

OPERATING INSTRUCTIONS

Simple Form Capacitor No. 30826

1. Introduction

The Simple Form Capacitor introduces students to the principle of capacitance and to the nature of a capacitor. The simple, easy-to-understand model is fully functional.

2. Description

The Simple Form Capacitor is a set of two metal plates, each with a 10cm square flat surface. At the bottom of this flat surface, the metal is bent back to provide a support on which the plate can stand. Binding posts for wires are attached to each plate.

3. Operation

Attach thin wire leads to the binding posts on both capacitor plates. The other ends of these leads can be attached to a measuring instrument such as an electroscope or electrometer.

Space the plates with thin sheets of dielectric, such as paper or plastic film. Use a charged friction rod or similar device to charge the capacitor. The electroscope's behavior will give indications both of the charge q and of the capacitance C . Students can study the relationship of these quantities and of the voltage V ($V = qC$) between the plates as a function of dielectric thickness and type.

4. Maintenance

The Simple Form Capacitor needs no special maintenance. If any difficulty develops with this apparatus, contact Central Scientific Company, giving all details of the problem. Do not return this apparatus without written authorization from Central Scientific Company.

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