

Medical Hearing & Auditory Testing

Hearing and auditory testing systems rely on precise signals and stable connections. Noise, distortion, or intermittent links can affect results and diagnostic confidence.

Typical systems include audiometers, tone generators, measurement microphones, sound field speakers, hearing aid analyzers, and networked workstations. Operating at low signal levels in electrically noisy facilities, they require secure connections, effective shielding, and consistent performance.

Audiometry and Signal Integrity

Accurate audiometric testing depends on clean, balanced signal paths between tone generators, transducers, and analyzers. Any interference, noise, or inconsistent connection can affect test accuracy, particularly in compact or portable diagnostic equipment.

Sound Field Testing and Acoustic Output

Sound booths and acoustic testing environments require consistent speaker performance and secure connections. Even minor disruptions or loose connections can compromise calibrated output and daily testing reliability.

Measurement and Calibration

Measurement microphones and calibration tools operate at very low signal levels and are highly sensitive to RF and electrical interference. Maintaining signal integrity is essential for repeatable, accurate calibration and verification across devices.

Hearing Aid Testing and Fitting

Hearing aid analyzers and fitting systems rely on repeatable, reliable connections to ensure devices are programmed to manufacturer specifications. Frequent connection cycles can stress equipment, making durability and stability critical.

Networked and Powered Diagnostic Suites

Modern audiology labs increasingly use networked diagnostic systems and powered accessories within sound booths. Reliable data and power connections are essential to prevent downtime and maintain system integrity during testing.

Commonly Used Components

- **XLR Connectors** – low-noise, stable connections for audiometers and analyzers
- **Tiny XLR (Mini XLR) Connectors** – compact solutions for portable diagnostic devices
- **Balanced Audio Cables** – interference-free signal routing in multi-channel setups
- **Speakerlatch Connectors** – secure, keyed connections for sound booth speakers
- **Shielded Cable Assemblies** – dual-braided shielding for sensitive microphones and analyzers
- **Etherlatch Connectors & Cables** – reliable network connectivity for diagnostic workstations
- **Powerlatch Connectors & Cables** – locking, keyed power delivery for active speakers and lab equipment

