Assistive listening, reimagined.

Bettear

With Bettear's Wi-Fi and Auracast Hi-Fi solutions, your audience can simply enjoy the moment using their own smartphones and hearing devices—no extra equipment, no hassle. It is all about streamlining Hi-Fi over Wi-Fi and Auracast™.

- No extra equipment. No hassle.
- All in one: complete audio solution powered by AI and DSP Technology.

- Hearing aids of all types can be easily connected.
- BYOD: Bring your own device.
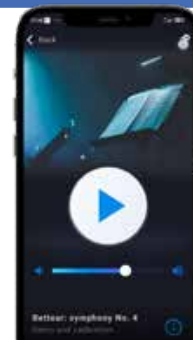- Effortless set-up: connect in seconds.

So how does it work?

Hi-Fi over Wi-Fi and Auracast™

To overcome reverberant environments, background noise, and other challenging acoustic conditions, Bettear's devices connect directly to various audio sources, such as microphones or sound consoles, and efficiently sample the sound in real-time. It then streams the audio with low latency over Wi-Fi and Auracast™ to personal end devices such as smartphones, hearing-aids and many other hearable devices.

Bettear offers an advanced hybrid mode to fully cover venues with Wi-Fi and Auracast™, ensuring the inclusive, high quality listening experience for everyone.
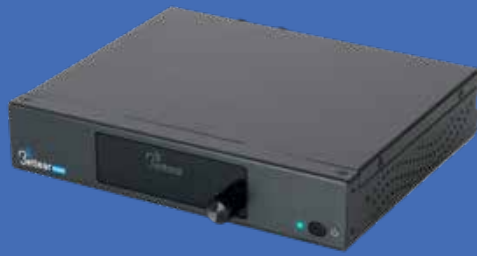
Mobile Application

Attendees can effortlessly access the Bettear app by downloading it from different application stores, free of charge. The setup is easy, and suitable for people of all ages and technical skill levels, letting them connect their own hearing aids or earphones. Once connected, they can enjoy a high quality, personalised sound.

Download our app App Store Google Play

Audio Personalisation

Hard-of-hearing individuals, including those who experience any degree of hearing or cognitive decline, frequently encounter difficulties in comprehending and enjoying audio content to the fullest extent. Bettear offers manual customisation and automatic calibration that guarantee an accessible, equitable, and exceptional listening experience.

Bettear SHOW

A Wi-Fi-based assistive listening solution designed to enable hard-of-hearing individuals to participate in live events, such as concerts and lectures, with ease, allowing them to enjoy the experience just like everybody else.

Bettear SHOW connects directly to the audio source, such as a microphone or a sound console, effectively sampling the sound in real-time while overcoming reverberant environments and background noise. It then distributes the audio over a designated WiFi network to personal smartphones with low latency. Through the Bettear App, audio is streamed directly to the user's hearing-aids, cochlear implants, or any other earpiece/accessory.

Specifications		
Network	IP Address: DHCP, Reserved	
	Users Per Unit: Up to 1,000	
	Prioritisation: QoS	
	Bandwidth Per User: 250 kbps	
	Latency: 40ms - 110ms (may vary with network and mobile device)	
	App Support: iOS/Android	
	Offline Management Panel: Yes	
	Cloud Management: Yes (if connected to internet)	
	Content Management System (Cloud): Yes (if connected to internet)	
Hardware	Processor: Quad Core Cortex-A55 (ARM v8.2-A) 64-bit @1.5GHz	
	Memory: 4GB	
	Audio Input Channels: 1 Stereo/2 Mono	
	Maximum Input Voltage: 2.1Vrms (4.2Vrms for balanced input)	
	Rackmount 19" Compatible: Yes	
	Power Supply: 9 VDC (Positive polarity), 2.5A	
	Operating Temperature: 0 ℃ – 55 ℃	
Audio	ADC Signal-to-Noise Ratio: 110dB	
	DAC Signal-to-Noise ratio: 112dB	
	ADC THD+N: -90dB	
	DAC THD+N: -93dB	
	Frequency Response: 10Hz-22kHz	
	Input Gain: -12dB to 32dB	
	Automatic Gain Control (AGC): Yes	
	Audio Filter: HPF and LPF	
	Sample Rate: 48kHz	
	Bit Depth: 32 bits	

- **Connect with ease**
  One tap to access a venue - No technical expertise is required.
- **Personalised audio**
  Tailored to the listener's preferences.
- **Compatibility**
  Supports hearing-aids, cochlear implants, and headphones of all types.
- **Automatic firmware updates**
  Via WiFi/LAN.
- **Live transcription**
  On-site live transcription displayed via the Bettear App.

- **B-LITE**
  An easy-to-use designated receiver for non-smartphone users.
- **Remote maintenance**
  Local and cloud-based monitoring and maintenance dashboard.
- **Dynamic latency**
  Set to compensate the delay time between the streamed audio and the environmental audio coming from the loudspeakers, in real time.
- **Accessibility map**
  Displays all Bettear accessible sites.
- **Automatic Gain Control (AGC)**
  Optimises the audio input level adaptively and enhances user experience.

Complementary Products:

INPUT EXTENSION UNIT (B-EX4)
The B-EX4 effortlessly integrates with SHOW and ART systems, introducing 4 additional input channels (6 Mono / 3 Stereo channels in total, including the SHOW system's built-in channels). The unit is also equipped with phantom power (48V).

BETTEAR ETHERNET UPGRADER
A USB to Ethernet adapter facilitates the remote updating of B-SHOW and B-ART devices through any available on-site wired network access – automatically.
Allows internet access for the Bettear products family without providing access for the connected listeners of the accessibility network as well.
Supports internet sharing over VLAN to remotely manage cloud-based access points.

BETTEAR WI-FI UPGRADER
A USB to Wi-Fi adapter facilitates the remote updating of B-SHOW and B-ART devices through any available on-site Wi-Fi network – automatically.
Allows internet access for the Bettear products family without providing access of the connected listeners to the accessibility network as well.
Supports 2.4GHz Wi-Fi networks.
Supports internet sharing over VLAN to remotely manage cloud-based access points.

PORTABLE CHARGING TROLLEY
A portable charging trolley, allows for the simultaneous charging of up to 20 B-LITE devices.
Includes charging status indication LEDs for each charging slot. Equipped with a battery protection circuit for maximal battery lifetime.
Input power: 110-240V AC.
Charging case dimensions: 52x42x23 cm.

B-HEADPHONES (KN-01)
Foldable over-ear headphones, designed for use with B-LITE devices, allow users to enjoy high-quality audio without disturbing those seated next to you.
Equipped with 3.5mm PL plug

CHARGING CABINET
The blue charging cabinet allows for the simultaneous charging of up to 20 B-LITE devices.
Includes charging status indication LEDs for each charging slot. Equipped with a battery protection circuit for maximal battery lifetime.
Input power: 110-240V AC.
Can be hung on a wall or simply placed on a desk.
Charging cabinet size: 46x35x22 cm

B-LITE
A designated hand-held, plug-and-play receiver connects to the B-SHOW and B-ART systems.
Listeners can easily adjust EQ presets and make personalised on-the-fly customisations to meet their specific needs.
Live transcription, offered by the Bettear family of devices, will be displayed on the built-in 6.5" screen of the B-LITE.
Average Differential Audio Arrival (DAA) – up to 40ms.

Enquiries 1800 00 77 80
Email sales@madisonav.com.au
www.madisonav.com.au

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beyond connected