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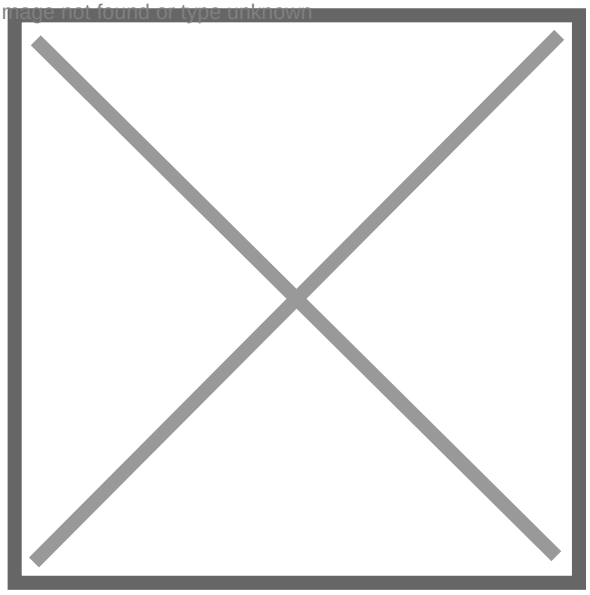
Product Name :

Apparatus for demonstrating the phenomenon of wave propagation and reflection

Product Code :

SCL-697/049

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Description :

Apparatus for demonstrating the phenomenon of wave propagation and reflection (Product Code: SCL-697/049) is a ripple-tank style physics demonstration kit used to make water waves visible so students can study how waves travel, reflect, refract and interfere in school and college physics lessons. A mechanical oscillator drives two forks that excite waves at two points on the water surface, and circular waves can also show the Doppler effect. The apparatus is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, an OEM scientific instruments manufacturer in India, at its own factory in Ambala.

Key Details

Parameter	Detail
Wave medium	Water tank
Wave generation	Mechanical oscillator; two forks excite waves at two points on the water surface
Wave patterns	Circular waves and plane waves
Obstacle pieces	Concave lens; small diffraction barrier; two Young's slits (listed as"Jung cracks")
Base	Base unit (listed as "base camera")
Experiments described	Wavelength versus oscillator frequency; Doppler effect; wave velocity versus water depth; reflection and refraction at objects such as a plate, prism, concave lens and convex lens
Product code	SCL-697/049
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Wave Propagation and Reflection Apparatus Used For?

With a circular wave pattern, students measure the spacing between crests at several oscillator frequencies and see that the wavelength shrinks as the frequency rises. Moving the source while it vibrates bunches the crests ahead of it and spreads them behind, a clear view of the Doppler effect. Switching to plane waves and changing the water depth shows that waves travel more slowly in shallow water, which is the basis of refraction.

Placing a plate, prism or lens-shaped object in the path of plane waves shows reflection and refraction, while the small barrier and the two Young's slits reveal diffraction and interference. Driving both forks together produces the two-source interference pattern of alternating calm and active lines. For clear results, level the tank so the depth is uniform and keep the water free of dust and bubbles.

What to Specify When Ordering

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