3M Personal Safety Division

3M™ Bio-Acoustic Simulator Series



Flexible.

- Performs quick, easy audiometer testing to help ensure accurate patient assessments
- Available in specialized versions designed to meet specific OSHA or ANSI requirements

Efficient.

- No need to use a human test subject to perform daily biological checks
- Powered by battery or optional power adapter, dependent on application

Versatile.

- 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





Reliable Daily Performance

Daily functional testing

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

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.



Conforms to standards

(Models BA-202-25 and BA-202-27)

- Dedicated models specifically meet OSHA or ANSI requirements for background noise level verification.
- Reduces guesswork on hearing compliance needs.

Low battery indicator

• Flashes when battery power is low to help avoid service interruption.

Dual power capability

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

Specifications

Test Frequencies	125 Hz to 8 kHz	
Background Test Levels (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	
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 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	6.8" x 6.5" x 4.2" (173 x 165 x 107 mm)	
Weight	1.63 lbs. (739 g); not including the remote microphone	
Markings	CE	

Product No.	Description	3M ID
BA-202	Bio-Acoustic Simulator for biological testing	70-0715-8059-4
BA-202-25	Bio-Acoustic Simulator with Octave Monitor for OSHA background noise level verifications	70-0715-8060-2
BA-202-27	Bio-Acoustic Simulator with Class 1 Octave Monitor for ANSI S3.1-1999 background noise level verifications	70-0715-8061-0



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below

> **WATER** UK Office **Keison Products,**

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560 Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.