

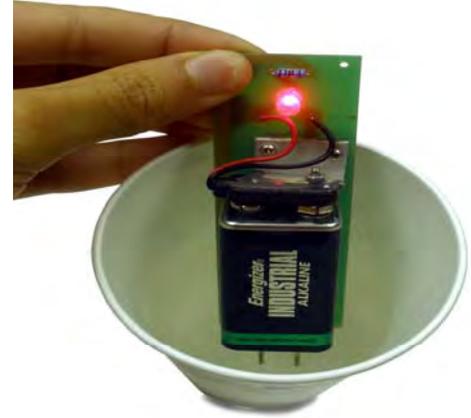
## **611-2263 (10-025) Blinking LED Conductivity**

### **Description:**

This simple yet effective device is useful for demonstrating conductivity. For fluids, install a standard 9V battery and submerge the electrodes about 15mm into the fluid. In an insulator, such as oil, nothing will happen. Submerge the leads in a **weak** insulator, and the LED (light emitting diode) will glow weakly but won't blink. Should the electrodes come into contact with a good conductor, such as water with a high amount of dissolved salt, the LED will glow brightly and blink on and off.

For solids, the technique is similar. Just set the electrodes down on the solid material, making sure both electrodes are making good contacts. A non-insulator will show no reaction. A **weak** insulator will glow but not blink. A good conductor will glow brightly and blink on and off.

Note: 9V battery not included.



### **Warranty and Parts:**

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain small parts that can be choking hazards. Adult supervision is required.

### **Other Science First items for you to consider:**

**611-2260 Conductivity of Water Tester:** Used to determine the conductivity of different liquids or concentrations, this qualitative device causes a light bulb to glow when water conducts electricity. Because the cord at the side can't contact water, there is absolutely no shock hazard. Includes plastic molded body with recessed electrical connections and electrodes. Attaches to standard ring stand up to 12.7 mm in diameter (not included) with thumbscrew clamp. Illustration instructions. Operates on 110 volt AC only.

**611-2261 10 Level Conductivity Meter:** Visually compare conductivity between different solutions. The green LED is numbered from 1-10 and will light up as the probes are dipped into solutions of salts or acids.

**611-2280 Thermal Conductivity Bars:** Although all metals conduct heat, they do so at different rates. Our set, aided by liquid crystal thermometers, demonstrates this. Contains steel, brass, aluminum, and copper specimens. Enclosed in a plastic housing.