



Acceleration Measurement Setup

Nvis 6051



Nvis 6051 Acceleration Measurement Setup is very useful to understand the concept of Gravitational force of earth. It includes Simple Pendulum, Compound Pendulum and concept of object drop method.

Acceleration due to gravity can be easily determined with Simple Pendulum which is suspended by a weightless, inextensible and perfectly flexible string. Practically it is not possible to have such ideal pendulum because neither we can get a single material particle nor a weightless and inextensible string.

Compound Pendulum is the basic apparatus, by which we can find acceleration due to gravity, moment of inertia and radius of gyration of any rigid body.

In free falling body (object displacement) method we can drop an object from various distances and measure its time of drop by a measurement unit. The body follows Gravitational law.

A Measurement Unit is provided in this setup for measuring time of oscillations. It has a microcontroller based LCD display which has automatic and manual mode.



Acceleration Measurement Setup

Nvis 6051

Features

- Digital Stop watch
- Self-contained setup
- Simple and Compound pendulum
- Low cost
- Online product tutorial

Scope of Learning

- To determine the acceleration due to gravity by object drop method
- To determine the acceleration due to gravity by Simple Pendulum
- To determine the acceleration due to gravity with the help of Compound Pendulum
- To determine the radius of gyration and moment of inertia of a Compound Pendulum about its centre of gravity

Technical Specifications

Bar Rod

Length	: 1m
Breadth	: 4.3cm
Width	: 0.7cm

Number of holes : 19

Distance between holes : 5cm

Diameter of holes : 1cm

Diameter of bob : 2.47cm

Height of Hook : 1.1cm

Measurement unit

Adaptor input	: 100-240V, 0.2A, 50 / 60Hz
Adaptor output	: 5V