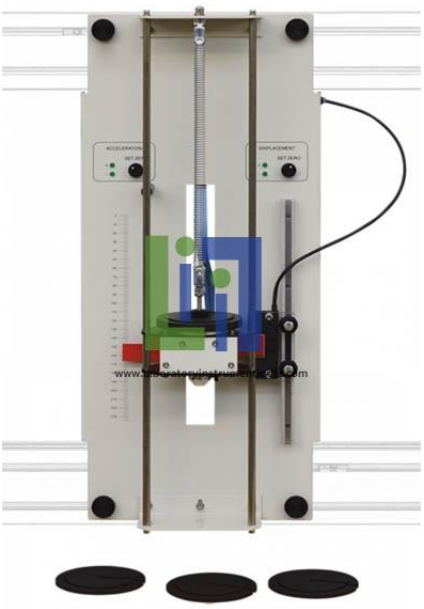
Email : sales@laboratoryinstrumentindia.com

Product Name :	**Product Code :**
Free Vibrations Of A Mass Spring System	LBNY-0005-1400006



Description :

Free Vibrations Of A Mass Spring System fits to the sturdy Test Frame for study or demonstration. A back panel fixes to the Test Frame. The panel holds two vertical guide rods and a non-contacting displacement sensor. A test spring suspends a balanced mass platform which vibrates vertically in the guide rods. Therefore, students can easily make the link to simple harmonic motion - defined as the oscillatory motion where the restoring force is proportional to the displacement. The mass-spring system is one of the most easily explainable oscillatory systems. This is because students may already be familiar with Hookes Law, showing the force exerted by a spring is proportional to the extension.
Free Vibrations Of A Mass Spring System is part of a range that explores free vibrations in simple one degree of freedom systems.
It introduces students to key scientific terms such as:
Spring constant and Hookes Law
Oscillation damping
Simple harmonic motion and frequency of oscillation
Phase difference between displacement and its derivatives.

Technical Specification :

Experiments:
Spring extension and force and Hookes law
Oscillation damping and coefficient
Phase difference between displacement and its derivatives
Comparison of measured and derived acceleration
Frequency of oscillation, spring constant and varying mass.

Laboratory Instrument India