



Features

- USB type C socket to connect to a smartphone/tablet (iOS, iPadOS) or a Windows computer
- Recording equalization *Independent of direction* (ID)
- Playback equalization *Independent of direction* (ID), *Free Field* (FF), and *Diffuse Field* (DF); controlled by playback software
- Hardware limiter (configurable via Mobile Frontend Tools)
- 130 dB_[SPL] range (124 dB + 6 dB head room)
- Voltage supply via USB connection (iOS, iPadOS, Windows)
- HEAD B2U app for binaural recording and playback with smartphones and tablets
- Binaural recording, playback, and analysis with ArtemiS SUITE
- Insensitive to mobile device emissions
- Mobile Frontend Tools (Windows only) for
 - Firmware updates
 - Calibration via pistonphone
 - Limiter configuration
- Multicolor LED status indicator on the bottom of the right earpiece

- Detachable wind shield against low frequency wind noise
- Numerous adjustment options for high wearing comfort

Interfaces

- USB-C socket (right earpiece bottom)

Scope of delivery

- Digital, binaural headset SQope
- CUSB V.1.5 (code 5474-1.5) USB-C to USB-C cable, 1.5 m (4.9 ft)
- CUSB IX.1.5 (code 9897-1.5) USB-A to USB-C cable, 1.5 m (4.9 ft)
- HSC V.4 Bag for SQope and accessories
- Wind shield
- Calibration adapter

Optional accessories

- H0162 USB-A to Lightning adapter

SQope (3300)

Digital, binaural headset

Overview

SQope combined with the HEAD B2U app on a mobile device represents the easiest way to make, save, and play back binaural recordings. You control the recording on the mobile device via the HEAD B2U app by well-known touch operations. The HEAD B2U app is available on the App Store (iOS, iPadOS).

After installing the HEAD B2U app, you connect SQope to the mobile device via USB, launch the app, and immediately start recording. SQope is supplied with power via the USB connection so that you are completely self-sufficient and can move around freely. Your recordings are saved on the mobile device, can be played back via SQope, or transferred to a computer for later analysis.

You can connect SQope to the mobile frontends SQobold and SQquadriga III and then record the SQope signal together with the GPS and the video signal of the mobile frontend. SQope is also the ideal partner for the ArtemiS SUITE Compact Analysis Module (code 5010), which enables you to analyze stored measurements with just a few clicks.

Recording and playback are equalized completely independent from your mobile device or a computer by SQope. The necessary equalization filters are already installed so that recording and playback are correctly equalized from the start.

SQope is particularly suited for acquisition and analysis of noise complaints, for environmental measuring applications, within sound walks and soundscapes, and for academic education.

Easy binaural recording and playback

The digital, binaural headset SQope makes binaural recording and playback easier than ever. You only need a smartphone or a tablet with iOS or iPadOS and the HEAD B2U app. No further measuring equipment, no tripods, no setup or take down. Wherever you are, you can always start recording or play back. And all that in the proven binaural quality HEAD acoustics has been offering and developing for decades.

Simply install the HEAD B2U app from the App Store on your smartphone or tablet, connect SQope to your device, put on SQope, start the HEAD B2U app, and you can record right away. Completely independent from any other devices or a power supply, since SQope is supplied via the smartphone or the tablet.

Recordings are stored on your mobile device and can be managed via the clearly arranged Recordings list. This list allows for easy, aurally-accurate playback of stored recordings via SQope by using the Player integrated in the HEAD B2U app. During playback, level meters and diagrams for the time signal and a real-time FFT are displayed – just like during recording.



HEAD B2U app – Simply binaural

The HEAD B2U app is available for iOS/iPadOS via the App Store. Combined with a smartphone or tablet, the app offers maximum flexibility and allows for high-quality, binaural recordings and playing back stored recordings. Aurally-accurate, of course.

When you start the HEAD B2U app, the incoming signal is permanently displayed as a time signal diagram and an FFT diagram calculated in real time even without an active recording. The HEAD B2U app thus permanently provides additional information about noise event development in your environment.

When started, the HEAD B2U app permanently checks whether binaural recording and aurally-accurate playback are possible and indicates this with a prominent icon.

HEAD B2U app is operated with familiar controls similar to the ones from your smartphone or tablet so that you immediately find your way around. All app functions are designed to quickly and efficiently process a typical measurement task: familiar control buttons, large level meters, recording duration display.

Saved recordings are clearly listed in the Recordings list under an individually assigned name and with the recording duration as well as the time of recording. Simply open the Recordings list and start the playback of the desired recording. You can also delete, rename, and share recordings via the Recordings list.



Technical data

General

Communication interface	USB 2.0 (connection cable included)
Connector data acquisition/generation	USB-C port; additional adapter H0162 (USB-C to Lightning) mandatory for iOS/iPadOS
Connectors via adapters/adapter cables	USB-C cable (included) Adapter USB-A to USB-C (included) Adapter USB-C to Lightning (optional accessory)
Supply connector	USB
Supply voltage	5 V DC
Max. power consumption	
Operation	0.275 W (device only)
Standby	0.15 W
System sampling rate	48 kHz
Operating temperature	-20 – +50 °C (4 – 122 °F)
Storage temperature	-20 – +60 °C (4 – 140 °F)
Weight	220 g (160 g without cable)
Cable length	1.5 m (4.9 ft)

Analog input microphone

Microphone type	MEMS
Range	130 dB _[SPL] (124 dB + 6 dB head room)
Inherent noise	27 dB _[SPL] (A)
Frequency range	20 Hz – 20 kHz
Max. sound pressure level	130 dB _[SPL]
THD+N	
Sound pressure level < 128 dB _[SPL]	< 1 %
Sound pressure level < 112 dB _[SPL]	< 0.1 %

Headphones

Max. sound pressure level	110 dB _[SPL]
Harmonic distortion	0.1 % (at 100 dB _[SPL])
Transmission range	28 Hz – 17.1 kHz
Ear coupling	Supra-aural
Transducer principle	Dynamic
Recording equalization	Independent of direction (ID)
Playback equalization	Independent of direction (ID), free field (FF), diffuse field (DF)