Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

A.C. Generator

Product Code :

SLE/EAM/38



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Description :

The **A.C. Generator** (Product Code: SLE/EAM/38) is a transparent, hand-held generator in which a permanent magnet spins inside a coil of wire, producing an alternating voltage at two 4mm sockets. This physics lab equipment in India lets students investigate the same principle that powers a bicycle dynamo, with every moving part in view. Made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, it is a straightforward piece of electromagnetic induction kit for India's secondary schools and for physics departments abroad.

Specifications

Parameter	Detail
Principle	Permanent magnet rotating inside a coil of wire
Drive	Hand-held, direct drive to the rotating magnet (no gearing)
Housing	Transparent, showing all the inner workings
Output	About 0.5V peak to peak, swinging from + to – each revolution; magnitude varies with speed
Waveform	Not a simple sine wave, because of the geometry of the mechanism
Output terminals	Two 4mm sockets
Display options	Centre-zero moving coil voltmeter or oscilloscope
Weight	120g
Dimensions (L x W x H)	150 x 55 x 55

Typical Use

Connected to a centre-zero moving coil voltmeter and turned slowly, the generator makes the needle swing one way and then the other on every revolution — a direct, visible answer to the question of what "alternating" means. Turning faster makes the swings larger, so students can link output magnitude to speed of rotation. Because the drive has no gearing, the magnet turns exactly as fast as the hand, which keeps that cause-and-effect relationship easy to follow.

For a more advanced physics demonstration kit, connect the sockets to an oscilloscope instead. The trace is not a textbook sine wave, and that is a teaching opportunity: with a PC oscilloscope the waveform can be stored and examined in detail, prompting discussion of how magnet and coil geometry shape the output of real generators. Since the peak-to-peak output is about 0.5V, choose a sensitive range on the meter or scope.

Manufacturer

This generator comes from Jain Scientific Equipments Private Limited, an apparatus maker in Ambala, Haryana, that uses ScienceLab as its trading name. The company produces electricity and m
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