55967 Coupled Oscillator is a useful apparatus for understanding the basic modes of coupling. Two pendulums are coupled though a compression spring and energy transfer takes place from one pendulum to other. To make both the pendulums oscillate with same frequency they are made identical. Magnetic Field Sensors are used for accurate measurement of time period and frequency of oscillation.

Oscillations are being recorded with the help of interfacing software which facilitates visualization of all the three modes of coupling. Time period of oscillations can also be measured manually by counting number of oscillations and recording time on provided Data Acquisition Unit.

Features
1. Needle pivoting for very less friction
2. Two identical pendulums
3. Spring coupling
4. Oscillations of pendula is recorded on PC

Object
1. Study two normal modes of Coupled Oscillator and record the oscillations to determine the time period for both the modes (T and T) 01
2. Record the oscillations for Resonance Mode. To determine the Coupled Time Period and Beat Time Period of the oscillations (T and T), also c b compare the experimental values of time period with calculated values
3. To determine Degree of Coupling, Coupling Constant for different coupling lengths and study the variance of both T and T with Coupling 01 Constant
4. To determine the Spring Constant with the help of Coupled Oscillator
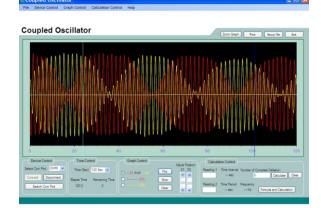
Technical Specifications
Pendulum

Length	:	1 meter

Spring

Length	:	21cm
Diameter	:	30mm
Spring constant	:	2.5N/m
Weights (4 Nos.)	:	500gm

Power supply

Output	:	12V, 5V / 500mA
Detector	:	Magnetic Field Sensor
PC interfacing	:	RS232

Data Acquisition Unit

Display	:	LCD
Least count	:	1 second

Notebook PC (optional)

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.
IT-2013, Ramchandrapura Industrial Area, Sitapura Extension, Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India, Tel: +91-9829132777; Email: info@tesca.in, tesca.technologies@gmail.com Website: www.tescaglobal.com

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