

Acoustic set with audio generator, Kundt tube and speaker

EQ044G-EXPORT

Function

Intended for experimental study, physics laboratory and carrying out physics experiments on: Mechanical waves. Acoustics. Sound sources, sound, noise and physiological qualities of sound. What is sound. The frequency of a sound wave, the high-pitched sound and the low-pitched sound. Hearing intensity, physiological quality associated with sound amplitude. Difference between the auditory intensity and the sound intensity of the wave. The wave only carries energy. Undesirable sounds, industrial noise. The reverberation of sound. The echo is the minimum distance for an observer to perceive the echo. Sound reverberation and acoustic comfort. The reverberation time. Standing waves in an open sound tube, resonance. Identifying the bellies and nodes of the wave, listening inside the tube. Emitting sound with a frequency and measuring its wavelength. Determining the speed of sound in an open sound tube. Locating bellies and knots with cork powder. Emitting sound with a frequency, measuring the wavelength and calculating its speed. Stationary sound waves in a closed tube, resonance. Sound, interference and standing wave in a closed sound tube. Identifying the bellies and nodes of the wave, listening inside the sound tube. Emitting sound with a frequency and measuring the wavelength. Determining the speed of sound in a closed sound tube. The positions of the bellies and nodes, indicated by cork powder, etc.

Knowledge areas

Physics

Key Experiments

