

— Calibration Certificate —

Per ISA-RP37.2

Model No. 353M198

Serial No. P57754

PO No. _____ Customer _____

Calibration traceable to NIST thru Project No. 822/259355-98

ICP® ACCELEROMETER

with built-in electronics

Calibration procedure is in compliance with ISO 10012-1, and former MIL-STD-45662A and traceable to NIST.

CALIBRATION DATA

Voltage Sensitivity **102.0** mV/g
 Transverse Sensitivity **0.3** %
 Resonant Frequency **26.0** kHz
 Output Bias Level **9.2** V
 Time Constant **0.6** s

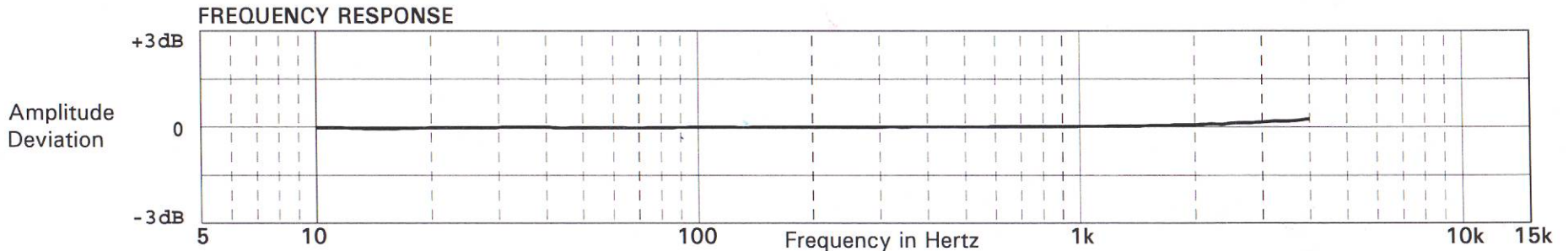
KEY SPECIFICATIONS

Range **50** ± g
 Resolution **0.0005** g
 Temp. Range **-65/+250** °F

METRIC CONVERSIONS:

$ms^{-2} = 0.102 \text{ g}$
 $^{\circ}C = 5/9 \times (^{\circ}F - 32)$

| Frequency | Hz | Reference Freq. | | | | | | | | | | | | | |
|---------------------|----|-----------------|------|------|------|-----|-----|-----|------|------|------|--|--|--|--|
| | | 10 | 15 | 30 | 50 | 100 | 300 | 500 | 1000 | 3000 | 4000 | | | | |
| Amplitude Deviation | % | -0.2 | -0.6 | -0.1 | -0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 1.8 | 3.0 | | | | |



Certificate of Calibration and Conformance

Certificate Number 1998-12247

Instrument Model 2900, Serial Number 0577, was calibrated on 01-06-1998. The instrument meets factory specifications according to Larson • Davis Test Procedure TP-1016, ISO 10012, ANSI S1.11 1986, ANSI S1.4 1983, IEC 651-Type 1 1979, and IEC 804-Type 1 1985.

Test Instruments

| MANUFACTURER | MODEL | SERIAL NUMBER | INTERVAL | CAL DUE | TRACEABILITY NO. |
|-----------------|-------|---------------|-----------|------------|------------------|
| Hewlett Packard | 8904A | 2948A03847 | 12 Months | 09/22/1998 | 092297-01 |

Certified Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Instrument found to be in calibration as received: YES

Date Calibrated: 01-06-1998

Calibration due: 01-06-1999

Calibration Environmental Conditions

Temperature: 21 ° Centigrade

Relative Humidity: 21 %

MIL-STD Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Larson • Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

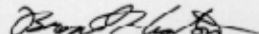
This calibration complies with ISO 10012. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

Due to state-of-the-art limitations, 4:1 calibration ratios are not possible on pressure measurement standards, microphones and acoustic calibrators. Calibration ratios for these types of devices are limited to 1:1.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of Larson • Davis Laboratories.

Technician: Brent Heaton

Service Center: Larson • Davis Laboratories, Utah

Signed: 



LARSON • DAVIS LABORATORIES

1681 West 820 North - Provo, Utah - 84601 - Phone (801) 375-0177



Larson Davis

A PCB Group Co.

Certificate of Calibration and Conformance

Certificate Number 2006-85905

Instrument Model 2900, Serial Number 0982, was calibrated on 18OCT2005. The instrument meets factory specifications per Procedure D0001.8146, ANSI S1.11 1986, ANSI S1.4 1983, ANSI S1.9-1996 Class 1, IEC 651-Type 1 1979, and IEC 804-Type 1 1985, IEC1043-1993 Class 1 when normalized.

Instrument found to be in calibration as received: NO

Date Calibrated: 18OCT2005

Calibration due: 18OCT2007

Calibration Standards Used

| MANUFACTURER | MODEL | SERIAL NUMBER | INTERVAL | CAL. DUE | TRACEABILITY NO. |
|--------------|--------------|---------------|-----------|-----------|------------------|
| Larson Davis | LDSigGn/2209 | 0617 / 0104 | 12 Months | 31JAN2007 | 2006-76574 |

Reference Standards are traceable to the National Institute of Standards and Technology (NIST)

Calibration Environmental Conditions

Temperature: 24 ° Centigrade

Relative Humidity: 32 %

Affirmations

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the U.S. National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with the requirements of ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. A one year calibration is recommended, however calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of the issuer.

"As received" data unavailable due to unit failure.

CORPORATE HEADQUARTERS

1681 West 820 North
Provo, Utah 84601-1341 USA
Toll Free: 888-258-3222
Tel: 801-375-0177
Fax: 801-375-0182
info@LarsonDavis.com
www.LarsonDavis.com

Signed: 

Technician: Sean Childs

SALES OFFICE

3425 Walden Avenue
Depew, New York 14043-2495 USA
Toll Free: 888-258-3222
Tel: 716-926-8243
Fax: 716-926-8215
info@LarsonDavis.com
www.LarsonDavis.com