SOUNDEXPERT®
SOUND LEVEL METER

LARSON DAVIS
A PCB DIVISION

NOISE MEASUREMENT SOLUTIONS

- Environmental Impact Studies
- Room Acoustics and HVAC Assessment
- Community Noise Assessment
- Construction Noise
- Boundary Noise
- Product Noise Testing

SOUNDEXPERT SOUND LEVEL METER

SERIES 821ENV

SoundExpert Sound Level Meter Series 821ENV is a powerful tool for noise level measurement. Whether making handheld sound level measurements or measuring environmental noise for several weeks, the user-friendly interface, extended battery life, and advanced features make SoundExpert and excellent choice for a wide range of users.

- Improved dynamic range over previous generation meters
- Simplified connectivity with LD Atlas phone app and LD G4 Utility software
- Measures and records of a wide range of parameters simultaneously
  - A/C/Z weightings (RMS)
  - A/C/Z weightings (Peak)
  - Slow/Fast/Impulse time weightings

The SoundExpert Sound Level Meter Model 821ENV together with Larson Davis' commitment to Total Customer Satisfaction delivers a professional solution you can trust.

SoundExpert is also available in a Class 2 version, SoundExpert Model 721ENV. Please see Configurations below.
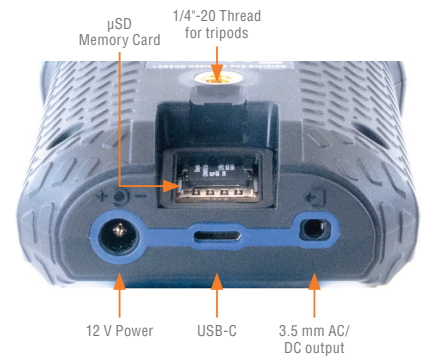
HIGHLIGHTS

- Large, responsive touch display
- Automatic data download via Bluetooth or USB
- Record audio when levels exceed user-defined thresholds with optional event sound recording
- Flexible powering options, including wireless charging and 12 V battery
- Optional octave band analysis and NC/RC ratings available
- Removable preamplifier can be used with up to 200 ft (60 m) cable
- Ready to measure in seconds with quick boot time
- Languages supported: English, Français, Italiano, Português, Español

DEFAULT CONFIGURATIONS

MODEL	721ENV	721ENV-D	821ENV	821ENV-D
Class	2	2	1	1
Logging	●	●	●	●
Measurement History	●	●	●	●
Community Noise Metrics	●	●	●	●
OBA (1/1 and 1/3 Bands)		●		●
Dosimetry	○	○	○	○
NC/RC Ratings		○		●
Sound Recording	○	○	○	○

● - Included ○ - Optional

μSD Memory Card

1/4"-20 Thread for tripods

12 V Power

USB-C

3.5 mm AC/ DC output

Meter Ports

SOUNDEXPERT NOISE MONITORING SYSTEM

MODEL NMS048

For unattended, longer noise monitoring projects, SoundExpert Noise Monitoring Kit Model NMS048 offers rugged environmental protection and flexible powering options. Choose from solar, line, 12 V battery, or D-cell battery to match the length and requirements of your project. Designed for easy transport to the measurement site, deploy the system and retrieve after measurement. Data is automatically download via Bluetooth to connected PC.

HIGHLIGHTS

- Complete weatherproof noise measuring system

- Up to two weeks of continuous operation with 12V SLA battery, plus flexible powering options for longer term measurements

- Ideal to deploy, measure, retrieve, and analyze data

- Includes SoundExpert Sound Level Meter Model 821ENV-D

AVAILABLE CONFIGURATIONS	
Base Model, typical run time 2 weeks	NMS048-SLA
Base Model with Solar Panel, indefinite run time	NMS048-SLA-S
Base Model with US / North American Power Kit, indefinite run time	NMS048-SLA-ACU
Base Model with European Power Kit, indefinite run time	NMS048-SLA-ACE

SOFTWARE SOLUTIONS

Freely available at our website and in app stores, both the LD Atlas mobile app and LD G4 Utility Software simplify every phase of your noise measurements.

- View live measurements remotely

- Visualize data with interactive graphing features

- Create shareable reports with a few simple click

Apps for Phone, Tablet, and Windows®

LD ATLAS™ MOBILE APP

LD Atlas™ is a free mobile app for use with your new Larson Davis equipment.

- Management of connected meters

- Ability to review data and preview graphs

- Report production and sharing

- Annotation of data with speech-to-text

- Playback of sound recording files

- Download of files via Bluetooth connection

LD Atlas™ Mobile App

G4 LD UTILITY

LD G4 Utility Software builds on the capabilities of the LD Atlas App by adding features that allow you to

- Save time with automatic data download

- Create and store device setups

- Push setup to multiple meters at once

- Perform what-if analysis with graphical editing of data

- Manage data from multiple projects

G4 LD Utility Measurement Report

SOUNDEXPERT MODEL 821ENV SPECIFICATIONS

General

Time Weightings	Fast, Slow & Impulse
Frequency Weightings	A, C & Z
Dynamic Range	17 to 140 dB
Data Storage (microSD card)	8 GB standard Up to 32 GB (µSDHC) or 256 (µSDXC)
Communication	USB-C, Bluetooth BLE 4.1
Display	480 x 800 color with capacitive touch
Power	Internal Lithium battery, USB-C or external 12 V
Battery Recharge	Qi Wireless, USB-C, or external 12 V
Runtime (internal battery @ 22 C)	40 hours (display off) 15 hours (display on)
External Power	6 V to 24 V DC (720 mW w/ display off)
Logging	Time history: 100 ms to 1 h Measurement History: 1 min to 6 h
Metrics	Leq, Lmax, Lmin, Lpeak, Ln (6 values), LDN, LDEN, Time above
1/1 and 1/3 Octave Metrics (Optional)	Leq, Lmax, Lmin
Signal Output	AC/DC on 3.5 mm TRS jack
Operating Temperature	-30 to 60 °C

Filters (Optional)

Bandwidth	1/1 and 1/3 Octaves
Frequencies (base 10)	1/1: 8 Hz to 16 kHz 1/3: 6.3 Hz to 20 kHz
Standards Compliance	ANSI S1.11-2014 Class 1 IEC 61260:2014 Class 1

Standards

Acoustic	721 Models: ANSI S1.4-2014 Class 2, IEC 61672-1:2013 Class 2 821 Models: ANSI S1.4-2014 Class 1, IEC 61672-1:2013 Class 1
Noise Dosimetry (Optional)	ANSI S1.25-1991 IEC 61252:2017
NC/RC Ratings (Optional)	ANSI/ASA S12.2-2019
Safety	Directive 2014/35/EU IEC 61010-1:2010 RoHS Directive 2011/65/EU
Approvals	CE, RoHS, WEEE

Physical

Weight	0.75 lbs. (383 g)
Dimensions (H x W x D)	10.1 x 3.3 x 1.3 in (260 x 83 x 32 mm)

ORDERING INFORMATION

Sound Level Meter Included Accessories

Free-field Microphone (50 mV/Pa)	721 Models: 375A04 821 Models: 377B02
Preamplifier	721 Models: PRM721 821 Models: PRM821
USB-C Cable	CBL242-03
Software	G4 LD Utility

Outdoor Noise Monitoring Included Accessories

Sound Level Meter with Accessories Noted Above	821ENV-D
Outdoor Microphone Protection	EPS2116
USB Power Supply	PSA045
Weatherproof Case	EPS048
21 AH 12 V SLA Battery	BAT011

Optional Accessories

Replacement internal lithium batteries	BAT026
Power cable with Anderson Powerpole® connectors to bare wires (6 in. / 15 cm)	CBL226-1/2
12 V power cable for 721 and 821 of length 15 in. (38 cm). Terminated with Anderson Powerpole® connector	CBL241-01
Universal AC power supply with USB-C output connector	PSA045
Hard shell shipping and carrying case	CCS060
Qi charger pad with USB-C connector	PSA046
Tripod with low acoustic signature for use with Sound Level Meters. Max height 80 inches (2 m)	TRP025
Accessory kit for Class 1 Sound Level Meters; includes case (CCS060), power supply (PSA045), Class 1 calibrator (CAL1200) & windscreen (WS001)	X21-ACC
Accessory kit for Class 2 Sound Level Meters; includes case (CCS060), power supply (PSA045), Class 2 calibrator (CAL150) & windscreen (WS001)	X21-ACC1
8 GB, industrial grade microSD memory chip	X21-SD-8GB
Weatherproof Case with 8, D-cell battery holder; offers 10 days run time, typical	EPS048-ALK
Monopole with Superclamp	EPS048-OPT3
Preamplifier extension cables up to 200 ft. (60 m)	EXC series

Firmware Options

Firmware option to disable Bluetooth	X21-NBT
Firmware option to add octave band data	X21-OB3
Firmware option to add NC/RC ratings according to ANSI/ASA S12.2-2019 (requires X21-OB3)	X21-NCRC
Firmware option to add event sound recording	X21-SR

SOUNDEXPERT OUTDOOR NOISE MONITORING SYSTEMS SUMMARY

System	Microphone Protection	SLA Battery	Solar Panel	AC Adaptor for North America	AC Adaptor for EU	Monopole	Solar Controller	Weight	Dimensions (H x W x D)
NMS048-SLA	✓	✓	Optional	Optional	Optional	Optional		28 lbs. (13 kg)	19 x 14 x 7 in (50 x 36 x 18 cm)
NMS048-SLA-ACE	✓	✓	Optional	✓		Optional	✓	31 lbs. (14 kg)	
NMS048-SLA-ACU	✓	✓	Optional		✓	Optional	✓	31 lbs. (14 kg)	
NMS048-SLA-S	✓	✓	✓	Optional	Optional	Optional	✓	42 lbs. (19 kg)	

LARSON DAVIS
A PCB DIVISION

3425 Walden Avenue, Depew, NY 14043 USA

larsondavis.com | sales@larsondavis.com | 888 258 3222 | +1 716 926 8243