



**INFORME DE ENSAYO SIMPLIFICADO
VIBRACIÓN
N° 17-016**

Formato informe:

MC2311-01

Fecha del formato:

25/11/2016

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INFORME DE VIBRACIÓN



Servicio de
Acreditación
Ecuatoriano

Acreditación N° OAE LE C 10-012
LABORATORIO DE ENSAYOS

CONSORCIO LÍNEA 1 METRO QUITO

MAYO 2017

- Este informe esta únicamente relacionado con las mediciones desarrolladas en fecha, hora y ubicaciones detalladas.
- El informe no podrá ser reproducido parcialmente, salvo autorización escrita de IPSOMARY S.A.
- La información completa relativa a los ensayos está a disposición del cliente

IPSOMARY S.A.

Cdla. 29 de junio Mz. E Solar 04 • Telf. 593-4-6013531 / 6013532

Email: serviciosambientales@ipsomary.com • www.ipsomary.com • Guayaquil-Ecuador





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1. FICHA TÉCNICA

TIPO DE ESTUDIO:	INFORME DE ENSAYO DE VIBRACIÓN
NOMBRE DE LA ACTIVIDAD:	Construcción de estaciones y túneles del Metro de Quito
RAZÓN SOCIAL (CLIENTE):	CONSORCIO LÍNEA 1 METRO QUITO
RUC:	1792627621001
PERIODO DEL ENSAYO:	02 de mayo del 2017
DIRECCIÓN:	Naciones Unidas y Nuñez de Vela S/N; Edificio Metropolitan piso 18. Quito - Ecuador
NOMBRE DEL LABORATORIO AMBIENTAL:	IPSOMARY S.A.
RUC:	0992560665001
REPRESENTANTE LEGAL:	Ing. Sergio Rodríguez Portés
DATOS DEL LABORATORIO AMBIENTAL:	Dirección: Cdla. 29 de junio MZ. E Solar 4. Teléfono de contacto: 046013531 Guayaquil - Ecuador
FECHA DE ELABORACIÓN DEL INFORME:	17 de mayo del 2017
FIRMA DEL RESPONSABLE DEL INFORME	  Ing. Marlon Villamar Director Técnico IPSOMARY S.A.

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2. INTRODUCCIÓN

El presente informe se genera en base a las mediciones de vibración en edificaciones, efectuados para CONSORCIO LINEA 1 METRO QUITO, en donde se ha dispuesto la realización de estos ensayos como parte del Plan de Manejo Ambiental aprobado por la Autoridad Ambiental Competente. Las actividades de construcción de las estaciones y túneles del nuevo sistema de transporte Metro Quito pueden generar molestias en las personas que residen o realizan actividades en las edificaciones cercanas; estas molestias pueden afectar en diferentes formas, además del confort y la calidad de vida. La evaluación de las afectaciones de la vibración en los seres humanos es compleja, pues se da en varias bandas de frecuencias y en los tres ejes basicéntricos, además oscila en relación al tiempo; pueden presentarse diferencias significativas de respuesta en varias personas expuestas a los mismos niveles de vibración, como malestar e irritación mental (entre otros).

Para la evaluación de las vibraciones en edificaciones se utiliza una ponderación de frecuencias establecidas en la Normativa Ambiental Ecuatoriana con una respuesta específica, de manera que las mediciones puedan ser relevantes entre sí en un rango de frecuencia dado.

3. DESCRIPCIÓN DEL SITIO DE MUESTREO

Las mediciones fueron realizadas en la estación Morán Valverde en los siguientes sitios:

- **Servicio Eléctrico El Circuito**
P1. 772941E-9969100N ±4
- **Centro Infantil y Guardería Pequeños del Presente**
P2. 772860E-9969021N ±5

Edificio o residencia en donde se realizó la medición:

- **Servicio Eléctrico El Circuito**
P1. Vivienda de 2 plantas de cemento
- **Centro Infantil y Guardería Pequeños del Presente**
P2. Edificio de 3 pisos de cemento

Las actividades básicas realizadas por las personas expuestas en los sitios de ubicación de los puntos de medición son:

- P1. Atención de mini market y actividades domésticas.
- P2. Actividades del centro infantil.

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4. MARCO LEGAL

TULSMA TEXTO UNIFICADO DE LEGISLACIÓN SECUNDARIA DEL MINISTERIO DE AMBIENTE
Libro VI, Anexo 5, A.M. 097-A.

“Niveles Máximos de emisión de vibraciones

10. límites para vibraciones transmitidas al espacio interior habitable de edificaciones

10.1 Para efectos de la aplicación de la presente norma, se establecen los límites de vibraciones transmitidas al espacio interior habitable de edificaciones destinadas a uso hospitalario, educativos o culturales, residencia, hospedaje y oficinas señalados en la siguiente tabla:”

USO DE LA EDIFICACIÓN RECEPTORA	Límite de transmisión de vibraciones L_{aw} dB	
	DIURNO	NOCTURNO
Hospitalario, Educativo, cultural	83	80
Residencial, hospedaje	89	86
Oficinas Comercial	95	95

5. METODOLOGÍA

5.1. Equipos

Para la medición de vibración se utilizó los siguientes instrumentos:

Equipo Utilizado	Modelo	Marca	Serie
Vibrómetro	HVM100	Larson Davis	02021
Acelerómetro triaxial	SEN027	PCB	P111647

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5.2. Método Utilizado

La medición realizada para Consorcio Línea 1 Metro Quito, se desarrolló mediante el método establecido en el Texto Unificado de Legislación Secundaria del Ministerio de Ambiente TULSMA LIBRO VI, Anexo 5, A.M. 097-A, además se siguieron los lineamientos requeridos por la norma internacional ISO 2631-2:2003 exposición humana a vibraciones de cuerpo entero, vibración en Edificaciones.

6. FECHA DE EJECUCIÓN

Las fechas de ejecución de las mediciones fueron:

- **Servicio Eléctrico El Circuito**
P1. 02 de mayo del 2017
- **Centro Infantil y Guardería Pequeños del Presente**
P2. 02 de mayo del 2017

7. RESULTADOS Y COMPARACIÓN CON LÍMITES PERMISIBLES

A continuación, se presentan los resultados de las mediciones realizadas:

Punto	Resultado L_{aw} dB	Incert. K=2 \pm dB	*Valor Limite	Evaluación
Morán Valverde P1. Servicio Eléctrico El Circuito 772941E-9969100N \pm 4	70.2	4.55	89	CUMPLE
Morán Valverde P2. Centro Infantil y Guardería Pequeños del Presente 772860E-9969021N \pm 5	69.4	4.31	83	CUMPLE

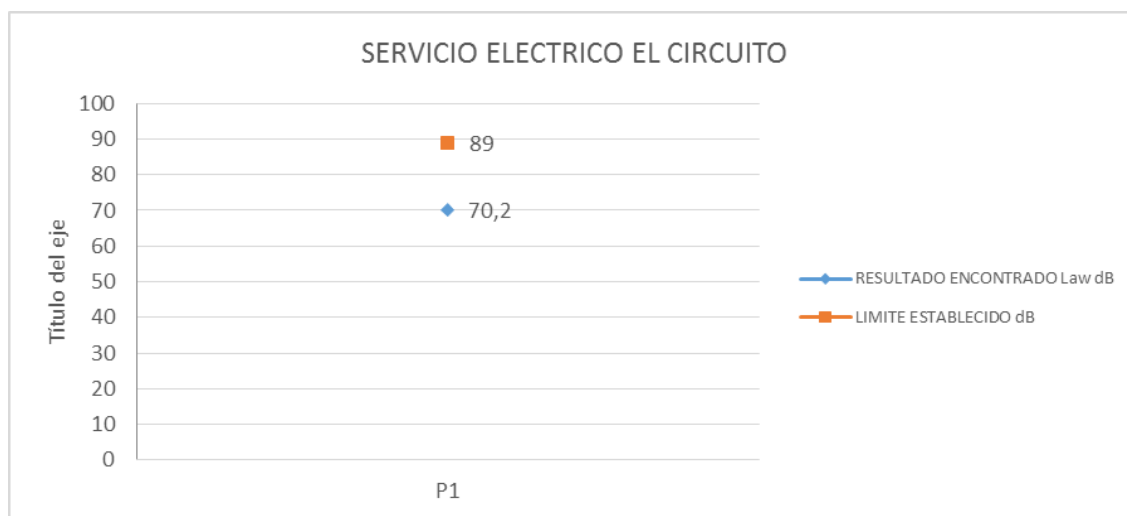
* Según TULSMA Libro VI, Anexo 5, A.M. 097-A

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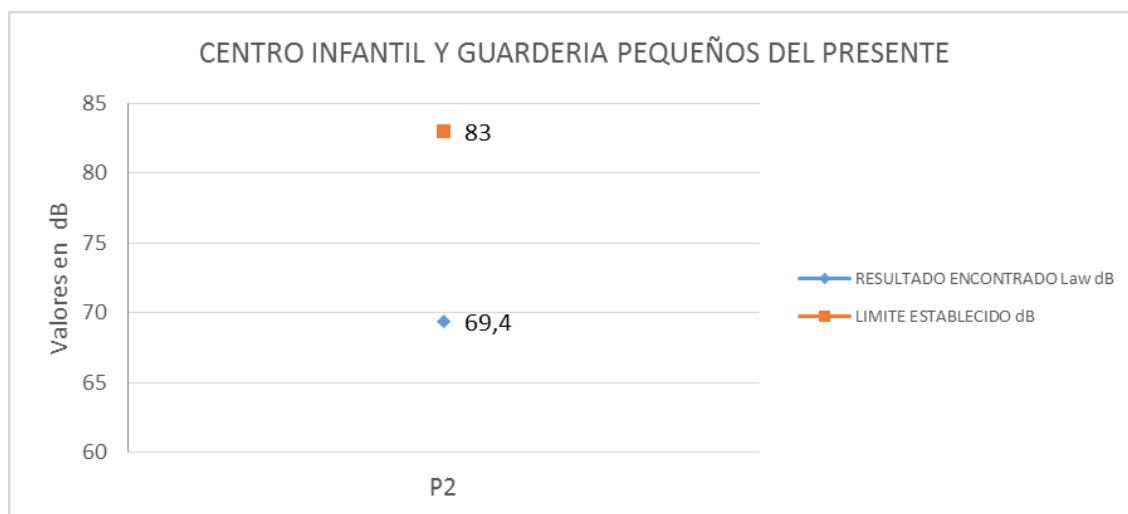
A continuación de manera gráfica se presentan los resultados:

ESTACIÓN MORÁN VALVERDE

Servicio Eléctrico El Circuito



Centro Infantil y Guardería Pequeños del Presente



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8. OBSERVACIONES Y CONCLUSIONES

Las opiniones / interpretaciones que se indican a continuación, están fuera del alcance de acreditación del SAE.

Según los resultados encontrados y su comparación con la Legislación Ambiental Ecuatoriana se puede establecer que los puntos analizados cumplen con el límite máximo permisible en horario diurno para los diferentes usos de la edificación receptora.

Se debe tener en cuenta que los valores de los límites establecidos por la legislación Ecuatoriana, son para “espacios interiores habitables”.

Cabe mencionar que el monitoreo se realizó en compañía de los Socializadores de la Empresa Pública Metro Quito, EPMMQ y personal de Fiscalización.

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9. ANEXOS

a. Certificado y alcance de acreditación SAE

A continuación, se presenta el certificado y alcance de acreditación ISO 17025 otorgado por el Servicio de Acreditación Ecuatoriano.

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REPÚBLICA DEL ECUADOR



Servicio de
Acreditación
Ecuatoriano

CERTIFICADO DE ACREDITACIÓN

IPSOMARY S.A.

Guayaquil - Ecuador



Acreditación N° OAE LE C 10-012
LABORATORIO DE ENSAYOS

Se encuentra acreditado por el Servicio de Acreditación Ecuatoriano en cumplimiento con los requisitos establecidos en la Norma NTE INEN-ISO/IEC 17025:2006 "Requisitos generales para la competencia de los laboratorios de ensayo y de calibración", equivalente a la Norma ISO/IEC 17025:2005, y con los criterios y procedimientos de acreditación del SAE.

Esta acreditación demuestra la competencia técnica para la ejecución de los ensayos detallados en el **ALCANCE DE ACREDITACIÓN***, que se realizan en las localizaciones identificadas en el mismo.

Ing. Estuardo Ruiz Pozo
DIRECTOR EJECUTIVO



Acreditación inicial: 2010-07-08

Renovación 1: 2015-01-19

Expira: 2020-01-18

La acreditación está condicionada al cumplimiento continuo por parte del laboratorio con los requisitos de acreditación, por lo que la vigencia del presente certificado de acreditación debe ser consultada en la página web del SAE, www.acreditacion.gob.ec

* El presente certificado solo tiene validez con su correspondiente **ALCANCE DE ACREDITACIÓN**.

Ley del Sistema Ecuatoriano de la Calidad, Art. 21.



ALCANCE DE ACREDITACIÓN

Laboratorio IPSOMARY S.A.

Cda. 29 de junio Manzana E, Solar 4, (detrás de SOLCA)
• Teléfono: 04 6013531 • E-mail: serviciosambientales@ipsomary.com
Guayaquil - Ecuador

Sector
Ensayos

Certificado de Acreditación N°: **OAE LE C 10-012**
Actualización N°: **07**
Resolución N°: **SAE-ACR-0071-2017**
Vigencia a partir de: **2017-03-20**
Acreditación Inicial: **2010-07-08**
Responsable(s) Técnico(s): **Ing. Marlon Villamar**

Está acreditado por el Servicio de Acreditación Ecuatoriano (SAE) de acuerdo con los requerimientos establecidos en la Norma NTE INEN ISO/IEC 17025:2006 "Requisitos generales para la competencia de los laboratorios de ensayo y de calibración", los Criterios Generales de Acreditación para laboratorios de ensayo y calibración (CR GA01), Guías y Políticas del SAE en su edición vigente, para las siguientes actividades:

CATEGORIA: 1. Ensayos In-situ

CAMPO DE ENSAYO: Acústica ambiental

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Ruido Ambiental	Ruido, Nivel de Presión Sonora (39 a 140) dB	PEE/IPSOMARY/01 Método de Referencia ISO 1996: 2005 Partes 1 ISO Parte 2 Tulas, Libro VI, Anexo 5, Primera edición. 1996: 2009

CATEGORIA: 1. Ensayos In-situ

CAMPO DE ENSAYO: Acústica Laboral

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Ruido laboral	Ruido, Nivel de Presión Sonora (39 a 137) dB	PEE/IPSOMARY/06 Método de Referencia ISO 9612: 2009

CATEGORIA: 1. Ensayos In-situ

CAMPO DE ENSAYO: Ensayos en Aire Ambiente

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Aire Ambiente	Material Particulado, Gravimetría PM 10 (10 a 300) µg/m ³	PEE/IPSOMARY/02 Método de Referencia: EPA, Título 40, Capítulo 1, Subcapítulo C, 2009. Parte 50 – National Primary and Secondary Ambient Air Quality Standards, Appendix L to part 50

	Material Particulado, Gravimetría PM 2.5 (6 a 200) µg/m ³	PEE/IPSOMARY/003 Método de Referencia: EPA, Título 40, Capítulo 1, Subcapítulo C, 2009. Parte 50 – National Primary and Secondary Ambient Air Quality Standards, Appendix L to part 50
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CATEGORÍA 0: Ensayos en el laboratorio permanente

CAMPO DE ENSAYO: Ensayos Físico – Aguas

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Aguas Naturales, Residuales y de Consumo	pH, Electrometría, (4 a 10) unidades de pH	PEE/IPSOMARY/10 Método de Referencia: SM4500 H+B, 2012.
	Conductividad, Electrometría, (150 a 12900) µs/cm	PEE/IPSOMARY/11 Método de Referencia: SM 2510 B, 2012.
	Demanda Química de Oxígeno, Reflujo Cerrado, (150 a 1000) mg/l	PEE/IPSOMARY/12 Método de Referencia: SM 5220 D, 2012.
	Turbidez, Nefelometría, (10 a 800) NTU	PEE/IPSOMARY/14 Método de Referencia: SM 2130 B, 2012.

CATEGORÍA 0: Ensayos en el laboratorio permanente

CAMPO DE ENSAYO: Ambiente Laboral

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Ambiente Laboral	Luminosidad, (150 a 1100) luxes	PEE/IPSOMARY/09 Método de Referencia: Métodos, condiciones e iluminación en los centros de trabajo. Norma oficial mexicana NOM, NOM-025 STPS- 2008.

CATEGORÍA: 0. Ensayos en el laboratorio permanente

CAMPO DE ENSAYO: Ensayos Físico – químicos en caucho vulcanizado

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Caucho vulcanizado	Dureza Shore, Durómetro, (10 a 90) Grados Shore A	PEE/IPSOMARY/04 Método de Referencia NTC 467. 2006
	Resistencia a la Tensión, Máquina Universal de Ensayos, (40 a 150) kgf/cm ²	PEE/IPSOMARY/05 Método de referencia: NTC 444. 2006

CATEGORÍA: 1. Ensayos In-situ
CAMPO DE ENSAYO: Vibración mecánica

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO, TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Cuerpo entero	Vibración, Acelerómetro, Valores comprendidos en el rango de frecuencias:	PEE/IPSOMARY/07 Método de Referencia
Edificaciones	(0,4 a 100) Hz (0,001 a 9,8) m/s ² (0,001 a 9,8) m/s ²	ISO 2631-1, Parte 1. 2008 ISO 2631-2, Parte 2. 2003

CATEGORIA: 0. Ensayos en el laboratorio permanente
CAMPO DE ENSAYO: Análisis Físico – químicos en aguas

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Aguas naturales Aguas residuales Aguas de consumo	Temperatura, Termometría, (5 a 80) °C	PEE/IPSOMARY/18 Standard Method, Ed. 22, 2012 2550 B
	Aceites y grasas, Gravimetría, (7a 426) mg/L	PEE/IPSOMARY/19 Standard Method, Ed.22, 2012 5520D
	Hidrocarburos Totales de Petróleo, Gravimetría, (5 a 300) mg/L	PEE/IPSOMARY/19 Standard Method, Ed.22, 2012 5520F
	Sólidos Totales, Gravimetría, (22 a 21800) mg/L	PEE/IPSOMARY/22 Standard Method, Ed.22, 2012 2540B
	Demanda Bioquímica de Oxígeno – DBO ₅ , Electrometría, (1,26 a 3842,60) mg/L	PEE/IPSOMARY/13 Standard Method, Ed. 22, 5210B

CATEGORIA: 1. Ensayos in situ
CAMPO DE ENSAYO: Acústica Laboral

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO TÉCNICA Y RANGOS	MÉTODO DE ENSAYO
Ruido Laboral	Ruido, Nivel de presión sonora, (39 a 137) dB(A)	PEE/IPSOMARY/06 Método de Referencia: ISO 9612: 2009
	Dosimetría de Ruido Nivel de presión sonora (60 a 137) dB(A)	PEE/IPSOMARY/06 Método de Referencia: ISO 9612: 2009

CATEGORIA: 1. Ensayos in situ
CAMPO DE ENSAYO: Ambiente Laboral

PRODUCTO O MATERIAL A ENSAYAR	ENSAYO TÉCNICA Y RANGO	MÉTODO DE ENSAYO
Ambiente Laboral	Temperaturas para Estrés Térmico, Termometría, Temperatura de bulbo seco, (10,8 a 75,6) °C Temperatura de bulbo húmedo (5,5 a 39,7) °C Temperatura de Globo (10,8 a 76,9) °C	PEE/IPSOMARY/17 Método de Referencia: UNE-EN 27243 (ISO 7243)

Control de Cambios en Alcance

Fecha	Modificaciones
2015-12-24	Vigilancia 1, Mantener la acreditación Ampliación, Aceptar la solicitud de retiro voluntario
2017-03-20	Vigilancia 2, Mantener la acreditación Ampliación de Alcance, Ampliar la Acreditación



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b. Personas responsables del análisis y monitoreo

El técnico que realizó la medición es:

Sr. Cristhian Portés Aragonés

C.I. 0921990735

El responsable de Informe y de la medición es:

Ing. Marlon Villamar Franco

C.I. 0923586028

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c. Registro Fotográfico

A continuación, las fotografías de las mediciones realizadas:

ESTACIÓN MORÁN VALVERDE
P1. Servicio Eléctrico El Circuito
772941E-9969100N ±4
Fecha: 02 de mayo del 2017



ESTACIÓN MORÁN VALVERDE
P2. Centro Infantil y Guardería
Pequeños del Presente
772860E-9969021N ±5
Fecha: 02 de mayo del 2017



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d. Certificados de calibración

A continuación, se presentan los certificados de calibración del vibrómetro y del acelerómetro usado en la medición.

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West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

TRIAxIAL ACCELEROMETER

Manufactured by: LARSON DAVIS
Model No: SEN027
Serial No: P111647
Calibration Recall No: 27002

Submitted By:

Customer: Leslie Sanchez Pena / Marlon Villamar
Company: IPSOMARY S.A.
Address: Cdla. 29 de Junio Mz. E Villa 4
Guayaquil-Ecuador 090150

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. SEN027 LARS

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.


Approved by:

Calibration Date: 24-Oct-16

Certificate No: 27002 - 2

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1


Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

West Caldwell Calibration Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

TRIAXIAL ACCELEROMETER

Manufactured by: LARSON DAVIS
Model No: SEN041F (ID#EM/VB-01-01)
Serial No: P107440
Calibration Recall No: 27002

Submitted By:

Customer: Leslie Sanchez Pena / Marlon Villamar
Company: IPSOMARY S.A.
Address: Cda. 29 de Junio Mz. E Villa 4
Guayaquil-Ecuador 090150

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. SEN041F (I LARS

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.

Approved by:

Calibration Date: 24-Oct-16

Certificate No: 27002 - 3

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1

FL
Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

**West Caldwell
Calibration
Laboratories, Inc.**
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01

West Caldwell Calibration Laboratories Inc.

Certificate of Calibration

for

HUMAN VIBRATION UNIT

Manufactured by: LARSON DAVIS
Model No: HVM-100 (ID#EM/VB-01-10)
Serial No: 02021
Calibration Recall No: 27002

Submitted By:

Customer: Leslie Sanchez Pena / Marlon Villamar
Company: IPSOMARY S.A.
Address: Cdla. 29 de Junio Mz. E Villa 4
Guayaquil-Ecuador 090150

The subject instrument was calibrated to the indicated specification using standards traceable to the National Institute of Standards and Technology or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the submitter.

West Caldwell Calibration Laboratories Procedure No. HVM-100 (LARS

Upon receipt for Calibration, the instrument was found to be:

Within (X)

tolerance of the indicated specification. See attached Report of Calibration.

West Caldwell Calibration Laboratories' calibration control system meets the requirements, ISO 10012-1 MIL-STD-45662A, ANSI/NCSL Z540-1, IEC Guide 25, ISO 9001:2008 and ISO 17025.

Note: With this Certificate, Report of Calibration is included.


Approved by:

Calibration Date: 22-Oct-16

Certificate No: 27002 - 1

QA Doc. #1051 Rev. 2.0 10/1/01

Certificate Page 1 of 1


Felix Christopher (QA Mgr.)
ISO/IEC 17025:2005

West Caldwell
Calibration
Laboratories, Inc.
uncompromised calibration
1575 State Route 96, Victor, NY 14564, U.S.A.



Calibration Lab. Cert. # 1533.01



**INFORME DE ENSAYO SIMPLIFICADO
VIBRACIÓN
N° 17-016**

Formato informe:

MC2311-01

Fecha del formato:

25/11/2016

Página 12 de 13

e. Mapa de ubicación de los puntos de monitoreo

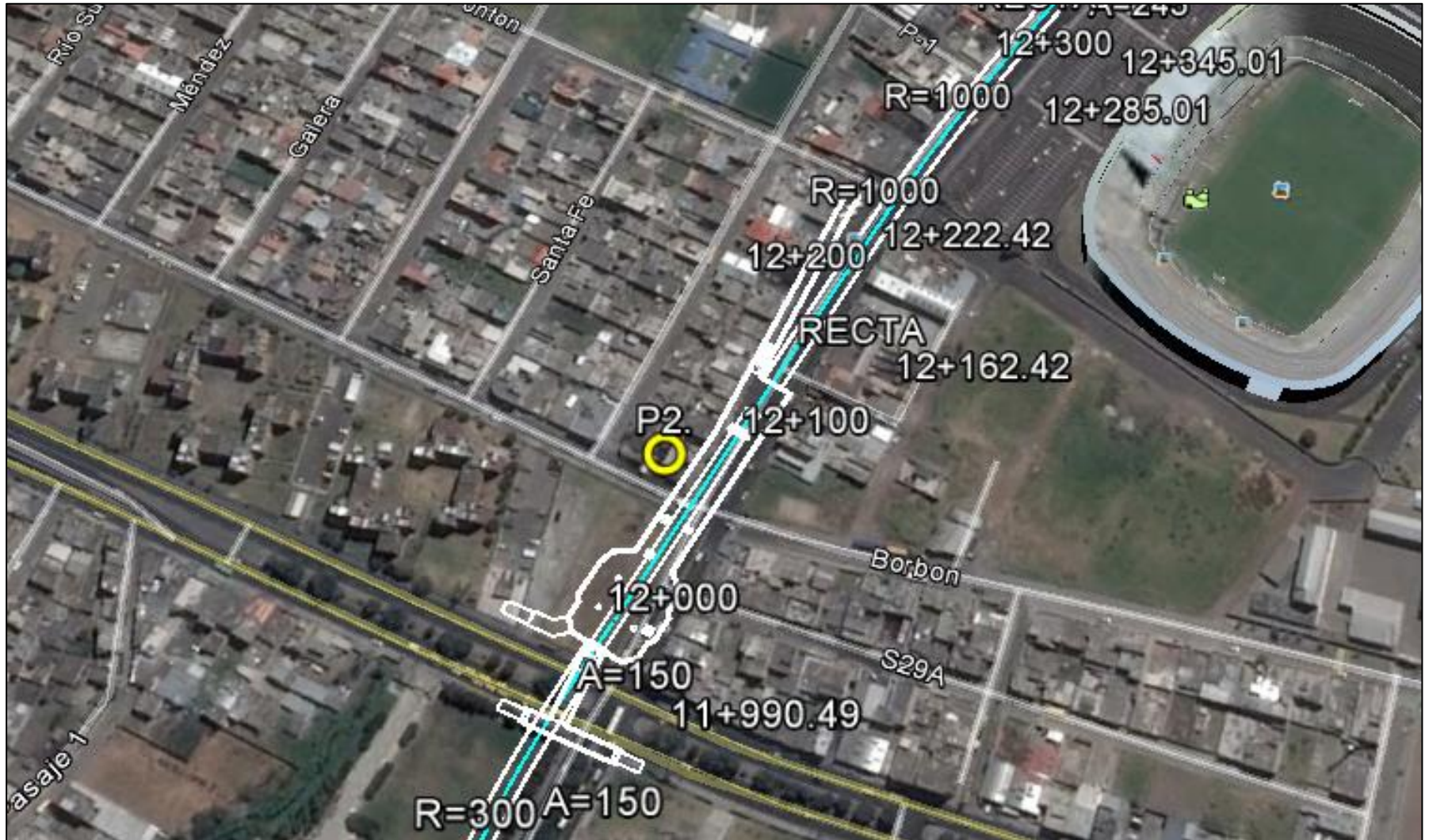
A continuación, se evidencia la ubicación de los puntos según sus coordenadas geográficas.

- Este informe esta únicamente relacionado con las mediciones desarrolladas en fecha, hora y ubicaciones detalladas.
- El informe no podrá ser reproducido parcialmente, salvo autorización escrita de IPSOMARY S.A.
- La información completa relativa a los ensayos está a disposición del cliente

SERVICIO ELECTRICO EL CIRCUITO



CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE





**INFORME DE ENSAYO SIMPLIFICADO
VIBRACIÓN
N° 17-016**

Formato informe:

MC2311-01

Fecha del formato:

25/11/2016

Página 13 de 13

f. Datos del Equipo

A continuación, se adjuntan los datos del equipo.

- Este informe esta únicamente relacionado con las mediciones desarrolladas en fecha, hora y ubicaciones detalladas.
- El informe no podrá ser reproducido parcialmente, salvo autorización escrita de IPSOMARY S.A.
- La información completa relativa a los ensayos está a disposición del cliente

HVM General Information

HVM File Registers

Serial Number

Model

Firmware Version

HVM File Name

2

02021

LARSON DAVIS HVM100

1.33

Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO

Pl. SERVICIO ELECTRICO EL CIRCUITO 772941E-9969100N ±4

REPETICIÓN 1

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00124	.00142	.00106	.00216	m/s ²
Amax	.00345	.00359	.00326	.00582	m/s ²
Amp	.00973	.00994	.00932	.01610	m/s ²
Amin	.000497	.000577	.000621	.00113	m/s ²
Aeq(k)	.00124	.00142	.00106		m/s ²
VDV	.00626	.00661	.00563	.01010	
CFmp	7.8400	7.0000	8.7600	7.4300	
CFmp (dB)	17.900	16.900	18.800	17.400	dB

Time History File Name: Health/Seat Register: 2

Measurement Time 02 May 17 10:46:56

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:46:57	.00345	.00944	.00338	.00994	.00326	.00805	.00582	.01580
10:46:58	.00228	.00190	.00218	.00290	.00207	.00193	.00377	.00323
10:46:59	.00161	.00255	.00146	.00193	.00142	.00234	.00259	.00277
10:47:00	.00108	.00134	.000997	.00143	.00102	.00207	.00179	.00212
10:47:01	.000952	.00181	.000803	.00152	.000948	.00221	.00156	.00240
10:47:02	.000872	.00190	.000925	.00216	.000794	.00156	.00149	.00240
10:47:03	.00117	.00301	.000858	.00203	.000693	.00174	.00161	.00351
10:47:04	.000930	.00194	.000800	.00166	.000928	.00303	.00153	.00304
10:47:05	.000753	.00153	.000749	.00189	.000799	.00161	.00132	.00240
10:47:06	.000766	.00162	.000714	.00193	.000813	.00202	.00132	.00240
10:47:07	.000848	.00199	.000973	.00239	.000935	.00239	.00159	.00286
10:47:08	.000979	.00194	.00106	.00281	.000943	.00230	.00172	.00304
10:47:09	.00116	.00282	.00124	.00327	.00101	.00326	.00197	.00425
10:47:10	.000983	.00255	.000926	.00171	.000949	.00253	.00164	.00342
10:47:11	.000849	.00153	.000854	.00184	.000839	.00197	.00146	.00212
10:47:12	.00112	.00287	.000761	.00166	.000781	.00271	.00156	.00304
10:47:13	.000807	.00185	.000733	.00143	.000815	.00243	.00136	.00249
10:47:14	.000851	.00167	.000649	.00171	.000847	.00248	.00136	.00286
10:47:15	.00189	.00532	.000902	.00180	.000795	.00197	.00223	.00536
10:47:16	.00229	.00565	.00114	.00318	.000660	.00166	.00263	.00582
10:47:17	.00185	.00273	.00118	.00262	.000738	.00184	.00231	.00304
10:47:18	.00126	.00162	.000981	.00189	.000892	.00267	.00182	.00314
10:47:19	.00139	.00320	.000844	.00212	.00108	.00275	.00195	.00407
10:47:20	.000989	.00139	.000767	.00207	.000795	.00166	.00148	.00212
10:47:21	.000908	.00167	.000699	.00161	.000745	.00174	.00136	.00212
10:47:22	.000919	.00190	.000653	.00175	.000757	.00174	.00135	.00249
10:47:23	.000948	.00167	.000810	.00253	.000635	.00174	.00139	.00286
10:47:24	.000728	.00106	.000974	.00225	.000806	.00275	.00145	.00286
10:47:25	.000931	.00232	.000867	.00249	.000787	.00184	.00149	.00268
10:47:26	.000869	.00199	.000943	.00212	.000778	.00211	.00150	.00333
10:47:27	.000794	.00134	.000875	.00180	.000817	.00207	.00143	.00222
10:47:28	.000634	.00134	.000732	.00152	.000828	.00207	.00127	.00212
10:47:29	.00111	.00278	.00114	.00262	.000966	.00271	.00186	.00379
10:47:30	.00115	.00236	.00120	.00258	.000904	.00234	.00188	.00314
10:47:31	.000866	.00139	.00123	.00272	.000934	.00289	.00176	.00333

Measurement Time 02 May 17 10:46:56

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:47:32	.00140	.00292	.00128	.00239	.000855	.00253	.00207	.00342
10:47:33	.00215	.00445	.00117	.00212	.000956	.00239	.00262	.00462
10:47:34	.00154	.00222	.000845	.00156	.000869	.00267	.00195	.00342
10:47:35	.00109	.00176	.000803	.00175	.000923	.00303	.00164	.00304
10:47:36	.000785	.00153	.000665	.00221	.000966	.00221	.00141	.00249
10:47:37	.000711	.00181	.000772	.00198	.000813	.00243	.00132	.00296
10:47:38	.000560	.00106	.000596	.00156	.000860	.00234	.00118	.00240
10:47:39	.000757	.00176	.000827	.00207	.000765	.00202	.00135	.00240
10:47:40	.000819	.00190	.00132	.00341	.000730	.00189	.00171	.00342
10:47:41	.000813	.00153	.00166	.00497	.000903	.00312	.00205	.00498
10:47:42	.000678	.00185	.00284	.00692	.00103	.00345	.00309	.00738
10:47:43	.000709	.00167	.00320	.00653	.000854	.00248	.00337	.00655
10:47:44	.000849	.00227	.00224	.00354	.000863	.00225	.00254	.00379
10:47:45	.000867	.00194	.00186	.00354	.000783	.00184	.00219	.00351
10:47:46	.000803	.00185	.00241	.00428	.000806	.00216	.00266	.00444
10:47:47	.000822	.00172	.00235	.00424	.000639	.00161	.00256	.00425
10:47:48	.00112	.00255	.00246	.00552	.000869	.00267	.00283	.00582
10:47:49	.00321	.00973	.00359	.00902	.00316	.00932	.00574	.01610
10:47:50	.00236	.00472	.00254	.00392	.00218	.00413	.00408	.00684
10:47:51	.00153	.00167	.00169	.00212	.00153	.00275	.00274	.00296
10:47:52	.00116	.00181	.00144	.00239	.00115	.00197	.00218	.00333
10:47:53	.000847	.00157	.00145	.00309	.00108	.00280	.00199	.00351
10:47:54	.000709	.00134	.00122	.00244	.000921	.00243	.00168	.00268
10:47:55	.000841	.00185	.00100	.00193	.00105	.00257	.00167	.00296
10:47:56	.000848	.00185	.00105	.00276	.00107	.00308	.00172	.00360

HVM General Information

HVM File Registers 3
 Serial Number 02021
 Model LARSON DAVIS HVM100
 Firmware Version 1.33
 HVM File Name Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P1. SERVICIO ELECTRICO EL CIRCUITO 772941E-9969100N ±4
 REPETICIÓN 2

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00218	.00269	.00210	.00404	m/s ²
Amax	.01280	.01200	.01200	.02120	m/s ²
Amp	.03180	.03060	.03140	.05400	m/s ²
Amin	.000567	.000894	.000621	.00128	m/s ²
Aeq(k)	.00218	.00269	.00210		m/s ²
VDV	.01770	.01710	.01700	.02980	
CFmp	14.600	11.400	15.000	13.400	
CFmp (dB)	23.300	21.100	23.500	22.500	dB

Time History File Name: Health/Seat Register: 3

Measurement Time 02 May 17 10:49:00

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:49:01	.01280	.03180	.01200	.03060	.01200	.03140	.02120	.05400
10:49:02	.00778	.00190	.00739	.00419	.00735	.00211	.01300	.00425
10:49:03	.00475	.00148	.00527	.00502	.00447	.00138	.00837	.00508
10:49:04	.00295	.00199	.00354	.00378	.00277	.00239	.00537	.00416
10:49:05	.00188	.00181	.00359	.00709	.00185	.00221	.00444	.00701
10:49:06	.00123	.00111	.00311	.00599	.00126	.00170	.00356	.00601
10:49:07	.00100	.00181	.00219	.00276	.000883	.00184	.00256	.00304
10:49:08	.000888	.00190	.00188	.00386	.000751	.00170	.00220	.00387
10:49:09	.000780	.00157	.00253	.00636	.000746	.00262	.00275	.00627
10:49:10	.000689	.00143	.00248	.00400	.000856	.00243	.00270	.00397
10:49:11	.000881	.00232	.00192	.00309	.000879	.00216	.00228	.00351
10:49:12	.000821	.00157	.00213	.00438	.000810	.00193	.00241	.00434
10:49:13	.000743	.00176	.00210	.00364	.000923	.00253	.00240	.00462
10:49:14	.000635	.00157	.00141	.00184	.000844	.00221	.00176	.00231
10:49:15	.000699	.00162	.00116	.00327	.000764	.00207	.00155	.00333
10:49:16	.000841	.00232	.00104	.00207	.000845	.00211	.00158	.00277
10:49:17	.000768	.00162	.00159	.00341	.000885	.00230	.00197	.00351
10:49:18	.000756	.00172	.00207	.00415	.000806	.00262	.00234	.00425
10:49:19	.000659	.00157	.00155	.00253	.000739	.00184	.00184	.00277
10:49:20	.000754	.00208	.00241	.00507	.000765	.00221	.00263	.00526
10:49:21	.000868	.00199	.00201	.00327	.000710	.00179	.00230	.00369
10:49:22	.00144	.00296	.00168	.00267	.000744	.00207	.00233	.00369
10:49:23	.00114	.00213	.00263	.00557	.000754	.00207	.00296	.00582
10:49:24	.000840	.00139	.00220	.00346	.000797	.00211	.00248	.00351
10:49:25	.000719	.00162	.00191	.00364	.000781	.00189	.00217	.00397
10:49:26	.000823	.00213	.00161	.00327	.000935	.00225	.00203	.00333
10:49:27	.000847	.00176	.00158	.00438	.000845	.00299	.00197	.00434
10:49:28	.000728	.00148	.00118	.00193	.000816	.00225	.00160	.00222
10:49:29	.000843	.00194	.00121	.00272	.000800	.00216	.00167	.00296
10:49:30	.000735	.00130	.00160	.00350	.000823	.00207	.00194	.00379
10:49:31	.000722	.00181	.00132	.00253	.000947	.00230	.00177	.00351
10:49:32	.00101	.00273	.00152	.00327	.000969	.00221	.00206	.00342
10:49:33	.00101	.00218	.00146	.00350	.00107	.00267	.00207	.00360
10:49:34	.00109	.00245	.00163	.00290	.000934	.00197	.00217	.00342
10:49:35	.00117	.00310	.00308	.00622	.000879	.00230	.00340	.00619

Measurement Time 02 May 17 10:49:00

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:49:36	.000905	.00162	.00283	.00520	.000828	.00239	.00307	.00526
10:49:37	.000958	.00222	.00225	.00438	.000799	.00243	.00257	.00452
10:49:38	.000953	.00232	.00169	.00285	.000851	.00225	.00211	.00314
10:49:39	.00106	.00241	.00153	.00295	.00101	.00308	.00211	.00379
10:49:40	.000940	.00245	.00179	.00461	.00120	.00312	.00234	.00452
10:49:41	.000818	.00190	.00167	.00304	.000994	.00221	.00210	.00323
10:49:42	.00147	.00301	.00295	.00636	.000986	.00225	.00343	.00646
10:49:43	.00130	.00241	.00307	.00544	.000914	.00202	.00344	.00563
10:49:44	.000974	.00167	.00212	.00285	.000940	.00262	.00250	.00323
10:49:45	.000825	.00199	.00166	.00322	.00107	.00262	.00213	.00323
10:49:46	.000811	.00172	.00172	.00346	.00116	.00299	.00222	.00387
10:49:47	.000686	.00157	.00155	.00285	.000906	.00197	.00191	.00296
10:49:48	.000841	.00190	.00111	.00189	.000948	.00243	.00168	.00296
10:49:49	.000954	.00172	.00113	.00258	.000848	.00234	.00170	.00268
10:49:50	.000793	.00190	.00111	.00239	.000808	.00234	.00158	.00268
10:49:51	.000703	.00194	.000898	.00143	.000752	.00216	.00136	.00231
10:49:52	.000636	.00143	.000979	.00244	.000630	.00166	.00132	.00259
10:49:53	.000642	.00157	.00185	.00400	.000865	.00216	.00213	.00444
10:49:54	.000706	.00194	.00162	.00364	.000893	.00243	.00198	.00369
10:49:55	.000717	.00176	.00158	.00249	.000728	.00211	.00187	.00259
10:49:56	.000620	.00111	.00112	.00166	.000699	.00197	.00146	.00231
10:49:57	.000725	.00176	.00143	.00318	.000679	.00170	.00173	.00333
10:49:58	.000911	.00255	.00142	.00281	.000701	.00179	.00182	.00296
10:49:59	.00460	.01240	.00458	.01290	.00444	.01290	.00784	.02180
10:50:00	.00557	.01670	.00545	.01600	.00551	.01750	.00952	.02840

HVM General Information

HVM File Registers

Serial Number

Model

Firmware Version

HVM File Name

4
02021
LARSON DAVIS HVM100
1.33
Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
Pl. SERVICIO ELECTRICO EL CIRCUITO 772941E-9969100N ±4
REPETICIÓN 3

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00335	.00347	.00326	.00580	m/s ²
Amax	.02530	.02480	.02430	.04280	m/s ²
Amp	.06580	.06540	.06400	.11200	m/s ²
Amin	.000466	.000668	.000566	.00117	m/s ²
Aeq(k)	.00335	.00347	.00326		m/s ²
VDV	.03620	.03560	.03480	.06130	
CFmp	19.600	18.800	19.700	19.300	
CFmp (dB)	25.900	25.500	25.900	25.700	dB

Time History File Name: Health/Seat Register: 4

Measurement Time 02 May 17 10:50:10

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:50:11	.02530	.06580	.02480	.06540	.02430	.06400	.04280	.11200
10:50:12	.01540	.00361	.01500	.00180	.01480	.00372	.02600	.00471
10:50:13	.00935	.00190	.00914	.00225	.00899	.00207	.01580	.00286
10:50:14	.00571	.00194	.00559	.00180	.00547	.00193	.00966	.00240
10:50:15	.00355	.00222	.00343	.00156	.00337	.00225	.00596	.00249
10:50:16	.00222	.00162	.00240	.00262	.00219	.00248	.00392	.00304
10:50:17	.00147	.00172	.00248	.00451	.00148	.00243	.00323	.00444
10:50:18	.000965	.00130	.00194	.00373	.00110	.00202	.00242	.00407
10:50:19	.000925	.00172	.00195	.00424	.000918	.00230	.00234	.00434
10:50:20	.000966	.00222	.00187	.00350	.000787	.00234	.00224	.00360
10:50:21	.000882	.00218	.00201	.00354	.000690	.00161	.00229	.00407
10:50:22	.000647	.00153	.00228	.00424	.000719	.00267	.00247	.00425
10:50:23	.000538	.00125	.00156	.00207	.00103	.00326	.00195	.00333
10:50:24	.000583	.00139	.00141	.00225	.00111	.00253	.00188	.00277
10:50:25	.000626	.00176	.00164	.00364	.000934	.00193	.00198	.00387
10:50:26	.000641	.00139	.00129	.00221	.000797	.00230	.00164	.00314
10:50:27	.000556	.00130	.00123	.00244	.000806	.00230	.00156	.00314
10:50:28	.000553	.00139	.00125	.00249	.000751	.00184	.00155	.00259
10:50:29	.000509	.00116	.00114	.00198	.000914	.00253	.00154	.00277
10:50:30	.000530	.00134	.00114	.00235	.000832	.00202	.00150	.00268
10:50:31	.000553	.00139	.00101	.00221	.000818	.00207	.00141	.00231
10:50:32	.000518	.00148	.000971	.00180	.000792	.00225	.00135	.00277
10:50:33	.000593	.00162	.000975	.00262	.000717	.00207	.00134	.00277
10:50:34	.000542	.00116	.000753	.00138	.000840	.00230	.00125	.00240
10:50:35	.000502	.00130	.000731	.00147	.000770	.00197	.00117	.00212
10:50:36	.000605	.00148	.000804	.00161	.000923	.00248	.00136	.00296
10:50:37	.000838	.00190	.000808	.00198	.000831	.00193	.00143	.00222
10:50:38	.000908	.00181	.000967	.00239	.000835	.00216	.00156	.00268
10:50:39	.000908	.00172	.000881	.00180	.000798	.00271	.00149	.00296
10:50:40	.000767	.00157	.000783	.00184	.000816	.00267	.00136	.00268
10:50:41	.000838	.00162	.00107	.00295	.000940	.00243	.00165	.00351
10:50:42	.00115	.00287	.00102	.00221	.000776	.00170	.00172	.00369
10:50:43	.000837	.00116	.00208	.00585	.000913	.00267	.00241	.00582
10:50:44	.000737	.00143	.00160	.00295	.000869	.00202	.00196	.00323
10:50:45	.000665	.00176	.00163	.00285	.000755	.00174	.00191	.00286

Measurement Time 02 May 17 10:50:10

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:50:46	.000691	.00181	.00185	.00337	.000774	.00189	.00212	.00360
10:50:47	.000738	.00208	.00152	.00272	.000792	.00243	.00186	.00314
10:50:48	.000593	.00143	.00120	.00230	.000765	.00230	.00153	.00259
10:50:49	.000607	.00153	.00113	.00272	.000889	.00216	.00156	.00296
10:50:50	.000760	.00172	.000905	.00171	.000902	.00239	.00148	.00249
10:50:51	.000800	.00218	.00106	.00322	.000741	.00142	.00151	.00323
10:50:52	.000948	.00250	.000921	.00216	.000886	.00202	.00159	.00277
10:50:53	.000939	.00213	.00100	.00212	.000779	.00197	.00157	.00249
10:50:54	.000773	.00157	.00104	.00272	.000847	.00221	.00154	.00314
10:50:55	.000737	.00185	.00124	.00285	.000826	.00225	.00166	.00333
10:50:56	.000673	.00172	.00124	.00276	.00112	.00312	.00180	.00387
10:50:57	.000794	.00208	.00139	.00300	.000881	.00166	.00182	.00314
10:50:58	.000705	.00204	.00105	.00203	.000875	.00211	.00153	.00231
10:50:59	.000953	.00241	.00116	.00239	.000989	.00385	.00179	.00397
10:51:00	.000817	.00167	.00150	.00433	.000795	.00267	.00188	.00462
10:51:01	.000652	.00125	.00130	.00249	.000876	.00211	.00169	.00286
10:51:02	.000654	.00157	.00109	.00230	.000868	.00230	.00153	.00268
10:51:03	.000634	.00176	.000977	.00244	.000749	.00161	.00138	.00249
10:51:04	.000797	.00260	.00134	.00341	.000838	.00248	.00176	.00369
10:51:05	.000844	.00250	.00184	.00386	.000781	.00202	.00216	.00387
10:51:06	.000820	.00190	.00155	.00378	.000792	.00197	.00192	.00379
10:51:07	.000661	.00130	.00160	.00396	.000651	.00147	.00185	.00397
10:51:08	.000655	.00245	.00181	.00304	.000635	.00193	.00202	.00304
10:51:09	.000610	.00134	.00174	.00424	.00111	.00321	.00215	.00462
10:51:10	.000707	.00153	.00142	.00295	.00104	.00248	.00189	.00342

HVM General Information

HVM File Registers
 Serial Number
 Model
 Firmware Version
 HVM File Name

5
 02021
 LARSON DAVIS HVM100
 1.33
 Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P1. SERVICIO ELECTRICO EL CIRCUITO 772941E-9969100N ±4
 REPETICIÓN 4

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.000899	.00159	.000970	.00206	m/s ²
Amax	.00367	.00328	.00364	.00607	m/s ²
Amp	.00648	.00718	.00634	.01010	m/s ²
Amin	.000475	.000732	.000587	.00117	m/s ²
Aeq(k)	.000899	.00159	.000970		m/s ²
VDV	.00442	.00641	.00452	.00814	
CFmp	7.2100	4.5200	6.5400	4.8900	
CFmp (dB)	17.200	13.100	16.300	13.800	dB

Time History File Name: Health/Seat Register: 5

Measurement Time 02 May 17 10:51:25
 Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:51:26	.00367	.00648	.00321	.00548	.00364	.00634	.00607	.01010
10:51:27	.00238	.00310	.00280	.00456	.00238	.00239	.00437	.00471
10:51:28	.00151	.00153	.00207	.00350	.00163	.00234	.00303	.00369
10:51:29	.00123	.00181	.00147	.00235	.00131	.00253	.00231	.00286
10:51:30	.000855	.00130	.00160	.00300	.00103	.00197	.00208	.00304
10:51:31	.000677	.00172	.00142	.00290	.000924	.00230	.00182	.00296
10:51:32	.000705	.00218	.00136	.00337	.000745	.00166	.00170	.00342
10:51:33	.000600	.00125	.000995	.00152	.000748	.00225	.00138	.00249
10:51:34	.000531	.00134	.000994	.00253	.000760	.00184	.00136	.00249
10:51:35	.000580	.00172	.00219	.00442	.000828	.00308	.00241	.00444
10:51:36	.000696	.00208	.00208	.00378	.000790	.00221	.00233	.00387
10:51:37	.000735	.00204	.00201	.00386	.000734	.00184	.00225	.00387
10:51:38	.000706	.00157	.00160	.00354	.000671	.00166	.00187	.00360
10:51:39	.000928	.00236	.00122	.00189	.000728	.00179	.00169	.00259
10:51:40	.000815	.00181	.00272	.00718	.00102	.00253	.00301	.00720
10:51:41	.000860	.00181	.00288	.00552	.000975	.00248	.00315	.00572
10:51:42	.000862	.00162	.00267	.00511	.00103	.00289	.00298	.00563
10:51:43	.00103	.00245	.00253	.00561	.00132	.00399	.00303	.00675
10:51:44	.000790	.00208	.00278	.00695	.00104	.00285	.00306	.00701
10:51:45	.000914	.00194	.00187	.00216	.000926	.00248	.00227	.00277
10:51:46	.000894	.00162	.00222	.00415	.000834	.00225	.00253	.00425
10:51:47	.000686	.00176	.00190	.00350	.000961	.00243	.00223	.00351
10:51:48	.000731	.00199	.00188	.00354	.000882	.00225	.00219	.00379
10:51:49	.000796	.00208	.00160	.00309	.000906	.00234	.00200	.00323
10:51:50	.000872	.00218	.00173	.00382	.000933	.00216	.00214	.00425
10:51:51	.000678	.00157	.00194	.00516	.000880	.00248	.00223	.00526
10:51:52	.000681	.00176	.00139	.00193	.00104	.00289	.00187	.00286
10:51:53	.000601	.00134	.00126	.00253	.000958	.00253	.00169	.00277
10:51:54	.000543	.00125	.00131	.00337	.000893	.00216	.00167	.00351
10:51:55	.000708	.00185	.000934	.00203	.000846	.00271	.00144	.00286
10:51:56	.000775	.00176	.000982	.00216	.000811	.00211	.00149	.00249
10:51:57	.000675	.00143	.000910	.00230	.000804	.00239	.00138	.00259
10:51:58	.000592	.00148	.000760	.00221	.000790	.00225	.00124	.00249
10:51:59	.000506	.00111	.000774	.00184	.000807	.00207	.00122	.00249
10:52:00	.000645	.00181	.00102	.00225	.000779	.00211	.00143	.00296

Measurement Time 02 May 17 10:51:25

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:52:01	.000718	.00190	.000971	.00198	.000773	.00221	.00143	.00249
10:52:02	.000607	.00130	.000808	.00175	.000700	.00156	.00123	.00185
10:52:03	.000632	.00162	.000958	.00198	.000878	.00262	.00144	.00296
10:52:04	.000552	.00139	.00195	.00378	.000741	.00174	.00216	.00379
10:52:05	.000597	.00162	.00202	.00386	.000786	.00189	.00224	.00387
10:52:06	.000611	.00172	.00155	.00272	.000902	.00216	.00189	.00277
10:52:07	.000767	.00213	.00106	.00166	.000687	.00133	.00147	.00231
10:52:08	.000816	.00199	.00106	.00267	.000731	.00202	.00152	.00323
10:52:09	.000731	.00153	.00136	.00341	.000840	.00234	.00176	.00397
10:52:10	.000990	.00208	.00174	.00406	.00110	.00257	.00228	.00480
10:52:11	.000860	.00162	.00143	.00313	.00112	.00336	.00200	.00425
10:52:12	.000858	.00236	.00108	.00175	.000819	.00151	.00160	.00240
10:52:13	.000967	.00236	.00114	.00304	.000755	.00197	.00167	.00323
10:52:14	.000865	.00148	.00115	.00216	.000624	.00124	.00156	.00259
10:52:15	.000714	.00162	.00134	.00346	.000638	.00161	.00164	.00369
10:52:16	.000738	.00245	.00118	.00290	.000744	.00193	.00157	.00333
10:52:17	.000650	.00176	.00135	.00300	.000715	.00225	.00165	.00387
10:52:18	.000736	.00199	.00104	.00175	.000670	.00166	.00144	.00231
10:52:19	.000876	.00213	.00110	.00225	.000938	.00271	.00169	.00333
10:52:20	.000819	.00185	.00112	.00249	.000957	.00230	.00168	.00259
10:52:21	.000930	.00218	.000940	.00253	.000790	.00184	.00153	.00296
10:52:22	.000728	.00130	.000858	.00175	.000689	.00156	.00132	.00194
10:52:23	.000626	.00139	.000995	.00212	.000673	.00170	.00135	.00212
10:52:24	.000945	.00227	.000918	.00207	.000622	.00166	.00145	.00268
10:52:25	.000873	.00172	.000876	.00207	.000680	.00189	.00141	.00249

HVM General Information

HVM File Registers
 Serial Number
 Model
 Firmware Version
 HVM File Name

6
 02021
 LARSON DAVIS HVM100
 1.33
 Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P1. SERVICIO ELECTRICO EL CIRCUITO 772941E-9969100N ±4
 REPETICIÓN 5

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00187	.00209	.00201	.00344	m/s ²
Amax	.01330	.01430	.01370	.02380	m/s ²
Amp	.03330	.03490	.03250	.05750	m/s ²
Amin	.000503	.000562	.000592	.00109	m/s ²
Aeq(k)	.00187	.00209	.00201		m/s ²
VDV	.01830	.01920	.01830	.03210	
CFmp	17.800	16.700	16.200	16.700	
CFmp (dB)	25.000	24.500	24.200	24.500	dB

Time History File Name: Health/Seat Register: 6

Measurement Time 02 May 17 10:52:58

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:52:59	.01330	.03330	.01430	.03490	.01370	.03250	.02380	.05750
10:53:00	.00813	.00320	.00875	.00428	.00831	.00353	.01450	.00572
10:53:01	.00496	.00172	.00534	.00193	.00507	.00156	.00885	.00203
10:53:02	.00307	.00162	.00329	.00207	.00312	.00151	.00546	.00259
10:53:03	.00189	.00111	.00206	.00166	.00198	.00234	.00342	.00231
10:53:04	.00119	.000879	.00138	.00253	.00151	.00285	.00236	.00296
10:53:05	.000846	.00167	.00119	.00239	.00110	.00216	.00182	.00240
10:53:06	.000764	.00153	.000888	.00152	.000910	.00207	.00148	.00240
10:53:07	.000773	.00181	.00111	.00253	.000873	.00193	.00160	.00323
10:53:08	.000745	.00194	.000966	.00203	.000731	.00156	.00142	.00231
10:53:09	.000810	.00218	.000792	.00198	.000885	.00253	.00143	.00249
10:53:10	.000836	.00194	.000684	.00166	.000969	.00257	.00145	.00286
10:53:11	.000659	.00148	.000752	.00203	.000926	.00221	.00136	.00249
10:53:12	.00101	.00218	.000736	.00203	.000777	.00184	.00147	.00259
10:53:13	.000792	.00143	.000813	.00184	.000898	.00234	.00144	.00268
10:53:14	.000682	.00143	.000805	.00175	.000844	.00234	.00135	.00249
10:53:15	.000578	.00139	.00126	.00327	.000762	.00179	.00158	.00333
10:53:16	.000690	.00167	.00105	.00216	.000821	.00216	.00150	.00286
10:53:17	.000852	.00176	.000849	.00166	.000767	.00174	.00142	.00259
10:53:18	.000785	.00227	.000770	.00207	.000686	.00170	.00129	.00249
10:53:19	.000715	.00153	.000691	.00156	.000717	.00184	.00122	.00222
10:53:20	.000708	.00162	.000635	.00152	.000670	.00179	.00116	.00203
10:53:21	.000704	.00176	.000718	.00216	.000737	.00248	.00124	.00259
10:53:22	.000639	.00176	.000740	.00225	.00102	.00423	.00141	.00425
10:53:23	.000585	.00120	.000596	.00138	.000881	.00174	.00121	.00203
10:53:24	.000603	.00143	.000684	.00189	.000697	.00156	.00114	.00212
10:53:25	.000622	.00143	.00105	.00290	.000795	.00202	.00145	.00296
10:53:26	.000706	.00194	.000841	.00171	.000780	.00161	.00134	.00249
10:53:27	.000728	.00157	.00107	.00212	.000909	.00225	.00158	.00249
10:53:28	.000583	.00111	.00113	.00249	.000827	.00216	.00151	.00268
10:53:29	.000655	.00162	.000902	.00189	.000846	.00225	.00139	.00249
10:53:30	.000712	.00176	.00174	.00639	.000832	.00207	.00205	.00646
10:53:31	.000689	.00181	.00167	.00322	.000753	.00239	.00195	.00351
10:53:32	.000679	.00157	.00109	.00143	.000721	.00202	.00147	.00231
10:53:33	.000683	.00194	.00120	.00249	.000728	.00216	.00155	.00323

Measurement Time 02 May 17 10:52:58

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
10:53:34	.000759	.00153	.000985	.00249	.000764	.00221	.00145	.00277
10:53:35	.000777	.00167	.000867	.00225	.000878	.00234	.00145	.00277
10:53:36	.000703	.00153	.000783	.00184	.000776	.00211	.00130	.00259
10:53:37	.000740	.00153	.000724	.00171	.000839	.00285	.00133	.00342
10:53:38	.000666	.00162	.000794	.00212	.00104	.00253	.00146	.00323
10:53:39	.000638	.00199	.00106	.00244	.00105	.00280	.00162	.00323
10:53:40	.000716	.00176	.000979	.00203	.00112	.00432	.00164	.00434
10:53:41	.000608	.00153	.000940	.00239	.00107	.00253	.00154	.00286
10:53:42	.000627	.00148	.000987	.00262	.000974	.00275	.00152	.00333
10:53:43	.000748	.00172	.000994	.00235	.00120	.00363	.00173	.00387
10:53:44	.000829	.00232	.00101	.00225	.00114	.00303	.00173	.00304
10:53:45	.00105	.00232	.00101	.00258	.00120	.00312	.00188	.00351
10:53:46	.000784	.00181	.000969	.00225	.00104	.00207	.00162	.00249
10:53:47	.000991	.00255	.000928	.00281	.000908	.00221	.00163	.00314
10:53:48	.00110	.00232	.00126	.00313	.00123	.00336	.00207	.00434
10:53:49	.000865	.00172	.00132	.00304	.00117	.00289	.00196	.00369
10:53:50	.000961	.00222	.00139	.00290	.00117	.00308	.00205	.00360
10:53:51	.000776	.00185	.00116	.00230	.00132	.00372	.00191	.00369
10:53:52	.000881	.00255	.00120	.00235	.00132	.00353	.00199	.00416
10:53:53	.000775	.00172	.00103	.00203	.00152	.00391	.00199	.00425
10:53:54	.000711	.00194	.000852	.00171	.00124	.00267	.00166	.00259
10:53:55	.000692	.00185	.000823	.00221	.00121	.00275	.00161	.00323
10:53:56	.000710	.00204	.000767	.00193	.00108	.00294	.00150	.00314
10:53:57	.000607	.00148	.000800	.00189	.00134	.00418	.00167	.00444
10:53:58	.000652	.00213	.000905	.00235	.00128	.00353	.00169	.00351

HVM General Information

HVM File Registers
 Serial Number
 Model
 Firmware Version
 HVM File Name

7
 02021
 LARSON DAVIS HVM100
 1.33
 Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P2. CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE 772860E-9969021N ±5
 REPETICIÓN 1

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00315	.00308	.00301	.00532	m/s ²
Amax	.02250	.02250	.02180	.03850	m/s ²
Amp	.06130	.06020	.05810	.10300	m/s ²
Amin	.000837	.000673	.000668	.00141	m/s ²
Aeq(k)	.00315	.00308	.00301		m/s ²
VDV	.03180	.03180	.03070	.05430	
CFmp	19.500	19.500	19.300	19.400	
CFmp (dB)	25.800	25.800	25.700	25.800	dB

Time History File Name: Health/Seat Register: 7

Measurement Time 02 May 17 11:13:25

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:13:26	.02250	.06130	.02250	.06020	.02180	.05810	.03850	.10300
11:13:27	.01370	.00713	.01370	.00585	.01330	.00781	.02350	.01140
11:13:28	.00837	.00245	.00836	.00332	.00811	.00262	.01430	.00360
11:13:29	.00512	.00181	.00513	.00267	.00498	.00285	.00878	.00286
11:13:30	.00315	.00157	.00315	.00161	.00317	.00465	.00546	.00462
11:13:31	.00211	.00273	.00203	.00230	.00209	.00399	.00359	.00407
11:13:32	.00141	.00204	.00135	.00198	.00144	.00253	.00242	.00277
11:13:33	.00116	.00255	.00109	.00253	.00140	.00455	.00211	.00480
11:13:34	.00123	.00356	.000789	.00198	.00116	.00294	.00186	.00360
11:13:35	.00106	.00218	.000704	.00166	.000991	.00234	.00161	.00286
11:13:36	.00107	.00245	.000747	.00189	.000926	.00253	.00159	.00304
11:13:37	.00110	.00227	.00106	.00290	.000840	.00179	.00173	.00304
11:13:38	.00120	.00292	.000999	.00262	.000921	.00257	.00181	.00323
11:13:39	.000925	.00245	.00110	.00350	.000782	.00225	.00163	.00351
11:13:40	.000973	.00227	.000940	.00239	.000966	.00446	.00166	.00471
11:13:41	.00121	.00287	.00109	.00249	.00158	.00790	.00225	.00822
11:13:42	.00129	.00348	.000975	.00281	.00126	.00583	.00205	.00582
11:13:43	.00114	.00301	.000947	.00290	.00112	.00465	.00185	.00462
11:13:44	.000977	.00241	.000849	.00175	.000923	.00230	.00159	.00268
11:13:45	.000854	.00232	.000798	.00189	.000801	.00248	.00141	.00259
11:13:46	.00155	.00402	.000831	.00235	.000960	.00275	.00200	.00508
11:13:47	.00148	.00328	.000862	.00337	.000807	.00225	.00189	.00333
11:13:48	.00116	.00301	.00101	.00253	.000847	.00225	.00176	.00323
11:13:49	.00122	.00324	.00119	.00281	.00105	.00381	.00199	.00397
11:13:50	.00130	.00282	.00113	.00341	.00152	.00713	.00229	.00730
11:13:51	.00105	.00250	.000880	.00189	.00147	.00528	.00200	.00526
11:13:52	.00103	.00245	.000771	.00189	.00128	.00317	.00181	.00342
11:13:53	.00127	.00361	.000998	.00276	.00124	.00312	.00203	.00462
11:13:54	.00142	.00356	.000931	.00309	.00107	.00317	.00200	.00379
11:13:55	.00123	.00241	.000774	.00171	.00121	.00519	.00189	.00518
11:13:56	.00115	.00236	.000994	.00285	.00128	.00468	.00198	.00480
11:13:57	.00119	.00296	.000911	.00239	.00109	.00336	.00185	.00369
11:13:58	.000998	.00255	.000892	.00267	.00105	.00418	.00170	.00416
11:13:59	.00118	.00348	.00105	.00267	.00113	.00372	.00194	.00369
11:14:00	.00113	.00208	.00116	.00244	.000920	.00248	.00186	.00304

Time History File Name: Health/Seat Register: 7

Measurement Time 02 May 17 11:13:25

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:14:01	.000869	.00185	.00109	.00230	.00104	.00294	.00174	.00351
11:14:02	.000870	.00190	.000944	.00262	.000938	.00317	.00159	.00333
11:14:03	.000978	.00250	.000847	.00175	.000920	.00230	.00158	.00268
11:14:04	.00120	.00361	.00130	.00406	.00120	.00363	.00213	.00462
11:14:05	.00128	.00320	.00151	.00304	.00133	.00446	.00237	.00518
11:14:06	.00107	.00199	.00136	.00285	.00107	.00331	.00203	.00351
11:14:07	.000995	.00301	.00111	.00212	.000945	.00225	.00176	.00323
11:14:08	.00107	.00292	.00108	.00272	.000869	.00243	.00175	.00323
11:14:09	.00121	.00255	.000921	.00235	.000893	.00239	.00176	.00314
11:14:10	.00105	.00269	.000771	.00152	.000947	.00262	.00160	.00286
11:14:11	.00138	.00269	.000733	.00171	.000807	.00207	.00176	.00333
11:14:12	.00141	.00287	.000924	.00198	.00101	.00303	.00196	.00379
11:14:13	.00169	.00328	.00106	.00262	.00112	.00385	.00228	.00462
11:14:14	.00161	.00394	.00105	.00253	.000960	.00197	.00214	.00425
11:14:15	.00124	.00255	.00120	.00253	.000906	.00225	.00194	.00314
11:14:16	.00104	.00213	.000954	.00189	.000888	.00225	.00166	.00268
11:14:17	.000865	.00204	.000947	.00184	.000721	.00156	.00147	.00249
11:14:18	.00109	.00245	.000967	.00285	.000787	.00303	.00165	.00360
11:14:19	.00118	.00236	.000987	.00276	.000793	.00193	.00172	.00296
11:14:20	.00101	.00232	.00115	.00295	.000819	.00179	.00173	.00333
11:14:21	.000970	.00250	.00102	.00281	.000677	.00161	.00156	.00323
11:14:22	.00159	.00440	.00104	.00272	.000880	.00321	.00209	.00444
11:14:23	.00133	.00328	.000934	.00221	.000840	.00243	.00182	.00342
11:14:24	.00161	.00394	.000945	.00258	.000815	.00221	.00203	.00397
11:14:25	.00119	.00204	.000812	.00221	.000865	.00239	.00167	.00259

HVM General Information

HVM File Registers 8
 Serial Number 02021
 Model LARSON DAVIS HVM100
 Firmware Version 1.33
 HVM File Name Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P2. CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE 772860E-9969021N ±5
 REPETICIÓN 2

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00202	.00183	.00194	.00334	m/s ²
Amax	.01230	.01190	.01180	.02080	m/s ²
Amp	.02840	.02800	.02830	.04870	m/s ²
Amin	.000754	.000597	.000605	.00142	m/s ²
Aeq(k)	.00202	.00183	.00194		m/s ²
VDV	.01620	.01580	.01590	.02760	
CFmp	14.100	15.300	14.600	14.600	
CFmp (dB)	23.000	23.700	23.300	23.300	dB

Time History File Name: Health/Seat Register: 8

Measurement Time 02 May 17 11:14:31

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:14:32	.01230	.02840	.01190	.02800	.01180	.02830	.02080	.04870
11:14:33	.00753	.00402	.00729	.00332	.00730	.00399	.01270	.00489
11:14:34	.00490	.00551	.00448	.00235	.00461	.00598	.00806	.00655
11:14:35	.00314	.00292	.00280	.00249	.00290	.00280	.00509	.00379
11:14:36	.00213	.00236	.00189	.00258	.00201	.00275	.00348	.00369
11:14:37	.00147	.00287	.00138	.00207	.00139	.00294	.00244	.00342
11:14:38	.00110	.00255	.00112	.00212	.00117	.00253	.00195	.00387
11:14:39	.00101	.00245	.00116	.00304	.00103	.00317	.00185	.00333
11:14:40	.000810	.00148	.000974	.00216	.000969	.00257	.00159	.00296
11:14:41	.000883	.00227	.000967	.00203	.000978	.00211	.00163	.00286
11:14:42	.00102	.00255	.000791	.00166	.000776	.00189	.00150	.00268
11:14:43	.00113	.00213	.000817	.00249	.000679	.00179	.00155	.00296
11:14:44	.00144	.00389	.000915	.00212	.000653	.00147	.00182	.00387
11:14:45	.00129	.00255	.00101	.00295	.000676	.00193	.00177	.00314
11:14:46	.00107	.00204	.000982	.00244	.000902	.00243	.00170	.00277
11:14:47	.00111	.00296	.00105	.00313	.000869	.00197	.00175	.00333
11:14:48	.000965	.00218	.00105	.00198	.00113	.00372	.00182	.00397
11:14:49	.00119	.00269	.00101	.00221	.000882	.00243	.00179	.00323
11:14:50	.00115	.00250	.00110	.00258	.000776	.00197	.00176	.00369
11:14:51	.00108	.00292	.000813	.00134	.000838	.00225	.00158	.00351
11:14:52	.00110	.00255	.000795	.00203	.000811	.00221	.00157	.00314
11:14:53	.00254	.00880	.00180	.00673	.00225	.00904	.00383	.01110
11:14:54	.00256	.00662	.00164	.00364	.00170	.00413	.00347	.00758
11:14:55	.00176	.00194	.00126	.00225	.00128	.00243	.00250	.00286
11:14:56	.00152	.00324	.00102	.00221	.000987	.00216	.00207	.00323
11:14:57	.00146	.00375	.00102	.00216	.000906	.00321	.00200	.00397
11:14:58	.00132	.00296	.000967	.00272	.000924	.00234	.00188	.00333
11:14:59	.00120	.00250	.000921	.00262	.00102	.00312	.00182	.00314
11:15:00	.00119	.00348	.000926	.00221	.00109	.00285	.00186	.00342
11:15:01	.00101	.00232	.000792	.00258	.00123	.00492	.00178	.00489
11:15:02	.00106	.00241	.000702	.00175	.00114	.00515	.00170	.00518
11:15:03	.000904	.00181	.000789	.00180	.000977	.00280	.00154	.00333
11:15:04	.000967	.00273	.000936	.00212	.00100	.00271	.00167	.00360
11:15:05	.00108	.00269	.000991	.00337	.00171	.01550	.00227	.01570
11:15:06	.00146	.00583	.000892	.00337	.00262	.01840	.00315	.01860

Measurement Time 02 May 17 11:14:31

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:15:07	.00117	.00227	.000762	.00198	.00170	.00193	.00221	.00249
11:15:08	.000891	.00190	.000616	.00180	.00122	.00248	.00163	.00286
11:15:09	.000860	.00287	.000823	.00225	.00114	.00336	.00165	.00444
11:15:10	.00119	.00245	.000899	.00212	.00110	.00331	.00185	.00379
11:15:11	.00107	.00301	.000930	.00249	.00103	.00294	.00174	.00379
11:15:12	.00106	.00241	.000947	.00225	.000985	.00285	.00172	.00286
11:15:13	.00105	.00250	.00105	.00295	.000950	.00230	.00176	.00360
11:15:14	.00110	.00292	.000898	.00230	.00103	.00385	.00175	.00379
11:15:15	.000902	.00176	.000840	.00225	.00108	.00336	.00164	.00369
11:15:16	.000995	.00301	.000873	.00258	.00108	.00413	.00170	.00444
11:15:17	.00142	.00351	.00133	.00456	.00145	.00578	.00242	.00609
11:15:18	.00113	.00199	.00132	.00309	.00152	.00501	.00230	.00536
11:15:19	.00105	.00222	.00105	.00207	.00145	.00450	.00207	.00462
11:15:20	.00122	.00278	.00140	.00350	.00119	.00423	.00219	.00434
11:15:21	.000942	.00269	.00115	.00313	.000940	.00207	.00175	.00351
11:15:22	.00104	.00296	.000903	.00249	.000982	.00253	.00168	.00407
11:15:23	.00121	.00269	.000810	.00180	.000935	.00230	.00173	.00304
11:15:24	.00124	.00260	.000947	.00212	.000867	.00216	.00178	.00296
11:15:25	.00145	.00389	.00109	.00276	.000796	.00189	.00198	.00425
11:15:26	.00113	.00194	.000911	.00184	.00102	.00385	.00177	.00387
11:15:27	.00103	.00222	.000898	.00239	.00110	.00418	.00175	.00425
11:15:28	.00110	.00264	.000826	.00207	.00101	.00234	.00170	.00323
11:15:29	.00101	.00264	.000831	.00244	.00105	.00336	.00167	.00351
11:15:30	.000934	.00208	.000752	.00198	.000989	.00308	.00155	.00314
11:15:31	.000909	.00250	.000897	.00267	.000867	.00234	.00154	.00296

HVM General Information

HVM File Registers 9
 Serial Number 02021
 Model LARSON DAVIS HVM100
 Firmware Version 1.33
 HVM File Name Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P2. CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE 772860E-9969021N ±5
 REPETICIÓN 3

Setup

Operating Mode: Whole Body Autostore: Autostop
 Averaging: Slow Store Time (hh:mm): 00:01
 Accelerometer: ICP Integration: None

Weighting: X: Wm Buildings Y: Wm Buildings Z: Wm Buildings
 Sum Factor: X: 1.00 Y: 1.00 Z: 1.00
 Gain (dB): X: 60 Y: 60 Z: 60
 Sensitivity: X: 100.7 mV/g Y: 101.1 mV/g Z: 101.3 mV/g
 AC/DC Output X: AC: Weighted Y: AC: Weighted Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00185	.00171	.00176	.00306	m/s ²
Amax	.01080	.01070	.01080	.01860	m/s ²
Amp	.02690	.02750	.02690	.04620	m/s ²
Amin	.000721	.000699	.000718	.00147	m/s ²
Aeq(k)	.00185	.00171	.00176		m/s ²
VDV	.01520	.01510	.01470	.02590	
CFmp	14.600	16.100	15.300	15.100	
CFmp (dB)	23.300	24.200	23.700	23.600	dB

Time History File Name: Health/Seat Register: 9

Measurement Time 02 May 17 11:15:44

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:15:45	.01080	.02690	.01070	.02750	.01080	.02690	.01860	.04620
11:15:46	.00661	.00356	.00654	.00258	.00660	.00267	.01140	.00425
11:15:47	.00410	.00269	.00402	.00267	.00406	.00230	.00701	.00277
11:15:48	.00262	.00273	.00252	.00198	.00258	.00294	.00444	.00304
11:15:49	.00179	.00315	.00166	.00244	.00179	.00275	.00301	.00387
11:15:50	.00138	.00287	.00141	.00285	.00146	.00321	.00245	.00407
11:15:51	.00130	.00305	.00118	.00258	.00120	.00225	.00212	.00323
11:15:52	.00110	.00236	.00123	.00327	.00104	.00253	.00195	.00360
11:15:53	.00133	.00328	.00127	.00359	.000960	.00243	.00207	.00369
11:15:54	.00176	.00389	.00117	.00258	.000998	.00253	.00233	.00452
11:15:55	.00132	.00282	.00115	.00309	.00102	.00303	.00202	.00333
11:15:56	.00113	.00287	.00100	.00239	.000910	.00253	.00176	.00342
11:15:57	.00112	.00315	.00105	.00239	.000768	.00253	.00171	.00342
11:15:58	.00121	.00320	.000880	.00184	.000905	.00363	.00174	.00369
11:15:59	.00135	.00370	.000747	.00171	.000982	.00253	.00182	.00407
11:16:00	.00127	.00324	.000910	.00239	.000982	.00275	.00184	.00351
11:16:01	.00105	.00185	.000892	.00300	.00101	.00336	.00170	.00333
11:16:02	.000921	.00222	.000870	.00249	.000974	.00294	.00159	.00314
11:16:03	.000899	.00208	.00118	.00378	.000921	.00267	.00174	.00379
11:16:04	.000745	.00176	.00111	.00313	.000934	.00465	.00162	.00462
11:16:05	.000989	.00250	.000982	.00225	.000956	.00308	.00168	.00304
11:16:06	.00103	.00245	.000913	.00216	.000983	.00294	.00169	.00407
11:16:07	.00119	.00305	.000966	.00216	.000938	.00239	.00180	.00360
11:16:08	.00122	.00343	.000929	.00230	.00111	.00326	.00188	.00387
11:16:09	.00127	.00255	.000872	.00221	.000908	.00221	.00178	.00304
11:16:10	.00134	.00328	.000876	.00235	.00111	.00482	.00194	.00518
11:16:11	.00138	.00260	.000982	.00281	.00107	.00267	.00200	.00314
11:16:12	.00124	.00324	.000971	.00249	.000977	.00331	.00185	.00379
11:16:13	.00105	.00194	.000822	.00184	.000806	.00225	.00156	.00286
11:16:14	.00121	.00273	.000787	.00212	.000905	.00262	.00170	.00323
11:16:15	.00147	.00320	.000858	.00249	.000999	.00358	.00197	.00416
11:16:16	.00117	.00204	.00104	.00332	.000894	.00336	.00180	.00360
11:16:17	.00114	.00305	.00106	.00239	.000949	.00294	.00182	.00342
11:16:18	.00122	.00264	.000899	.00152	.00110	.00377	.00187	.00397
11:16:19	.00107	.00255	.00102	.00313	.00112	.00299	.00185	.00360

Measurement Time 02 May 17 11:15:44

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:16:20	.00134	.00255	.00116	.00327	.000960	.00257	.00201	.00416
11:16:21	.00139	.00315	.000944	.00193	.000915	.00207	.00191	.00323
11:16:22	.000975	.00167	.000875	.00198	.000906	.00381	.00159	.00387
11:16:23	.000836	.00194	.00102	.00285	.000944	.00391	.00162	.00407
11:16:24	.000958	.00278	.00104	.00207	.000740	.00142	.00159	.00296
11:16:25	.00108	.00269	.00109	.00244	.000785	.00184	.00172	.00296
11:16:26	.000925	.00269	.00102	.00225	.000873	.00262	.00162	.00296
11:16:27	.00112	.00315	.00117	.00304	.00102	.00363	.00191	.00387
11:16:28	.000981	.00250	.00105	.00285	.00128	.00593	.00192	.00609
11:16:29	.000939	.00208	.00103	.00189	.00110	.00413	.00177	.00444
11:16:30	.000893	.00245	.000899	.00161	.00128	.00515	.00180	.00536
11:16:31	.00106	.00260	.000794	.00193	.00104	.00262	.00168	.00323
11:16:32	.00122	.00334	.000897	.00216	.00112	.00372	.00188	.00379
11:16:33	.00103	.00194	.000897	.00203	.00134	.00446	.00191	.00452
11:16:34	.00112	.00315	.000853	.00212	.00127	.00340	.00189	.00379
11:16:35	.00113	.00232	.00129	.00373	.00118	.00331	.00208	.00416
11:16:36	.00113	.00232	.00125	.00341	.00114	.00308	.00203	.00407
11:16:37	.000915	.00172	.00102	.00230	.00112	.00363	.00176	.00369
11:16:38	.00120	.00366	.000990	.00253	.00117	.00326	.00194	.00379
11:16:39	.00110	.00370	.000832	.00161	.000963	.00271	.00168	.00425
11:16:40	.000952	.00185	.000873	.00262	.00107	.00312	.00167	.00342
11:16:41	.00169	.00519	.00142	.00392	.00165	.00446	.00275	.00601
11:16:42	.00184	.00538	.00129	.00285	.00169	.00542	.00280	.00675
11:16:43	.00206	.00445	.00113	.00295	.00177	.00436	.00293	.00526
11:16:44	.00163	.00402	.000999	.00198	.00122	.00253	.00226	.00425

HVM General Information

HVM File Registers 10
 Serial Number 02021
 Model LARSON DAVIS HVM100
 Firmware Version 1.33
 HVM File Name Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P2. CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE 772860E-9969021N ±5
 REPETICIÓN 4

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00142	.00118	.00116	.00218	m/s ²
Amax	.00561	.00525	.00482	.00905	m/s ²
Amp	.01380	.01200	.01660	.02380	m/s ²
Amin	.000834	.000728	.000718	.00140	m/s ²
Aeq(k)	.00142	.00118	.00116		m/s ²
VDV	.00699	.00684	.00699	.01170	
CFmp	9.7100	10.200	14.300	10.900	
CFmp (dB)	19.700	20.200	23.100	20.800	dB

Time History File Name: Health/Seat Register: 10

Measurement Time 02 May 17 11:16:50

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:16:51	.00561	.01380	.00525	.01200	.00482	.01660	.00905	.02380
11:16:52	.00380	.00394	.00324	.00175	.00303	.00253	.00583	.00444
11:16:53	.00263	.00292	.00227	.00313	.00214	.00569	.00407	.00627
11:16:54	.00177	.00227	.00150	.00171	.00147	.00257	.00274	.00286
11:16:55	.00129	.00227	.00115	.00225	.00126	.00345	.00213	.00351
11:16:56	.00137	.00287	.00101	.00193	.00121	.00427	.00208	.00425
11:16:57	.00117	.00282	.000862	.00212	.00107	.00267	.00180	.00333
11:16:58	.00115	.00301	.00112	.00281	.00105	.00280	.00191	.00369
11:16:59	.00127	.00269	.000921	.00212	.00106	.00486	.00189	.00498
11:17:00	.00132	.00273	.000985	.00272	.000957	.00267	.00190	.00333
11:17:01	.00144	.00328	.000990	.00216	.000989	.00340	.00200	.00416
11:17:02	.00128	.00282	.00120	.00295	.000866	.00207	.00195	.00407
11:17:03	.00114	.00236	.00100	.00207	.000790	.00189	.00171	.00277
11:17:04	.00153	.00453	.000804	.00166	.000923	.00267	.00195	.00508
11:17:05	.00143	.00287	.000911	.00258	.000970	.00267	.00195	.00379
11:17:06	.00156	.00477	.00108	.00276	.00111	.00336	.00219	.00545
11:17:07	.00152	.00402	.00108	.00295	.00142	.00634	.00234	.00655
11:17:08	.00148	.00328	.000913	.00212	.00109	.00257	.00205	.00351
11:17:09	.00140	.00380	.000939	.00244	.000979	.00262	.00195	.00387
11:17:10	.00147	.00315	.000858	.00198	.000982	.00326	.00196	.00379
11:17:11	.00124	.00269	.000801	.00203	.000894	.00221	.00172	.00304
11:17:12	.00137	.00301	.000794	.00198	.000869	.00275	.00180	.00369
11:17:13	.00123	.00301	.000801	.00235	.000827	.00184	.00168	.00333
11:17:14	.00111	.00278	.000858	.00276	.000810	.00207	.00161	.00342
11:17:15	.00112	.00255	.00102	.00244	.000840	.00225	.00173	.00323
11:17:16	.000989	.00245	.000930	.00212	.000914	.00349	.00163	.00351
11:17:17	.000995	.00245	.00101	.00313	.000902	.00285	.00167	.00360
11:17:18	.000977	.00241	.000900	.00207	.000862	.00367	.00158	.00416
11:17:19	.00117	.00324	.000993	.00276	.000935	.00321	.00179	.00360
11:17:20	.00106	.00315	.000950	.00203	.000879	.00221	.00167	.00387
11:17:21	.000889	.00204	.000914	.00203	.000771	.00184	.00149	.00259
11:17:22	.00106	.00245	.000782	.00147	.000825	.00303	.00155	.00323
11:17:23	.00112	.00245	.00114	.00272	.00111	.00432	.00194	.00489
11:17:24	.000928	.00227	.00144	.00400	.00146	.00720	.00225	.00720
11:17:25	.00118	.00301	.00120	.00392	.00117	.00275	.00205	.00397

Measurement Time 02 May 17 11:16:50

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:17:26	.00111	.00269	.00113	.00350	.00110	.00336	.00192	.00387
11:17:27	.000997	.00296	.00102	.00290	.00108	.00395	.00178	.00425
11:17:28	.00114	.00264	.000886	.00175	.00104	.00257	.00177	.00314
11:17:29	.00124	.00320	.000893	.00225	.00104	.00289	.00185	.00416
11:17:30	.00107	.00287	.00106	.00244	.000934	.00267	.00177	.00314
11:17:31	.00163	.00348	.00102	.00235	.000918	.00230	.00212	.00407
11:17:32	.00137	.00348	.000878	.00193	.000978	.00221	.00189	.00369
11:17:33	.00105	.00227	.00104	.00285	.000818	.00174	.00168	.00296
11:17:34	.00117	.00273	.00113	.00290	.000925	.00225	.00187	.00351
11:17:35	.00117	.00273	.000986	.00230	.000819	.00197	.00173	.00323
11:17:36	.00116	.00236	.000799	.00216	.000998	.00473	.00172	.00518
11:17:37	.000982	.00255	.000839	.00216	.000947	.00299	.00160	.00314
11:17:38	.000961	.00190	.000943	.00225	.000894	.00280	.00161	.00277
11:17:39	.00110	.00264	.00117	.00285	.000821	.00253	.00179	.00360
11:17:40	.00101	.00222	.000926	.00180	.000860	.00267	.00161	.00304
11:17:41	.00107	.00227	.00106	.00249	.00119	.00358	.00191	.00397
11:17:42	.00118	.00255	.00104	.00253	.00107	.00317	.00189	.00397
11:17:43	.000982	.00190	.000905	.00253	.000970	.00234	.00164	.00277
11:17:44	.00110	.00260	.000873	.00212	.00109	.00303	.00177	.00351
11:17:45	.00126	.00287	.00121	.00327	.00111	.00349	.00206	.00425
11:17:46	.00102	.00227	.000902	.00212	.00102	.00239	.00169	.00268
11:17:47	.000846	.00176	.000770	.00189	.000831	.00179	.00141	.00249
11:17:48	.00149	.00343	.000994	.00235	.000838	.00225	.00197	.00369
11:17:49	.00139	.00301	.00111	.00281	.000855	.00262	.00197	.00369
11:17:50	.00121	.00356	.000899	.00225	.000812	.00257	.00171	.00360

HVM General Information

HVM File Registers 11
 Serial Number 02021
 Model LARSON DAVIS HVM100
 Firmware Version 1.33
 HVM File Name Health/Seat

Note

CONSORCIO LÍNEA 1 METRO QUITO
 P2. CENTRO INFANTIL Y GUARDERIA PEQUEÑOS DEL PRESENTE 772860E-9969021N ±5
 REPETICIÓN 5

Setup

Operating Mode:	Whole Body	Autostore:	Autostop
Averaging:	Slow	Store Time (hh:mm):	00:01
Accelerometer:	ICP	Integration:	None
Weighting:	X: Wm Buildings	Y: Wm Buildings	Z: Wm Buildings
Sum Factor:	X: 1.00	Y: 1.00	Z: 1.00
Gain (dB):	X: 60	Y: 60	Z: 60
Sensitivity:	X: 100.7 mV/g	Y: 101.1 mV/g	Z: 101.3 mV/g
AC/DC Output	X: AC: Weighted	Y: AC: Weighted	Z: AC: Weighted

Overall Data

Run Time (hh:mm:ss) 00:01:00

	X: Axis	Y: Axis	Z: Axis	Sum	Units
Aeq	.00121	.00107	.00108	.00194	m/s ²
Amax	.00259	.00285	.00278	.00474	m/s ²
Amp	.00783	.00659	.01030	.01110	m/s ²
Amin	.000733	.000721	.000689	.00142	m/s ²
Aeq(k)	.00121	.00107	.00108		m/s ²
VDV	.00479	.00452	.00475	.00736	
CFmp	6.4500	6.1500	9.5700	5.7100	
CFmp (dB)	16.200	15.800	19.600	15.100	dB

Time History File Name: Health/Seat Register: 11

Measurement Time 02 May 17 11:18:05

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:18:06	.00259	.00783	.00285	.00659	.00278	.00638	.00474	.01110
11:18:07	.00181	.00282	.00190	.00221	.00179	.00184	.00317	.00286
11:18:08	.00138	.00255	.00131	.00253	.00126	.00253	.00227	.00342
11:18:09	.00132	.00305	.00107	.00244	.00114	.00340	.00204	.00387
11:18:10	.00120	.00287	.00109	.00304	.000943	.00202	.00187	.00342
11:18:11	.00124	.00260	.00113	.00253	.000797	.00234	.00185	.00304
11:18:12	.000971	.00222	.000997	.00184	.000798	.00189	.00160	.00240
11:18:13	.00113	.00282	.00102	.00470	.00118	.01030	.00193	.01040
11:18:14	.000872	.00143	.00110	.00309	.000965	.00216	.00170	.00304
11:18:15	.000797	.00232	.00100	.00239	.000734	.00156	.00147	.00277
11:18:16	.000942	.00292	.000885	.00189	.00134	.00611	.00186	.00619
11:18:17	.00106	.00273	.000910	.00212	.000994	.00528	.00171	.00554
11:18:18	.00107	.00250	.000923	.00258	.000904	.00299	.00167	.00323
11:18:19	.00123	.00292	.00115	.00332	.000918	.00216	.00191	.00379
11:18:20	.00116	.00282	.00102	.00249	.00107	.00395	.00188	.00416
11:18:21	.00121	.00305	.00115	.00276	.00128	.00446	.00209	.00444
11:18:22	.00133	.00398	.000989	.00235	.00115	.00385	.00201	.00480
11:18:23	.00119	.00227	.000978	.00207	.00109	.00385	.00188	.00379
11:18:24	.000966	.00204	.000868	.00230	.000991	.00308	.00163	.00304
11:18:25	.00151	.00394	.000819	.00203	.00106	.00349	.00201	.00471
11:18:26	.00122	.00218	.00115	.00337	.000960	.00267	.00193	.00333
11:18:27	.00106	.00305	.000940	.00207	.000905	.00271	.00168	.00333
11:18:28	.000883	.00167	.000985	.00198	.000911	.00363	.00160	.00369
11:18:29	.00122	.00264	.000979	.00225	.000846	.00216	.00177	.00268
11:18:30	.00129	.00324	.00102	.00203	.000843	.00239	.00184	.00387
11:18:31	.00129	.00273	.000940	.00258	.00106	.00317	.00191	.00333
11:18:32	.00119	.00255	.00106	.00253	.00119	.00358	.00198	.00387
11:18:33	.00116	.00260	.00104	.00267	.00119	.00317	.00195	.00342
11:18:34	.00105	.00310	.000952	.00276	.00117	.00262	.00183	.00333
11:18:35	.00102	.00185	.00111	.00350	.000940	.00230	.00177	.00369
11:18:36	.00105	.00282	.00113	.00267	.00109	.00358	.00188	.00416
11:18:37	.00115	.00310	.00114	.00281	.00114	.00381	.00197	.00407
11:18:38	.00108	.00232	.000920	.00203	.00117	.00331	.00183	.00379
11:18:39	.00118	.00328	.00113	.00346	.000928	.00239	.00187	.00397
11:18:40	.00118	.00273	.00110	.00253	.000894	.00243	.00184	.00304

Time History File Name: Health/Seat Register: 11

Measurement Time 02 May 17 11:18:05

Units: m/s²

TIME	X RMS	PEAK	Y RMS	PEAK	Z RMS	PEAK	S RMS	PEAK
11:18:41	.00128	.00292	.000945	.00216	.000823	.00243	.00178	.00342
11:18:42	.00116	.00204	.000853	.00221	.00104	.00271	.00177	.00323
11:18:43	.00141	.00269	.000903	.00235	.000957	.00262	.00192	.00333
11:18:44	.00122	.00260	.000971	.00327	.00134	.00413	.00205	.00452
11:18:45	.00123	.00320	.00102	.00332	.00119	.00294	.00198	.00425
11:18:46	.00121	.00310	.00104	.00203	.000989	.00216	.00187	.00369
11:18:47	.00142	.00389	.00125	.00438	.00115	.00294	.00221	.00518
11:18:48	.00117	.00227	.00106	.00267	.00108	.00267	.00191	.00323
11:18:49	.00103	.00213	.00111	.00272	.00105	.00299	.00183	.00351
11:18:50	.00114	.00273	.000898	.00207	.000963	.00303	.00174	.00360
11:18:51	.00114	.00366	.00137	.00475	.00149	.00707	.00231	.00831
11:18:52	.00100	.00296	.00129	.00442	.00140	.00598	.00214	.00627
11:18:53	.000923	.00222	.00106	.00193	.00105	.00216	.00175	.00240
11:18:54	.000928	.00264	.000991	.00193	.000963	.00193	.00166	.00286
11:18:55	.00121	.00296	.000918	.00189	.000970	.00221	.00180	.00369
11:18:56	.000962	.00176	.000875	.00175	.000952	.00179	.00161	.00277
11:18:57	.000794	.00190	.00102	.00290	.000923	.00221	.00159	.00296
11:18:58	.00102	.00222	.000990	.00235	.000854	.00253	.00165	.00286
11:18:59	.00148	.00417	.000879	.00175	.000819	.00253	.00190	.00434
11:19:00	.00156	.00351	.00108	.00262	.000940	.00275	.00211	.00425
11:19:01	.00182	.00389	.000994	.00249	.000910	.00275	.00226	.00425
11:19:02	.00136	.00213	.000973	.00221	.000866	.00230	.00188	.00286
11:19:03	.00137	.00334	.00123	.00272	.00116	.00694	.00217	.00701
11:19:04	.00103	.00218	.00106	.00253	.000902	.00221	.00172	.00333
11:19:05	.000903	.00199	.00101	.00235	.000948	.00257	.00165	.00333