BIO-ACOUSTIC SIMULATOR

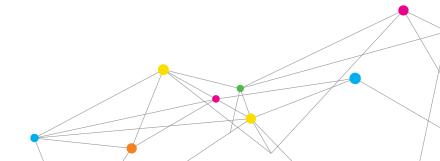
The TSI Bio-Acoustic Simulator provides daily audiometer verification. The device lets you perform daily audiometer checks without the need for a human test subject. The unit can be used as a portable tabletop unit or can be mounted on the wall.



Features and Benefits

- + Performs quick, easy audiometer testing to help ensure accurate patient assessments
- + Available in specialized versions designed to meet specific OSHA requirements
- + No need to use a human test subject to perform daily biological checks
- + Powered by battery or optional power adapter, dependent on application
- + Can be used as a portable tabletop unit or permanent wall-mount assembly
- + Compatible with manual, automatic and microprocessor audiometers for biological testing of earphones





BIO-ACOUSTIC SIMULATOR

Test Frequencies
Background Test Levels

125 Hz to 8 kHz

(BA-202-25)

40 dB at 500 Hz and 1 kHz, 47 dB at 2 kHz, 57 dB at 4 kHz, and 62 dB at 8 kHz (per OSHA, Fed. Reg. March 8, 1983)

Background Test Levels

(BA-202-27)

35 dB at 125 Hz, 25 dB at 250 Hz, 21 dB at 500 Hz, 26 dB at 1 kHz, 34 dB at 2 kHz,

37 dB at 4 kHz and 8 kHz

Calibration

60 dB HL +/- 1 dB at 1 kHz continuous tone with TDH-39, 49, or 50 earphone Repeatable to within 2 dB when using an

Accuracy

Repeatable to within 2 dB when using an audiometer with a continuously variable HL control. When using automatic audiometers, the BA-202 will be repeatable within the HL step increments

of the audiometer (usually 5 dB)

Transducers

Two electret microphones for

checking earphones

Response Output

Normally open and normally closed relay

contacts (SPDT 3 wire output)

Hysteresis

10 dB +/- 1 dB between ON and OFF indication for the LEFT/RIGHT earphone indicators when used with continuous $\frac{1}{2}$

tone input

Relay Specifications

250 mA current, 30 volts AC or DC, 20

million operations

Power

9-volt alkaline battery (Optional 120-volt or 220-volt power adapter) Low battery indicator when used in

battery mode

Size Weight $6.8'' \times 6.5'' \times 4.2'' (173 \times 165 \times 107 \text{ mm})$ 1.63 lbs. (739 g); not including the

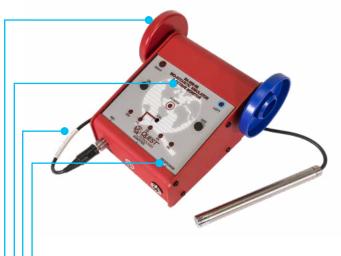
remote microphone

Markings

CE

Specifications are subject to change without notice.

Quest is a trademark, and TSI and the TSI logo are registered trademarks of TSI Incorporated.



Dual power capability

- + Uses either 9V alkaline battery or 120v/220V AC current with optional adapter
- + Hardwire installation option offers additional options

10' microphone cable

- + Facilitates mounting options other than standard in-room wall mounting
- + Adapts to meet different configurations in the testing area, enabling the mic to be properly positioned

Low battery indicator

+ Flashes when battery power is low to help avoid service interruption

Daily functional testing

- + Easily perform audiometer checks without the need for a human test subject
- + Reduces cost and uncertainty to ensure accurate daily results

Conforms to standards

(Model BA-202-25)

- + BA-202-25 includes octave band filter and set points for testing to OSHA requirement
- + Reduces guesswork on hearing compliance needs



 $\textbf{TSI Incorporated} \cdot \text{Visit our website } \textbf{www.tsi.com} \text{ for more information}.$

USA Tel: +1 800 874 2811
UK Tel: +44 149 4 459200
France Tel: +33 1 41 19 21 99
Germany Tel: +49 241 523030

India China Singapore

Tel: +91 80 67877200 Tel: +86 10 8219 7688 Tel: +65 6595 6388