

Mino Personal Amplifier

BE2030-C



Features

- 1 Digital signal processing**
Clear and noise-free sound
- 2 Small and light**
Fits discreetly in your pocket
- 3 Directional microphone**
Clarifies speech even further
- 4 Telecoil**
Works with loop systems
- 5 Flexible**
Connects to the TV or radio

MD

CE-marked medical device
under EU MDR 2017/745

Mino is a personal amplifier for hard of hearing that will bring out the words so you can hear them loud and clear, even when there is a lot going on in the background.

Digital signal processing. Mino uses digital state-of-the-art signal processing to bring out speech in difficult listening situations. Mino delivers crystal-clear sound, free from background noise and feedback.

Pocket size and super light. Mino is small and can be kept discreetly in your pocket without weighing you down.

Easy to use. Mino is intuitive to use. All functions are accessed with the simple press of a button and there are no complicated menus to navigate.

Long lasting power. Mino uses a rechargeable lithium-ion battery, just like other modern products.

Directional microphone. Mino is equipped with an omni-directional and a directional microphone. With the directional microphone, you can 'point' to the person talking, reducing unwanted background noise.

Built in Telecoil. Mino is equipped with a Telecoil. The Telecoil picks up sound in venues fitted with hearing loop systems, such as theaters, churches, and concert halls.

Flexible. Connect Mino to the TV, radio, MP3 player or computer and you can enjoy great sound in stereo at the volume of your choice while sparing your family's ears.

Great with hearing aids. Mino clarifies speech and filters out disturbing background noise before it reaches the hearing aid or cochlear implant. This means you don't have to make so much of an effort to hear (Neck loop accessory required).



Technical specifications

Subject to change without prior notice.

Size and weight

Height:	99 mm (3.9 inches)
Width:	48 mm (1.9 inches)
Depth:	22 mm (0.9 inches)
Weight:	74 grams (2.5 ounces)



Input signals

- Microphone: Built in omnidirectional and directional microphone
- Telecoil pickup for inductive loop systems
- External sound source input: 2.5 mm stereo jack plug (0 dBV max input signal)

Output signals

- Headphone socket: 3.5 mm stereo jack plug
- Distortion: 0.05% THD (electrical)
- Frequency range: 40 – 10 kHz
- Tone control: 9 steps
- Volume control: 9 steps
- Output power: 100 mW (16 Ω load)

In the box

The package includes everything you normally need in order to use your Mino.

- BE2030-C Mino Personal Amplifier
- BE9135 Lanyard
- BE9148 Charge cable USB
- Power adapter
- Power adapter plug

Power and battery

- Built in rechargeable lithium-ion battery
- Operating time: up to 29 hours
(With included light weight battery)
- Charging time: 4 hours
(With included light weight battery)

Acoustic specifications

- Maximum output using BE9124 earphones
132 dB SPL
- Gain at full volume using BE9124 earphones
(60 dB SPL input signal):
57,5 dB @ 1 kHz 56 dB HFA
- Distortion
Using BE9124 0,08 % THD
Using BE9122 0,6 % THD

Approvals



This product is a medical device in conformity with Regulation (EU) 2017/745 (Medical Device Regulation).

Buttons and controls



Environmental requirements

- Operating temperature:
0° to 35° C, 32° to 95° F
- Relative humidity: 5% to 95%
(non condensing)

Accessories

The following accessories are available:

- BE9122-P02 Headphones
- BE9124-P02 Earphones
- BE9159-P02 Neck Loop, long cable
- BE9161-P02 Neck Loop, short cable
- BE9129-P02 Microset
- BE9136-P02 External Microphone
- BE9408 Extension cable for Microphone
- BE9126 Audio Cable Kit

In-depth technical information

Subject to change without prior notice.

Features

- Digital Signal Processing, DSP
- Built in omnidirectional electret microphone and zoom microphone
- 10 channel dynamic range compressor
- 10 channel dynamic noise suppression
- Adaptive feedback manager
- Intuitive user interface
 - LED light bar for excellent readability
 - 9 step volume control (5 dB/step)
 - 9 step tone control
 - Clear indication of Volume, Tone, Mic & T mode
 - Low battery warning indicator
- Telecoil pickup for inductive loops
- Push-to-listen mode (Int. mic and Aux in mixed)
- Auxiliary stereo signal input (2.5 mm tele jack)
- Headphones stereo output (3.5 mm tele jack)
- Auto mute when switching between signal sources
- High gloss finish to minimize handling sound
- Requires no individual fitting
- Built-in rechargeable lithium-ion battery
- Universal charger with included mains plug
- BE9135 Lanyard
- Polished stainless steel belt clip included

Technical specifications

- Dimensions: 99 mm (h) x 48 mm (b) x 22 mm (d)
- Weight: 2.5 ounces (74 grams)
- Battery: Built in rechargeable lithium-ion, 617 mAh
- Operating time: Up to 29 hours (fully charged)
- Charging time: 4 hours (max)
- Ext. Mic./Aux. in connector: 2.5 mm stereo tele jack
- Headphones connector: 3.5 mm stereo tele jack
- Volume control: 9 steps (5 dB/step)
- Tone control: 9 steps
- Power switch: On/Off toggle button
- Mic and T mode: Separate mode select buttons
- External microphone / Aux in
 - Selects automatically when plugged in
- Dynamic Compressor
 - Dynamic gain range 0-35 dB
 - Compression 3:1
 - Expansion 1:1.5
 - Attack time 20 (25) ms (≥ 3 kHz)
 - Release time 110 (200) ms (> 3 kHz)
- Dynamic noise reduction
 - 10 channel adaptive noise reduction
- Feedback cancellation
 - Adaptive phase-invert feedback cancellation
- Digital signal processing
 - 22 050 kHz sampling frequency
 - 16 bit resolution in stereo

Acoustic specifications

- Maximum output saturation
 - Using BE9122-P02 Headphones 124.3 dB SPL (@ 2.5 kHz)
 - Using BE9124-P02 Earphones 132.0 dB SPL (@ 5 kHz)
- Gain, full volume (1 kHz, 60 dB SPL input signal)
 - Using BE9122-P02 Headphones 42.5 dB
 - Using BE9124-P02 Earphones 55.0 dB
- Gain, full volume (HFA, 60 dB SPL input signal)
 - Using BE9122-P02 Headphones 46.5 dB
 - Using BE9124-P02 Earphones 51.5 dB
- Distortion
 - Using BE9122-P02 Headphones 0.6 % THD
 - Using BE9124-P02 Earphones 0.08 % THD

Electrical specifications

- Output power tele-jack 100 mW w. 16 Ω last
- Distortion 0.05 % THD
- Dynamic range 90 dB
- Frequency range 40 – 10 kHz
- Tone control
 - Break point at 1.6 kHz
 - Tone, high: +10dB@3.15 kHz, -6dB@250Hz
 - Tone, mid: flat
 - Tone, low: -10dB@3.15 kHz, No bass boost
- Line in sensitivity 0 dBV (maximum input level)

Advanced settings



Balance control

Makes it possible to shift volume between Left and Right as preferred. 5 dB/step.



Basic attenuation

Trims the attenuation to a specific hearing accessory in 3 dB steps.



Stereo/Mono

Only effects the line-in signal. Mono is used for neck loop and stetoclips.



Bass reduction

Reduces low frequency interference from fans, road-noise etc.



Tone control blocking

Makes it easier for some end users to handle Mino.



Tone control preset

Select preset tone. Used together with Tone control blocking.



Disable T-coil

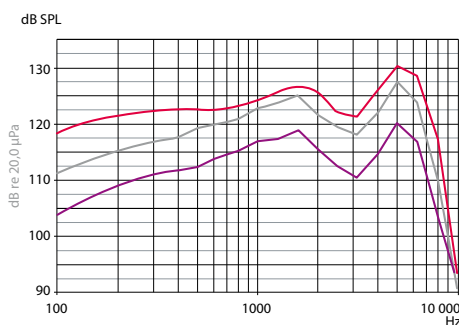
Makes it easier for some end users to handle Mino.



Reset to factory settings

Resets all settings to the default factory settings.

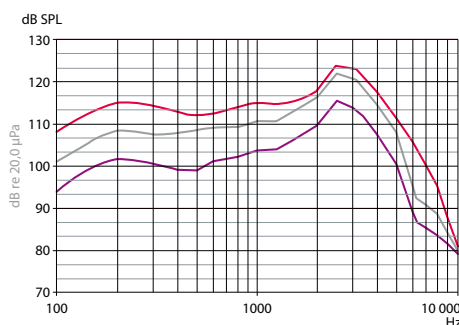
Output using BE9124-P02 Earphones



Input signal

— 60 dB SPL — 70 dB SPL — 90 dB SPL

Output using BE9122-P02 Headphones



Input signal

— 60 dB SPL — 70 dB SPL — 90 dB SPL