Headphone Fixture
- Reference Headphone test jig
- 1/2" prepolarized capsule
- Unique calibration files
- IEC 60318-4 couplers
- Sturdy & adjustable fixture
- Human-like soft silicone pinna

USB Interface
- USB Audio 2x2 UAC2 interface
- XMOS processor, ASIO drivers
- Low noise mic preamps
- Adjustable analog gain
- Onboard headphone amplifier
- Stereo DAC for external amp

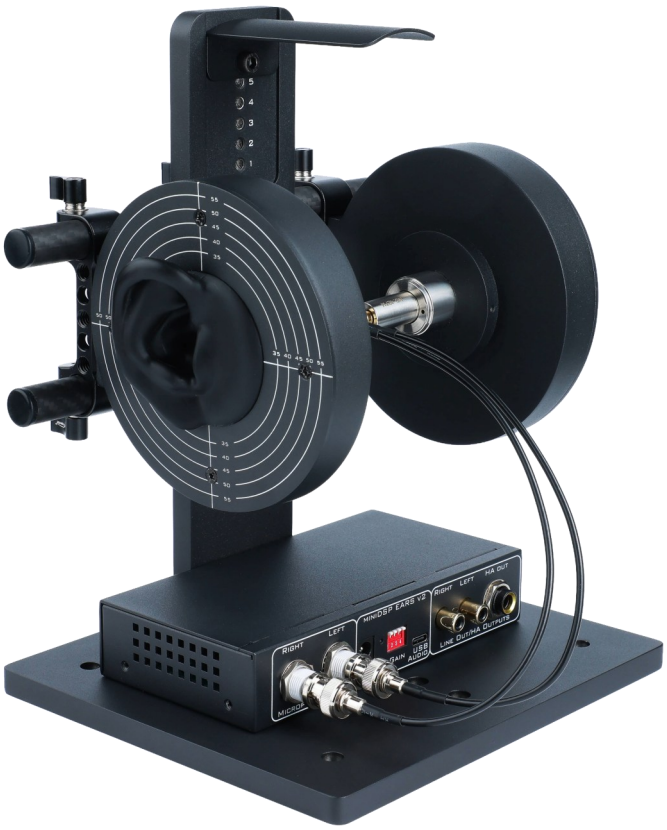
Applications
- Headphone R&D
- Production QA jig
- Binaural recording

EARS PRO is a professional headphone test fixture for accurate, repeatable acoustic measurement in R&D and manufacturing applications. Based on the extensive feedback from the original EARS platform, we went back to the drawing board to design a no compromise, all in one testing jig. It pairs a sturdy, adjustable fixture and human-like soft silicone pinna with IEC 60318-4 couplers, unique per-unit calibration files, and a precision 1/2" prepolarized measurement capsule for low-noise, traceable frequency response.

The optional USB Audio 2x2 (UAC2) interface with XMOS processing and ASIO drivers delivers low-latency connectivity to Windows, macOS and Linux. Onboard electronics include low-noise mic preamps, adjustable analog gain, an internal headphone amplifier and a stereo DAC. Together, they form a complete system for your testing application.

Engineered for headphone R&D, production QA and calibrated binaural recording, **EARS PRO**'s quick-change adapters, precise positioning and robust build enable high-throughput testing without sacrificing laboratory accuracy, providing manufacturers and labs a compact, traceable solution for objective and subjective evaluation.

PRODUCT VIEWS



TECHNICAL SPECIFICATIONS - HEAPHONE FIXTURE

Item	Description
Capsule type	1/2" prepolarized microphone, BNC connector
Sensitivity	~13.5mV/Pa (unique value specified in calibration file)
Coupler applicable standards	IEC 60318-4
Frequency response	10Hz-20kHz
Calibration file for each microphone	Unique microphone calibration .txt file referenced to the Serial Number Includes on axis Frequency / Amplitude / Sensitivity drift Matched microphone pair for small variation without calibration file
Silicon human like pinna	Hardness 35 Shore OO
Test jig material	Aluminum fixture with heavy base to prevent noise transmission
Adjustments	7 positions (8mm pitch) for adjustment of the headband holder 8 positions (9mm pitch) for adjustment of the Fully customizable width of ear to ear (100~200mm)
Additional mounting points	4 x holes on base plate for mounting on test bench 3 x holes on base plate for mounting mouth simulator (not included)
Ear plate diameter	120mm
Dimensions (H x W x D) mm	260 x 200 x 175 mm

TECHNICAL SPECIFICATIONS - USB INTERFACE (OPTIONAL)

Item	Description
USB Audio Controller	XMOS 500MHz multicore processor, USB Audio Class 2 (UAC2) 32bit 44.1~192kHz sample rate Window ASIO driver provided, Linux/OSx plug&play
Sample rate and resolution	24bit @ 48kHz
Analog to Digital Converter	32bit ADC with embedded PGA for up to 45dB analog gain Maximum 4Vrms, 0dB gain, 140dB SPL 30kΩ input impedance THD+N 108dB BNC input connector
Microphone preamplifier	ICP mode IEPE Bias 24V, 4mA (constant current)
Analog gain	Dip switch controls analog input gain: 0~45dB gain in 3dB increments
Digital to Analog Converter	CS43131
Stereo Analog output	Unbalanced RCA connector / Maximum output 2Vrms, Zout: 100Ω THD+N 110dB, SNR: 120dB A weight, Frequency response: 20~20kHz (+/-0.5dB)
Headphone amplifier output	6.3mm jack, 2V @32Ω 125mW in 32Ω. mW in 32Ω, SNR 118dB A-weight Frequency response: 20Hz-20kHz (+/-0.5dB)
Connectivity	USB port type C
Power supply	12V external supply
Dimensions (H x W x D) mm	31 x 160 x 90 mm