



MODEL AEC210

HEADPHONE PRODUCTION TEST FIXTURE

- Accurate headphone positioning
- Repeatable results
- ICP® microphones included
- Highly configurable
- Cost effective solution for broad deployment

TYPICAL APPLICATIONS

- Headphone testing
- Production line testing
- Noise-cancelling headphone testing
- Headphone microphone testing

HEADPHONE TESTING

The Headphone Production Test Fixture Model AEC210 is a cost effective solution for production volume headphone testing on a production line. Flush-mounted microphones and the flexibility to add speakers and additional microphones make it possible to test both noise-cancelling headphones and headsets with microphones. Two fully adjustable headphone positioners allow for accurately controlled placement and consistent, repeatable testing. A modular mounting system allows the positioning of additional microphones and speakers in the same location every time for increased testing consistency and quality systems compliance. The Headphone Production Test Fixture is an excellent alternative to costly head and torso simulators or devices using IEC 60318-4 compliant couplers.

An optional speaker, Model AEC210-SPK, can be added to the Headphone Production Test Fixture for testing noise cancelation and be used as an artificial mouth to test integrated headset microphones. For measuring noise outside of the headphones with microphones positioned at critical measurement locations, fully adjustable microphone stands are available as an option. The modular design allows for countless mounting configurations of multiple speakers and additional microphones.

MODEL AEC210 SPECIFICATIONS

Mechanical	US	SI
Dimensions (h x w x d)	12.2 x 8.1 x 7.1 in	31.1 x 20.6 x 18.0 cm
Weight	3 lbs	1.4 kg
Width between ears	9.65 in	145 mm
Height of headband holder	5.08 in	129 mm
Headband holder height adjustment	± .47 in	± 12 mm
Ear plate angle	4.5°	
Diameter of ear plate	5.31 in	135 mm
Measurement repeatability (typical)	<1 dB Standard Deviation	
Operating temperature	+14 °F to +122 °F	-10 °C to +50 °C
Microphone positioning	Flush with ear plate	
Headband holder height adjustment	± .47 in	± 12 mm
Operating humidity	0% to 90% RH, non-condensing	
Standards	CE, RoHS	
Included microphones (Model 130A25)		
Sensitivity	45 mV/Pa	
Frequency response (±2 dB)	20 to 10000 Hz	
Frequency response (±3 dB)	10 to 16000 Hz	
Frequency response (±4 dB)	10 to 20000 Hz	
Maximum sound pressure (3% distortion limit)	>122 dB re 20 µPa	
Excitation voltage	18 to 30 V DC	
Constant current excitation	2 to 20 mA	
Output bias	9 to 14 V DC	
TEDS compliant	Yes	

MODEL AEC210-SPK SPEAKER SPECIFICATIONS

Frequency response	150 Hz to 20 kHz	
Speaker Sensitivity (SPL)	86 dB (2.83 V rms input)	
Maximum power	10 Watts @ 25% duty cycle	
Input impedance	8 Ohms	
Electrical connector	Screw terminal	
Adjustable height range	5.04 in	128 mm
Speaker dimensions (h x w x d)	3.1 x 3.1 x 3.3 in	78 x 78 x 85 mm

MICROPHONE HOLDER	AEC210-1/2MS	AEC210-1/4MS
Supported microphone diameter	½ in (12.7 mm)	¼ in (6.35 mm)
Height adjustment	5.90 in	150 mm



AEC210



AEC210-SPK



AEC210-1/2MS