


# Mino

## Professional Communicator



**Bellman & Symfon**  
FOR EASY COMMUNICATION



**Features**

- Digital signal processing**  
Crystal clear stereo sound
- Pocket size and super light**  
Fits discretely in your pocket
- Zoom microphone**  
Point to the person talking
- Telecoil**  
Use Mino in public facilities

**The Mino** is a professional speech amplifier that helps you hear better in most everyday situations, whether you wear a hearing aid or just suffer the occasional hearing difficulty.

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

**Pocket size and super light.** The Mino is as small as a modern cellphone and weighs just 2½ oz. So the Mino can be kept discretely in your pocket without weighing you down.

**Easy to use.** The 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.** The Mino uses a rechargeable lithium-ion battery, just like a modern cellphone. So you never need to worry about buying new batteries.

**Zoom the sound.** Mino has both an omni- and a unidirectional microphone (zoom). With the zoom microphone, you can 'point' to the person talking, reducing any background noise.

**Bring it to the movies.** The 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.

**Customize your Mino.** If you'd like to tailor your solution, we offer a number of accesso-

ries, ranging from practical car chargers and travel cases to advanced hearing accessories. It's your decision.

**Enjoy music and TV.** With the Mino, you can enjoy music and TV at any volume without disturbing others. Always with full hi-fi quality.

**Boost your hearing aid.** Connect a neck loop, and the Mino further amplifies speech and acts as an additional volume and tone control for your hearing aid.



# Technical specifications

## Size and weight

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



## Input signals

- Microphone: Built in omnidirectional and zoom microphone
- Telecoil pickup for inductive loops
- 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: 40-10 000 Hz
- 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 Professional communicator
- USB universal charger
- Mains plug
- Charger cable
- Neck strap with safety clasp
- User manual

## Power and battery

- Built in rechargeable lithium-ion battery
- Operating time: up to 18 hours (With included light weight battery)
- Charging time: 2.5 hours (With included light weight battery)

## Acoustic specifications

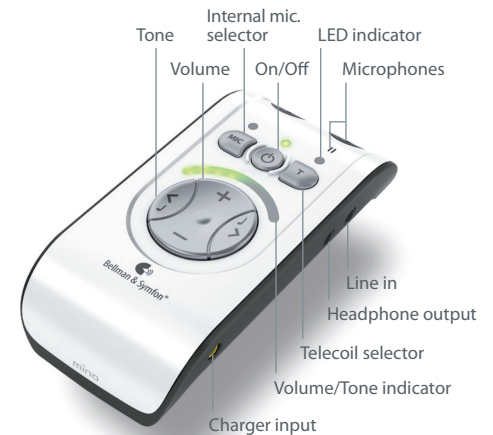
- Maximum output using BE9124 earphones  
132 dB SPL
- Gain at full volume using BE9124 earphones  
(60 dB SPL input signal):  
55.0 dB @ 1kHz      51.5 dB HFA
- Distortion  
Using BE9124      0,08 % THD  
Using BE9122      0,6 % THD

## Regulatory requirements

- Complies with the following requirements:  
**CE, FCC, RoHS, WEEE and C-Tick**



## Buttons and controls



## Environmental requirements

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

## Accessories

The following accessories are available:

- BE9122 Stereo headphones
- BE9124 Stereo in-ear earphones
- BE9125 Stetoclips
- BE9127 Tie-clip microphone
- BE9129 MicroSet™
- BE9137 Cable kit, 16 feet (stereo) incl. adapter from 3,5 mm stereo tele jack to RCA (phono)
- BE9128 Neck loop
- BE9143 USB car charger
- BE1360 Scart switch

# In-depth technical information

## 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 lightbar 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 Neck strap with safety clasp included
- 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 18 hours (fully charged)
- Charging time: 2.5 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 ( $\geq 3$  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 Headphones 124.3 dB SPL (@ 2.5 kHz)
  - Using BE9124 Earphones 132.0 dB SPL (@ 5 kHz)
  - Using BE9125 Stetoclips 133.7 dB SPL (@ 1 kHz)
- Gain, full volume (1 kHz, 60 dB SPL input signal)
  - Using BE9122 Headphones 42.5 dB
  - Using BE9124 Earphones 55.0 dB
  - Using BE9125 Stetoclips 58.2 dB B
- Gain, full volume (HFA, 60 dB SPL input signal)
  - Using BE9122 Headphones 46.5 dB
  - Using BE9124 Earphones 51.5 dB
  - Using BE9125 Stetoclips 52.0 dB
- Distortion
  - Using BE9122 Headphones 0.6 % THD
  - Using BE9124 Earphones 0.08 % THD

## Advanced settings



### Balance control

Compensates for example for hearing loss in one ear. 5 dB / step.



### Basic attenuation

Limits the maximum output level Useful for e.g. a child. 3 dB / step.



### 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 the 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 the Mino.



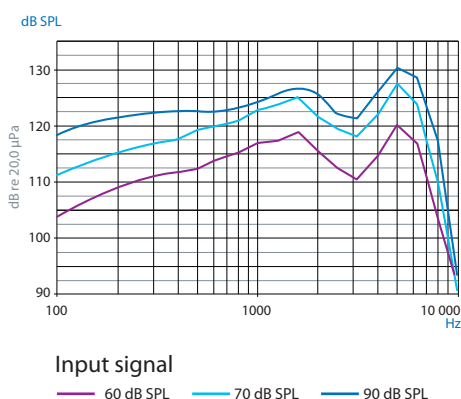
### Reset to factory settings

Resets all settings to the default factory settings.

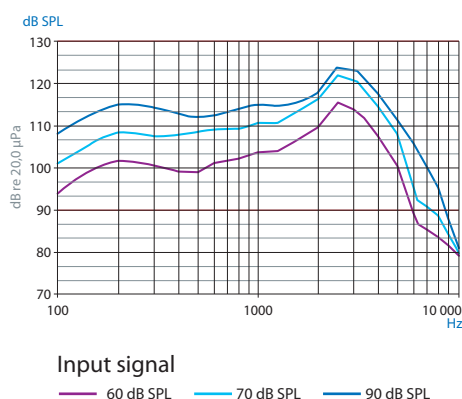
## Electrical specifications

- Output power tele-jack 100 mW w. 16  $\Omega$  last
- Distortion 0.05 % THD
- Dynamic range 90 dB
- Frequency range 40 – 10 000 Hz
- 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)

## Output using BE9124 Earphones



## Output using BE9122 Headphones



## Output using BE9125 Stetoclips

