Internal photoelectric effect (photoconductivity) - the increase in the electrical conductivity of certain materials when they are exposed to light of sufficient energy.

When the photoresistor is exposed to darkness, it has very high resistance, so current cannot flow through the circuit. The LED receives no current and, thus, does not light up. The LED stays off as long as the photoresistor is exposed to darkness.

When the photoresistor is exposed to light (*see the picture*), it has very little resistance, so current can flow through the circuit. The LED receives current and lights up; it stays lit as long as the photoresistor is exposed to light.



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