



# Software Development Kit

Write software to control and acquire data from Larson Davis products – Model 831, LxT SoundExpert and HVM200 Human Vibration Meter

## Highlights

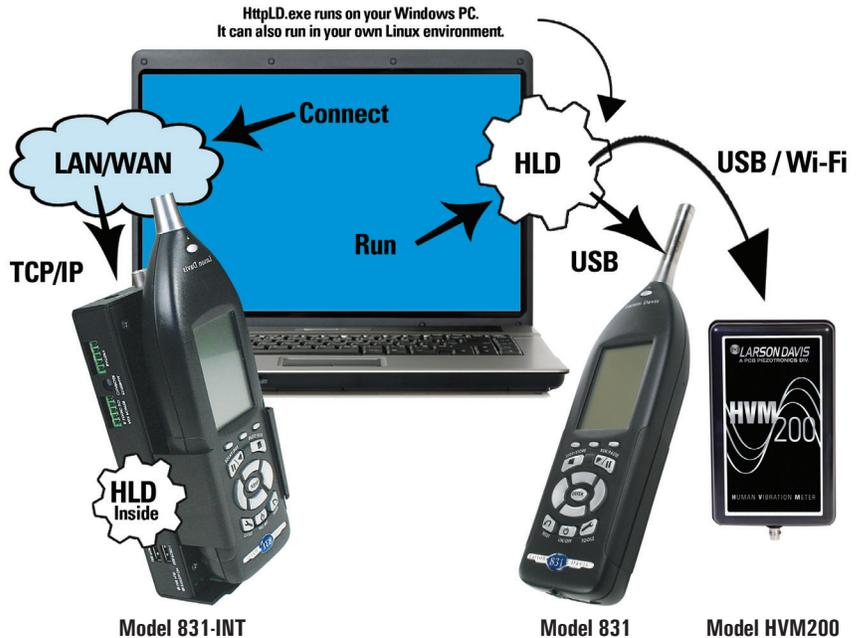
- Full instrument control
- Windows and Linux support
- Control meter from mobile platform
- Simple web integration
- JSON data-interchange
- Readable ASCII commands and responses
- Support for multiple, simultaneous instrument connections

## Applications

- Custom software
- Integrate Larson Davis meter into existing software
- Implement specialized algorithms
- Construction Noise
- Mining Noise
- Outdoor Venues
- Aircraft Noise
- Amusement Parks
- Environmental Impact Studies
- Industrial Noise Monitoring



Supported Instruments



### Overview

The Software Development Kit (SDK) is a toolkit for developing custom applications in MS Windows®, Debian Linux and mobile platforms that includes example code and everything else you need to communicate with the Model 831, 831 with 831-INT-ET, LxT or HVM200.

### Control Model 831 and LxT Sound Level Meters

Our latest version of the SDK includes a documented http API and software components that allow the control and setup of Larson Davis products using methods designed for the Internet. These methods enable Independent Software Vendors (ISV) to write software that will run on a wide variety of platforms.

### Control HVM200 Human Vibration Meter

The SDK provides the documentation needed to use the http API that is built into the HVM200 and the libraries to access data stored in HVM200 data files.

### Easily Utilize the Internet and Web

This is accomplished by communicating to the sound level meter over a network using a tcp/ip socket. Software requests and instrument responses are both formatted using simple ASCII text for development ease and to make the resulting application highly portable. Requests made through the SDK are formatted like a URL and response data is formatted using standard JSON format. At the simplest level this allows interface to a meter using only a browser.



## Specifications

### SDK Components for Control & Download

Runtime Operating System	MS Windows 7 or newer Debian Linux
LxT Communication	USB, serial
831 Communication	tcp/ip[i], USB, serial2
SDK API	http over tcp/ip for instrument control C# & C++ for data file access
Data-interchange format (command and control)	JSON
Example code	C#, C++, Javascript
SDK component type	Stand-alone executable Documentation

### SDK for Reading Data Files

Runtime Operating System	MS Windows 7 or newer
Development Environment	C++, C#
LDTranslator.dll (C# component)	For 831, LxT, HVM100 & HVM200
SLMtranslate.dll (C++ component)	For 831 & LxT
SDK component type	.dll files
File Types Supported	.ldbin, .slmdl, .hvm2

### Components required for Windows development (included)

831 or LxT firmware revision	≥ 2.300
Miniweb.dll[ii]	
Libusb[iii]	1.0
Supercom	
MSVCP120	
MSVCR120	
Components required for Debian Linux development	
831 or LxT firmware revision	≥ 2.300
Miniweb.dll3	
Libusb4	1.0 (not included in SDK)

### Included Items

Software interface application (Windows & one Linux version)	HttpIpd.exe
File translation library (Windows only)	Slmtranslate.dll
Documentation	

### Ordering Information

SWWW-G4-SDK Software Development kit supporting Larson Davis Model 831, LxT and HVM200 instruments. For Debian Linux and Microsoft® Windows® 7 or newer  
 SWWW-G4-WINDSK Software Development kit supporting Larson Davis Model 831, LxT and HVM200 instruments. For Microsoft® Windows® 7 or newer

### Notes

[i] Requires Model 831 with 831-INT-ET. [ii] GPL3 license. [iii] GPL2 license

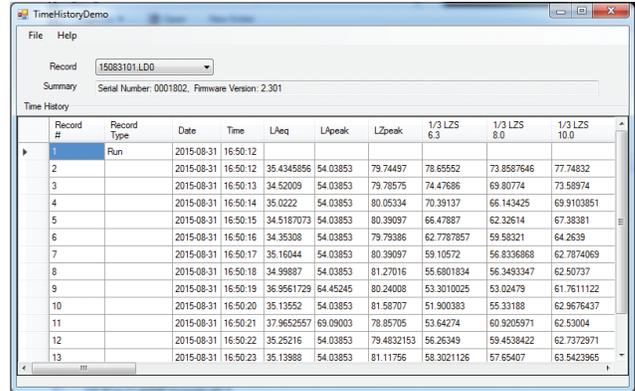


Figure 1 - C# SLM Translator Example

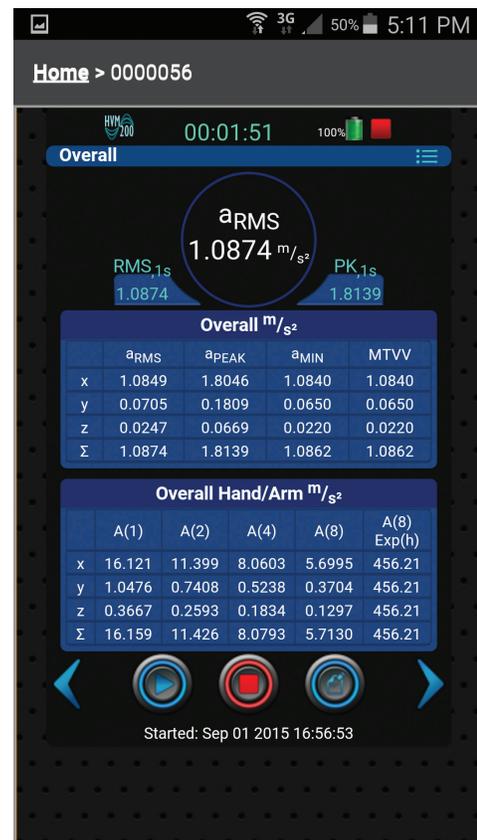


Figure 2 - Sample HVM200 display



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