



# **Instruction manual LeCroy PP005A**

**Revision B - January 2002**

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## Warranty

LeCroy warrants this oscilloscope accessory for normal use and operation within specification for a period of one year from the date of shipment. Spare parts, replacement parts and repairs are warranted for 90 days.

In exercising its warranty, LeCroy, at its option, will either repair or replace any assembly returned within its warranty period to the Customer Service Department or an authorized service center. However, this will be done only if the product is determined by LeCroy's examination to be defective due to workmanship or materials, and the defect is not caused by misuse, neglect, accident, abnormal conditions of operation, or damage resulting from attempted repair or modifications by a non-authorized service facility.

The customer will be responsible for the transportation and insurance charges for the return of products to the service facility. LeCroy will return all products under warranty with transportation charges prepaid.

This warranty replaces all other warranties, expressed or implied, including but not limited to any implied warranty of merchantability, fitness or adequacy for any particular purposes or use. LeCroy shall not be liable for any special, incidental, or consequential damages, whether in contract or otherwise.

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PP005A-OM-E

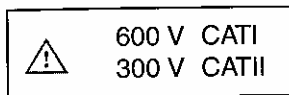
Rev B

0102



## Introduction

The PP005A is a high impedance passive probe with a range of probing accessories. The micro-fine tip of all PP005A probes is spring-loaded, reducing the chance of "skipping" the circuit once contact is established. Mechanical pressure is therefore reduced and probe life is enhanced. The micro-fine tip contributes to contact stability, in addition to making it easier to reach tightly placed circuitry.



## Specifications

### Electrical Characteristics

Attenuation	$\pm 10 \pm 1\%$
Input resistance	$10 \text{ M}\Omega \pm 1\%$
Input Capacitance	$11 \text{ pF} \pm 0.5 \text{ pF}$
Compensation Range	$10 \text{ pF}$ to $20 \text{ pF}$
Bandwidth	500 MHz typical
Max. Non-destructive Input Voltage	600 V (DC + peak AC) to 0.5 MHz See voltage derating curve

### General Characteristics

Operating Temp	$0^\circ\text{C}$ to $50^\circ\text{C}$
Cable length	1.2 m
Weight	200 g
Coupling	$1 \text{ M}\Omega$ AC/DC

## Safety Certification

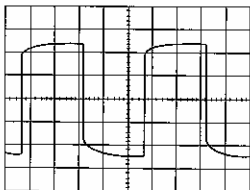
Designed to comply with IEC-1010, CAT I, CAT II Pollution Degree 2.



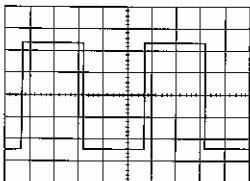
Refer to this manual before using the probe.

## LF Probe Adjustment

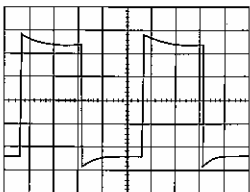
LF compensation is made by connecting the probe to the oscilloscope CAL connector and adjusting the compensation trimmer in the BNC box for optimum square wave response.



Undershoot



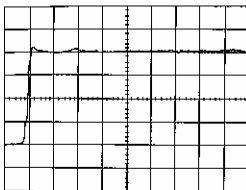
Correct



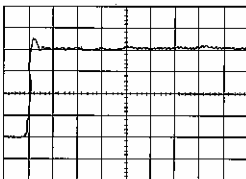
Overshoot

## HF Probe Adjustment

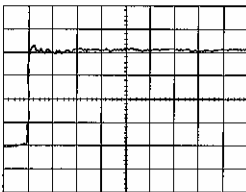
HF adjustment may be accomplished with a 300 ps risetime generator by adjusting the two HF compensation resistors (located under the BNC box black plastic cap) to optimize rise time and overshoot.



Sensitivity Ranges: [1 mV to 50 mV]

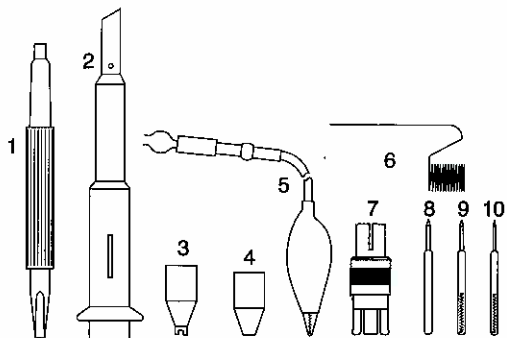


Sensitivity Ranges: [100 mV to 500 mV]

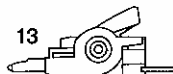
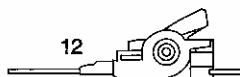
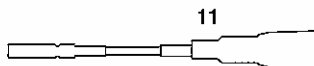


Sensitivity Ranges: [1V to 10V]

## Replaceable Parts



PK 102 Standard Accessories Kit



PK 101 Microclip Accessories

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## Replaceable Parts List

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Item Number	Item Description	LeCroy Part Number
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### Standard Accessories

#### PK 102-Standard Accessories:

1	Trimming Tool	NA
2	Sprung Hook (Black)	PP005A-Hook
3	IC Insulating Tip (Black)	NA
4	Tip Protector	NA
5	Ground Lead (11 cm)	PP005-GL11
6	Ground Lead Short on Probe Tip	PP005-GLPT
7	BNC Adapter	PP005-BNC
8	Probe Tip	PP005-RT
9	Spring Contact Tip (0.8)	PP005-ST8
10	Spring Contact Tip (0.38)	PP005-ST38
	Instruction Manual	PP005A-OM-E

### Optional Accessories

#### PK 101-Microclip Accessories:

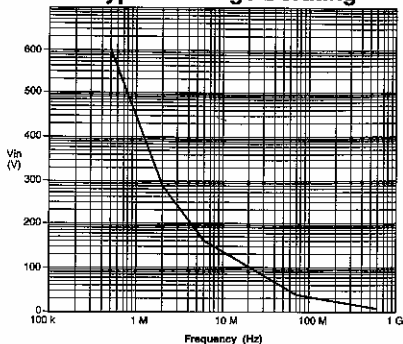
11	Single Lead Adapter	PK106-2
12	QFPIC Clip (Long 0.5 mm pitch)	NA
12	QFPIC Clip (0.5 mm pitch)	PACC-CL001

### Additional Accessories

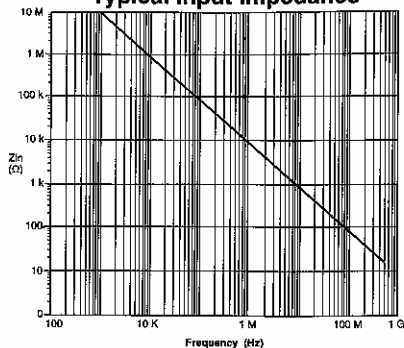
#### PK 106-SMT Accessories:

Refer to LeCroy's Website: [www.lecroy.com](http://www.lecroy.com)

### Typical Voltage Derating



### Typical Input Impedance



### Safety Information

The probe is designed to be safe under the following conditions:

- Indoor use

- Altitude to 2000 m

- Maximum relative humidity 80% for temperatures up to 31 °C decreasing linearly to 40% relative humidity at 50 °C

### Warning

Do not disconnect probes while they are connected to a voltage source.

### Cleaning

The exterior of the probe should be cleaned with a soft cloth moistened with either water or isopropyl alcohol.

### Usage and Maintenance

The probe user should note that if the equipment is used in a manner not specified by the manufacturer, the protection may be impaired.

To guarantee accurate performance characteristics, mechanical shock should be avoided, as well as damage to the cable through excessive bending.

Handle with care especially when fitted with the extra thin springtip.

All maintenance should be referred to qualified personnel.