Resonance Tube Setup

Nvis 6053



Nvis 6053 Resonance Tube Setup works on the principle of resonance and is useful apparatus for determining the speed of sound. It consists of the closed organ pipe attached to the water reservoir. When the sound waves are sent in closed organ pipe, standing wave pattern consisting of nodes and antinodes is formed. By varying the position of water reservoir, the length of air column in closed organ pipe changes. The length at which antinodes are formed is being noted.

Nvis 6053 facilitates measurement of speed of sound by both conventional and new (electrical) methods. In first method, the sound wave of fixed frequency is generated with the help of tuning fork and the position of antinode is found by hearing the intensity of sound. The second method uses an audio transceiver for generating sound wave of fixed frequency and the condition of resonance is detected on Oscilloscope.

Features

- Provided with Audio Transceiver for accurate measurement
- Tuning fork of three different frequencies
- Long tube helps in obtaining more resonance points
- Easy to operate
- Online product tutorial

Scope of Learning

- Study of determine speed of sound with the help of tuning fork
- Study of determine speed of sound with the help of audio transceiver



Transmitted & Received signal on Oscilloscope screen

Technical Specifications

Resonance Tube

Material : Acrylic
Length : 1m
Diameter : 4.00cm
Volume : 908ml

Transparent Rubber Tube

Length : 94cm

Tuning Fork

Frequency : 320, 480, 512Hz

Audio Transceiver

Frequency range : 250Hz to 1.5kHz

Speaker : 5W, 8O

Steel Beaker

Volume : 350ml

Optional : Oscilloscope Scientech 801

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