

TECHNICAL SPECIFICATIONS

Frequency range	
Insert earphones:	Standard frequencies: 125 - 8000 Hz
TDH39 earphones, HDA 200/HDA 300, ME-70, HOLMCO:	Standard frequencies: 125 - 12500 Hz
BC:	Standard frequencies: 250 - 8000 Hz
SF:	Standard frequencies: 125 - 12500 Hz
Accuracy:	< 0.03%.
FRESH noise stimulus:	Available in entire frequency range within the transducer specified range. (for SF 125 - 12500 Hz). Accuracy 0.3%
Narrow Band Noise masking:	Available for each stimulus frequency.
Frequency resolution:	125 to 12500 Hz at standard frequencies
Stimulus types	
Tone audiometry	Tone, Warble, Pulsed tone, Pulsed warble, FRESH Noise
Loudness Scaling	Warble, ISTS, FRESH Noise
Masking types	
AC, BC, SF:	Narrow Band Noise (correlated)
Ас, д., эг.	
	Speech Weighted Noise (correlated) White Noise (Wide band noise) (correlated)
Stimulus modulation	
	Adjustable modulation rate and depth
FM (Warble):	Modulation rate: 1-20 Hz (default: 5 Hz).
	Modulation depth: 1-25% of center frequency (default: 5%).
SISI:	5, 2, 1 dB increments
Signal presentation	
Accuracy of sound level	
Entire level range (AC):	125 to 5000 Hz: ±3 dB, 5000 to 12500 Hz: ±5 dB
Entire level range (BC):	250 to 5000 Hz: ±4 dB, 5000 to 8000 Hz: ±5 dB
_ · · ·	
Attenuator	
1 or 5 dB step resolution over the entire range.	
HL Range	
Maximum output will be limited by the transducer.	
Total harmonic distortion	
Air < 2.5 %	
Bone < 5 %	
Selectable transducers	
AC:	TDH 39, ME-70, HOLMCO, HDA 200/HDA 300 headphones, and Insert Earphones
BC:	Bone oscillator (Mastoid)
SF:	Passive sound field speaker, using the built-in amplifier in AURICALAud, or
	Cound field appellant with heilt in any lifer an external applifier with both types wire the line autout from AUDICAL
	Sound field speaker with built-in amplifier or external amplifier, with both types using the line output from AURICAL
	Sound field speaker with built-in amplifier or external amplifier, with both types using the line output from AukiCAL Aud.
Outputs	
Outputs AC:	Aud.
Outputs AC: BC:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals,
Outputs AC: BC: SF power output:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load
Outputs AC: BC: SF power output: SF line output:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals,
Outputs AC: BC: SF power output: SF line output:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ.
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms Jnput voltage: 1.002 to 1.02 Vrms 3.5 mm (1/8") jack
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack with 3 powered USB ports
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms Jnput voltage: 1.002 to 1.02 Vrms 3.5 mm (1/8") jack
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack with 3 powered USB ports
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack with 3 powered USB ports
Outputs AC: BC: SF power output: SF line output: CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack With 3 powered USB ports DC power, 2.5 mm
Outputs AC: BC: SF power output: SF line output: CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms Dc power 2.21 kΩ. 3.5 mm (1/8") jack with 3 powered USB ports DC power, 2.5 mm
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories Operator monitor headset - headphones:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms S.5 mm (1/8") jack with 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack With 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack Electret microphone Electret microphone Electret microphone Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories Operator monitor headset - headphones:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input voltage: 0.002 to 0.02 Vrms S.5 mm (1/8") jack with 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories Operator monitor headset - headphones:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 kΩ, 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 kΩ. 3.5 mm (1/8") jack With 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack Electret microphone Input voltage: 0.002 to 0.02 Vrms,
Outputs AC: BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories Operator monitor headset - headphones: Operator microphone (desktop or boom):	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 k Ω , 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 k Ω 3.5 mm (1/8") jack With 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack Electret microphone Input resistance: 2.21 k Ω 3.5 mm (1/8") stereo jack
BC: SF power output: SF line output: External inputs CD/Analog line in: Talk Back microphone: USB 2.0 hub: 24V DC power supply: Stimulus presentation Normal, Continuous on, Pulsed Operator accessories Operator monitor headset - headphones:	Aud. 2 x 2 mono jacks, 6.3 mm (1/4 ") 1 x mono jack, 6.3 mm (1/4 ") 3 x terminals, 3 x 40 W peak, 8 Ω load 2 x 1.6 Vrms, 0.2 to 2.0 Vrms, 10 k Ω , 1 stereo 3.5 mm (1/8") jack Electret microphone Input voltage: 0.002 to 0.02 Vrms Input resistance: 2.21 k Ω 3.5 mm (1/8") jack With 3 powered USB ports DC power, 2.5 mm 40 mW 16 Ω 3.5 mm (1/8") stereo jack Electret microphone Input resistance: 2.21 k Ω 3.5 mm (1/8") stereo jack



TECHNICAL SPECIFICATIONS

Transport and storage	
Temperature:	-30°C to +60°C (-22°F to 140°F)
Air humidity:	10% to 90%, non-condensing
Air pressure:	500 hPa to 1060 hPa
Operating environment	
Mode of operation:	Continuous
Temperature:	+15°C to +35°C (59°F to 95°F)
Air humidity:	30% to 90%, non-condensing
Air pressure:	980 hPa to 1040 hPa.
(Operation in temperatures exceeding -20°C (-4°F) or +60°	C (140°F) may cause permanent damage.)
Warm-up time	
< 5 min.	
Disposal	
AURICAL Aud can be disposed of as normal electronic was	te, according to WEEE and local regulations.
Dimensions	
AURICAL Aud:	Approx. 275 x 205 x 60 mm, (10.8 x 8.0 x 2.4 inches)
Weight	
AURICAL Aud with HI-PRO:	Approx. 0.85 kg, (1.875 lb)
AURICAL Aud without HI-PRO:	Approx. 0.65 kg, (1.433 lb)
Power consumption	
< 60 VA	
Standards	
Audiometer:	IEC 60645-1, Type 2, 2010; IEC 60645-2, Type A, 1993;ANSI S3.6
Patient Safety:	Complies with IEC 60601-1, Class 1, Type B; UL 60601-1; CAN/CSA-C22.2 NO 601.1-90.
EMC:	IEC 60601-1-2
HI-PRO 2	
2 x 6-pin mini-DIN sockets:	For connecting programmable hearing instruments
Safety:	EN 60601-1, Class 1, Type BF and UL 544.
EMC:	EN 606011-2; EN 300 328-2; EN 301 489-17
Test software. See the AURICALAud Service Manual.	
AURICAL speaker unit	
Interfaces	
USB port output, type A	Primarily for USB Bluetooth dongle
USB port input, type B	USB connection from PC
24V DC in	DC power, 2.5 mm
24V DC throughput	DC power, 2.5 mm
Speaker input	RCA phone optimized for 8 Ω . speaker
Dimensions	
Speaker:	Approx. 375 x 285 x 145 mm (14.8 x 11.2 x 5.7 inches)
Weight	
Speaker:	Approx. 1.5 kg (3.3 lb)
•	
Accessories	om country to country - please consult your local distributor.
scandard accessories and optional accessories fildy vary if	on country to country - prease consult your local distributor.

TDH 39 headphones, ME-70 headphones, HOLMCO headphones, HDA 200 headphones for high-frequency audiometry, HDA 300 headphones for high-frequency audiometry, Bone oscillators: NB-71, B-71, Insert phones: Otometrics insert phone, E-A-RTONE® 3A, AURICAL speaker unit for integration with AURICAL FreeFit, Sound field loudspeakers, Monitor headphones with boom microphone, Desktop microphone, Talkback microphone, Patient Responder, Power supply and mains cable, Wall mounting plate, Connection cables, AURICAL FreeFit, AURICAL Aud Reference Manual, AURICAL Aud User Guide

System requirements

1.5 GHz processor or higher (2 GHz recommended) • 2 GB RAM • 3.5 GB free disk space for installation of the OTOsuite software. Additional disk space is needed for installation of prerequisites. • Microsoft® Windows® XP (32 bit) with SP3 or higher, or Windows 7 (32 or 64 bit) or Windows 8.1 (64 bit) • USB port for connecting accessories, v. 1.1 or higher (v. 2.0 or higher for OTOcam 300) • DVD drive (only for a minority of features) • 32 bit color display, 1024x768 screen resolution • 128 MB graphic memory • Windows-compatible sound card • If required, NOAH 3.5.2, NOAH 3.5.2 for ENTs, or higher, or Noah 4 or Noah 4 for ENTs, for Noah mode operation. • If you are going to use speech material supplied by GN Otometrics, check the Speech Material Installation CD to make sure that your PC has the additional disk space required.

