



**55952** 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.

55952 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

#### Object

1. Study of determine speed of sound with the help of tuning fork
2. Study of determine speed of sound with the help of audio transceiver

#### Technical Specifications

##### Resonance Tube

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

##### Transparent Rubber Tube

Length	: 94cm
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##### Tuning Fork

Frequency	: 320, 480, 512Hz
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##### Audio Transceiver

Frequency range	: 250Hz to 1.5kHz
Speaker	: 5W, 8Ω

##### Steel Beaker

Volume	: 350ml
Optional	: Oscilloscope

Note: Specifications are subject to change.