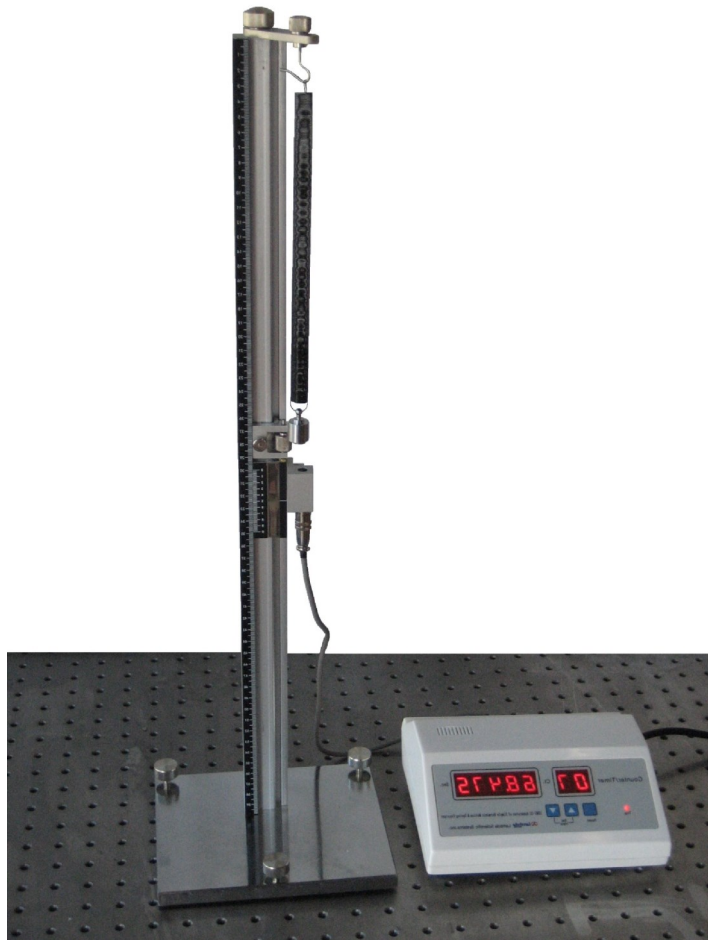


LEMI-21 Simple Harmonic Motion & Spring Constant

- *High accuracy of timing device*
- *High accuracy of reading device*
- *Affordable*



This experimental apparatus integrates two innovative devices into a Jolly balance: a reading device using a pointer and a reflective mirror with a vernier; and a timing device using an integrated Hall switch sensor. Its performance has been greatly improved from conventional apparatus. Through these experiments, students can understand the law of a spring oscillator for simple harmonic motion, and learn how to measure vibrational period. It can be used for general physics teaching.

Experimental Contents

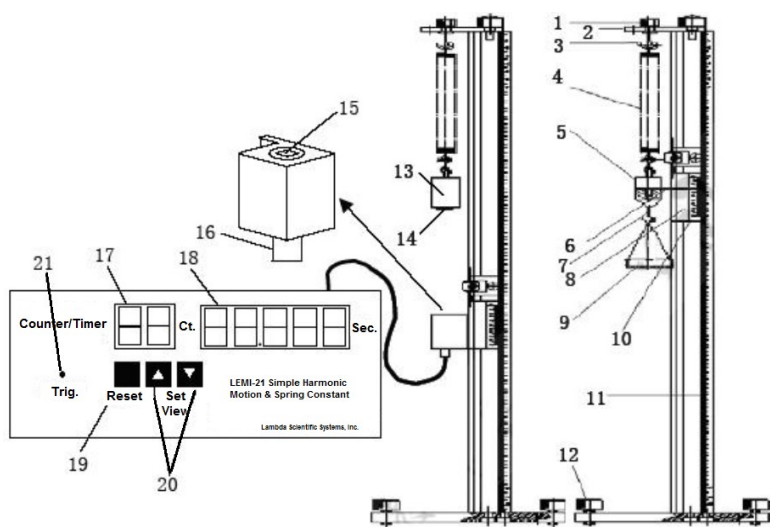
1. Verify Hooke's law, and measure the stiffness coefficient of a spring.
2. Study simple harmonic motion of a spring, measure period, calculate stiffness coefficient.
3. Study the properties and operation of a Hall switch sensor.

Specifications

Jolly balance scale ruler	range: 0 ~ 551 mm, reading accuracy: 0.02 mm
Counter/Timer	accuracy: 1 ms, with storage function
Integrated Hall switch sensor	critical distance: 9 mm
Small magnet	diameter: 10 mm, thickness: 2 mm
Spring	wire diameter 0.5 mm, spring outside diameter 12 mm
Weight set	1 g (10 pcs), 20 g (1 pc)

Part List

Name	Qty
Main body of Jolly balance	1
Digital counter/timer	1
Hall switch sensor	1
Spring (wire dia. 0.5 mm)	2
Initial weight	2
Hook	2
Weight tray	1
Large weight (~20 g)	1
Small weight (1 g)	10
Small tweezers	1
Small steel magnet	1
Power cord	1
Instruction manual	1



1. Adjust knob, 2. Arm, 3. Hook, 4. Spring, 5. Initial weights, 6. Pointer, 7. Hook, 8. Mirror, 9. Weight tray, 10. Vernier, 11. Ruler, 12. Leveling screw, 13. Weights, 14. Magnet, 15. Integrated Hall sensor, 16. Wiring socket, 17. Counter display, 18. Timer display, 19. Reset button, 20. Set/View button, 21. Trigger indicator

Schematic of system

Note: above product information is subject to change without notice.