

K25A Sound/SPL

User Guide

July 06 2010, Second Edition



WARNING:

For safety reasons and to avoid personal injury, read all operating guides and information in the product guide.? Please check that this product is operating properly prior to when you intend to use it for educational purposes only. Use this device and sensors for teaching and learning. The information given in this electronic document shall not be regarded as a guarantee or warranty of physical characteristics and any conditions.? We will not replace or cover the costs of a damaged sensor or probe due to negligent or destructive, improper use.?

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- 1. DO NOT attempt to modify Mentor device and sensors in any way. This may result in fire, injury, electric shock or severe damage to you or them.?
- 2. DO NOT operate Mentor device and sensors with wet hands, this may cause an electric ?shock.
- 3. DO NOT use Mentor device and sensors in close proximity to flammable or explosive gases, or chemical vapors. Use this product in a well ventilated area.??
- 4. Optical radiation hazards which can be produced by any artificial sources, the sun light source or others as well as continuous or repetitive exposure to them may cause greater injury or damage such as blindness, skin cancer, and temporary or permanent loss of vision.
- 5. For safety reasons keep this sensor out of reach of children or animals to prevent accidents, for example swallowing small size of the sensor. ?DO NOT allow children to play on or around the sensor.

CAUTION:

- 1. DO NOT use Mentor device and sensors in extreme conditions which are over the operating range and short-term exposure limit conditions.? Stresses above input range may cause permanent damage.
- 2. Exposure to absolute maximum conditions for extended periods may degrade sensor reliability. ?
- 3. The sensors are permanently sealed during construction and cannot be opened to any purpose. DO NOT attempt to decompose, modify or repair the sensor in any other ways. This may cause permanent damage to the sensor.

Specifications

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Item	Description
	Audio: 20 to 20,000Hz/channel
Input range	Max.Input SPL: 105dB SPL
	Power spectrum (SPL): Normalized (-165dBV)
Resolution	Sampling: 200kHz/channel,
Resolution	50kHz/4channels

CAUTION:

- 1. DO NOT use this sensor in close proximity to flammable or explosive gases. Chemical vapors may interfere with the polymer layers used for capacitive this sensor and high levels of pollutants may cause permanent damage to this sensor.
- 2. DO NOT use or expose this sensor at the maximum range under 1minute residence time (exposure limit with max. input range)
- 3. Prolonged direct exposure to extreme conditions may cause significant property damage. Care must be taken not to expose this sensor to direct sunlight.
- 4. DO NOT place sensor or cable in water, liquids, flame or on a hot plate.?

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For more information about installing Mentor, using other applications and getting the feedbacks, contact: ScienceCube international distributor.