



## MODEL SERIES SDK

# SOFTWARE DEVELOPMENT KIT

- Full instrument control via mobile platform
- Windows and Linux support
- Simple web integration
- JSON data-interchange
- Readable ASCII commands and responses

## TYPICAL APPLICATIONS

- Custom software and implementation of specialized algorithms
- Environmental Noise Monitoring
- Construction Noise
- Mining Noise
- Outdoor Venues
- Aircraft Noise
- Industrial Noise Monitoring

## WRITE SOFTWARE TO CONTROL AND ACQUIRE DATA

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

Our latest version of the SDK includes a documented http API and software components that allow the control and setup of Larson Davis Sound Level Meters – Model 831C, 831, LxT - using methods designed for compatibility with the internet. These methods enable Independent Software Vendors (ISV) to write software that will run on a wide variety of platforms. When working with a Human Vibration Meter, the SDK provides the documentation needed to use the http API that is built into the HVM200 and the associated libraries to access data stored in HVM200 data files.

The SDK allows you to easily utilize the internet by communicating to your 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	Windows 7 or newer Debian Linux
LxT Communication	USB, serial
831 Communication	tcp/ip <sup>[1]</sup> , USB, serial 2
SDK API	http over tcp/ip for instrument control C# & C++ for data file access
Data-interchange format	JSON
(command and control)	
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 831C, 831, LxT, HVM100 & HVM200
SLMtranslate.dll (C++ component)	For 831C, 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 <sup>[2]</sup>	
Libusb <sup>[3]</sup>	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)

### Ordering Information

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

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

### Included Accessories

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

[1] Requires Model 831 with 831 INT-ET

[2] GPL3 license

[3] GPI2 license

Record #	Record Type	Date	Time	L/Avg	L/Peak	L/Zpeak	1/3 L25	1/3 L25	1/3 L25
1	Run	2015-08-31	17:04:05	14.4977045	54.03853	59.4919167	22.4507122	31.0338874	30.2363224
2		2015-08-31	17:04:05	14.370945	54.03853	58.5228157	21.0883732	27.5838814	28.5473152
3		2015-08-31	17:04:07	14.44736	54.03853	58.5228157	26.9514828	26.7440128	30.10268
4		2015-08-31	17:04:08	14.3295288	54.03853	59.4919167	28.9532757	26.8234062	29.3821239
5		2015-08-31	17:04:09	14.3118383	54.03853	58.5228157	29.9602554	27.21262	27.8816862
6		2015-08-31	17:04:10	14.3312969	54.03853	58.5228157	30.6310616	29.58257	25.6478186
7		2015-08-31	17:04:11	14.358202	54.03853	58.5228157	28.5876274	29.4268347	26.7749367
8		2015-08-31	17:04:12	14.3407858	54.03853	59.4919167	30.1895887	26.4272278	28.6361046
9		2015-08-31	17:04:13	14.4028789	54.03853	58.5228157	30.0449162	25.8407868	25.6956474
10		2015-08-31	17:04:14	14.3740753	54.03853	58.5228157	28.3156033	26.1509724	26.1498814
11		2015-08-31	17:04:15	14.3616762	54.03853	60.28373	28.18516	28.0565	27.81782
12		2015-08-31	17:04:16	14.32961	54.03853	59.4919167	27.3026619	27.8428631	27.7831821

Figure 1

C# SLM Translator Example

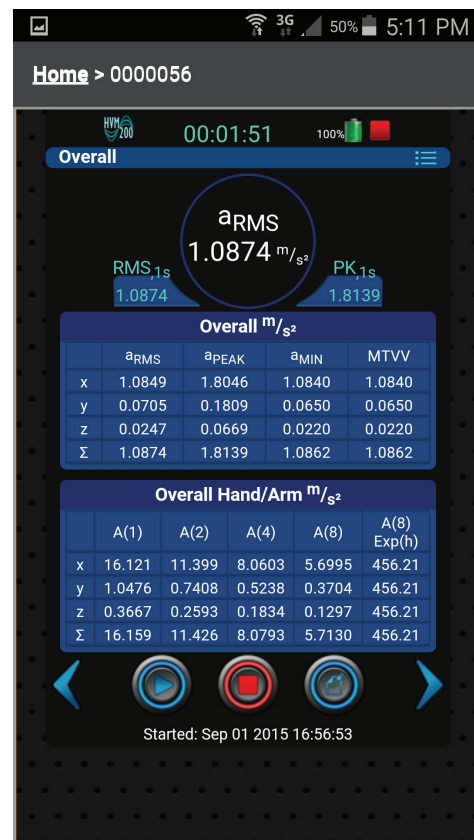


Figure 2

Sample HVM200 display