**VIDEO :01: MULTIMETER**

* Understanding the fundamental electrical variables of voltage, current, and resistance is crucial for electronics. A multimeter is an essential tool for measuring these parameters effectively and accurately.

Collapse

* Ohm's law defines the relationship between voltage, current, and resistance, allowing users to calculate one variable if the others are known. This understanding is fundamental for electrical work.
* A multimeter measures voltage, current, and resistance, essential for electronics. It features settings for resistance, continuity, and voltage measurement, distinguishing between AC and DC. Proper probe connections are crucial, especially when measuring current. Understanding these basics helps troubleshoot circuits effectively.
* Measuring resistance is straightforward with a multimeter, but difficulties arise when testing in a live circuit due to current flow. This can lead to inaccurate readings.
* When measuring voltage, distinguishing between alternating current (AC) and direct current (DC) is essential for ensuring safety and obtaining correct measurements. Most common devices operate on DC.