acousticon

smartALF

interactive Fitting Procedure

QuickStart Guide (EN)

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1. Introduction

1.1. Features

smartALF - volume demo with narrowband sounds of different frequencies. A2000 free-field headphones for reproducible and constant sound fields. Plastic housing made of polypropylene with robust, scratch-resistant coating. Sturdy metal base for a secure stand. Ergonomic and modern software interface for Windows with intuitive design. Connection cable with magnetic connectors for quick assembly and disassembly.

1.2. Intended use

smartALF is a device for checking the pleasant sound of hearing systems and subjective comparisons between the right and left ear or different frequency channels. It is recommended to carry out an in-situ fitting of the hearing systems in addition to smartALF.

1.3. Scope of delivery

smartALF consists of the following components:

- Housing with integrated electronics
- Aluminium stand with fixing screw
- Free-field headphones A2000
- USB-3 type A to USB-3 type C cable
- Audio cable with magnetic connectors for connecting the free-field headphones
- Instructions for use

2. Installation

2.1. System requirements

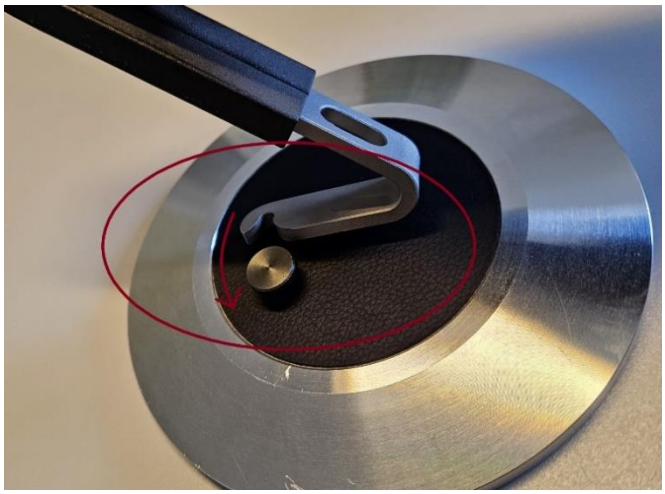
smartALF has been developed for Windows operating systems. Although the software has low hardware requirements and a low CPU resource dependency, we recommend faster PC components, especially when operating with several software programmes running in parallel.

Minimal system requirements:

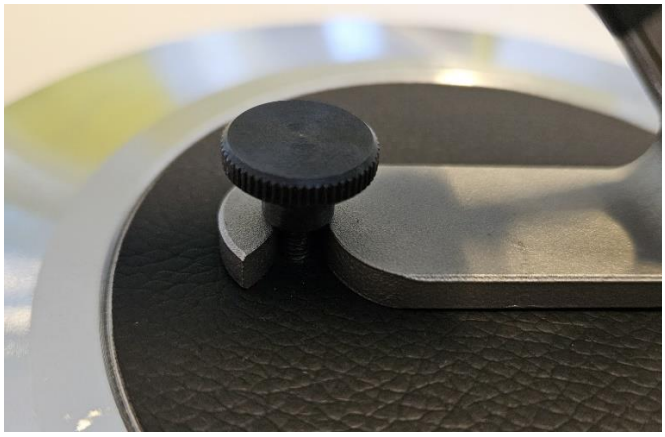
- Operating system: Microsoft Windows 10 or 11 (64 bit)
- 1 available USB 3.0 port
- 500 MB hard drive space
- 1 GHz processor with at least 2 cores
- 4 GB RAM
- Internet connection for access to the hearing aid database

2.2. Installation of hardware

2. Mounting the housing in the stand



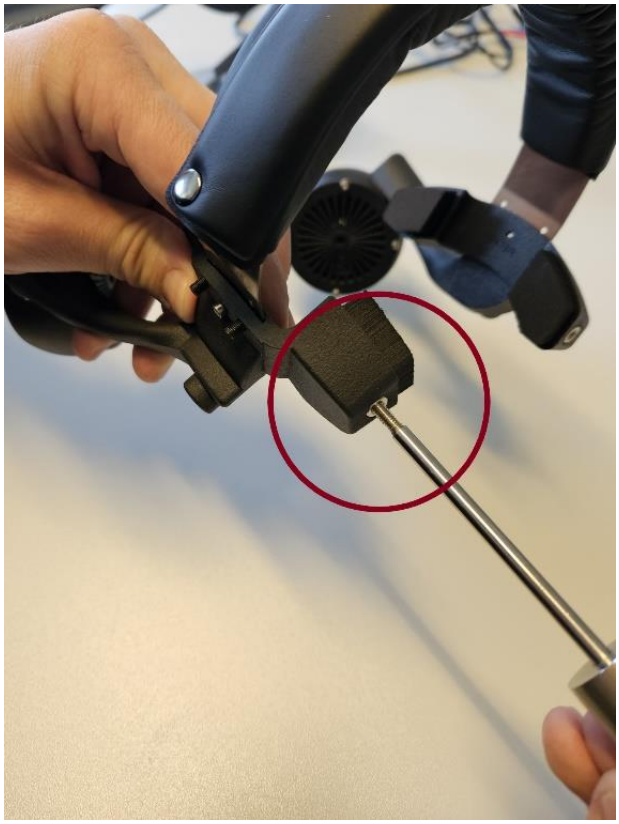
3. Tighten the screw (hand tight!)



4. Place the headphone support on the smartALF housing

5. Connect the USB cable to the front of the smartALF housing

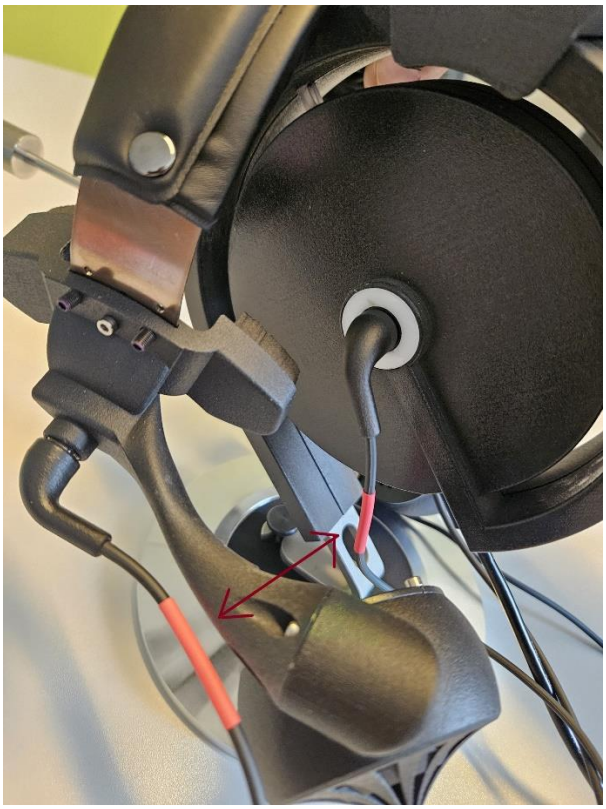
6. Screw the counterweights into the threads provided



7. View of the fully assembled A2000 free-field-headphone

8. Connect the audio cable to the A2000 by bringing the magnetic connectors close to the magnetic sockets on the sides of the headphones. The connection via the sliding contact is made automatically by the magnetic attraction.

9. Connect the audio cable to the smartALF housing. Make sure you connect the correct side. If you look at the smartALF from the front (front is where the USB port is located), the right side (red marking) is on the left of the housing. When the smartALF is connected to the computer, the Plexiglas rings light up in red and blue to indicate the side. There is also a colour marking on the cable (red for the right side and blue for the left side).



2.3. Software installation

Install the software by executing the file Setup_smartALF_1_2_0_16.exe.

The installation routine will guide you through the rest of the process. Select a local hard disc, that is permanently installed in the computer (not a USB stick or network drive) as the installation directory. The drivers required for operation are installed automatically. After installation, the smartALF is immediately ready for use.

3. Technical Data

smartALF Article No.	A1027093
Measurement principle	Determination of individual loudness perception via relative loudness comparison
Measurement signals	Narrowband noise, audio books
Frequency range	100 Hz - 10 kHz
Number of measurement frequencies	Around 120 individual centre frequencies of the individual channels of the hearing systems

Preconfigured hearing instrument manufacturers	AudioService, Bernafon, Hansaton, Otion, Phonak, ReSound, Signia, Starkey, Unitron, WIDEX
Duration of hearing instrument fitting	approx. 20 minutes
Connection type smartALF to computer	USB type C to USB type A
Required current	2A (via USB-3)
System requirements	Windows 10 or 11 (64 bit), 500 MB hard drive space, 1 GHz processor with at least 2 cores, 4 GB RAM, DirectX12 compatible graphics card, Internet connection for accessing the hearing system database
Languages (software operation)	German, English, Spanish
Dimensions (W x H x D)	approx. 236 x 243 x 239 mm
Dimensions without headphones (W x H x D)	approx. 160 (Ø base) x 242 x 43 mm
Weight (without headphones, packaging and cable)	approx. 1.2 kg
Permitted temperature range	0 °C to 60 °C
Free-field headphone A2000	
Ear coupling	Free-field sound, distance 70 mm
Contact pressure	12.5 N @ 150 mm head width
Transducer connection type	Magnetic connector
Connection cable length	approx. 3 m, guided on both sides
Dimensions (W x H x D)	approx. 220 x 185 x 190 mm
Weight (without packaging and cable)	approx. 350 g

4. General Notes

Contact:

Acousticon Hörsysteme GmbH
Hirschbachstraße 48
64354 Reinheim, Germany

For technical support enquiries, please contact our hotline on +49 6162/9324-45 or send an email to support@acousticon.de. The support hotline is usually available from Monday to Friday from 9 am to 5 pm (European Central Time). Please leave a message, if you are calling outside the opening times and we will call you back.

You can find more information at www.acousticon.de

5. Troubleshooting and Error messages

Error pattern	Possible cause	Troubleshooting
FB1: Software cannot be started - "Device not connected" message	USB cable is not plugged into the smartALF or computer	Check cable connection between smartALF and computer
FB1: Software cannot be started - "Device not connected" message	USB cable is damaged	Check the cable for mechanical damage to the insulation or plug. Replace the cable
FB1: Software cannot be started - "Device not connected" message	smartALF electronics is damaged	Check whether the status lights of the smartALF light up when plugged in. If the LEDs do not light up and a cable fault can be ruled out, the device must be sent to Acousticon for repair.
FB1: Software cannot be started - "Device not connected" message	USB port of the computer is damaged	Plug the smartALF into another USB port.
FB1: Software cannot be started - "Device not connected" message	Computer was not restarted after Windows update	Restart the computer by clicking on the "Restart" option of the on/off menu in the start bar.
FB2: No sound comes out of the headphones	The headphones are not connected to the smartALF	Check the magnetic connectors on the A2000 handsfree headphones and smartALF. Reconnect the connectors.
FB2: There is no sound coming from the headphones	The sound card is muted	Check the sound settings in the control panel and make sure that the sound card is not muted.
FB2: There is no sound coming from the headphones	The headphones or the cable is defective	Send the headphones and/or cable to Acousticon for repair.

FB3: The sound from the headphones is very quiet/very loud	The calibration is not correct	Contact Acousticon customer support on +49 6162/9324-45.
FB4: The sound from the headphones is much too quiet	The cable and/or the connection sockets (magnetic connectors) of the cable have a loose contact	Check the magnetic plugs on the headphones and smartALF. Disconnect the cable from both the smartALF and the headphones and reconnect it.
FB5: The headphones distort even at low or medium levels	The headphone capsules are damaged	Send the headphones to Acousticon for repair.
FB6: The LEDs of the side markers on the headphone plug do not light up in blue/red	The hardware is not connected to the computer	Check the USB connection of the smartALF to the computer.
FB7: Red front LED lights up briefly when playing a sound and sound is interrupted	Current exceeds limit value	Restart the computer and reinsert the USB plug into the computer. If the error persists, contact Acousticon customer support on +49 6162/9324 -45
FB8: Windows reports an exception when playing a sound and the sound is interrupted	USB port of the computer is not supplying enough power	Make sure that the USB port you are using is a USB 3.0 or 3.x port. If you are using a laptop, connect the laptop to the mains power supply beforehand and try again. If you are using a USB hub, connect the smartALF directly to a USB port.
FB9: After starting the software, the white front LED does not light up	Hardware malfunction	Contact Acousticon customer support +49 6162/9324 -45