



Seat interface transducer pad

Introduction

The *HVLab* seat interface transducer pad (SIT-pad) has been developed through research at the University of Southampton's Institute of Sound and Vibration Research, a world-class leader in its field.

The *HVLab* SIT-pad can be used for the measurement of vibration at the seat-body interfaces: on the seat squab and also on the backrest. It is available in single axis and tri-axial versions.

Applications

The *HVLab* SIT-pad may be used for the measurement of vibration at the body-seat interface. The device is used in industrial, research and educational establishments in both laboratory and field measurements.



Applications include:

- Automotive seat testing
- Measuring SEAT values
- Suspension seat testing
- Fundamental research
- Measuring seat transmissibility
- Conformance with EU Directives

Features

The *HVLab* SIT-pad consists of a semi-rigid disk with a central cavity containing either one (single axis pad) or three (tri-axial pad) miniature accelerometers. The single axis version can be used in the measurement of vibration perpendicular to the measurement surface; the tri-axial version can measure vibration three orthogonal axis.

The flexible pad is designed to conform to the contours of the seat under the weight of the body, but not compress under the action of commonly vibration.

The pad has minimal affect on the posture of a seated person and does not adversely affect contact conditions with the seat surface. The *HVLab* SIT-pad can also be used for the measurement of vibration at the seat back.

Technical Details

Accelerometer:	Piezo-resistive	Type:	Entran EGCSY-240D*
Amplitude range:	$\pm 10g$	Frequency range:	0 to 120 Hz
Sensitivity:	500 mV/g *	Output:	$\pm 5V$ *
Radius:	200 mm	Thickness:	3.5mm (min), 12mm (max)
Cable length:	4 m *	Connector	6-way DIN *

* Other options available, please contact for details

Support Facilities

The *HVLab* SIT-pad is supplied with a user manual and calibration data and the use of free hotline support for the first 6 months.

Further Information ...

The *HVLab* SIT-pad is just one of a range of *HVLab* products.

The product range include an anthropodynamic dummy for use in place of human subjects in dynamic seat testing applications, a 16-Channel Data Acquisition and Analysis System, a Tri-axial Finger ring mount for the measurement of hand-transmitted vibration and *HVLab* Data Acquisition and Analysis software.



For more information please contact:

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