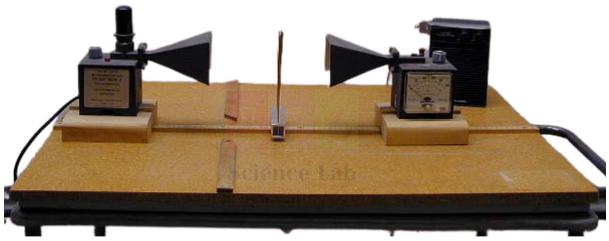
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Product Name :

Apparatus Microwave

Product Code :

SLE/PHY/15



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Description :

Apparatus Microwave (Product Code: SLE/PHY/15) is a microwave optics kit used to demonstrate the wave properties of electromagnetic microwaves, namely reflection, polarization, diffraction and interference, in senior school and college physics labs. It pairs a microwave transmitter with a receiver, audio amplifier and loudspeaker, so students hear as well as measure changes in the signal, and it runs from a 12V DC supply. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India, as a wave motion kit for school and college use.

Specifications

Parameter	Detail
Purpose	Demonstrating wave properties of electromagnetic microwaves for comparison with the behaviour of visible light
Effects demonstrated	Reflection, polarization, diffraction, interference
Power requirement	12V DC supply
Source and detection	Microwave transmitter; receiver; audio amplifier and loudspeaker
Reflectors	Two large aluminium reflectors; one narrow aluminium reflector
Other parts	Black hardboard mirror; polarization grille; battery charging lead
Documentation	Instruction booklet
Product code	SLE/PHY/15
Supplied by	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the Microwave Apparatus Used For?

Microwaves have wavelengths of a few centimetres, so effects that need a microscope or a laser with visible light can be shown on an ordinary bench. With the transmitter aimed at the receiver, students tilt an aluminium reflector and follow the reflected beam, rotate the polarization grille to make the signal fade and return, send the beam past the narrow reflector to see it spread by diffraction, and set up two paths to produce interference maxima and minima. The loudspeaker makes every change audible to the whole class.

Each result can then be compared directly with the matching experiment in light, which is the main teaching value of the kit. Keep the reflectors flat and clean, work on a clear bench away from metal cupboards that cause stray reflections, and follow the instruction booklet for set-up and safe use. It is a useful piece of physics lab equipment for India's senior-secondary and undergraduate wave-optics topics.

Supplier

Jain Scientific Equipments Private Limited, which trades as ScienceLab, supplies the Apparatus Micro iry, quota u need ll help -

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