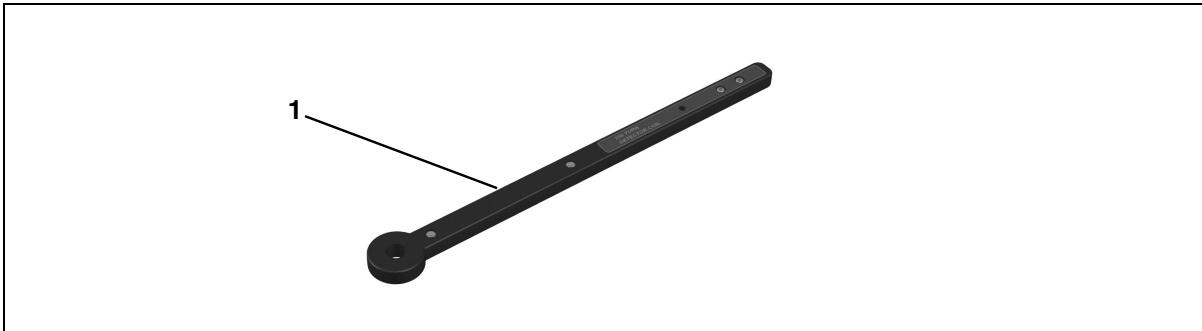


# Induction Wand

Model No. EM-8099

## Equipment List



Included Equipment	Replacement Model Number*
1. Induction Wand	EM-8099

\*Use Replacement Model Numbers to expedite replacement orders.

Additional Equipment Recommended (for experiments)	Replacement Model Number*
Faraday's Law of Induction apparatus	EX-9914
<i>ScienceWorkshop</i> <sup>®</sup> interface (500 or 750 SCSI or 750 USB)	CI-6400 or CI-6450 or CI-7650
<i>DataStudio</i> <sup>®</sup> software	various (See PASCO catalog)
A computer	NA

NA= not for sale at PASCO scientific

## Introduction

The PASCO EM-8099 Induction Wand is useful for demonstrations of electromagnetic induction. It can be used in combination with the PASCO EM-6711 Field Coil to a) verify Faraday's Law and b) measure the relationship between the magnitude of the induced electromotive force and the angle of the magnetic field of a field coil and a pickup coil.<sup>1</sup>

## Equipment Description

The 200-turn Induction Wand has a wire coil on one end and two terminals at the other end. The terminals accommodate the banana plug contacts, permitting easy connection to an electric circuit.



**CAUTION:** Do not use the wand at currents exceeding 625 mA.

## Specifications

<b>Induction Wand</b>	
<b>No. of turns</b>	200 turns, #28 copper wire, approximately 0.32 mm diameter
<b>Coil dimensions</b>	inner diameter: 1.9 cm; outer diameter 3.1 cm
<b>Body material</b>	molded ABS plastic
<b>Total wand length:</b>	35.7 cm
<b>Handle dimensions:</b>	width: 1.9 cm; height: 1.25 cm; length: 31.5 cm

<sup>1</sup> For an induction experiment, see Christopher C. Jones. Faraday's Law Apparatus for the Freshman Laboratory. *Am. J. Physics*. 1987; 55(12): 1148-1150.

## Technical Support

For assistance with the EM-8099 Induction Wand or any other PASCO products, contact PASCO as follows:

Address: PASCO scientific  
10101 Foothills Blvd.  
Roseville, CA 95747-7100

Phone: (916) 786-3800

FAX: (916) 786-3292

Web: [www.pasco.com](http://www.pasco.com)

Email: [techsupp@pasco.com](mailto:techsupp@pasco.com)

## Limited Warranty

PASCO scientific warrants the product to be free from defects in materials and workmanship for a period of one year from the date of shipment to the customer. PASCO will repair or replace, at its option, any part of the product which is deemed to be defective in material or workmanship. The warranty does not cover damage to the product caused by abuse or improper use. Determination of whether a product failure is the result of a manufacturing defect or improper use by the customer shall be made solely by PASCO scientific. Responsibility for the return of equipment for warranty repair belongs to the customer. Equipment must be properly packed to prevent damage and shipped postage or freight prepaid. (Damage caused by improper packing of the equipment for return shipment will not be covered by the warranty.) Shipping costs for returning the equipment after repair will be paid by PASCO scientific.

## Equipment Return

If the product requires return to PASCO scientific for any reason, notify PASCO scientific by letter or phone before returning the product. Upon notification, the return authorization and shipping instructions will be promptly issued.