

“YOUR ONE-STOP SOUND & VIBRATION SHOP”

TEST EQUIPMENT RENTAL

SOUND LEVEL METER / ENVIRONMENTAL NOISE RENTALS



LD 820

Community and construction logging



LD 824

Analyzer with Octaving, FFT, room acoustics and more



LxT

Plant survey and task analyzer



LD 831

Adds digital audio and voice recording



Outdoor Systems

Short term kits for moderate weather

Why Rent?



Advanced Instrumentation

We provide state-of-the-art instrumentation manufactured by our sister company Larson Davis, a world leader in precision sound level meter solutions.



Quick and Complete Solutions

Complete systems are typically available within one to two days of order placement, ensuring complete, certified and calibrated equipment will be ready for your test.



Bid on Test Jobs

Allows acquisition of the right equipment for each specific test on an as-needed basis.



Avoid Total Cost of Ownership

Avoid costly calibration and upkeep fees while avoiding any capital expenditure.

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 **TMS** THE MODAL SHOP, INC.
A PCB GROUP CO.

“Simplifying with Smart Sensing Solutions”

Sound Level Meter Overview and Selection

For more details visit www.modalshop.com

The Modal Shop offers a complete range of Larson Davis Sound Level Meters. Selecting the proper sound level meter testing system is one of the most important aspects of any sound test. The Modal Shop's Rental Program offers proven solutions with a variety of capabilities and kit configurations. Meters are available for both short and long term rentals.

Every meter offered is an integrating unit that logs data (including Leq, Lmax, Ln s), meets Class 1 standards and connects to a PC to setup and download data.

First, a few points for each meter that answer some common questions:

- Model 831** provides the most versatility and is the most common choice for a variety of tests. With the widest dynamic range, the 831 is used if site levels vary between quiet and quite loud, perfect for 24hr construction measurement or if very low levels need to be analyzed. 831 also provides features (some unique) such as .wav sound recording, FFT, GPS and room acoustics.
- Model 820** is an industry standard environmental noise monitor and remains a popular choice for those familiar with the platform. The lack of ability to measure 1/1 or 1/3 octave data, limited memory and dated interface tend to make the 820 a meter most often used by those who have used it in the past, but the low price point makes it an economical logging system.
- Model LxT** is the most basic meter for a straightforward test. The LxT excels at walk-around workplace noise assessments, but can also be configured to log a variety of sound parameters. Intuitive navigation and a large screen make it an easy choice for basic tests.
- Model 824** is primarily used for its unique capabilities, ranging from use with 0V and 200V condenser microphones to audiometry testing. Its use as an environmental monitor has waned due to the superior memory, connectivity and low power consumption of the 831.

Meter Capabilities	820	824	LxT1	831
Dynamic Range	>110dB	>105	>100dB	>120dB
Internal Memory (as rented)	256k	2M	2G	2G
Time History (Data Logging including Leq and Lmax)	●	●	●	●
Measurement History (Intervals, including Ln data)	●	●	●	●
Exceedance History	●	●	-	●
Industrial Hygiene Parameters (Dose)	●	●	●	●
1/1 and/or 1/3 Octave	-	○	○	○
FFT (narrowband frequency analysis)	-	○	-	○
Voice Annotation	-	-	○	○
Sound Recording (events, timed, manual, and more)	-	-	-	○
Room Acoustics (RT60 and more)	-	○	-	○
Audiometry (hearing level, FM, pulse, THD and more)	-	○	-	-
Microphone Extension Cable	●	●	●	●
Standard off-the-shelf battery power	●	●	●	●
AC power adapter	○	●	●	●
Cabling to USB for interface and/or power	●	●	●	●
Source Output	-	-	-	●
Setup and Download Software	●	●	●	●
DNA Data Navigation and Analysis software	○	○	○	○
Outdoor Kits Available	○	○	○	○
GPS	-	-	-	○
USB memory stick data transfer	-	-	-	○

Typical Data Storage Capabilities*

Leq time history (at 0.1dB resolution)	>120,000	>1M	>100M	>100M
Measurement History (Intervals, including Ln data)	>4,500	>35,000	>1.2M	>400,000
1/3 octave spectra	-	>28,000	>12M	>12M

* without storing additional parameters

● standard with rental ○ optional

- not available

North American Pricelist - October 2011

Please contact us for international requests

All Sound Level Meter Rentals from The Modal Shop are shipped by default as kits, with a "K" prefix before the model number. Rental kits include a selectable microphone, preamplifier, 10ft extension cable, windscreen, AC/DC output cable, internal (short use) batteries, and calibration certificates. 824, 831 and LxT systems also include a case and AC line power supply.

In addition, unless otherwise specified or arranged, all Sound Level Meter kit rentals of any quantity include Quantity 1 of the following line item at no charge. It appears as 100% discount for the line item and will not be charged for the duration of the paid meter kit rental:

KSLM-ACC	Standard accessory kit for SLM rental, includes manual sets, utility software for setup and data download (1 for each family of meter rented) with computer interface accessories, and a single calibrator. Contact The Modal Shop if additional items are required.	\$100 (at 100% discount)
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831 Kits \$/ 30 day

K831L	Basic logging version of 831 with 1GB memory, for exceedance based logging and industrial hygiene measurements	\$ 930
K831	K831L with 2GB memory and 1/1 and 1/3 octave band capability	1100
K831H	K831 plus sound recording option, sound snapshot on demand or on events	1200
NMS831L	831-based outdoor noise monitoring system. Includes tripod, environmental protection kit, and EPS030-831 kit with battery to provide up to 15 day outdoor use between recharges.	1290
NMS831	NMS831L kit plus 2GB memory and 1/1 and 1/3 octave band capability	1460
NMS831H	NMS831 kit plus sound recording	1560

LxT1 Kits (Class 1 LxT)

KLxT1L	Includes plant survey mode, task analysis, voice annotation with headset upon request, industrial hygiene parameters	\$ 640
KLxT1H	KLxT1L plus real time 1/1 and 1/3 octave band capability	750

824 Kits

K824L	Type/Class 1, simultaneous A/C/Flat for Slow/Fast/Impulse, 2MB memory 6 selectable Lns, exceedances and logging (LOG)	\$ 840
K824	K824L plus 400-line FFT option, SSA 1/1 or 1/3 octave capability, and RTA room acoustics option	1100
K824-AUD	K824 plus AUD audiometry calibration firmware option (artificial ear, mastoid, and more available separately)	1400
NMS009	Noise monitoring system ideal for up to 6 day noise studies. Includes 824L meter with accessories, tripod, environmental protection kit, and EPS024 kit with battery.	1300
NMS+SSA	Adds SSA option to 824L in NMS009 kit to allow for 1/1 or 1/3 octave measurements.	320

820 Kit and Outdoor System

K820	Type/Class 1, Slow/Fast/Impulse detectors, A/C weight, 256kb memory, 6 selectable Lns, exceedances and logging (LOG)	\$ 640
NMS002	Featherweight environmental noise monitoring system for short term (to 15 day) measurements in moderate weather. Includes 820, microphone, preamp, calibrator, tripod, EPS023 kit with battery, software, case and accessories.	1060

Software Enhance productivity with software to setup multiple meters, and increase ability to report data efficiently

Utility Software	Setup and data download data from software interface	(Included in rental) \$ 0
DNA-Basic	Provides advanced instrument control, setup, live display, data translation, download and reporting for most meters	call
AUDIT	Audiometer calibration software for model 824 based systems, mastoids/couplers available separately	call

Please phone for additional kit packages and options

Common Options

Rented meter kits include selectable microphones and a single calibrator. Rentals can be customized to fit specific test needs. The most common options include adding more calibrators, various tripods and environmental enclosures for the meters, humidity protection kits, longer microphone extension cables, and specialized preamps to power ICP/IEPE accelerometers for input to the meters. Details and pricing can be found from the full pricelist online at www.modal-shop.com or by contacting us directly.

Additional Items Available Include

706RC	Larson Davis Spark Series Noise Dosimeter with LCD Keypad and remote control capability	\$ 350
831-GPS	GPS unit for 831 provides global positioning information to 831 data, connects via AUX USB connection	40
Accels	PCB Piezotronics Accelerometers for a variety of vibration measurement tests	call
BAS001	Larson Davis Omnidirectional (Dodecahedral) Source for reverberation time, room acoustic and building acoustic measurements	500
NOR277A	Norsonic 277 tapping machine conforms to ISO140, ASTM E-1007, ASTM E492 standards	1200
TC4013	RESON high sensitivity broadband miniature hydrophone for underwater measurements	280

The Rental Process

To initiate a rental, feel free to call or email if you have questions or need a quotation sent. Purchase Orders with Net 30 payment terms and major credit cards are accepted from those with TMS-approved credit, which can be done within a day. Upon placement of an order, a Rental Agreement is sent to confirm the order and show agreement with our standard rental Terms and Conditions. It's that easy! The Credit Application and Rental Agreement are available for download from our site.





About The Modal Shop

Our name was chosen to combine the science of "modal," or structural testing, and the full-service attitude of our "shop-like" organization. Our business is dedicated to help you test, model, and modify the dynamic behavior of structures and processes. We strive to provide the measurement community with a single source for all sound and vibration needs.



Why rent from The Modal Shop?



Selection Help

Not sure which is best for a specific test? Check online for more details of each meter's capabilities, or call us to guide you through the selection process.



Tech Support

Full manual sets (with quick guides and reference manuals) ship with all equipment, and no charge technical support is also included with every rental.



Turnkey Kits

Out of the box, items to help the test run smoothly are included - from software to setup and download data, to microphone extension and data output cables, to a calibrator and more.



Calibrated Units

Sound meters, microphones, calibrators - everything arrives calibrated, and the entire system is functionality tested together prior to shipment.



Fast Turnaround

Most units can be turned around in one to two business days. If your testing is scheduled, future reservations for meters are welcomed to assure availability.



Open Ended Return

Rentals are commonly set in day-specific periods. If a rental period is up and testing isn't complete, rentals typically extend to another period, without hassle or worry of return.



Flexibility

Rent just what is needed for a test. Select a standard rental kit or customize and select specific items.



Family of Companies

The Modal Shop has rented equipment since the beginning. When Larson Davis joined the PCB family, it was natural to add their product line to the rental program.



Rent to Own

Apply a portion of your rental towards buyout of the same equipment. Units sold through rental include recent calibration and a warranty.



Total Customer Satisfaction

All rental products are backed by PCB Group's "no-risk" policy that guarantees satisfaction or your money refunded.

The PCB Group is a family of technology based companies offering a wide range of sensor technologies. With PCB Piezotronics as its flagship, other individual PCB Group companies and divisions include:

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www.pcb.com

Piezoelectric, ICP®, charge output, piezoresistive and capacitive accelerometers, microphones, pressure sensors, load cells, torque sensors, and signal conditioners for test, measurement, monitoring and research and development.

Larson Davis
www.larsondavis.com

Sound level meter and precision microphones, portable and fixed noise monitoring systems, noise dosimeters, human vibration meters, and report generation software for industrial hygiene applications.

IMI Sensors
www.imi-sensors.com

Vibration sensors, transmitters, switches, instrumentation, and accessories for machinery vibration monitoring and predictive maintenance in harsh industrial environments.

STI Technologies, Inc.
www.sti-tech.com

Finite element analysis, advanced analytical techniques, experimentation, technology development, and design optimization, monitoring, and performance enhancement of turbomachinery, rotating machinery systems, and mechanical structures/components.

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Distributes and supports ANSYS engineering simulation software from several offices across North America. In addition, each office provides engineering consulting and training in FEA and CFD techniques based on ANSYS tools.

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