### <u>Technical Data Sheet</u>

# *Noise* Personal Noise Dosimeters

"Moving Beyond Compliance"

### Introduction

hy settle for noise dosimeter systems that merely document exposures for compliance when the latest innovations from Quest will assist you in proactively reducing or preventing them altogether? Afterall, the risk and cost of compensable hearing loss is typically far greater than the risk and cost of a regulatory violation.

The new **NoiseP**<sup>Ao</sup> Series dosimeters and latest QuestSuite<sup>®</sup> Professional Applications Software provide "The System Solution" for professionals responsible for occupational hearing conservation. More than just a recorder of history, "The System Solution" from Quest serves hearing conservationists needs on three unique fronts. An **Optional Vibrating Belt Clip** promotes the usage of hearing protection and/or self-management of daily noise exposures. The convenient **Go/No-Go Screen Icons** provide technician and worker-friendly indications of exposure status. Powerful QuestSuite Professional Application Software enables the user to perform **Engineering and Administrative Controls Simulation** prior to their purchase or implementation. This includes task-based assessments using dosimetry and/or sound level meter studies. But the benefits don't end there.

QuestSuite's Virtual Docking Station allows you to effortlessly and automatically program and retrieve data from an entire group of dosimeters via wireless infrared link. No more time wasted manually connecting and transferring information one dosimeter at a time. The **Noise** *vo* DLX's **Data Shuttle** carries results from multiple dosimeters in the field or on the plant floor back to your computer. Now you can easily turn dosimeters around between work shifts and quickly get them on the next group of workers to be monitored. An **Optional Boom Microphone** instantly transforms your **Noise** *vo* dosimeter into a handheld sound level meter for a fraction of the cost of an additional stand-alone meter.

The **Noise** Associate Series consists of four advanced instruments for occupational noise exposure assessment. They have many programmable settings to serve a variety of applications. Settings can be auto-configured to meet specific regulatory standards by simply selecting the standard's name from a list of pre-defined setups. User-specified setups may also be defined and deployed. Multiple Virtual Dosimeters in each instrument permit assessments against more than one standard simultaneously. A large, backlit, graphical display shows measured and calculated parameters in an easy-to-understand format. The datalogging capability of the **Noise** Associate DL allows tremendous insight into the profile of noise exposure by providing 1-minute time history interval data throughout the duration of a test. The **Noise** Associated parameters are provided as the provides even more data per time history interval, intervals as fine as one second in duration and a host of additional programmable features. The **Noise** Associated parameters are provided by DLX-1 is a Class 1 version of the **Noise** Prove DLX. The base **Noise** Prove model is a powerful but lower cost unit presenting summary noise exposure data and a reduced feature set.

While not required for use, QuestSuite Professional, "The System Solution" software application, will greatly enhance the value of your investment in any of the instruments in the series. Beyond the Virtual Docking Station and Engineering and Administrative Controls Simulation already identified, QuestSuite maintains a record of your instrument inventory, schedules and reminds you of annual calibrations and maintains a running history of each. All of this capability comes in addition to the charting, reporting and data editing functions you expect from professional software applications. This software suite also serves many other applications such as octave band analysis, community and environmental noise, handarm and whole-body vibration, heat stress, thermal comfort, confined space entry and indoor air quality.

You can be assured this latest addition to "The System Solution" will provide you with the same Red, Rugged and Reliable performance you have come to expect from Quest for more than 30 years.







## Features:

#### For Noise Pro / Noise Pro DL / Noise Pro DLX

- Class / Type 2 Accuracy
- IP-65 Rated, Industrial-Grade Cast Aluminum Case
- Large, Backlit Liquid Crystal Display
- Auto-Configuration to Standards
- Real-Time Compliance Indicator
- High-Speed Infrared RS-232 Communications
- High Capacity Non-Volatile Data Storage
- Listed Intrinsically Safe
- Up to 2 Virtual Dosimeters in One
- Real-Time Clock & Calendar
- Programmable Twice Daily or (1) One-Time Scheduled Runs
- English, Spanish, German, French & Italian Languages
- Optional Vibration Alarm
- Optional Boom Microphone
- Optional Multilingual QuestSuite® Professional PC Software
  - English, Spanish, German, French, Italian & Portuguese
  - Reporting & Recordkeeping
  - Virtual Docking Station
  - Calibration Management
  - Exposure Recalculation
  - Administrative/Engineering Controls Assessment

#### For *Noise* DL, add:

• Time History and Statistical Distribution Profiling via QuestSuite® Professional

#### For *Noise* DLX, add:

- Up to 4 Virtual Dosimeters in One
- Infrared Retrieval of Data From Other *Noise* Monitors
- Expanded Time History Data
- Programmable Twice Daily or Up to (4) One-Time Scheduled Runs

#### For *Noise* DLX-1, add:

• Class / Type 1 Accuracy



### **Common Specifications**

Measurement Range:	40 to 110 dB RMS, 70 to 140 dB RMS, 115 to 143 dB Peak		
Dynamic Range:	70 dB RMS, 28 dB Peak		
Amplitude Resolution:	0.1 dB		
Dose Resolution:	0.001% to 9999%, auto-scaling always shows 4 digits		
Statistical Distribution Resolution:	0.1 dB increments for Fast & Slow		
Number of Channels:	(1) RMS, (1) Peak		
Frequency Weighting per channel:	RMS A or C, Peak A, C or Z		
Time Constant per dosimeter:	Slow or Fast for each or Impulse for all		
Exchange Rate per dosimeter:	3, 4, 5 or 6 dB		
Criterion Level per dosimeter:	40 to 140 dB in 1 dB increments		
Criterion Time per dosimeter:	1 to 24 hours in 1 hour increments		
Personal Noise Exposure Level Times per dosimeter:	1 to 18 hours in 1 hours increments		
Threshold Level per dosimeter:	40 to 140 dB in 1 dB increments		
Upper Limit Value per dosimeter:	40 to 140 dB in 1 dB increments		
Ceiling Limit Value per unit:	(1) FastMax and (1) Slow Max, 40 to 140 dB		
Data Labels:	ISO/IEC or Basic (U.S.) nomenclature		
# of Setup Files in Memory:	(5) Factory-defined and (4) User-defined		
Date & Time:	DD/MMM/YYYY; HH:MM:SS AM/PM or 24-hr clock		
Data Available Via Display:	Setup Filename, Pre-calibration date & time, Post-calibration		
	date & time, SPL, Lavg/Leq, Peak, SlowMin, SlowMax, FastMin,		
	FastMax, TWA, Projected TWA, Dose, Projected Dose, SEL,		
	Exposure, Run Time		
Keypad Combination Lock:	(2) User-defined 4-digit codes, (1) for Run/Stop Access, (1) for		
	Setup Access		
Display:	Backlit 128 x 64 pixel graphical LCD		
Languages:	English, Spanish, German, French & Italian		
Size:	2.7" x 5" x 1.5" (68.6mm x 127mm x 38.1mm)		
Weight:	14 ozs., (369g.)		
Power:	Optimally (70) hrs from (2) AA disposable alkaline batteries		
Mechanical:	Industrial-grade cast aluminum, IP-65 rated case. Removable		
	belt clip with tripod mounting adapter.		
Operating Temperature Range:	-10 to +50 C, +14 to +122 F		
Storage Temperature Range:	-25 to +60 C, -13 to +140 F		
Humidity Range:	O to 95% non-condensing		
Intrinsic Safety Agency Listing:	UL, cUL, Ex, ATEX, MSHA (pending), SIMTARS (pending)		
Product Standards:	CE Mark, EN 61252, ANSI S1.25		
Software Compatibility:	QuestSuite® Professional		
Optional Features:	Vibrating Alarm Belt Clip and Boom Microphone		

Model-Specific Specifications	<b>Noise</b> Pro	<i>Noise</i> ₽∞ DL	NoisePro DLX	NoisePro DLX-
Accuracy:				
Class/Type 2	~	<ul> <li>✓</li> </ul>	~	-
Class/Type 1	-	-	-	<ul> <li>✓</li> </ul>
Time History Resolution:				
1 minute	-	~	~	<ul> <li>✓</li> </ul>
1, 5, 10, 15, 30 seconds	-	-	~	<ul> <li>✓</li> </ul>
1, 5, 10, 15, 30 minutes	-	-	~	<ul> <li>✓</li> </ul>
1 hour	-	-	~	<ul> <li>✓</li> </ul>
Number of Virtual Dosimeters:				
Тwo	~	~	-	-
Four	-	-	~	~
Time History Statistics:				
Lavg/Leq, FastMax & SlowMax	-	V	~	v
FastMin, SlowMin, Fast Ceiling Count, Slow Ceiling Count, Lpeak	-	-	~	<ul> <li>✓</li> </ul>
Time History Statistics Selection:				
Each Statistic can be turned on or off	-	-	~	<ul> <li>✓</li> </ul>
Data Available Via PC Download:				
Same as via Display	~	~	~	<ul> <li>✓</li> </ul>
Statistical Distribution	-	-	~	<ul> <li>✓</li> </ul>
Time History	-	~	~	<ul> <li>✓</li> </ul>
Recalculated Exposure Data	~	~	~	<ul> <li>✓</li> </ul>
Alarm Set Points:				
Overall TWA value of dosimeter #1	~	~	~	· ·
Any time history interval Lavg/Leq for dosimeter #1	-	~	~	<ul> <li>✓</li> </ul>
Auto-Run Activators:				
(1) or (2) daily runs with choice of days of week	~	v .	~	<ul> <li>✓</li> </ul>
(1) One-time run	~	~	~	~
Up to (4) One-time runs	-	-	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Auto-Stop:				
Any HH:MM:SS duration	~	~	~	· ·
Data Storage:				
Non-volatile memory retention with batteries removed	~	~	~	· ·
Minimum (40) hrs time history capacity with all data saved	-	~	~	~
Receive data from other dosimeters in series	-	-	~	~
Data Communications:				
Infrared Serial Interface @ 115kbps	<b>v</b>	~	~	~
Remotely retrieve data from any unit in series	-	-	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>

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specifications subject to change without notice

ISO 9001:2000 Registered Company ISO 17025 Accredited Calibration Lab Employee Owned Company



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