

# QUICK START GUIDE

Sound Detector SD-200



**TSI | QUEST™**

# Sound Detector SD-200 components



## **DANGERS, WARNINGS, CAUTIONS**



### **DANGER**

- Failure to observe the following procedures may result in serious personal injury
- + Not for use in explosive or hazardous locations. This product is not intrinsically safe.
- + Contains built-in lithium polymer battery. Do not incinerate or dispose of in fire. Do not disassemble, alter or re-construct.



### **WARNING**

- Failure to observe the following procedures could damage the instrument
- + Read the manual before operation
- + Do not store outside of the temperature range of -4° F to 158° F (-20° C to 70° C).
- + Do not immerse in liquids.
- + Condensation may damage your instrument.
- + Substitution of components may impair the accuracy of the instrument. Repair should be done by authorized service personnel only.



### **CAUTION - General**

- + The battery in this instrument has limited shelf-life, even if never used.
- + A non-condensing environment is required for proper instruments
- + Do not charge the battery outside of the range of 32° F to 104° F (0° C to 40° C).
- + Battery run-time may be reduced when operating at temperatures lower than 32° F (0° C).
- + The SD-200 Sound Level Meter may not be sufficient to carry out a full risk assessment of workers exposed to hazardous noise levels to help comply with the European Physical Agents (Noise) Directive 2003/10/EC. For further information contact a Safety Professional or Industrial Hygienist.

## Charging

It is recommended that the SD-200 is charged for approximately 12 hours before first use.

## Intended use

The SD-200 Sound Level Meter is intended to measure sound pressure levels in air and provide sound and noise detection measurements. For suitability and proper use follow local regulations and refer to all information supplied. For more information contact a safety professional.

## Measuring sound pressure level

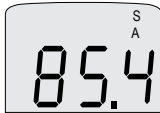
1. Place windscreen over microphone (if not attached).
2. Switch on the SD-200 and check that the battery indicator is not present.
  - + If present, charge the instrument prior to measuring.
3. Select desired weighting and/or response time (A/C Key, F/S Key).
4. Position the SD-200 microphone at 0 degrees for the reference direction or at 70 degrees for random incidence direction.
5. Measuring: When first switched on, the current SPL will be displayed or the last viewed parameter.
  - + For integrated measurements, press the Run/Stop Key. Unlike SPL, the LEQ/LAVG values will provide steadier values over a period of time until values become more stable.
  - + To cycle through the measurements, repeatedly press the mode key.
  - + To stop measuring, press Run/Stop Key.
6. Switch off by pressing and holding the Power Key until it turns off (When not in Run mode).

**NOTE:** It is advisable to perform a field calibration before taking measurements to ensure your measurements are accurate in the current environment. An optional calibrator and calibrator adaptor are used for this procedure.

## Viewing measurements

The mode key is used to cycle through the measurement screens with its related values. (as displayed below):

1. SPL (Nomeasurement screen indicator)



4. MIN\*



2. LEQ/LAVG\*



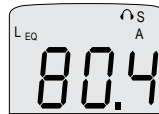
5. Optime alert and HP\*



3. MAX\*



6. Run-time\*



\*When integrating measurement has occurred.

## Alert and Hearing Protection (HP) screen

Alert and hearing protection indicator levels

Green LED	Flashes when noise measurements are 80-85dB(A)
Green and Yellow LEDs	Flashes when noise measurements are 83-85 dB(A)
Yellow LED	Flashes when noise measurements are 83-93 dB(A)
Yellow and Red LEDs	Flashes when noise measurements are 87-93 dB(A)
Red LED	Flashes single slow pulses when noise measurements are 87-95 dB(A)
	Double Flashes when noise measurements are >95 dB(A)

**IMPORTANT:** For appropriate use of hearing protection devices, consult your safety professional

This product complies with the requirements of IEC61672-1 with the exception of clause 9.1c - "An instruction manual shall be provided as a printed document in one or more parts". A printed copy of the instruction manual is available on request.

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