







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

	Communication tcp/ip ¹¹ , USB, serial 2 API http over tcp/ip for instrument control G# & C++ for data file access C# & C++ for data file access interchange format JSON imand and control) Example interchange format JSON imand and control) Example imple code C#, C++, Javascript component type Stand-alone executable ponents required pata Files Documentation ime Operating System MS Windows 7 or newer lopment Environment C++, C# anslator.dll (C# component) For 831C, 831, LxT, HVM100 & HVM200 translate.dll (C++ component) For 831C, 831, LxT component type .dlbin, .slmdl, .hvm2 ponents required for Windows development (included) Example or LxT firmware revision ≥ 2.300 web.dll ^[2] 1.0 cord CR120 ponents required for Debian cdevelopment cdr LxT firmware revision ≥ 2.300 web.dll3 1.0 (not included in SDK) ring Information 1.0 (not include in SDK)						
SDK Component	s for Control & Dow	nload					
Runtime Operati	na Svetem	Windows 7 or newer					
Huntime operating bystem		Debian Linux					
LxT Communication		USB, serial					
831 Communica	tion	tcp/ip [1], USB, serial 2					
SDK API		http over tcp/ip for instrument control					
		C# & C++ for data file access					
Data-interchange format		JSON					
(command and c	control)						
Example code		C#, C++, Javascript					
CDK component	tuno	Stand-alone executable					
SPK component type		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 Suppo	orted	.ldbin, .slmdl, .hvm2					
Components req	uired for Windows d	levelopment (included)					
831 or LxT firmware revision		≥ 2.300					
Miniweb.dll [2]							
Libusb [3]		1.0					
Supercom							
MSVCP120							
MSVCR120							
Components req Linux developme							
831 or LxT firmware revision		≥ 2.300					
Miniweb.dll3							
Libusb4		1.0 (not included in SDK)					
Ordering Inform	ation						
		it kit supporting Larson Davis Model 831C, For Debian Linux and Microsoft® Windows®					
		ment kit supporting Larson Davis Model nents. For Microsoft® Windows® 7 or newer					
Included Access	ories						
Httpld.exe	software interface application (Windows & one Linux version)						
SImtranslate.dll	File tr	anslation library (Windows only)					
Documentation							
	021 with 021 INT ET						

[1] Requires Model 831 with 831 INT-ET

LARSON DAVIS

A PCB DIVISION

GPL3 license [2] GPL3 license[3] GPI2 license

File	e Help										
Record		15083102.LD0 •									
	Summary History	Setal Number: 0	0001802, Femiva	re Version:	2.301						
	Record #	Record Type	Date	Time	L/leg	LApeak	LZpeak	1/3 LZS 6.3	1/3 LZS 8.0	1/3 LZS 10.0	1
	1	Run	2015-08-31	17.04.05							
	2	1	2015-08-31	17:04:05	14.4977245	54.03853	59,4919167	22.4507122	31.0338974	30 2363224	
	3		2015-08-31	17.04.06	14.370945	54.03853	58.5228157	21.0883732	27.5838814	28.9473152	
	4		2015-08-31	17:04:07	14.44738	54.03853	58.5228157	26.9514828	26.7440128	30.10268	
	5		2015-08-31	17.04.08	14.3295288	54.03853	59.4919167	28.9532757	26.8234062	29.3821239	
	6		2015-08-31	17:04:09	14.3119383	54.03853	58 5228 157	29.9902554	27.23262	27.8051662	
	7		2015-08-31	17:04:10	14.3312569	54.03853	58.5228157	30.6310616	29.58257	25.6675186	
	8		2015-08-31	17:04:11	14.358202	54.03853	58.5228157	28.5876274	29.5266247	26.7749367	
	9		2015-08-31	17:04:12	14.3407555	54.03853	59.4919167	30.1855087	26.6272278	28.6361046	
	10		2015-08-31	17:04:13	14.4026709	54.03853	58.5228157	30.0449162	25.8487988	25.6936474	
	11		2015-08-31	17:04:14	14.3743753	54.03853	58.5228157	28.3156033	26.1509724	25.1490014	
	12		2015-08-31	17:04:15	14.3616762	54.03853	60.28373	28.18516	28.0565	27.81782	
	13		2015-08-31	17:04:16	14.32561	54.03053	59 4919167	27 3026619	27.8429631	27 7831821	

Figure 1

C# SLM Translator Example



Figure 2 Sample HVM200 display

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